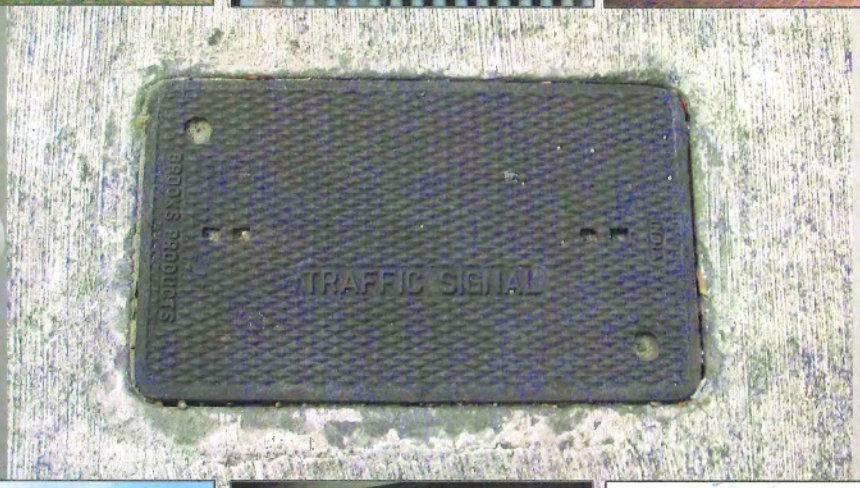
Metropolitan Planning Organization

Miami-Dade County

Reversible flow lane study

SR 5 / US 1 / South dixie Highway
From SW 40th street/SR 976/Bird Road to
Interstate 95 (I-95)



Appendix I – synchro output results

Arterial Level of Service: NB US 1

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Douglas Rd	II	40	30.9	21.2	52.1	0.30	20.9	D
Bird Rd	II	40	29.2	26.8	56.0	0.27	17.0	D
SW 32nd Ave	II	30	40.9	42.9	83.8	0.32	13.8	E
SW 27th Ave	II	40	49.0	65.9	114.9	0.54	17.1	D
SW 22nd Ave	II	37	51.6	152.3	203.9	0.54	9.4	F
SW 17th Ave	II	30	65.9	155.1	221.0	0.55	8.9	F
SW 16th Ave	II	40	15.2	33.4	48.6	0.13	9.8	F
Total	II		282.7	497.6	780.3	2.65	12.2	F

Arterial Level of Service: SB US 1

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SW 16th Ave	II	37	73.6	25.6	99.2	0.76	27.4	C
SW 17th Ave	II	40	15.2	10.8	26.0	0.13	18.4	D
SW 22nd Ave	II	30	65.9	27.1	93.0	0.55	21.3	D
SW 27th Ave	II	37	51.6	34.6	86.2	0.54	22.3	C
SW 32nd Ave	II	40	49.0	26.8	75.8	0.54	25.9	C
Bird Rd	II	30	40.9	26.7	67.6	0.32	17.1	D
Douglas Rd	II	40	29.2	18.4	47.6	0.27	20.1	D
Total	II		325.4	170.0	495.4	3.10	22.6	C

Existing 2007 AM
From Douglas Rd to I-95

5/30/2007

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	170		170	200		0	170		0	92		0
Storage Lanes	1		1	1		0	1		0	1		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
Leading Detector (ft)	50	50	50	50	50		50	0		50	0	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor												
Frt			0.850		0.955						0.995	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	1792	1524	1703	3252	0	1646	4567	0	1646	4544	0
Flt Permitted	0.302			0.133			0.038			0.040		
Satd. Flow (perm)	541	1792	1524	238	3252	0	66	4567	0	69	4544	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			67		3			1			7	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		735			672			1600			1400	
Travel Time (s)		16.7			15.3			27.3			23.9	
Volume (vph)	34	402	116	45	248	108	140	2668	7	54	2302	76
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.87	0.87	0.87	0.98	0.98	0.98	0.89	0.89	0.89
Growth Factor	100%	100%	100%	100%	100%	100%	100%	115%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	37	442	127	52	285	124	143	3131	7	61	2587	85
Lane Group Flow (vph)	37	442	127	52	409	0	143	3138	0	61	2672	0
Turn Type	Perm		Perm	Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8			2			6		
Detector Phases	4	4	4	8	8		5	2		6	6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0		8.0	21.0		21.0	21.0	
Total Split (s)	34.0	34.0	34.0	34.0	34.0	0.0	12.0	116.0	0.0	104.0	104.0	0.0
Total Split (%)	22.7%	22.7%	22.7%	22.7%	22.7%	0.0%	8.0%	77.3%	0.0%	69.3%	69.3%	0.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0	1.0		1.0	1.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Recall Mode	Min	Min	Min	Min	Min		C-Min	Max		Max	Max	
Act Effct Green (s)	30.0	30.0	30.0	30.0	30.0		112.0	112.0		100.0	100.0	
Actuated g/C Ratio	0.20	0.20	0.20	0.20	0.20		0.75	0.75		0.67	0.67	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.34	1.23	0.35	1.08	0.63		1.07	0.92		1.33	0.88	
Control Delay	61.9	175.9	27.9	209.9	59.3		133.1	21.2		208.3	18.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	61.9	175.9	27.9	209.9	59.3		133.1	21.2		208.3	18.4	
LOS	E	F	C	F	E		F	C		F	B	
Approach Delay		137.9			76.3			26.1			22.6	
Approach LOS		F			E			C			C	
Queue Length 50th (ft)	31	~533	49	~57	193		~107	817		~76	411	
Queue Length 95th (ft)	71	#752	114	#146	243		#255	898		m#81	m395	
Internal Link Dist (ft)		655			592			1520			1320	
Turn Bay Length (ft)	170		170	200			170			92		
Base Capacity (vph)	108	358	358	48	653		134	3410		46	3032	
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	0.34	1.23	0.35	1.08	0.63		1.07	0.92		1.33	0.88	

Intersection Summary

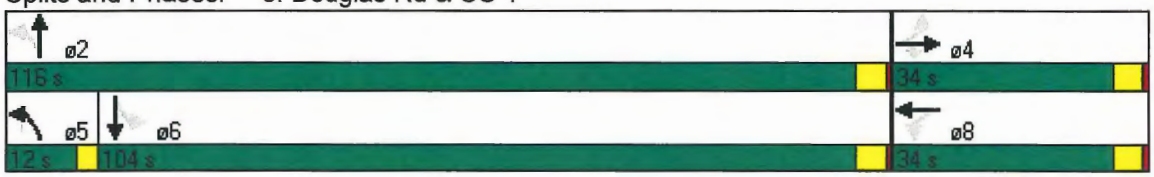
Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 5 (3%), Referenced to phase 5:NBL, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.33
Intersection Signal Delay: 37.6 Intersection LOS: D
Intersection Capacity Utilization 100.6% ICU Level of Service G
Analysis Period (min) 15

~ 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.

Splits and Phases: 3: Douglas Rd & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	350		0	0		90	0		0
Storage Lanes	2		0	1		0	0		1	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
Leading Detector (ft)	50	50		50	50			0	0		0	
Trailing Detector (ft)	0	0		0	0			0	0		0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.91	0.91	1.00	1.00	0.95	0.95	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor												
Frt		0.991			0.986				0.850		0.979	
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3099	1616	0	1703	3358	0	0	4567	1422	0	4471	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3099	1616	0	1703	3358	0	0	4567	1422	0	4471	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			3				35		46	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			30	
Link Distance (ft)		833			777			1400			1700	
Travel Time (s)		18.9			17.7			23.9			38.6	
Volume (vph)	504	650	42	169	430	44	0	2516	109	0	2283	376
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.97	0.97	0.97	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	115%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	554	714	46	174	443	45	0	3111	117	0	2455	404
Lane Group Flow (vph)	554	760	0	174	488	0	0	3111	117	0	2859	0
Turn Type	Split			Split					Perm			
Protected Phases	4	4		8	8			2			6	
Permitted Phases									2			
Detector Phases	4	4		8	8			2	2		6	
Minimum Initial (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Minimum Split (s)	22.0	22.0		22.0	22.0			21.0	21.0		21.0	
Total Split (s)	28.0	28.0	0.0	17.0	17.0	0.0	0.0	105.0	105.0	0.0	105.0	0.0
Total Split (%)	18.7%	18.7%	0.0%	11.3%	11.3%	0.0%	0.0%	70.0%	70.0%	0.0%	70.0%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0			1.0	1.0		1.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Min	Min		Min	Min			C-Max	C-Max		C-Max	
Act Effct Green (s)	24.0	24.0		13.0	13.0			101.0	101.0		101.0	
Actuated g/C Ratio	0.16	0.16		0.09	0.09			0.67	0.67		0.67	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.12	2.92		1.18	1.66			1.01	0.12		0.94	
Control Delay	132.2	896.6		185.3	350.6			26.8	3.2		26.7	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	132.2	896.6		185.3	350.6			26.8	3.2		26.7	
LOS	F	F		F	F			C	A		C	
Approach Delay		574.3			307.2			25.9			26.7	
Approach LOS		F			F			C			C	
Queue Length 50th (ft)	~341	~1417		~203	~365			~1123	8		576	
Queue Length 95th (ft)	#470	#1697		#362	#485			#1230	m10		635	
Internal Link Dist (ft)		753			697			1320			1620	
Turn Bay Length (ft)				350					90			
Base Capacity (vph)	496	260		148	294			3075	969		3026	
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	1.12	2.92		1.18	1.66			1.01	0.12		0.94	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 25 (17%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.92
Intersection Signal Delay: 138.7 Intersection LOS: F
Intersection Capacity Utilization 113.7% ICU Level of Service H
Analysis Period (min) 15

~ 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.

Splits and Phases: 6: Bird Rd & US 1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	90		0	70		0	85		0
Storage Lanes	1		0	1		0	1		0	1		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
Leading Detector (ft)	50	50		50	50		50	0		50	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor												
Frt		0.953			0.940			0.999			0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3246	0	1703	3201	0	1646	4563	0	1646	4563	0
Flt Permitted	0.555			0.220			0.037			0.037		
Satd. Flow (perm)	995	3246	0	394	3201	0	64	4563	0	64	4563	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		42			49			1			1	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			30			40	
Link Distance (ft)		770			1211			1700			2875	
Travel Time (s)		17.5			27.5			38.6			49.0	
Volume (vph)	78	272	124	27	101	67	55	2971	17	54	2508	14
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.91	0.91	0.91	0.96	0.96	0.96	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	115%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	85	296	135	30	111	74	57	3559	18	56	2586	14
Lane Group Flow (vph)	85	431	0	30	185	0	57	3577	0	56	2600	0
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phases	4	4		8	8		5	2		1	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		8.5	21.0		8.0	21.0	
Total Split (s)	29.0	29.0	0.0	29.0	29.0	0.0	8.0	113.0	0.0	8.0	113.0	0.0
Total Split (%)	19.3%	19.3%	0.0%	19.3%	19.3%	0.0%	5.3%	75.3%	0.0%	5.3%	75.3%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		0.0	1.0		0.0	1.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	Min	Min		Min	Min		Min	C-Max		Min	C-Max	
Act Effct Green (s)	22.8	22.8		22.8	22.8		115.1	110.5		115.4	110.6	
Actuated g/C Ratio	0.15	0.15		0.15	0.15		0.77	0.74		0.77	0.74	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.56	0.82		0.50	0.35		0.59	1.06		0.57	0.77	
Control Delay	73.4	68.4		86.5	42.9		23.4	42.9		30.1	26.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	73.4	68.4		86.5	42.9		23.4	42.9		30.1	26.8	
LOS	E	E		F	D		C	D		C	C	
Approach Delay		69.2			49.0			42.6			26.9	
Approach LOS		E			D			D			C	
Queue Length 50th (ft)	77	195		27	62		15	~445		19	854	
Queue Length 95th (ft)	138	257		#68	101		m12	m#392		m20	905	
Internal Link Dist (ft)		690			1131			1620			2795	
Turn Bay Length (ft)	300			90			70			85		
Base Capacity (vph)	166	576		66	574		97	3362		99	3366	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.51	0.75		0.45	0.32		0.59	1.06		0.57	0.77	

Intersection Summary

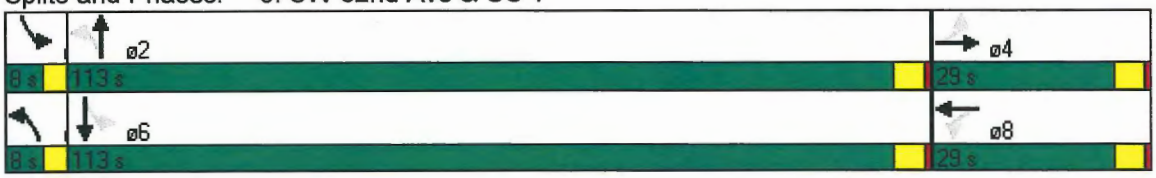
Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 43 (29%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.06
Intersection Signal Delay: 38.8 Intersection LOS: D
Intersection Capacity Utilization 91.2% ICU Level of Service F
Analysis Period (min) 15

~ 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.

Splits and Phases: 9: SW 32nd Ave & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	170		200	80		100	545		0	245		0
Storage Lanes	1		1	1		1	1		0	1		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
Leading Detector (ft)	50	50	50	50	50	50	50	0		50	0	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor												
Frt			0.850			0.850		0.999			0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3406	1524	1703	3406	1524	1646	4563	0	1646	4563	0
Flt Permitted	0.438			0.230			0.039			0.039		
Satd. Flow (perm)	785	3406	1524	412	3406	1524	68	4563	0	68	4563	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			145			141		1			2	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		798			1372			2875			1425	
Travel Time (s)		18.1			31.2			49.0			24.3	
Volume (vph)	66	330	213	47	211	221	170	3222	22	54	2639	19
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.97	0.97	0.97	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	115%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	75	375	242	53	240	251	175	3820	23	56	2749	20
Lane Group Flow (vph)	75	375	242	53	240	251	175	3843	0	56	2769	0
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phases	4	4	4	8	8	8	5	2		1	6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	21.0	8.0	22.0		8.0	22.0	
Total Split (s)	25.0	25.0	25.0	25.0	25.0	25.0	18.0	107.0	0.0	18.0	107.0	0.0
Total Split (%)	16.7%	16.7%	16.7%	16.7%	16.7%	16.7%	12.0%	71.3%	0.0%	12.0%	71.3%	0.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	0.0	2.0		0.0	2.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	
Act Effct Green (s)	20.5	20.5	20.5	20.5	20.5	20.5	121.5	112.8		110.6	104.2	
Actuated g/C Ratio	0.14	0.14	0.14	0.14	0.14	0.14	0.81	0.75		0.74	0.69	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.70	0.81	0.73	0.93	0.52	0.76	0.90	1.12		0.48	0.87	
Control Delay	94.0	76.8	37.8	165.1	64.4	42.3	72.5	65.9		27.4	34.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	94.0	76.8	37.8	165.1	64.4	42.3	72.5	65.9		27.4	34.6	
LOS	F	E	D	F	E	D	E	E		C	C	
Approach Delay		65.0			64.0			66.2			34.5	
Approach LOS		E			E			E			C	
Queue Length 50th (ft)	71	189	91	52	116	105	133	~1594		16	890	
Queue Length 95th (ft)	#148	243	185	#142	159	204	m133	m#1479		m18	945	
Internal Link Dist (ft)		718			1292			2795			1345	
Turn Bay Length (ft)	170		200	80		100	545			245		
Base Capacity (vph)	110	477	338	58	477	335	202	3433		201	3172	
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	0.68	0.79	0.72	0.91	0.50	0.75	0.87	1.12		0.28	0.87	

Intersection Summary

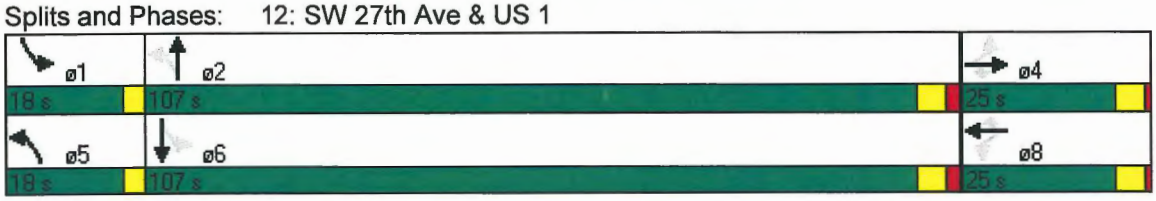
Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 91 (61%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.12
Intersection Signal Delay: 54.9 Intersection LOS: D
Intersection Capacity Utilization 101.2% ICU Level of Service G
Analysis Period (min) 15

~ 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.

Splits and Phases: 12: SW 27th Ave & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	160		200	116		120	165		0	50		0
Storage Lanes	1		1	1		1	1		0	1		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
Leading Detector (ft)	50	50	50	50	50	50	50	0		50	0	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor												
Frt			0.850			0.850		0.999			0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3406	1524	1703	1792	1524	1646	4563	0	1646	4563	0
Flt Permitted	0.554			0.439			0.037			0.037		
Satd. Flow (perm)	993	3406	1524	787	1792	1524	64	4563	0	64	4563	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			80			80		1			2	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			35			30	
Link Distance (ft)		700			1260			1400			2900	
Travel Time (s)		15.9			28.6			27.3			65.9	
Volume (vph)	83	230	181	47	89	146	81	3305	16	41	2704	17
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.82	0.82	0.82	0.96	0.96	0.96	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	125%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	88	245	193	57	109	178	84	4303	17	43	2846	18
Lane Group Flow (vph)	88	245	193	57	109	178	84	4320	0	43	2864	0
Turn Type	Perm		Perm	Perm		Over	pm+pt			pm+pt		
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phases	4	4	4	8	8	1	5	2		1	6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	22.0	22.0	22.0	23.0	23.0	8.0	8.0	22.0		8.0	22.0	
Total Split (s)	26.0	26.0	26.0	26.0	26.0	11.0	11.0	113.0	0.0	11.0	113.0	0.0
Total Split (%)	17.3%	17.3%	17.3%	17.3%	17.3%	7.3%	7.3%	75.3%	0.0%	7.3%	75.3%	0.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.0	0.0	2.0		0.0	2.0	
Lead/Lag						Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes		Yes	Yes	
Recall Mode	Min	Min	Min	Min	Min	Min	Min	C-Max		Min	C-Max	
Act Effct Green (s)	19.0	19.0	19.0	19.0	19.0	10.0	115.8	109.0		120.7	112.3	
Actuated g/C Ratio	0.13	0.13	0.13	0.13	0.13	0.07	0.77	0.73		0.80	0.75	

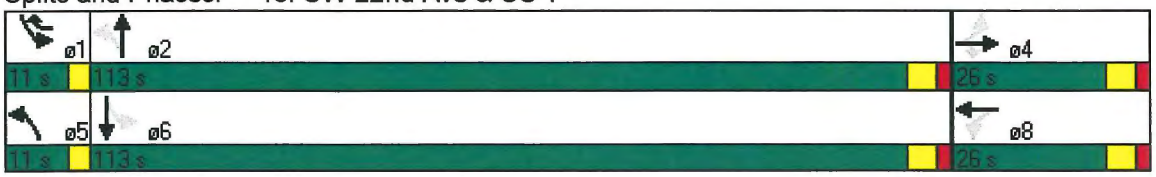
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.70	0.57	0.73	0.58	0.48	1.01	0.69	1.30		0.27	0.84	
Control Delay	90.5	66.6	53.0	83.6	67.6	106.0	37.3	152.3		18.8	27.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	90.5	66.6	53.0	83.6	67.6	106.0	37.3	152.3		18.8	27.1	
LOS	F	E	D	F	E	F	D	F		B	C	
Approach Delay		65.6			90.1			150.1			27.0	
Approach LOS		E			F			F			C	
Queue Length 50th (ft)	83	119	107	53	100	~118	42	~1976		8	1068	
Queue Length 95th (ft)	#153	165	198	94	147	#250	m38	m#1679		m8	m1096	
Internal Link Dist (ft)		620			1180			1320			2820	
Turn Bay Length (ft)	160		200	116		120	165			50		
Base Capacity (vph)	146	500	292	115	263	176	126	3316		157	3415	
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	0.60	0.49	0.66	0.50	0.41	1.01	0.67	1.30		0.27	0.84	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 127 (85%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.30
Intersection Signal Delay: 98.4 Intersection LOS: F
Intersection Capacity Utilization 103.8% ICU Level of Service G
Analysis Period (min) 15

~ 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.

Splits and Phases: 18: SW 22nd Ave & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	165		0	116		0	280		0	60		0
Storage Lanes	1		0	1		0	1		0	1		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
Leading Detector (ft)	50	50		50	50		50	0		50	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor												
Frt		0.970			0.956			0.994			0.996	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3303	0	1703	3256	0	1646	4540	0	1646	4549	0
Flt Permitted	0.182			0.198			0.040			0.040		
Satd. Flow (perm)	326	3303	0	355	3256	0	69	4540	0	69	4549	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17			35			9			6	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			30			40	
Link Distance (ft)		611			1465			2900			700	
Travel Time (s)		13.9			33.3			65.9			11.9	
Volume (vph)	49	309	77	82	293	120	106	3233	163	108	2613	75
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.97	0.97	0.97	0.93	0.93	0.93	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	115%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	52	329	82	85	302	124	114	3998	175	111	2694	77
Lane Group Flow (vph)	52	411	0	85	426	0	114	4173	0	111	2771	0
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phases	4	4		8	8		5	2		1	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	22.0	22.0		22.0	22.0		8.0	21.0		8.0	21.0	
Total Split (s)	26.0	26.0	0.0	26.0	26.0	0.0	19.0	105.0	0.0	19.0	105.0	0.0
Total Split (%)	17.3%	17.3%	0.0%	17.3%	17.3%	0.0%	12.7%	70.0%	0.0%	12.7%	70.0%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		0.0	1.0		0.0	1.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	Min	Min		Min	Min		Min	C-Max		Min	C-Max	
Act Effct Green (s)	22.0	22.0		22.0	22.0		116.2	105.6		115.8	105.4	
Actuated g/C Ratio	0.15	0.15		0.15	0.15		0.77	0.70		0.77	0.70	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.08	0.82		1.63	0.84		0.69	1.30		0.68	0.87	
Control Delay	212.7	73.9		394.8	72.5		39.6	155.1		45.9	10.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	1.7	
Total Delay	212.7	73.9		394.8	72.5		39.6	155.1		45.9	12.5	
LOS	F	E		F	E		D	F		D	B	
Approach Delay		89.5			126.1			152.0			13.8	
Approach LOS		F			F			F			B	
Queue Length 50th (ft)	~57	200		~120	199		73	~1911		71	206	
Queue Length 95th (ft)	#152	#277		#237	#282		m47	m#1276		m77	468	
Internal Link Dist (ft)		531			1385			2820			620	
Turn Bay Length (ft)	165			116			280			60		
Base Capacity (vph)	48	499		52	507		212	3198		212	3197	
Starvation Cap Reductn	0	0		0	0		0	0		0	261	
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	1.08	0.82		1.63	0.84		0.54	1.30		0.52	0.94	

Intersection Summary

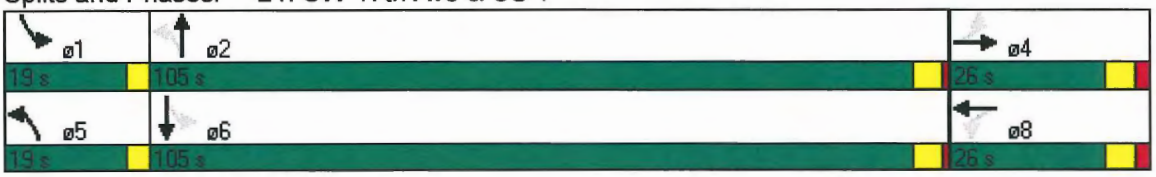
Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 29 (19%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.63
Intersection Signal Delay: 97.9 Intersection LOS: F
Intersection Capacity Utilization 110.3% ICU Level of Service H
Analysis Period (min) 15

~ 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.

Splits and Phases: 21: SW 17th Ave & US 1



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	10	10	10
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	170			0
Storage Lanes	1	1	1			0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	0	0	
Trailing Detector (ft)	0	0	0	0	0	
Turning Speed (mph)	15	9	15			9
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91
Ped Bike Factor						
Frt		0.850			0.997	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1703	1524	1646	4567	4553	0
Flt Permitted	0.950		0.034			
Satd. Flow (perm)	1703	1524	59	4567	4553	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		92			5	
Headway Factor	1.00	1.00	1.04	1.09	1.09	1.09
Link Speed (mph)	30			40	37	
Link Distance (ft)	525			700	3993	
Travel Time (s)	11.9			11.9	73.6	
Volume (vph)	176	120	94	3308	2676	60
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.88	0.88	0.95	0.95	0.94	0.94
Growth Factor	110%	100%	100%	115%	115%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	220	136	99	4004	3274	64
Lane Group Flow (vph)	220	136	99	4004	3338	0
Turn Type		custom	pm+pt			
Protected Phases	7		5	2	6	
Permitted Phases		4	2			
Detector Phases	7	4	5	2	6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	9.0	21.0	8.0	22.0	22.0	
Total Split (s)	20.0	20.0	13.0	130.0	117.0	0.0
Total Split (%)	13.3%	13.3%	8.7%	86.7%	78.0%	0.0%
Yellow Time (s)	4.0	4.0	3.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	0.0	2.0	2.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	Min	Min	Min	C-Max	C-Max	
Act Effct Green (s)	16.0	16.0	126.0	126.0	114.1	
Actuated g/C Ratio	0.11	0.11	0.84	0.84	0.76	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	1.21	0.56	0.74	1.04	0.96	
Control Delay	188.0	32.1	47.1	33.4	25.6	
Queue Delay	0.0	0.0	0.0	21.4	2.2	
Total Delay	188.0	32.1	47.1	54.8	27.9	
LOS	F	C	D	D	C	
Approach Delay	128.5			54.6	27.9	
Approach LOS	F			D	C	
Queue Length 50th (ft)	~262	40	60	~378	986	
Queue Length 95th (ft)	#422	108	m38	m48	1087	
Internal Link Dist (ft)	445			620	3913	
Turn Bay Length (ft)			170			
Base Capacity (vph)	182	245	145	3836	3464	
Starvation Cap Reductn	0	0	0	177	0	
Spillback Cap Reductn	0	1	0	0	74	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	1.21	0.56	0.68	1.09	0.98	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 28 (19%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.21
Intersection Signal Delay: 46.5 Intersection LOS: D
Intersection Capacity Utilization 90.9% ICU Level of Service E
Analysis Period (min) 15

~ 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.

Splits and Phases: 24: SW 16th Ave & US 1

Arterial Level of Service: NB US 1

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Douglas Rd	II	40	30.9	34.9	65.8	0.30	16.6	E
Bird Rd	II	40	29.2	300.0	329.2	0.27	2.9	F
SW 32nd Ave	II	30	40.9	56.7	97.6	0.32	11.9	F
SW 27th Ave	II	40	49.0	109.7	158.7	0.54	12.4	F
SW 22nd Ave	II	37	51.6	193.7	245.3	0.54	7.9	F
SW 17th Ave	II	30	65.9	166.9	232.8	0.55	8.5	F
SW 16th Ave	II	40	15.2	69.6	84.8	0.13	5.6	F
Total	II		282.7	931.5	1214.2	2.65	7.9	F

Arterial Level of Service: SB US 1

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SW 16th Ave	II	37	73.6	52.7	126.3	0.76	21.6	D
SW 17th Ave	II	40	15.2	17.0	32.2	0.13	14.8	E
SW 22nd Ave	II	30	65.9	21.2	87.1	0.55	22.7	C
SW 27th Ave	II	37	51.6	9.6	61.2	0.54	31.5	B
SW 32nd Ave	II	40	49.0	3.2	52.2	0.54	37.6	A
Bird Rd	II	30	40.9	254.5	295.4	0.32	3.9	F
Douglas Rd	II	40	29.2	30.7	59.9	0.27	15.9	E
Total	II		325.4	388.9	714.3	3.10	15.6	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	170		170	200		0	170		0	92		0
Storage Lanes	1		1	1		0	1		0	1		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
Leading Detector (ft)	50	50	50	50	50		50	0		50	0	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor												
Frt			0.850		0.963			0.999			0.996	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	1792	1524	1703	3280	0	1646	4563	0	1646	4549	0
Flt Permitted	0.195			0.111			0.032			0.033		
Satd. Flow (perm)	350	1792	1524	199	3280	0	55	4563	0	57	4549	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			67		2			1			5	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		735			672			1600			1400	
Travel Time (s)		16.7			15.3			27.3			23.9	
Volume (vph)	50	410	140	50	330	110	150	3030	20	11	2720	80
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.87	0.87	0.87	0.98	0.98	0.98	0.89	0.89	0.89
Growth Factor	100%	100%	100%	100%	100%	100%	100%	110%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	55	451	154	57	379	126	153	3401	20	12	3056	90
Lane Group Flow (vph)	55	451	154	57	505	0	153	3421	0	12	3146	0
Turn Type	Perm		Perm	Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8			2			6		
Detector Phases	4	4	4	8	8		5	2		6	6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0		8.0	21.0		21.0	21.0	
Total Split (s)	40.0	40.0	40.0	40.0	40.0	0.0	16.0	140.0	0.0	124.0	124.0	0.0
Total Split (%)	22.2%	22.2%	22.2%	22.2%	22.2%	0.0%	8.9%	77.8%	0.0%	68.9%	68.9%	0.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0	1.0		1.0	1.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Recall Mode	Min	Min	Min	Min	Min		C-Min	Max		Max	Max	
Act Effct Green (s)	36.0	36.0	36.0	36.0	36.0		136.0	136.0		120.0	120.0	
Actuated g/C Ratio	0.20	0.20	0.20	0.20	0.20		0.76	0.76		0.67	0.67	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.79	1.26	0.43	1.43	0.77		1.03	0.99		0.32	1.04	
Control Delay	127.0	192.5	39.1	337.4	76.6		133.8	34.9		4.4	30.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	127.0	192.5	39.1	337.4	76.6		133.8	34.9		4.4	30.7	
LOS	F	F	D	F	E		F	C		A	C	
Approach Delay		151.2			103.0			39.1			30.6	
Approach LOS		F			F			D			C	
Queue Length 50th (ft)	63	~665	90	~91	300		~146	1323		1	~1486	
Queue Length 95th (ft)	#157	#897	169	#191	356		#312	#1430		m1	m58	
Internal Link Dist (ft)		655			592			1520			1320	
Turn Bay Length (ft)	170		170	200			170			92		
Base Capacity (vph)	70	358	358	40	658		148	3448		38	3034	
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	0.79	1.26	0.43	1.43	0.77		1.03	0.99		0.32	1.04	

Intersection Summary

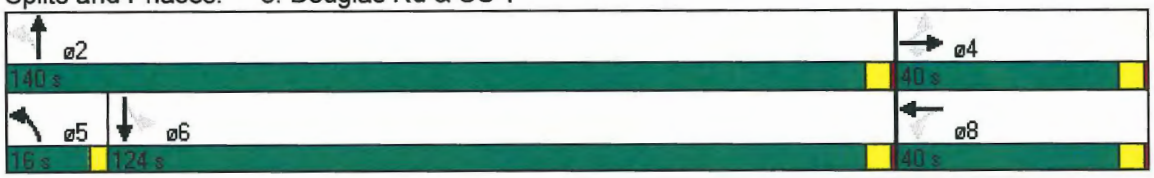
Area Type: Other
Cycle Length: 180
Actuated Cycle Length: 180
Offset: 138 (77%), Referenced to phase 5:NBL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.43
Intersection Signal Delay: 49.6 Intersection LOS: D
Intersection Capacity Utilization 106.4% ICU Level of Service G
Analysis Period (min) 15

~ 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.

Splits and Phases: 3: Douglas Rd & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	350		0	0		90	0		0
Storage Lanes	2		0	1		0	0		1	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
Leading Detector (ft)	50	50		50	50			0	0		0	
Trailing Detector (ft)	0	0		0	0			0	0		0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.91	0.91	1.00	1.00	0.95	0.95	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor												
Frt		0.994			0.985				0.850		0.980	
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3099	1621	0	1703	3355	0	0	4567	1422	0	4476	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3099	1621	0	1703	3355	0	0	4567	1422	0	4476	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			5				22		22	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			30	
Link Distance (ft)		833			777			1400			1700	
Travel Time (s)		18.9			17.7			23.9			38.6	
Volume (vph)	520	1270	50	175	450	50	0	2940	150	0	2560	390
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.97	0.97	0.97	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	110%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	571	1396	55	180	464	52	0	3477	161	0	2753	419
Lane Group Flow (vph)	571	1451	0	180	516	0	0	3477	161	0	3172	0
Turn Type	Split			Split					Perm			
Protected Phases	4	4		8	8			2			6	
Permitted Phases									2			
Detector Phases	4	4		8	8			2	2		6	
Minimum Initial (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Minimum Split (s)	22.0	22.0		22.0	22.0			21.0	21.0		21.0	
Total Split (s)	70.0	70.0	0.0	20.0	20.0	0.0	0.0	90.0	90.0	0.0	90.0	0.0
Total Split (%)	38.9%	38.9%	0.0%	11.1%	11.1%	0.0%	0.0%	50.0%	50.0%	0.0%	50.0%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0			1.0	1.0		1.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Min	Min		Min	Min			C-Max	C-Max		C-Max	
Act Effct Green (s)	66.0	66.0		16.0	16.0			86.0	86.0		86.0	
Actuated g/C Ratio	0.37	0.37		0.09	0.09			0.48	0.48		0.48	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.50	2.44		1.19	1.70			1.59	0.23		1.48	
Control Delay	46.2	676.6		198.6	372.5			300.0	28.1		254.5	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	46.2	676.6		198.6	372.5			300.0	28.1		254.5	
LOS	D	F		F	F			F	C		F	
Approach Delay		498.5			327.5			288.0			254.5	
Approach LOS		F			F			F			F	
Queue Length 50th (ft)	288	~3124		~255	~469			~2139	91		~1896	
Queue Length 95th (ft)	353	#3415		#429	#598			m#2165	m94		m#1948	
Internal Link Dist (ft)		753			697			1320			1620	
Turn Bay Length (ft)				350					90			
Base Capacity (vph)	1136	595		151	303			2182	691		2150	
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	0.50	2.44		1.19	1.70			1.59	0.23		1.48	

Intersection Summary

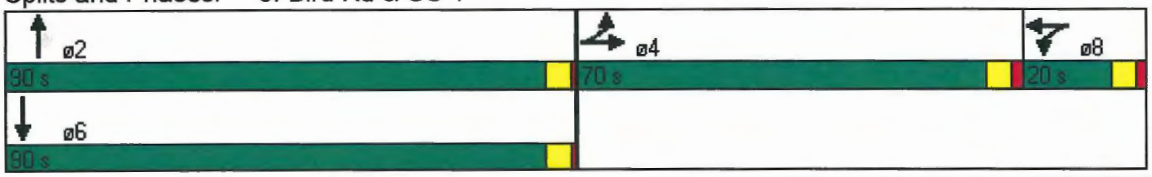
Area Type: Other
Cycle Length: 180
Actuated Cycle Length: 180
Offset: 142 (79%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.44
Intersection Signal Delay: 324.4 Intersection LOS: F
Intersection Capacity Utilization 153.7% ICU Level of Service H
Analysis Period (min) 15

~ 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.

Splits and Phases: 6: Bird Rd & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	90		0	70		0	85		0
Storage Lanes	1		0	1		0	1		0	1		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
Leading Detector (ft)	50	50		50	50		50	0		50	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor												
Frt		0.950			0.952			0.999			0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3235	0	1703	3242	0	1646	4563	0	1646	4563	0
Flt Permitted	0.369			0.190			0.030			0.030		
Satd. Flow (perm)	661	3235	0	341	3242	0	52	4563	0	52	4563	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		39			24			2			2	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			30			40	
Link Distance (ft)		770			1211			1700			2875	
Travel Time (s)		17.5			27.5			38.6			49.0	
Volume (vph)	80	280	140	30	150	70	60	3390	30	60	2860	20
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.91	0.91	0.91	0.96	0.96	0.96	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	110%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	87	304	152	33	165	77	62	3884	31	62	2948	21
Lane Group Flow (vph)	87	456	0	33	242	0	62	3915	0	62	2969	0
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phases	4	4		8	8		5	2		1	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		8.5	21.0		8.0	21.0	
Total Split (s)	25.0	25.0	0.0	25.0	25.0	0.0	14.7	147.0	0.0	8.0	140.3	0.0
Total Split (%)	13.9%	13.9%	0.0%	13.9%	13.9%	0.0%	8.2%	81.7%	0.0%	4.4%	77.9%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		0.0	1.0		0.0	1.0	
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	Min	Min		Min	Min		Min	C-Max		Min	C-Max	
Act Effct Green (s)	21.0	21.0		21.0	21.0		143.0	143.0		140.0	140.0	
Actuated g/C Ratio	0.12	0.12		0.12	0.12		0.79	0.79		0.78	0.78	

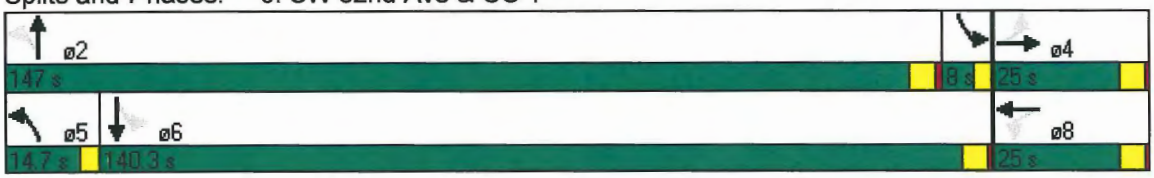
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.13	1.11		0.82	0.61		0.60	1.08		0.82	0.84	
Control Delay	207.7	139.6		170.5	74.9		58.2	56.7		56.9	3.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	207.7	139.6		170.5	74.9		58.2	56.7		56.9	3.2	
LOS	F	F		F	E		E	E		E	A	
Approach Delay		150.5			86.4			56.7			4.3	
Approach LOS		F			F			E			A	
Queue Length 50th (ft)	~118	~300		39	131		32	~1919		27	90	
Queue Length 95th (ft)	#248	#424		#118	183		m17	m34		m32	m138	
Internal Link Dist (ft)		690			1131			1620			2795	
Turn Bay Length (ft)	300			90			70			85		
Base Capacity (vph)	77	412		40	399		136	3625		76	3550	
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	1.13	1.11		0.82	0.61		0.46	1.08		0.82	0.84	

Intersection Summary

Area Type: Other
Cycle Length: 180
Actuated Cycle Length: 180
Offset: 12 (7%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.13
Intersection Signal Delay: 44.0 Intersection LOS: D
Intersection Capacity Utilization 98.3% ICU Level of Service F
Analysis Period (min) 15

~ 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.

Splits and Phases: 9: SW 32nd Ave & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	170		200	80		100	545		0	245		0
Storage Lanes	1		1	1		1	1		0	1		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
Leading Detector (ft)	50	50	50	50	50	50	50	0		50	0	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor												
Frt			0.850			0.850		0.999			0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3406	1524	1703	3406	1524	1646	4563	0	1646	4563	0
Flt Permitted	0.383			0.163			0.035			0.035		
Satd. Flow (perm)	687	3406	1524	292	3406	1524	61	4563	0	61	4563	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			179			49		2			1	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		798			1372			2875			1425	
Travel Time (s)		18.1			31.2			49.0			24.3	
Volume (vph)	70	360	220	50	230	230	220	3540	30	120	2800	20
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.97	0.97	0.97	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	110%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	80	409	250	57	261	261	227	4014	31	125	2917	21
Lane Group Flow (vph)	80	409	250	57	261	261	227	4045	0	125	2938	0
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phases	4	4	4	8	8	8	5	2		1	6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	21.0	8.0	22.0		8.0	22.0	
Total Split (s)	29.0	29.0	29.0	29.0	29.0	29.0	25.0	139.0	0.0	12.0	126.0	0.0
Total Split (%)	16.1%	16.1%	16.1%	16.1%	16.1%	16.1%	13.9%	77.2%	0.0%	6.7%	70.0%	0.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	0.0	2.0		0.0	2.0	
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	
Act Effct Green (s)	25.0	25.0	25.0	25.0	25.0	25.0	135.0	135.0		122.0	122.0	
Actuated g/C Ratio	0.14	0.14	0.14	0.14	0.14	0.14	0.75	0.75		0.68	0.68	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.84	0.86	0.68	1.39	0.55	1.03	0.98	1.18		1.12	0.95	
Control Delay	130.3	94.1	31.9	326.0	77.2	122.4	64.4	109.7		128.8	9.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	130.3	94.1	31.9	326.0	77.2	122.4	64.4	109.7		128.8	9.6	
LOS	F	F	C	F	E	F	E	F		F	A	
Approach Delay		77.0			122.1			107.3			14.5	
Approach LOS		E			F			F			B	
Queue Length 50th (ft)	94	253	79	~90	153	~275	221	~2087		~123	100	
Queue Length 95th (ft)	#196	#327	178	#192	201	#456	m204	m#1834		m#155	570	
Internal Link Dist (ft)		718			1292			2795			1345	
Turn Bay Length (ft)	170		200	80		100	545			245		
Base Capacity (vph)	95	473	366	41	473	254	231	3423		112	3093	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.84	0.86	0.68	1.39	0.55	1.03	0.98	1.18		1.12	0.95	

Intersection Summary

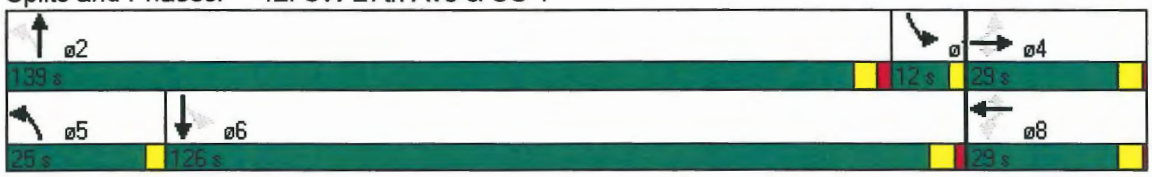
Area Type: Other
Cycle Length: 180
Actuated Cycle Length: 180
Offset: 162 (90%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.39
Intersection Signal Delay: 72.8 Intersection LOS: E
Intersection Capacity Utilization 109.2% ICU Level of Service H
Analysis Period (min) 15

~ 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.

Splits and Phases: 12: SW 27th Ave & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	160		200	116		120	165		0	50		0
Storage Lanes	1		1	1		1	1		0	1		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
Leading Detector (ft)	50	50	50	50	50	50	50	0		50	0	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor												
Frt			0.850			0.850		0.999			0.997	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3406	1524	1703	1792	1524	1646	4563	0	1646	4553	0
Flt Permitted	0.276			0.402			0.034			0.034		
Satd. Flow (perm)	495	3406	1524	721	1792	1524	59	4563	0	59	4553	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			116			75		1			3	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			35			30	
Link Distance (ft)		700			1260			1400			2900	
Travel Time (s)		15.9			28.6			27.3			65.9	
Volume (vph)	90	240	190	50	160	150	160	3720	30	70	2780	50
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.82	0.82	0.82	0.96	0.96	0.96	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	120%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	96	255	202	61	195	183	167	4650	31	74	2926	53
Lane Group Flow (vph)	96	255	202	61	195	183	167	4681	0	74	2979	0
Turn Type	Perm		Perm	Perm		Over	pm+pt			pm+pt		
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phases	4	4	4	8	8	1	5	2		1	6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	22.0	22.0	22.0	23.0	23.0	8.0	8.0	22.0		8.0	22.0	
Total Split (s)	30.0	30.0	30.0	30.0	30.0	12.0	20.0	138.0	0.0	12.0	130.0	0.0
Total Split (%)	16.7%	16.7%	16.7%	16.7%	16.7%	6.7%	11.1%	76.7%	0.0%	6.7%	72.2%	0.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.0	0.0	2.0		0.0	2.0	
Lead/Lag						Lead	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?						Yes	Yes	Yes		Yes	Yes	
Recall Mode	Min	Min	Min	Min	Min	Min	Min	C-Max		Min	C-Max	
Act Effct Green (s)	26.0	26.0	26.0	26.0	26.0	8.0	134.0	134.0		126.0	126.0	
Actuated g/C Ratio	0.14	0.14	0.14	0.14	0.14	0.04	0.74	0.74		0.70	0.70	

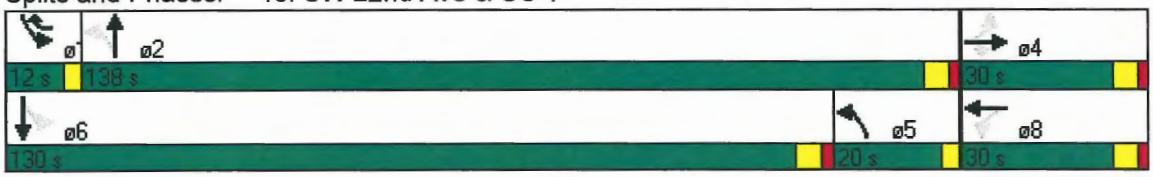
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.33	0.52	0.63	0.59	0.75	1.32	0.90	1.38		0.66	0.93	
Control Delay	272.0	75.4	40.0	95.5	92.4	217.1	69.9	193.7		42.9	21.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	272.0	75.4	40.0	95.5	92.4	217.1	69.9	193.7		42.9	21.2	
LOS	F	E	D	F	F	F	E	F		D	C	
Approach Delay		96.6			144.8			189.5			21.7	
Approach LOS		F			F			F			C	
Queue Length 50th (ft)	~147	148	96	69	225	~189	148	~2673		36	1298	
Queue Length 95th (ft)	#282	201	195	115	290	#310	m130	m#2127		m36	m1288	
Internal Link Dist (ft)		620			1180			1320			2820	
Turn Bay Length (ft)	160		200	116		120	165			50		
Base Capacity (vph)	72	492	319	104	259	139	185	3397		112	3188	
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	1.33	0.52	0.63	0.59	0.75	1.32	0.90	1.38		0.66	0.93	

Intersection Summary

Area Type: Other
Cycle Length: 180
Actuated Cycle Length: 180
Offset: 126 (70%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.38
Intersection Signal Delay: 123.9 Intersection LOS: F
Intersection Capacity Utilization 117.5% ICU Level of Service H
Analysis Period (min) 15

~ 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.

Splits and Phases: 18: SW 22nd Ave & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	165		0	116		0	280		0	60		0
Storage Lanes	1		0	1		0	1		0	1		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
Leading Detector (ft)	50	50		50	50		50	0		50	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor												
Frt		0.967			0.954			0.994			0.996	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3293	0	1703	3249	0	1646	4540	0	1646	4549	0
Flt Permitted	0.194			0.221			0.032			0.033		
Satd. Flow (perm)	348	3293	0	396	3249	0	55	4540	0	57	4549	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18						10			5	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			30			40	
Link Distance (ft)		611			1465			2900			700	
Travel Time (s)		13.9			33.3			65.9			11.9	
Volume (vph)	80	350	100	130	340	150	110	3740	170	11	2900	80
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.97	0.97	0.97	0.93	0.93	0.93	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	110%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	85	372	106	134	351	155	118	4424	183	11	2990	82
Lane Group Flow (vph)	85	478	0	134	506	0	118	4607	0	11	3072	0
Turn Type	Perm			Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Detector Phases	4	4		8	8		5	2		6	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	22.0	22.0		22.0	22.0		8.0	21.0		21.0	21.0	
Total Split (s)	40.0	40.0	0.0	40.0	40.0	0.0	14.0	140.0	0.0	126.0	126.0	0.0
Total Split (%)	22.2%	22.2%	0.0%	22.2%	22.2%	0.0%	7.8%	77.8%	0.0%	70.0%	70.0%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		0.0	1.0		1.0	1.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Recall Mode	Min	Min		Min	Min		Min	C-Max		C-Max	C-Max	
Act Effct Green (s)	36.0	36.0		36.0	36.0		136.0	136.0		122.2	122.2	
Actuated g/C Ratio	0.20	0.20		0.20	0.20		0.76	0.76		0.68	0.68	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.21	0.71		1.70	0.78		0.92	1.34		0.28	0.99	
Control Delay	232.0	71.2		400.7	77.6		71.8	166.9		9.8	17.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	33.4	
Total Delay	232.0	71.2		400.7	77.6		71.8	166.9		9.8	50.4	
LOS	F	E		F	E		E	F		A	D	
Approach Delay		95.4			145.2			164.5			50.3	
Approach LOS		F			F			F			D	
Queue Length 50th (ft)	~123	271		~231	302		91	~2586		2	853	
Queue Length 95th (ft)	#252	340		#385	374		m54	m62		m2	m646	
Internal Link Dist (ft)		531			1385			2820			620	
Turn Bay Length (ft)	165			116			280			60		
Base Capacity (vph)	70	673		79	650		130	3433		39	3091	
Starvation Cap Reductn	0	0		0	0		0	0		0	262	
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	1.21	0.71		1.70	0.78		0.91	1.34		0.28	1.09	

Intersection Summary

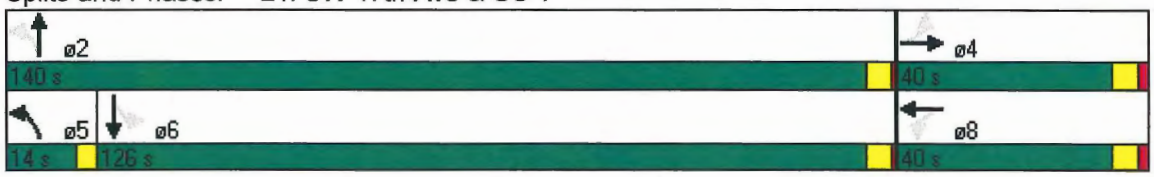
Area Type: Other
Cycle Length: 180
Actuated Cycle Length: 180
Offset: 24 (13%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.70
Intersection Signal Delay: 119.7 Intersection LOS: F
Intersection Capacity Utilization 120.0% ICU Level of Service H
Analysis Period (min) 15

~ 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.

Splits and Phases: 21: SW 17th Ave & US 1



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	10	10	10
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	170			0
Storage Lanes	1	1	1			0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	0	0	
Trailing Detector (ft)	0	0	0	0	0	
Turning Speed (mph)	15	9	15			9
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91
Ped Bike Factor						
Frt		0.850			0.997	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1703	1524	1646	4567	4553	0
Flt Permitted	0.950		0.029			
Satd. Flow (perm)	1703	1524	50	4567	4553	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		92			5	
Headway Factor	1.00	1.00	1.04	1.09	1.09	1.09
Link Speed (mph)	30			40	37	
Link Distance (ft)	525			700	3993	
Travel Time (s)	11.9			11.9	73.6	
Volume (vph)	200	130	120	3710	2870	70
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.88	0.88	0.95	0.95	0.94	0.94
Growth Factor	110%	100%	100%	110%	115%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	250	148	126	4296	3511	74
Lane Group Flow (vph)	250	148	126	4296	3585	0
Turn Type		custom	pm+pt			
Protected Phases	7		5	2	6	
Permitted Phases		4	2			
Detector Phases	7	4	5	2	6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	9.0	21.0	8.0	22.0	22.0	
Total Split (s)	26.0	26.0	15.0	154.0	139.0	0.0
Total Split (%)	14.4%	14.4%	8.3%	85.6%	77.2%	0.0%
Yellow Time (s)	4.0	4.0	3.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	0.0	2.0	2.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	Min	Min	Min	C-Max	C-Max	
Act Effct Green (s)	22.0	22.0	150.0	150.0	135.2	
Actuated g/C Ratio	0.12	0.12	0.83	0.83	0.75	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	1.20	0.55	0.92	1.13	1.05	
Control Delay	189.7	37.5	70.4	69.6	52.7	
Queue Delay	0.0	0.2	0.0	40.6	37.5	
Total Delay	189.7	37.7	70.4	110.2	90.2	
LOS	F	D	E	F	F	
Approach Delay	133.2			109.1	90.2	
Approach LOS	F			F	F	
Queue Length 50th (ft)	~357	61	110	~2136	~1682	
Queue Length 95th (ft)	#533	139	m73	m121	#1716	
Internal Link Dist (ft)	445			620	3913	
Turn Bay Length (ft)			170			
Base Capacity (vph)	208	267	139	3806	3421	
Starvation Cap Reductn	0	0	0	284	0	
Spillback Cap Reductn	0	5	0	0	262	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	1.20	0.56	0.91	1.22	1.13	

Intersection Summary

Area Type: Other
Cycle Length: 180
Actuated Cycle Length: 180
Offset: 16 (9%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.20
Intersection Signal Delay: 102.2 Intersection LOS: F
Intersection Capacity Utilization 97.7% ICU Level of Service F
Analysis Period (min) 15

~ 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.

Splits and Phases: 24: SW 16th Ave & US 1

Arterial Level of Service: NB US 1

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Douglas Rd	II	40	30.9	81.6	112.5	0.30	9.7	F
Bird Rd	II	40	29.2	305.9	335.1	0.27	2.8	F
SW 32nd Ave	II	30	40.9	8.1	49.0	0.32	23.7	C
SW 27th Ave	II	40	49.0	11.3	60.3	0.54	32.5	B
SW 22nd Ave	II	37	51.6	44.7	96.3	0.54	20.0	D
SW 17th Ave	II	30	65.9	28.5	94.4	0.55	20.9	D
SW 16th Ave	II	40	15.2	6.7	21.9	0.13	21.8	D
Total	II		282.7	486.8	769.5	2.65	12.4	F

Arterial Level of Service: SB US 1

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SW 16th Ave	II	37	73.6	34.9	108.5	0.76	25.1	C
SW 17th Ave	II	40	15.2	3.2	18.4	0.13	25.9	C
SW 22nd Ave	II	30	65.9	7.1	73.0	0.55	27.1	C
SW 27th Ave	II	37	51.6	12.3	63.9	0.54	30.1	B
SW 32nd Ave	II	40	49.0	25.2	74.2	0.54	26.4	C
Bird Rd	II	30	40.9	256.8	297.7	0.32	3.9	F
Douglas Rd	II	40	29.2	53.4	82.6	0.27	11.6	F
Total	II		325.4	392.9	718.3	3.10	15.6	E

Alternative #2 2030 AM
3: Douglas Rd & US 1

5/30/2007

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	170		170	200		0	170		0	0		0
Storage Lanes	1		1	1		0	1		0	1		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
Leading Detector (ft)	50	50	50	50	50		50	0		50	0	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor												
Frt			0.850		0.963			0.999			0.996	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	1792	1524	1703	3280	0	1646	4563	0	1646	4549	0
Flt Permitted	0.221			0.138			0.048			0.048		
Satd. Flow (perm)	396	1792	1524	247	3280	0	83	4563	0	83	4549	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			86		29			1			6	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		735			672			1600			1400	
Travel Time (s)		16.7			15.3			27.3			23.9	
Volume (vph)	50	410	140	50	330	110	150	3030	20	110	2720	80
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.87	0.87	0.87	0.98	0.98	0.98	0.89	0.89	0.89
Growth Factor	100%	100%	100%	100%	100%	100%	100%	110%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	55	451	154	57	379	126	153	3401	20	124	3056	90
Lane Group Flow (vph)	55	451	154	57	505	0	153	3421	0	124	3146	0
Turn Type	Perm		Perm	Perm			pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phases	4	4	4	8	8		5	2		1	6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0		8.0	21.0		8.0	21.0	
Total Split (s)	33.0	33.0	33.0	33.0	33.0	0.0	15.0	98.0	0.0	9.0	92.0	0.0
Total Split (%)	23.6%	23.6%	23.6%	23.6%	23.6%	0.0%	10.7%	70.0%	0.0%	6.4%	65.7%	0.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	4.0		3.5	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0	1.0		0.5	1.0	
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	Min	Min	Min	Min	Min		C-Min	Max		None	Max	
Act Effct Green (s)	29.0	29.0	29.0	29.0	29.0		94.0	94.0		88.5	88.5	
Actuated g/C Ratio	0.21	0.21	0.21	0.21	0.21		0.67	0.67		0.63	0.63	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.67	1.22	0.40	1.12	0.72		0.88	1.12		1.15	1.09	
Control Delay	89.4	165.4	24.9	212.5	55.3		77.6	81.6		104.6	53.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	89.4	165.4	24.9	212.5	55.3		77.6	81.6		104.6	53.4	
LOS	F	F	C	F	E		E	F		F	D	
Approach Delay		126.3			71.2			81.4			55.4	
Approach LOS		F			E			F			E	
Queue Length 50th (ft)	47	~502	52	~59	215		91	~1310		~92	~1216	
Queue Length 95th (ft)	#121	#717	121	#148	268		#220	#1379		m47	m68	
Internal Link Dist (ft)		655			592			1520			1320	
Turn Bay Length (ft)	170		170	200			170					
Base Capacity (vph)	82	371	384	51	702		179	3064		108	2879	
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	0.67	1.22	0.40	1.12	0.72		0.85	1.12		1.15	1.09	

Intersection Summary

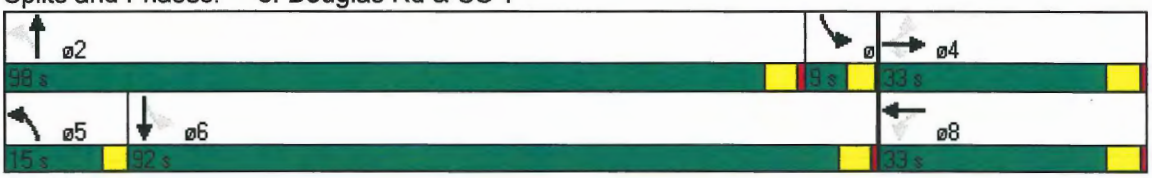
Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 55 (39%), Referenced to phase 5:NBL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.22
Intersection Signal Delay: 73.8 Intersection LOS: E
Intersection Capacity Utilization 109.2% ICU Level of Service H
Analysis Period (min) 15

~ 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.

Splits and Phases: 3: Douglas Rd & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	350		0	0		90	0		0
Storage Lanes	2		0	1		0	0		1	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
Leading Detector (ft)	50	50		50	50			50	50		50	
Trailing Detector (ft)	0	0		0	0			0	0		0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.91	0.91	1.00	1.00	0.95	0.95	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor												
Frt		0.994			0.985				0.850		0.980	
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3099	1621	0	1703	3355	0	0	4567	1422	0	4476	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3099	1621	0	1703	3355	0	0	4567	1422	0	4476	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			7				28		27	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			30	
Link Distance (ft)		833			777			1400			1700	
Travel Time (s)		18.9			17.7			23.9			38.6	
Volume (vph)	520	1270	50	175	450	50	0	2940	150	0	2560	390
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.97	0.97	0.97	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	110%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	571	1396	55	180	464	52	0	3477	161	0	2753	419
Lane Group Flow (vph)	571	1451	0	180	516	0	0	3477	161	0	3172	0
Turn Type	Split			Split					Perm			
Protected Phases	4	4		8	8			2			6	
Permitted Phases									2			
Detector Phases	4	4		8	8			2	2		6	
Minimum Initial (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Minimum Split (s)	22.0	22.0		22.0	22.0			21.0	21.0		21.0	
Total Split (s)	48.0	48.0	0.0	22.0	22.0	0.0	0.0	70.0	70.0	0.0	70.0	0.0
Total Split (%)	34.3%	34.3%	0.0%	15.7%	15.7%	0.0%	0.0%	50.0%	50.0%	0.0%	50.0%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0			1.0	1.0		1.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Min	Min		Min	Min			C-Max	C-Max		C-Max	
Act Effct Green (s)	44.0	44.0		18.0	18.0			66.0	66.0		66.0	
Actuated g/C Ratio	0.31	0.31		0.13	0.13			0.47	0.47		0.47	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.59	2.85		0.82	1.18			1.61	0.24		1.49	
Control Delay	43.3	855.3		87.7	153.3			305.9	23.6		256.8	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	43.3	855.3		87.7	153.3			305.9	23.6		256.8	
LOS	D	F		F	F			F	C		F	
Approach Delay		626.0			136.3			293.4			256.8	
Approach LOS		F			F			F			F	
Queue Length 50th (ft)	240	~2510		162	~293			~1660	70		~1487	
Queue Length 95th (ft)	306	#2807		#290	#413			m#1428	m65		#1561	
Internal Link Dist (ft)		753			697			1320			1620	
Turn Bay Length (ft)				350					90			
Base Capacity (vph)	974	510		219	437			2153	685		2124	
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	0.59	2.85		0.82	1.18			1.61	0.24		1.49	

Intersection Summary

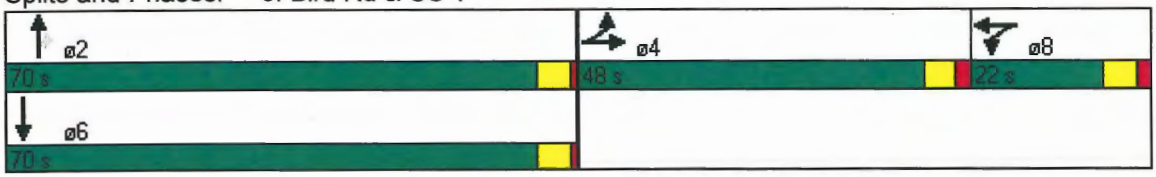
Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 56 (40%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.85
Intersection Signal Delay: 340.3 Intersection LOS: F
Intersection Capacity Utilization 153.7% ICU Level of Service H
Analysis Period (min) 15

~ 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.

Splits and Phases: 6: Bird Rd & US 1



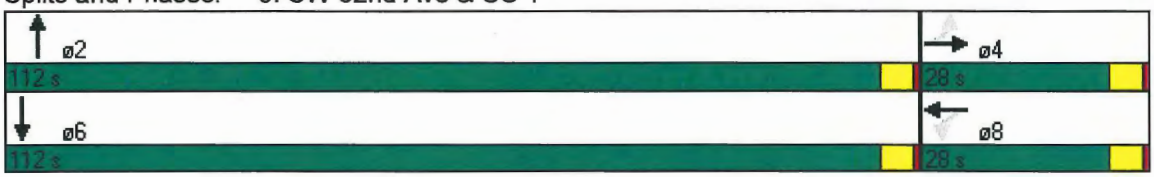
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	90		0	70		0	85		0
Storage Lanes	1		0	1		0	0		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
Leading Detector (ft)	50	50		50	50			0			0	
Trailing Detector (ft)	0	0		0	0			0			0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.86	0.86	1.00	0.91	0.91
Ped Bike Factor												
Frt		0.956			0.962			0.999			0.996	
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1703	3256	0	1703	3276	0	0	5749	0	0	4549	0
Flt Permitted	0.388			0.167								
Satd. Flow (perm)	695	3256	0	299	3276	0	0	5749	0	0	4549	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			1			3			9	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			30			40	
Link Distance (ft)		770			1211			1700			2875	
Travel Time (s)		17.5			27.5			38.6			49.0	
Volume (vph)	80	340	140	30	210	70	0	3390	30	0	2860	80
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.91	0.91	0.91	0.96	0.96	0.96	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	110%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	87	370	152	33	231	77	0	3884	31	0	2948	82
Lane Group Flow (vph)	87	522	0	33	308	0	0	3915	0	0	3030	0
Turn Type	Perm			Perm								
Protected Phases		4			8			2			6	
Permitted Phases	4			8								
Detector Phases	4	4		8	8			2			6	
Minimum Initial (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Minimum Split (s)	21.0	21.0		21.0	21.0			21.0			21.0	
Total Split (s)	28.0	28.0	0.0	28.0	28.0	0.0	0.0	112.0	0.0	0.0	112.0	0.0
Total Split (%)	20.0%	20.0%	0.0%	20.0%	20.0%	0.0%	0.0%	80.0%	0.0%	0.0%	80.0%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0			1.0			1.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Min	Min		Min	Min			C-Max			C-Max	
Act Effct Green (s)	24.0	24.0		24.0	24.0			108.0			108.0	
Actuated g/C Ratio	0.17	0.17		0.17	0.17			0.77			0.77	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.73	0.93		0.65	0.55			0.88			0.86	
Control Delay	88.5	80.5		105.8	57.1			8.1			25.2	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	88.5	80.5		105.8	57.1			8.1			25.2	
LOS	F	F		F	E			A			C	
Approach Delay		81.6			61.8			8.1			25.2	
Approach LOS		F			E			A			C	
Queue Length 50th (ft)	76	247		28	136			239			968	
Queue Length 95th (ft)	#169	#357		#90	187			m10			1014	
Internal Link Dist (ft)		690			1131			1620			2795	
Turn Bay Length (ft)	300			90								
Base Capacity (vph)	119	562		51	562			4437			3512	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.73	0.93		0.65	0.55			0.88			0.86	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 93 (66%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.93
Intersection Signal Delay: 22.7 Intersection LOS: C
Intersection Capacity Utilization 84.2% ICU Level of Service E
Analysis Period (min) 15
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.

Splits and Phases: 9: SW 32nd Ave & US 1



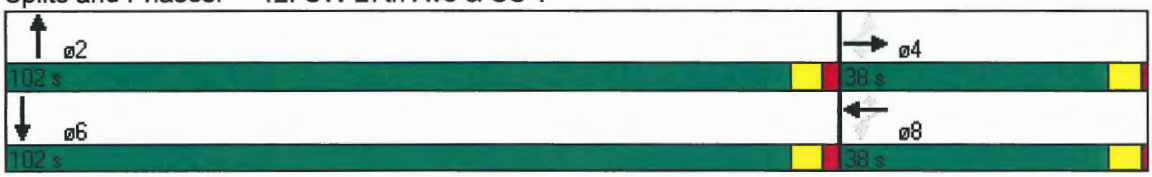
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	170		200	80		100	545		0	245		0
Storage Lanes	1		1	1		1	0		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
Leading Detector (ft)	50	50	50	50	50	50		0			0	
Trailing Detector (ft)	0	0	0	0	0	0		0			0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.86	0.86	1.00	0.91	0.91
Ped Bike Factor												
Frt			0.850			0.850		0.999			0.999	
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1703	3406	1524	1703	3406	1524	0	5749	0	0	4563	0
Flt Permitted	0.264			0.236								
Satd. Flow (perm)	473	3406	1524	423	3406	1524	0	5749	0	0	4563	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			3					2			2	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		798			1372			2875			1425	
Travel Time (s)		18.1			31.2			49.0			24.3	
Volume (vph)	70	480	220	50	450	230	0	3540	30	0	2800	20
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.97	0.97	0.97	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	110%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	80	545	250	57	511	261	0	4014	31	0	2917	21
Lane Group Flow (vph)	80	545	250	57	511	261	0	4045	0	0	2938	0
Turn Type	Perm		Perm	Perm		Perm						
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8						
Detector Phases	4	4	4	8	8	8		2			6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0			4.0	
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	21.0		22.0			22.0	
Total Split (s)	38.0	38.0	38.0	38.0	38.0	38.0	0.0	102.0	0.0	0.0	102.0	0.0
Total Split (%)	27.1%	27.1%	27.1%	27.1%	27.1%	27.1%	0.0%	72.9%	0.0%	0.0%	72.9%	0.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0			4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0		2.0			2.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None		C-Max			C-Max	
Act Effct Green (s)	29.8	29.8	29.8	29.8	29.8	29.8		102.2			102.2	
Actuated g/C Ratio	0.21	0.21	0.21	0.21	0.21	0.21		0.73			0.73	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.79	0.75	0.77	0.63	0.71	0.81		0.96			0.88	
Control Delay	98.4	58.3	66.5	79.8	56.3	71.0		11.3			12.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Total Delay	98.4	58.3	66.5	79.8	56.3	71.0		11.3			12.3	
LOS	F	E	E	E	E	E		B			B	
Approach Delay		64.3			62.6			11.3			12.3	
Approach LOS		E			E			B			B	
Queue Length 50th (ft)	68	240	207	46	222	221		1134			819	
Queue Length 95th (ft)	#148	294	297	#103	275	313		#1147			763	
Internal Link Dist (ft)		718			1292			2795			1345	
Turn Bay Length (ft)	170		200	80		100						
Base Capacity (vph)	115	827	372	103	827	370		4199			3333	
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	0.70	0.66	0.67	0.55	0.62	0.71		0.96			0.88	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 7 (5%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.96
Intersection Signal Delay: 21.9 Intersection LOS: C
Intersection Capacity Utilization 85.0% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 12: SW 27th Ave & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	160		200	116		120	165		0	50		0
Storage Lanes	1		1	1		1	0		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
Leading Detector (ft)	50	50	50	50	50	50		0			0	
Trailing Detector (ft)	0	0	0	0	0	0		0			0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.86	0.86	1.00	0.91	0.91
Ped Bike Factor												
Frt			0.850			0.850		0.999			0.994	
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1703	3406	1524	1703	1792	1524	0	5749	0	0	4540	0
Flt Permitted	0.190			0.250								
Satd. Flow (perm)	341	3406	1524	448	1792	1524	0	5749	0	0	4540	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			7					3			16	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			35			30	
Link Distance (ft)		700			1260			1400			2900	
Travel Time (s)		15.9			28.6			27.3			65.9	
Volume (vph)	90	360	190	50	320	150	0	3720	30	0	2780	120
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.82	0.82	0.82	0.96	0.96	0.96	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	120%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	96	383	202	61	390	183	0	4650	31	0	2926	126
Lane Group Flow (vph)	96	383	202	61	390	183	0	4681	0	0	3052	0
Turn Type	Perm		Perm	Perm		Perm						
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8						
Detector Phases	4	4	4	8	8	8		2			6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0			4.0	
Minimum Split (s)	22.0	22.0	22.0	23.0	23.0	23.0		22.0			22.0	
Total Split (s)	25.0	25.0	25.0	25.0	25.0	25.0	0.0	115.0	0.0	0.0	115.0	0.0
Total Split (%)	17.9%	17.9%	17.9%	17.9%	17.9%	17.9%	0.0%	82.1%	0.0%	0.0%	82.1%	0.0%
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	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Min	Min	Min	Min	Min	Min		C-Max			C-Max	
Act Effct Green (s)	21.0	21.0	21.0	21.0	21.0	21.0		111.0			111.0	
Actuated g/C Ratio	0.15	0.15	0.15	0.15	0.15	0.15		0.79			0.79	

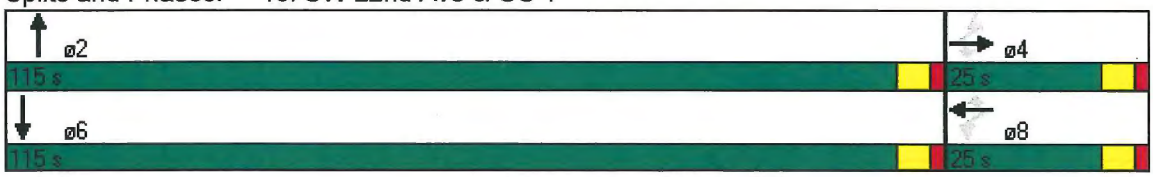
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.88	0.75	0.86	0.91	1.45	0.80		1.03			0.85	
Control Delay	493.4	67.1	87.5	145.3	263.2	82.4		44.7			7.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Total Delay	493.4	67.1	87.5	145.3	263.2	82.4		44.7			7.1	
LOS	F	E	F	F	F	F		D			A	
Approach Delay		133.2			199.7			44.7			7.1	
Approach LOS		F			F			D			A	
Queue Length 50th (ft)	~133	178	176	55	~483	163		~1353			65	
Queue Length 95th (ft)	#254	236	#320	#131	#606	#243		#1374			m66	
Internal Link Dist (ft)		620			1180			1320			2820	
Turn Bay Length (ft)	160		200	116		120						
Base Capacity (vph)	51	511	235	67	269	229		4559			3603	
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	1.88	0.75	0.86	0.91	1.45	0.80		1.03			0.85	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 85 (61%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.88
Intersection Signal Delay: 49.5 Intersection LOS: D
Intersection Capacity Utilization 97.0% ICU Level of Service F
Analysis Period (min) 15

~ 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.

Splits and Phases: 18: SW 22nd Ave & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	165		0	116		0	280		0	60		0
Storage Lanes	1		0	1		0	0		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
Leading Detector (ft)	50	50		50	50			0			0	
Trailing Detector (ft)	0	0		0	0			0			0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.86	0.86	1.00	0.91	0.91
Ped Bike Factor												
Frt		0.973			0.969			0.994			0.996	
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1703	3314	0	1703	3300	0	0	5720	0	0	4549	0
Flt Permitted	0.167			0.167								
Satd. Flow (perm)	299	3314	0	299	3300	0	0	5720	0	0	4549	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5						18			9	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			30			40	
Link Distance (ft)		611			1465			2900			700	
Travel Time (s)		13.9			33.3			65.9			11.9	
Volume (vph)	80	460	100	130	570	150	0	3740	170	0	2900	80
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.97	0.97	0.97	0.93	0.93	0.93	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	110%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	85	489	106	134	588	155	0	4424	183	0	2990	82
Lane Group Flow (vph)	85	595	0	134	743	0	0	4607	0	0	3072	0
Turn Type	Perm			Perm								
Protected Phases		4			8			2			6	
Permitted Phases	4			8								
Detector Phases	4	4		8	8			2			6	
Minimum Initial (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Minimum Split (s)	22.0	22.0		22.0	22.0			21.0			21.0	
Total Split (s)	28.0	28.0	0.0	28.0	28.0	0.0	0.0	112.0	0.0	0.0	112.0	0.0
Total Split (%)	20.0%	20.0%	0.0%	20.0%	20.0%	0.0%	0.0%	80.0%	0.0%	0.0%	80.0%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0			1.0			1.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Min	Min		Min	Min			C-Max			C-Max	
Act Effct Green (s)	24.0	24.0		24.0	24.0			108.0			108.0	
Actuated g/C Ratio	0.17	0.17		0.17	0.17			0.77			0.77	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.67	1.04		2.63	1.31			1.04			0.87	
Control Delay	406.4	103.4		808.0	197.6			28.5			3.2	
Queue Delay	0.0	0.0		0.0	0.0			0.0			3.0	
Total Delay	406.4	103.4		808.0	197.6			28.5			6.1	
LOS	F	F		F	F			C			A	
Approach Delay		141.3			290.8			28.5			6.1	
Approach LOS		F			F			C			A	
Queue Length 50th (ft)	~112	~305		~205	~457			~401			137	
Queue Length 95th (ft)	#227	#429		#345	#586			m#80			m127	
Internal Link Dist (ft)		531			1385			2820			620	
Turn Bay Length (ft)	165			116								
Base Capacity (vph)	51	572		51	566			4417			3511	
Starvation Cap Reductn	0	0		0	0			0			338	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	1.67	1.04		2.63	1.31			1.04			0.97	

Intersection Summary

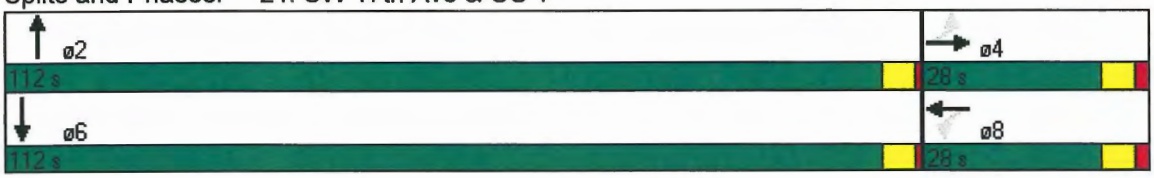
Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 14 (10%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.63
Intersection Signal Delay: 54.3 Intersection LOS: D
Intersection Capacity Utilization 97.4% ICU Level of Service F
Analysis Period (min) 15

~ 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.

Splits and Phases: 21: SW 17th Ave & US 1



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	10	10	10
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	170			0
Storage Lanes	1	1	0			0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		0	0	
Trailing Detector (ft)	0	0		0	0	
Turning Speed (mph)	15	9	15			9
Lane Util. Factor	1.00	1.00	1.00	0.86	0.91	0.91
Ped Bike Factor						
Frt		0.850			0.992	
Flt Protected	0.950					
Satd. Flow (prot)	1703	1524	0	5755	4531	0
Flt Permitted	0.950					
Satd. Flow (perm)	1703	1524	0	5755	4531	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		2			21	
Headway Factor	1.00	1.00	1.04	1.09	1.09	1.09
Link Speed (mph)	30			40	37	
Link Distance (ft)	525			700	3993	
Travel Time (s)	11.9			11.9	73.6	
Volume (vph)	200	130	0	3710	2870	180
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.88	0.88	0.95	0.95	0.94	0.94
Growth Factor	110%	100%	100%	110%	115%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	250	148	0	4296	3511	191
Lane Group Flow (vph)	250	148	0	4296	3702	0
Turn Type		custom				
Protected Phases	7			2	6	
Permitted Phases		4				
Detector Phases	7	4		2	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0	
Minimum Split (s)	9.0	21.0		22.0	22.0	
Total Split (s)	24.0	24.0	0.0	116.0	116.0	0.0
Total Split (%)	17.1%	17.1%	0.0%	82.9%	82.9%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		2.0	2.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	Min	Min		C-Max	C-Max	
Act Effct Green (s)	20.0	20.0		112.0	112.0	
Actuated g/C Ratio	0.14	0.14		0.80	0.80	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	1.03	0.68		0.93	1.02	
Control Delay	123.0	72.4		6.7	34.9	
Queue Delay	0.0	0.0		3.7	2.9	
Total Delay	123.0	72.4		10.4	37.9	
LOS	F	E		B	D	
Approach Delay	104.2			10.4	37.9	
Approach LOS	F			B	D	
Queue Length 50th (ft)	~243	128		299	~1305	
Queue Length 95th (ft)	#405	201		m278	#1366	
Internal Link Dist (ft)	445			620	3913	
Turn Bay Length (ft)						
Base Capacity (vph)	243	219		4604	3629	
Starvation Cap Reductn	0	0		256	0	
Spillback Cap Reductn	0	0		0	29	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	1.03	0.68		0.99	1.03	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 139 (99%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.03
Intersection Signal Delay: 26.9 Intersection LOS: C
Intersection Capacity Utilization 86.6% ICU Level of Service E
Analysis Period (min) 15

~ 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.

Splits and Phases: 24: SW 16th Ave & US 1

Arterial Level of Service: NB US 1

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Douglas Rd	II	40	30.9	73.8	104.7	0.30	10.4	F
Bird Rd	II	40	29.2	306.4	335.6	0.27	2.8	F
SW 32nd Ave	II	30	40.9	56.4	97.3	0.32	11.9	F
SW 27th Ave	II	40	49.0	9.4	58.4	0.54	33.6	B
SW 22nd Ave	II	37	51.6	7.7	59.3	0.54	32.5	B
SW 17th Ave	II	30	65.9	30.3	96.2	0.55	20.6	D
SW 16th Ave	II	40	15.2	3.3	18.5	0.13	25.8	C
Total	II		282.7	487.3	770.0	2.65	12.4	F

Arterial Level of Service: SB US 1

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SW 16th Ave	II	37	73.6	22.6	96.2	0.76	28.3	B
SW 17th Ave	II	40	15.2	28.4	43.6	0.13	10.9	F
SW 22nd Ave	II	30	65.9	24.0	89.9	0.55	22.0	D
SW 27th Ave	II	37	51.6	10.8	62.4	0.54	30.9	B
SW 32nd Ave	II	40	49.0	7.6	56.6	0.54	34.6	B
Bird Rd	II	30	40.9	67.2	108.1	0.32	10.7	F
Douglas Rd	II	40	29.2	42.7	71.9	0.27	13.3	E
Total	II		325.4	203.3	528.7	3.10	21.1	D

Alternative #3 2030 AM
3: Douglas Rd & US 1 5/30/2007

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	170		170	200		0	170		0	0		0
Storage Lanes	1		1	1		0	1		0	1		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
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor												
Frt			0.850		0.963			0.999			0.996	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	1792	1524	1703	3280	0	1646	4563	0	1646	4549	0
Flt Permitted	0.195			0.111			0.038			0.038		
Satd. Flow (perm)	350	1792	1524	199	3280	0	66	4563	0	66	4549	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			67		22			1			5	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		735			672			1600			1400	
Travel Time (s)		16.7			15.3			27.3			23.9	
Volume (vph)	50	410	140	50	330	110	150	3030	20	110	2720	80
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.87	0.87	0.87	0.98	0.98	0.98	0.89	0.89	0.89
Growth Factor	100%	100%	100%	100%	100%	100%	100%	110%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	55	451	154	57	379	126	153	3401	20	124	3056	90
Lane Group Flow (vph)	55	451	154	57	505	0	153	3421	0	124	3146	0
Turn Type	Perm		Perm	Perm			pm+pt			pm+pt		
Protected Phases		6			2		7	4		3	8	
Permitted Phases	6		6	2			4			8		
Detector Phases	6	6	6	2	2		7	4		3	8	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	20.0	20.0	20.0	20.0	20.0		8.0	20.0		8.0	20.0	
Total Split (s)	40.0	40.0	40.0	40.0	40.0	0.0	22.0	128.0	0.0	12.0	118.0	0.0
Total Split (%)	22.2%	22.2%	22.2%	22.2%	22.2%	0.0%	12.2%	71.1%	0.0%	6.7%	65.6%	0.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max		None	None		None	None	
Act Effct Green (s)	36.0	36.0	36.0	36.0	36.0		124.0	124.0		116.2	116.2	
Actuated g/C Ratio	0.20	0.20	0.20	0.20	0.20		0.69	0.69		0.65	0.65	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.79	1.26	0.43	1.43	0.75		0.83	1.09		1.10	1.07	
Control Delay	127.0	192.5	39.1	337.4	72.6		83.2	73.8		93.9	42.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	127.0	192.5	39.1	337.4	72.6		83.2	73.8		93.9	42.7	
LOS	F	F	D	F	E		F	E		F	D	
Approach Delay		151.2			99.4			74.2			44.7	
Approach LOS		F			F			E			D	
90th %ile Green (s)	36.0	36.0	36.0	36.0	36.0		18.0	124.0		8.0	114.0	
90th %ile Term Code	Coord	Coord	Coord	Coord	Coord		Max	Max		Max	Max	
70th %ile Green (s)	36.0	36.0	36.0	36.0	36.0		18.0	124.0		8.0	114.0	
70th %ile Term Code	Coord	Coord	Coord	Coord	Coord		Max	Max		Max	Max	
50th %ile Green (s)	36.0	36.0	36.0	36.0	36.0		18.0	124.0		8.0	114.0	
50th %ile Term Code	Coord	Coord	Coord	Coord	Coord		Max	Max		Max	Max	
30th %ile Green (s)	36.0	36.0	36.0	36.0	36.0		14.8	124.0		8.0	117.2	
30th %ile Term Code	Coord	Coord	Coord	Coord	Coord		Gap	Max		Max	Max	
10th %ile Green (s)	36.0	36.0	36.0	36.0	36.0		10.1	124.0		8.0	121.9	
10th %ile Term Code	Coord	Coord	Coord	Coord	Coord		Gap	Max		Max	Max	
Queue Length 50th (ft)	63	~665	90	~91	287		129	~1658		~122	~1554	
Queue Length 95th (ft)	#157	#897	169	#191	343		#241	#1699		m#117	m#1364	
Internal Link Dist (ft)		655			592			1520			1320	
Turn Bay Length (ft)	170		170	200			170					
Base Capacity (vph)	70	358	358	40	674		203	3144		113	2939	
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	0.79	1.26	0.43	1.43	0.75		0.75	1.09		1.10	1.07	

Intersection Summary

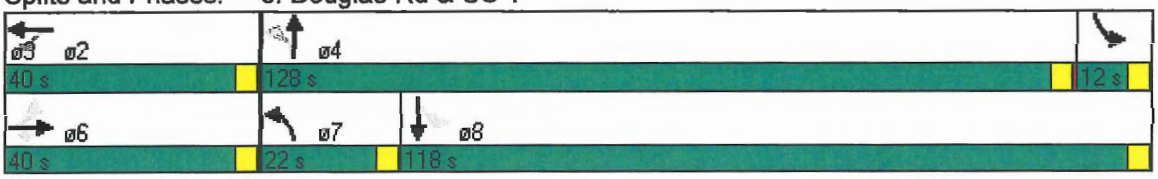
Area Type: Other
Cycle Length: 180
Actuated Cycle Length: 180
Offset: 158 (88%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.43
Intersection Signal Delay: 70.3 Intersection LOS: E
Intersection Capacity Utilization 109.2% ICU Level of Service H
Analysis Period (min) 15

~ 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.

Splits and Phases: 3: Douglas Rd & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	350		0	0		90	0		0
Storage Lanes	2		0	1		0	0		1	1		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
Leading Detector (ft)	50	50		50	50			50	50	50	50	
Trailing Detector (ft)	0	0		0	0			0	0	0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.91	0.91	1.00	1.00	0.95	0.95	1.00	0.91	1.00	1.00	0.86	0.86
Ped Bike Factor												
Frt		0.994			0.985				0.850		0.982	
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	3099	1621	0	1703	3355	0	0	4567	1422	1646	5651	0
Flt Permitted	0.950			0.950						0.045		
Satd. Flow (perm)	3099	1621	0	1703	3355	0	0	4567	1422	78	5651	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			5				17		29	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			30	
Link Distance (ft)		833			777			1400			1700	
Travel Time (s)		18.9			17.7			23.9			38.6	
Volume (vph)	520	1270	50	175	450	50	0	2940	150	100	2560	360
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.97	0.97	0.97	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	110%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	571	1396	55	180	464	52	0	3477	161	108	2753	387
Lane Group Flow (vph)	571	1451	0	180	516	0	0	3477	161	108	3140	0
Turn Type	Split			Split					custom	pm+pt		
Protected Phases	4	4		8	8			2		1	6	
Permitted Phases									4	6		
Detector Phases	4	4		8	8			2	4	1	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0			4.0	4.0	4.0	4.0	
Minimum Split (s)	20.0	20.0		20.0	20.0			20.0	20.0	8.0	20.0	
Total Split (s)	60.0	60.0	0.0	23.0	23.0	0.0	0.0	89.0	60.0	8.0	97.0	0.0
Total Split (%)	33.3%	33.3%	0.0%	12.8%	12.8%	0.0%	0.0%	49.4%	33.3%	4.4%	53.9%	0.0%
Yellow Time (s)	3.5	3.5		3.5	3.5			3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5			0.5	0.5	0.5	0.5	
Lead/Lag								Lead		Lag		
Lead-Lag Optimize?								Yes		Yes		
Recall Mode	None	None		None	None			C-Max	None	None	C-Max	
Act Effct Green (s)	56.0	56.0		19.0	19.0			85.0	56.0	93.0	93.0	
Actuated g/C Ratio	0.31	0.31		0.11	0.11			0.47	0.31	0.52	0.52	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.59	2.87		1.00	1.44			1.61	0.35	1.44	1.07	
Control Delay	55.4	869.5		144.4	263.2			306.4	33.7	273.1	67.2	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	
Total Delay	55.4	869.5		144.4	263.2			306.4	33.7	273.1	67.2	
LOS	E	F		F	F			F	C	F	E	
Approach Delay		639.6			232.5			294.4			74.1	
Approach LOS		F			F			F			E	
90th %ile Green (s)	56.0	56.0		19.0	19.0			85.0	56.0	4.0	93.0	
90th %ile Term Code	Max	Max		Max	Max			Coord	Max	Max	Coord	
70th %ile Green (s)	56.0	56.0		19.0	19.0			85.0	56.0	4.0	93.0	
70th %ile Term Code	Max	Max		Max	Max			Coord	Max	Max	Coord	
50th %ile Green (s)	56.0	56.0		19.0	19.0			85.0	56.0	4.0	93.0	
50th %ile Term Code	Max	Max		Max	Max			Coord	Max	Max	Coord	
30th %ile Green (s)	56.0	56.0		19.0	19.0			85.0	56.0	4.0	93.0	
30th %ile Term Code	Max	Max		Max	Max			Coord	Max	Max	Coord	
10th %ile Green (s)	56.0	56.0		19.0	19.0			85.0	56.0	4.0	93.0	
10th %ile Term Code	Max	Max		Max	Max			Coord	Max	Max	Coord	
Queue Length 50th (ft)	315	~3248		~217	~432			~2147	136	~125	~1181	
Queue Length 95th (ft)	386	#3538		#394	#561			m#1913	m126	m#182	m#1204	
Internal Link Dist (ft)		753			697			1320			1620	
Turn Bay Length (ft)				350					90			
Base Capacity (vph)	964	505		180	359			2157	454	75	2934	
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	0.59	2.87		1.00	1.44			1.61	0.35	1.44	1.07	

Intersection Summary

Area Type: Other
Cycle Length: 180
Actuated Cycle Length: 180
Offset: 29 (16%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.87
Intersection Signal Delay: 288.1 Intersection LOS: F
Intersection Capacity Utilization 162.6% ICU Level of Service H
Analysis Period (min) 15

~ 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.

Splits and Phases: 6: Bird Rd & US 1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	90		0	70		0	85		0
Storage Lanes	1		0	1		0	0		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
Leading Detector (ft)	50	50		50	50			50			50	
Trailing Detector (ft)	0	0		0	0			0			0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor												
Frt		0.956			0.962			0.999			0.996	
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1703	3256	0	1703	3276	0	0	4563	0	0	4549	0
Flt Permitted	0.308			0.160								
Satd. Flow (perm)	552	3256	0	287	3276	0	0	4563	0	0	4549	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			1			2			9	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			30			40	
Link Distance (ft)		770			1211			1700			2875	
Travel Time (s)		17.5			27.5			38.6			49.0	
Volume (vph)	80	340	140	30	210	70	0	3390	30	0	2860	80
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.91	0.91	0.91	0.96	0.96	0.96	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	110%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	87	370	152	33	231	77	0	3884	31	0	2948	82
Lane Group Flow (vph)	87	522	0	33	308	0	0	3915	0	0	3030	0
Turn Type	Perm			Perm								
Protected Phases		4			8			2			6	
Permitted Phases	4			8								
Detector Phases	4	4		8	8			2			6	
Minimum Initial (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Minimum Split (s)	20.0	20.0		20.0	20.0			20.0			20.0	
Total Split (s)	29.0	29.0	0.0	29.0	29.0	0.0	0.0	151.0	0.0	0.0	151.0	0.0
Total Split (%)	16.1%	16.1%	0.0%	16.1%	16.1%	0.0%	0.0%	83.9%	0.0%	0.0%	83.9%	0.0%
Yellow Time (s)	3.5	3.5		3.5	3.5			3.5			3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5			0.5			0.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None			C-Max			C-Max	
Act Effct Green (s)	25.0	25.0		25.0	25.0			147.0			147.0	
Actuated g/C Ratio	0.14	0.14		0.14	0.14			0.82			0.82	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.13	1.14		0.82	0.68			1.05			0.82	
Control Delay	206.3	150.8		168.8	81.6			56.4			7.6	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	206.3	150.8		168.8	81.6			56.4			7.6	
LOS	F	F		F	F			E			A	
Approach Delay		158.7			90.0			56.4			7.6	
Approach LOS		F			F			E			A	
90th %ile Green (s)	25.0	25.0		25.0	25.0			147.0			147.0	
90th %ile Term Code	Max	Max		Max	Max			Coord			Coord	
70th %ile Green (s)	25.0	25.0		25.0	25.0			147.0			147.0	
70th %ile Term Code	Max	Max		Max	Max			Coord			Coord	
50th %ile Green (s)	25.0	25.0		25.0	25.0			147.0			147.0	
50th %ile Term Code	Max	Max		Max	Max			Coord			Coord	
30th %ile Green (s)	25.0	25.0		25.0	25.0			147.0			147.0	
30th %ile Term Code	Max	Max		Max	Max			Coord			Coord	
10th %ile Green (s)	25.0	25.0		25.0	25.0			147.0			147.0	
10th %ile Term Code	Max	Max		Hold	Hold			Coord			Coord	
Queue Length 50th (ft)	~119	~373		39	184			~899			463	
Queue Length 95th (ft)	#249	#502		#118	242			m186			553	
Internal Link Dist (ft)		690			1131			1620			2795	
Turn Bay Length (ft)	300			90								
Base Capacity (vph)	77	458		40	456			3727			3717	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	1.13	1.14		0.82	0.68			1.05			0.82	

Intersection Summary

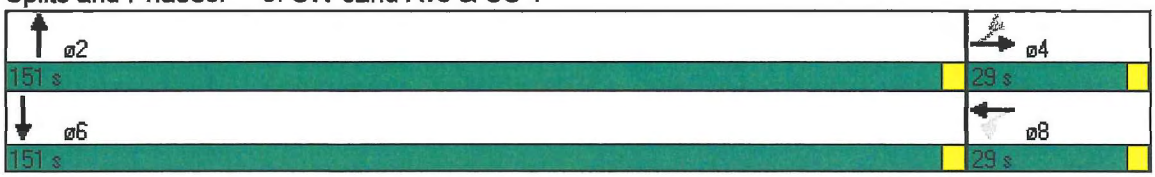
Area Type: Other
Cycle Length: 180
Actuated Cycle Length: 180
Offset: 3 (2%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.14
Intersection Signal Delay: 47.0 Intersection LOS: D
Intersection Capacity Utilization 99.9% ICU Level of Service F
Analysis Period (min) 15

~ 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.

Splits and Phases: 9: SW 32nd Ave & US 1



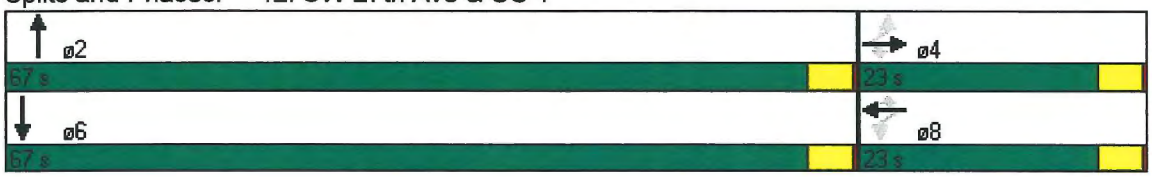
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	170		200	80		100	545		0	245		0
Storage Lanes	1		1	1		1	0		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
Leading Detector (ft)	50	50	50	50	50	50		50			50	
Trailing Detector (ft)	0	0	0	0	0	0		0			0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.81	0.81	1.00	0.91	0.91
Ped Bike Factor												
Frt			0.850			0.850		0.999			0.993	
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1703	3406	1524	1703	3406	1524	0	6769	0	0	4535	0
Flt Permitted	0.257			0.225								
Satd. Flow (perm)	461	3406	1524	403	3406	1524	0	6769	0	0	4535	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			3					4			20	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		798			1372			2875			1425	
Travel Time (s)		18.1			31.2			49.0			24.3	
Volume (vph)	70	480	220	50	450	230	0	3540	30	0	2800	140
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.97	0.97	0.97	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	110%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	80	545	250	57	511	261	0	4014	31	0	2917	146
Lane Group Flow (vph)	80	545	250	57	511	261	0	4045	0	0	3063	0
Turn Type	Perm		Perm	Perm		Perm						
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8						
Detector Phases	4	4	4	8	8	8		2			6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0			4.0	
Minimum Split (s)	20.0	20.0	20.0	20.0	20.0	20.0		20.0			20.0	
Total Split (s)	23.0	23.0	23.0	23.0	23.0	23.0	0.0	67.0	0.0	0.0	67.0	0.0
Total Split (%)	25.6%	25.6%	25.6%	25.6%	25.6%	25.6%	0.0%	74.4%	0.0%	0.0%	74.4%	0.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5		3.5			3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5		0.5			0.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None		C-Max			C-Max	
Act Effct Green (s)	18.1	18.1	18.1	18.1	18.1	18.1		63.9			63.9	
Actuated g/C Ratio	0.20	0.20	0.20	0.20	0.20	0.20		0.71			0.71	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.87	0.80	0.81	0.70	0.75	0.85		0.84			0.95	
Control Delay	100.8	43.7	55.1	77.8	41.2	60.5		9.4			10.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Total Delay	100.8	43.7	55.1	77.8	41.2	60.5		9.4			10.8	
LOS	F	D	E	E	D	E		A			B	
Approach Delay		52.2			49.8			9.4			10.8	
Approach LOS		D			D			A			B	
90th %ile Green (s)	19.0	19.0	19.0	19.0	19.0	19.0		63.0			63.0	
90th %ile Term Code	Max	Max	Max	Max	Max	Max		Coord			Coord	
70th %ile Green (s)	19.0	19.0	19.0	19.0	19.0	19.0		63.0			63.0	
70th %ile Term Code	Max	Max	Max	Max	Max	Max		Coord			Coord	
50th %ile Green (s)	19.0	19.0	19.0	19.0	19.0	19.0		63.0			63.0	
50th %ile Term Code	Max	Max	Max	Max	Max	Max		Coord			Coord	
30th %ile Green (s)	19.0	19.0	19.0	19.0	19.0	19.0		63.0			63.0	
30th %ile Term Code	Max	Max	Max	Max	Max	Max		Coord			Coord	
10th %ile Green (s)	14.4	14.4	14.4	14.4	14.4	14.4		67.6			67.6	
10th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Hold		Coord			Coord	
Queue Length 50th (ft)	44	154	133	30	142	142		573			329	
Queue Length 95th (ft)	#124	206	#241	#93	193	#260		m491			178	
Internal Link Dist (ft)		718			1292			2795			1345	
Turn Bay Length (ft)	170		200	80		100						
Base Capacity (vph)	97	719	324	85	719	322		4809			3227	
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	0.82	0.76	0.77	0.67	0.71	0.81		0.84			0.95	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 62 (69%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.95
Intersection Signal Delay: 18.0 Intersection LOS: B
Intersection Capacity Utilization 84.2% ICU Level of Service E
Analysis Period (min) 15
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.

Splits and Phases: 12: SW 27th Ave & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	160		200	116		120	165		0	50		0
Storage Lanes	1		1	1		1	0		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
Leading Detector (ft)	50	50	50	50	50	50		50			50	
Trailing Detector (ft)	0	0	0	0	0	0		0			0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.81	0.81	1.00	0.91	0.91
Ped Bike Factor												
Frt			0.850			0.850		0.999			0.994	
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1703	3406	1524	1703	1792	1524	0	6769	0	0	4540	0
Flt Permitted	0.250			0.350								
Satd. Flow (perm)	448	3406	1524	627	1792	1524	0	6769	0	0	4540	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			4					4			19	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			35			30	
Link Distance (ft)		700			1260			1400			2900	
Travel Time (s)		15.9			28.6			27.3			65.9	
Volume (vph)	90	360	190	50	320	150	0	3720	30	0	2780	120
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.82	0.82	0.82	0.96	0.96	0.96	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	120%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	96	383	202	61	390	183	0	4650	31	0	2926	126
Lane Group Flow (vph)	96	383	202	61	390	183	0	4681	0	0	3052	0
Turn Type	Perm		Perm	Perm		Perm						
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8						
Detector Phases	4	4	4	8	8	8		2			6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0			4.0	
Minimum Split (s)	20.0	20.0	20.0	20.0	20.0	20.0		20.0			20.0	
Total Split (s)	20.0	20.0	20.0	20.0	20.0	20.0	0.0	70.0	0.0	0.0	70.0	0.0
Total Split (%)	22.2%	22.2%	22.2%	22.2%	22.2%	22.2%	0.0%	77.8%	0.0%	0.0%	77.8%	0.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5		3.5			3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5		0.5			0.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None		C-Max			C-Max	
Act Effct Green (s)	16.0	16.0	16.0	16.0	16.0	16.0		66.0			66.0	
Actuated g/C Ratio	0.18	0.18	0.18	0.18	0.18	0.18		0.73			0.73	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.20	0.63	0.74	0.55	1.22	0.68		0.94			0.92	
Control Delay	201.0	39.6	52.0	54.4	159.3	48.5		7.7			24.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Total Delay	201.0	39.6	52.0	54.4	159.3	48.5		7.7			24.0	
LOS	F	D	D	D	F	D		A			C	
Approach Delay		66.0			117.3			7.7			24.0	
Approach LOS		E			F			A			C	
90th %ile Green (s)	16.0	16.0	16.0	16.0	16.0	16.0		66.0			66.0	
90th %ile Term Code	Max	Max	Max	Max	Max	Max		Coord			Coord	
70th %ile Green (s)	16.0	16.0	16.0	16.0	16.0	16.0		66.0			66.0	
70th %ile Term Code	Max	Max	Max	Max	Max	Max		Coord			Coord	
50th %ile Green (s)	16.0	16.0	16.0	16.0	16.0	16.0		66.0			66.0	
50th %ile Term Code	Max	Max	Max	Max	Max	Max		Coord			Coord	
30th %ile Green (s)	16.0	16.0	16.0	16.0	16.0	16.0		66.0			66.0	
30th %ile Term Code	Max	Max	Max	Max	Max	Max		Coord			Coord	
10th %ile Green (s)	16.0	16.0	16.0	16.0	16.0	16.0		66.0			66.0	
10th %ile Term Code	Max	Max	Max	Max	Max	Max		Coord			Coord	
Queue Length 50th (ft)	~67	107	108	32	~276	98		121			1292	
Queue Length 95th (ft)	#165	155	#212	#72	#393	152		117			m619	
Internal Link Dist (ft)		620			1180			1320			2820	
Turn Bay Length (ft)	160		200	116		120						
Base Capacity (vph)	80	606	274	111	319	271		4965			3334	
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	1.20	0.63	0.74	0.55	1.22	0.68		0.94			0.92	

Intersection Summary

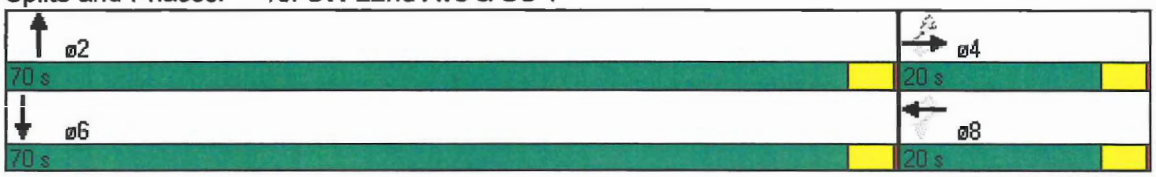
Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 14 (16%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.22
Intersection Signal Delay: 25.3 Intersection LOS: C
Intersection Capacity Utilization 88.2% ICU Level of Service E
Analysis Period (min) 15

~ 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.

Splits and Phases: 18: SW 22nd Ave & US 1



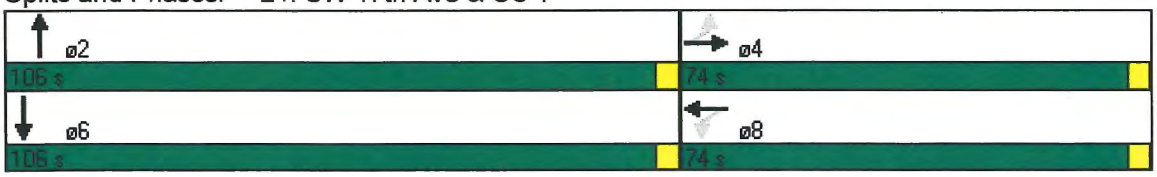
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	165		0	116		0	280		0	60		0
Storage Lanes	1		0	1		0	0		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
Leading Detector (ft)	50	50		50	50			50			50	
Trailing Detector (ft)	0	0		0	0			0			0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.81	0.81	1.00	0.91	0.91
Ped Bike Factor												
Frt		0.973			0.969			0.994			0.996	
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1703	3314	0	1703	3300	0	0	6735	0	0	4549	0
Flt Permitted	0.229			0.310								
Satd. Flow (perm)	410	3314	0	556	3300	0	0	6735	0	0	4549	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						9			4	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			30			40	
Link Distance (ft)		611			1465			2900			700	
Travel Time (s)		13.9			33.3			65.9			11.9	
Volume (vph)	80	460	100	130	570	150	0	3740	170	0	2900	80
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.97	0.97	0.97	0.93	0.93	0.93	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	110%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	85	489	106	134	588	155	0	4424	183	0	2990	82
Lane Group Flow (vph)	85	595	0	134	743	0	0	4607	0	0	3072	0
Turn Type	Perm			Perm								
Protected Phases		4			8			2			6	
Permitted Phases	4			8								
Detector Phases	4	4		8	8			2			6	
Minimum Initial (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Minimum Split (s)	20.0	20.0		20.0	20.0			20.0			20.0	
Total Split (s)	74.0	74.0	0.0	74.0	74.0	0.0	0.0	106.0	0.0	0.0	106.0	0.0
Total Split (%)	41.1%	41.1%	0.0%	41.1%	41.1%	0.0%	0.0%	58.9%	0.0%	0.0%	58.9%	0.0%
Yellow Time (s)	3.5	3.5		3.5	3.5			3.5			3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5			0.5			0.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None			C-Max			C-Max	
Act Effct Green (s)	49.8	49.8		49.8	49.8			122.2			122.2	
Actuated g/C Ratio	0.28	0.28		0.28	0.28			0.68			0.68	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.75	0.65		0.87	0.81			1.01			0.99	
Control Delay	93.4	59.6		105.0	67.5			30.3			28.4	
Queue Delay	0.0	0.0		0.0	0.0			0.0			42.0	
Total Delay	93.4	59.6		105.0	67.5			30.3			70.4	
LOS	F	E		F	E			C			E	
Approach Delay		63.8			73.2			30.3			70.4	
Approach LOS		E			E			C			E	
90th %ile Green (s)	70.0	70.0		70.0	70.0			102.0			102.0	
90th %ile Term Code	Hold	Hold		Max	Max			Coord			Coord	
70th %ile Green (s)	56.7	56.7		56.7	56.7			115.3			115.3	
70th %ile Term Code	Hold	Hold		Gap	Gap			Coord			Coord	
50th %ile Green (s)	47.4	47.4		47.4	47.4			124.6			124.6	
50th %ile Term Code	Hold	Hold		Gap	Gap			Coord			Coord	
30th %ile Green (s)	40.1	40.1		40.1	40.1			131.9			131.9	
30th %ile Term Code	Hold	Hold		Gap	Gap			Coord			Coord	
10th %ile Green (s)	35.0	35.0		35.0	35.0			137.0			137.0	
10th %ile Term Code	Hold	Hold		Gap	Gap			Coord			Coord	
Queue Length 50th (ft)	94	334		155	443			92			1003	
Queue Length 95th (ft)	150	334		220	435			m#1606			#1649	
Internal Link Dist (ft)		531			1385			2820			620	
Turn Bay Length (ft)	165			116								
Base Capacity (vph)	159	1289		216	1283			4574			3088	
Starvation Cap Reductn	0	0		0	0			0			311	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.53	0.46		0.62	0.58			1.01			1.11	

Intersection Summary

Area Type: Other
Cycle Length: 180
Actuated Cycle Length: 180
Offset: 39 (22%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.01
Intersection Signal Delay: 50.2 Intersection LOS: D
Intersection Capacity Utilization 92.8% ICU Level of Service F
Analysis Period (min) 15
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.

Splits and Phases: 21: SW 17th Ave & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	170		0	0		0
Storage Lanes	1		1	0		0	0		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
Leading Detector (ft)	50		50					50			50	
Trailing Detector (ft)	0		0					0			0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.81	1.00	1.00	0.91	0.91
Ped Bike Factor												
Frt			0.850								0.992	
Flt Protected	0.950											
Satd. Flow (prot)	1703	0	1524	0	0	0	0	6775	0	0	4531	0
Flt Permitted	0.950											
Satd. Flow (perm)	1703	0	1524	0	0	0	0	6775	0	0	4531	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			3								20	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			37	
Link Distance (ft)		525			1137			700			3993	
Travel Time (s)		11.9			25.8			11.9			73.6	
Volume (vph)	200	0	130	0	0	0	0	3710	0	0	2870	180
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.88	0.88	0.88	0.92	0.92	0.92	0.95	0.95	0.95	0.94	0.94	0.94
Growth Factor	100%	110%	100%	100%	100%	100%	100%	110%	100%	100%	115%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	227	0	148	0	0	0	0	4296	0	0	3511	191
Lane Group Flow (vph)	227	0	148	0	0	0	0	4296	0	0	3702	0
Turn Type	Prot		custom									
Protected Phases	7							2			6	
Permitted Phases			4									
Detector Phases	7		4					2			6	
Minimum Initial (s)	4.0		4.0					4.0			4.0	
Minimum Split (s)	8.0		20.0					20.0			20.0	
Total Split (s)	25.0	0.0	25.0	0.0	0.0	0.0	0.0	155.0	0.0	0.0	155.0	0.0
Total Split (%)	13.9%	0.0%	13.9%	0.0%	0.0%	0.0%	0.0%	86.1%	0.0%	0.0%	86.1%	0.0%
Yellow Time (s)	3.5		3.5					3.5			3.5	
All-Red Time (s)	0.5		0.5					0.5			0.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None		None					C-Max			C-Max	
Act Effct Green (s)	21.0		21.0					151.0			151.0	
Actuated g/C Ratio	0.12		0.12					0.84			0.84	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.14		0.82					0.76			0.97	
Control Delay	173.0		108.1					3.3			22.6	
Queue Delay	0.0		0.0					0.1			69.0	
Total Delay	173.0		108.1					3.4			91.7	
LOS	F		F					A			F	
Approach Delay								3.4			91.7	
Approach LOS								A			F	
90th %ile Green (s)	21.0		21.0					151.0			151.0	
90th %ile Term Code	Max		Max					Coord			Coord	
70th %ile Green (s)	21.0		21.0					151.0			151.0	
70th %ile Term Code	Max		Max					Coord			Coord	
50th %ile Green (s)	21.0		21.0					151.0			151.0	
50th %ile Term Code	Max		Max					Coord			Coord	
30th %ile Green (s)	21.0		21.0					151.0			151.0	
30th %ile Term Code	Max		Hold					Coord			Coord	
10th %ile Green (s)	21.0		21.0					151.0			151.0	
10th %ile Term Code	Max		Hold					Coord			Coord	
Queue Length 50th (ft)	~312		171					39			1179	
Queue Length 95th (ft)	#483		#288					m98			1238	
Internal Link Dist (ft)		445			1057			620			3913	
Turn Bay Length (ft)												
Base Capacity (vph)	199		180					5683			3804	
Starvation Cap Reductn	0		0					396			0	
Spillback Cap Reductn	0		0					0			611	
Storage Cap Reductn	0		0					0			0	
Reduced v/c Ratio	1.14		0.82					0.81			1.16	

Intersection Summary

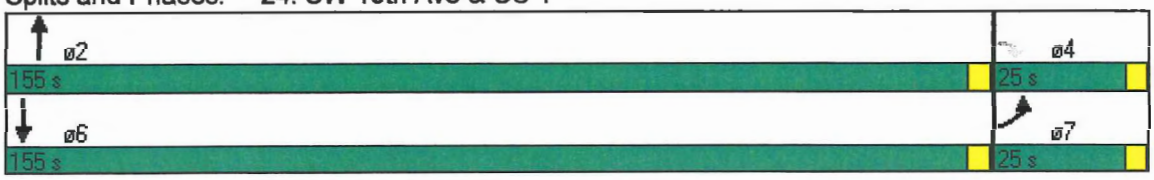
Area Type: Other
Cycle Length: 180
Actuated Cycle Length: 180
Offset: 2 (1%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.14
Intersection Signal Delay: 48.9 Intersection LOS: D
Intersection Capacity Utilization 85.5% ICU Level of Service E
Analysis Period (min) 15

~ 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.

Splits and Phases: 24: SW 16th Ave & US 1



Arterial Level of Service: NB US 1

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Douglas Rd	II	40	30.9	29.9	60.8	0.30	17.9	D
Bird Rd	II	40	29.2	227.7	256.9	0.27	3.7	F
SW 32nd Ave	II	30	40.9	34.4	75.3	0.32	15.4	E
SW 27th Ave	II	40	49.0	20.0	69.0	0.54	28.4	B
SW 22nd Ave	II	37	51.6	21.1	72.7	0.54	26.5	C
SW 17th Ave	II	30	65.9	81.7	147.6	0.55	13.4	E
SW 16th Ave	II	40	15.2	11.8	27.0	0.13	17.7	D
Total	II		282.7	426.6	709.3	2.65	13.5	E

Arterial Level of Service: SB US 1

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SW 16th Ave	II	37	73.6	44.8	118.4	0.76	23.0	C
SW 17th Ave	II	40	15.2	25.9	41.1	0.13	11.6	F
SW 22nd Ave	II	30	65.9	16.5	82.4	0.55	24.0	C
SW 27th Ave	II	37	51.6	35.0	86.6	0.54	22.2	C
SW 32nd Ave	II	40	49.0	8.4	57.4	0.54	34.2	B
Bird Rd	II	30	40.9	74.0	114.9	0.32	10.1	F
Douglas Rd	II	40	29.2	25.0	54.2	0.27	17.6	D
Total	II		325.4	229.6	555.0	3.10	20.1	D

Alternative #4 2030 AM
3: Douglas Rd & US 1

5/30/2007

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	170		170	200		0	170		0	0		0
Storage Lanes	1		1	1		0	1		0	1		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
Leading Detector (ft)	50	50	50	50	50		50	0		50	0	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor												
Frt			0.850		0.963			0.999			0.996	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	1792	1524	1703	3280	0	1646	4563	0	1646	4549	0
Flt Permitted	0.184			0.154			0.041			0.043		
Satd. Flow (perm)	330	1792	1524	276	3280	0	71	4563	0	75	4549	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			84		2			2			7	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		735			672			1600			1400	
Travel Time (s)		16.7			15.3			27.3			23.9	
Volume (vph)	50	410	140	50	330	110	150	3030	20	110	2720	80
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.87	0.87	0.87	0.98	0.98	0.98	0.89	0.89	0.89
Growth Factor	100%	100%	100%	100%	100%	100%	100%	110%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	55	451	154	57	379	126	153	3401	20	124	3056	90
Lane Group Flow (vph)	55	451	154	57	505	0	153	3421	0	124	3146	0
Turn Type	Perm		Perm	Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8			2			6		
Detector Phases	4	4	4	8	8		5	2		6	6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0		8.0	21.0		21.0	21.0	
Total Split (s)	30.0	30.0	30.0	30.0	30.0	0.0	12.0	110.0	0.0	98.0	98.0	0.0
Total Split (%)	21.4%	21.4%	21.4%	21.4%	21.4%	0.0%	8.6%	78.6%	0.0%	70.0%	70.0%	0.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0	1.0		1.0	1.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Recall Mode	Min	Min	Min	Min	Min		C-Min	Max		Max	Max	
Act Effct Green (s)	26.0	26.0	26.0	26.0	26.0		106.0	106.0		94.0	94.0	
Actuated g/C Ratio	0.19	0.19	0.19	0.19	0.19		0.76	0.76		0.67	0.67	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.90	1.35	0.44	1.12	0.83		1.06	0.99		2.48	1.03	
Control Delay	145.9	220.6	27.5	213.5	67.0		127.0	29.9		695.4	25.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	145.9	220.6	27.5	213.5	67.0		127.0	29.9		695.4	25.0	
LOS	F	F	C	F	E		F	C		F	C	
Approach Delay		169.3			81.9			34.1			50.5	
Approach LOS		F			F			C			D	
Queue Length 50th (ft)	50	~538	55	~59	234		~105	975		~190	~1145	
Queue Length 95th (ft)	#141	#753	127	#148	290		#253	#1239		m#193	m97	
Internal Link Dist (ft)		655			592			1520			1320	
Turn Bay Length (ft)	170		170	200			170					
Base Capacity (vph)	61	333	351	51	611		144	3455		50	3057	
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	0.90	1.35	0.44	1.12	0.83		1.06	0.99		2.48	1.03	

Intersection Summary

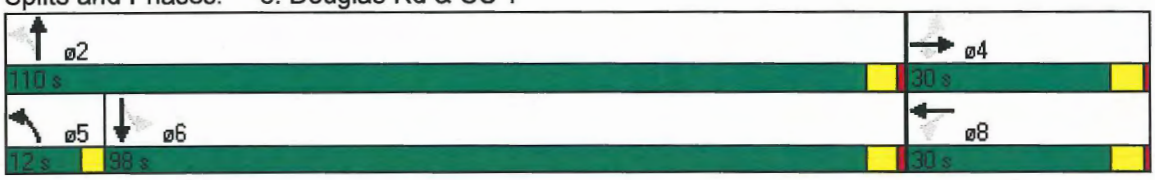
Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 136 (97%), Referenced to phase 5:NBL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.48
Intersection Signal Delay: 55.1 Intersection LOS: E
Intersection Capacity Utilization 109.2% ICU Level of Service H
Analysis Period (min) 15

~ 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.

Splits and Phases: 3: Douglas Rd & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	350		0	0		90	0		0
Storage Lanes	2		0	1		0	0		1	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
Leading Detector (ft)	50	50		50	50			50	50		50	
Trailing Detector (ft)	0	0		0	0			0	0		0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.91	0.91	1.00	1.00	0.95	0.95	1.00	0.91	1.00	1.00	0.86	0.86
Ped Bike Factor												
Frt		0.994			0.985				0.850		0.980	
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3099	1621	0	1703	3355	0	0	4567	1422	0	5640	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3099	1621	0	1703	3355	0	0	4567	1422	0	5640	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			7				32		42	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			30	
Link Distance (ft)		833			777			1400			1700	
Travel Time (s)		18.9			17.7			23.9			38.6	
Volume (vph)	520	1270	50	175	450	50	0	2940	150	0	2560	390
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.97	0.97	0.97	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	110%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	571	1396	55	180	464	52	0	3477	161	0	2753	419
Lane Group Flow (vph)	571	1451	0	180	516	0	0	3477	161	0	3172	0
Turn Type	Split			Split					Perm			
Protected Phases	4	4		8	8			2			6	
Permitted Phases									2			
Detector Phases	4	4		8	8			2	2		6	
Minimum Initial (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Minimum Split (s)	22.0	22.0		22.0	22.0			21.0	21.0		21.0	
Total Split (s)	40.0	40.0	0.0	22.0	22.0	0.0	0.0	78.0	78.0	0.0	78.0	0.0
Total Split (%)	28.6%	28.6%	0.0%	15.7%	15.7%	0.0%	0.0%	55.7%	55.7%	0.0%	55.7%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0			1.0	1.0		1.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Min	Min		Min	Min			C-Max	C-Max		C-Max	
Act Effct Green (s)	36.0	36.0		18.0	18.0			74.0	74.0		74.0	
Actuated g/C Ratio	0.26	0.26		0.13	0.13			0.53	0.53		0.53	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.72	3.47		0.82	1.18			1.44	0.21		1.06	
Control Delay	53.3	1134.7		87.7	153.3			227.7	18.0		74.0	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	53.3	1134.7		87.7	153.3			227.7	18.0		74.0	
LOS	D	F		F	F			F	B		E	
Approach Delay		829.3			136.3			218.4			74.0	
Approach LOS		F			F			F			E	
Queue Length 50th (ft)	261	~2609		162	~293			~1572	67		~934	
Queue Length 95th (ft)	334	#2906		#290	#413			m#1599	m71		m#980	
Internal Link Dist (ft)		753			697			1320			1620	
Turn Bay Length (ft)				350					90			
Base Capacity (vph)	797	418		219	437			2414	767		3001	
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	0.72	3.47		0.82	1.18			1.44	0.21		1.06	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 134 (96%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 3.47
Intersection Signal Delay: 294.0 Intersection LOS: F
Intersection Capacity Utilization 153.7% ICU Level of Service H
Analysis Period (min) 15

~ 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.

Splits and Phases: 6: Bird Rd & US 1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	90		0	1000		0	1000		0
Storage Lanes	1		0	1		0	1		0	1		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
Leading Detector (ft)	50	50		50	50		50	0		50	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor												
Frt		0.950			0.952			0.999			0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3235	0	1703	3242	0	1646	4563	0	1646	4563	0
Flt Permitted	0.412			0.235			0.035			0.035		
Satd. Flow (perm)	738	3235	0	421	3242	0	61	4563	0	61	4563	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			1			3			3	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			30			40	
Link Distance (ft)		770			1211			1700			2875	
Travel Time (s)		17.5			27.5			38.6			49.0	
Volume (vph)	80	280	140	30	150	70	60	3390	30	60	2860	20
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.91	0.91	0.91	0.96	0.96	0.96	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	110%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	87	304	152	33	165	77	62	3884	31	62	2948	21
Lane Group Flow (vph)	87	456	0	33	242	0	62	3915	0	62	2969	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phases	4	4		8	8		2	2		6	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	21.0	21.0	0.0	21.0	21.0	0.0	119.0	119.0	0.0	119.0	119.0	0.0
Total Split (%)	15.0%	15.0%	0.0%	15.0%	15.0%	0.0%	85.0%	85.0%	0.0%	85.0%	85.0%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Min	Min		Min	Min		C-Max	C-Max		C-Max	C-Max	
Act Effct Green (s)	17.0	17.0		17.0	17.0		115.0	115.0		115.0	115.0	
Actuated g/C Ratio	0.12	0.12		0.12	0.12		0.82	0.82		0.82	0.82	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.97	1.14		0.65	0.61		1.24	1.04		1.24	0.79	
Control Delay	146.6	141.5		109.4	65.5		144.6	34.4		228.2	8.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	146.6	141.5		109.4	65.5		144.6	34.4		228.2	8.4	
LOS	F	F		F	E		F	C		F	A	
Approach Delay		142.3			70.7			36.1			12.9	
Approach LOS		F			E			D			B	
Queue Length 50th (ft)	80	~252		29	111		~72	~1447		~23	411	
Queue Length 95th (ft)	#197	#367		#90	159		m15	m16		#125	458	
Internal Link Dist (ft)		690			1131			1620			2795	
Turn Bay Length (ft)	300			90			1000			1000		
Base Capacity (vph)	90	400		51	395		50	3749		50	3749	
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	0.97	1.14		0.65	0.61		1.24	1.04		1.24	0.79	

Intersection Summary

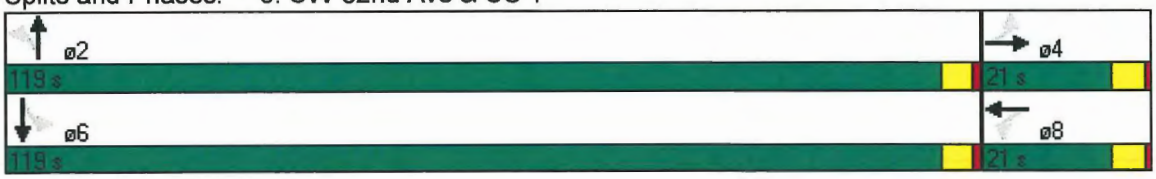
Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 31 (22%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.24
Intersection Signal Delay: 35.7 Intersection LOS: D
Intersection Capacity Utilization 98.3% ICU Level of Service F
Analysis Period (min) 15

~ 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.

Splits and Phases: 9: SW 32nd Ave & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	170		200	80		100	1000		0	1000		0
Storage Lanes	1		1	1		1	1		0	1		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
Leading Detector (ft)	50	50	50	50	50	50	50	0		50	0	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.86	0.86	1.00	0.91	0.91
Ped Bike Factor												
Frt			0.850			0.850		0.999			0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3406	1524	1703	3406	1524	1646	5749	0	1646	4563	0
Flt Permitted	0.396			0.200			0.043			0.043		
Satd. Flow (perm)	710	3406	1524	358	3406	1524	75	5749	0	75	4563	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			164			41		3			1	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		798			1372			2875			1425	
Travel Time (s)		18.1			31.2			49.0			24.3	
Volume (vph)	70	360	220	50	230	230	220	3540	30	120	2800	20
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.97	0.97	0.97	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	110%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	80	409	250	57	261	261	227	4014	31	125	2917	21
Lane Group Flow (vph)	80	409	250	57	261	261	227	4045	0	125	2938	0
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phases	4	4	4	8	8	8	5	2		1	6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	21.0	8.0	22.0		8.0	22.0	
Total Split (s)	24.0	24.0	24.0	24.0	24.0	24.0	14.0	116.0	0.0	8.0	102.0	0.0
Total Split (%)	16.2%	16.2%	16.2%	16.2%	16.2%	16.2%	9.5%	78.4%	0.0%	5.4%	68.9%	0.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0		3.5	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	0.0	2.0		0.5	2.0	
Lead/Lag							Lag	Lag		Lead	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	
Act Effct Green (s)	20.0	20.0	20.0	20.0	20.0	20.0	112.0	112.0		98.0	98.0	
Actuated g/C Ratio	0.14	0.14	0.14	0.14	0.14	0.14	0.76	0.76		0.66	0.66	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.83	0.89	0.72	1.19	0.57	1.08	0.92	0.93		1.36	0.97	
Control Delay	116.6	84.5	33.9	242.2	65.3	130.6	90.9	20.0		240.5	35.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	116.6	84.5	33.9	242.2	65.3	130.6	90.9	20.0		240.5	35.0	
LOS	F	F	C	F	E	F	F	B		F	C	
Approach Delay		70.9			112.1			23.8			43.4	
Approach LOS		E			F			C			D	
Queue Length 50th (ft)	76	207	79	~66	126	~245	170	826		~74	924	
Queue Length 95th (ft)	#174	#288	175	#160	171	#415	#333	871		#201	#1041	
Internal Link Dist (ft)		718			1292			2795			1345	
Turn Bay Length (ft)	170		200	80		100	1000			1000		
Base Capacity (vph)	96	460	348	48	460	241	248	4351		92	3022	
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	0.89	0.72	1.19	0.57	1.08	0.92	0.93		1.36	0.97	

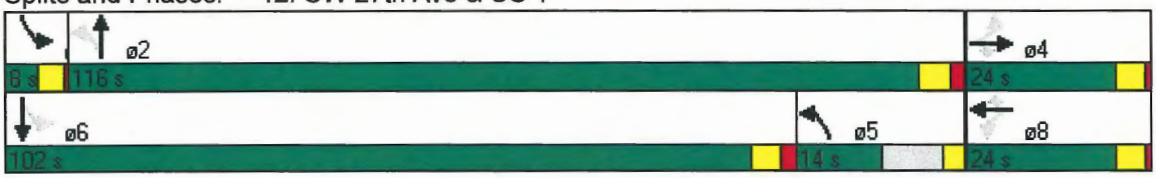
Intersection Summary

Area Type: Other
Cycle Length: 148
Actuated Cycle Length: 148
Offset: 11 (7%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.36
Intersection Signal Delay: 40.6 Intersection LOS: D
Intersection Capacity Utilization 93.4% ICU Level of Service F
Analysis Period (min) 15

~ 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.

Splits and Phases: 12: SW 27th Ave & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	160		200	116		120	1000		0	1000		0
Storage Lanes	1		1	1		1	1		0	1		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
Leading Detector (ft)	50	50	50	50	50	50	50	0		50	0	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.86	0.86	1.00	0.91	0.91
Ped Bike Factor												
Frt			0.850			0.850		0.999			0.997	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3406	1524	1703	1792	1524	1646	5749	0	1646	4553	0
Flt Permitted	0.250			0.372			0.037			0.038		
Satd. Flow (perm)	448	3406	1524	667	1792	1524	64	5749	0	66	4553	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			83					3			5	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			35			30	
Link Distance (ft)		700			1260			1400			2900	
Travel Time (s)		15.9			28.6			27.3			65.9	
Volume (vph)	90	240	190	50	160	150	160	3720	30	70	2780	50
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.82	0.82	0.82	0.96	0.96	0.96	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	120%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	96	255	202	61	195	183	167	4650	31	74	2926	53
Lane Group Flow (vph)	96	255	202	61	195	183	167	4681	0	74	2979	0
Turn Type	Perm		Perm	Perm		Perm	pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8		8	2			6		
Detector Phases	4	4	4	8	8	8	5	2		6	6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	22.0	22.0	22.0	23.0	23.0	23.0	8.0	22.0		22.0	22.0	
Total Split (s)	20.0	20.0	20.0	20.0	20.0	20.0	11.0	120.0	0.0	109.0	109.0	0.0
Total Split (%)	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	7.9%	85.7%	0.0%	77.9%	77.9%	0.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	0.0	2.0		2.0	2.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Recall Mode	Min	Min	Min	Min	Min	Min	Min	C-Max		C-Max	C-Max	
Act Effct Green (s)	16.0	16.0	16.0	16.0	16.0	16.0	116.0	116.0		105.0	105.0	
Actuated g/C Ratio	0.11	0.11	0.11	0.11	0.11	0.11	0.83	0.83		0.75	0.75	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.88	0.66	0.81	0.80	0.95	1.05	1.27	0.98		1.48	0.87	
Control Delay	494.1	68.1	60.3	118.9	112.3	140.7	197.8	21.1		320.2	16.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	494.1	68.1	60.3	118.9	112.3	140.7	197.8	21.1		320.2	16.5	
LOS	F	E	E	F	F	F	F	C		F	B	
Approach Delay		139.2			125.0			27.2			23.8	
Approach LOS		F			F			C			C	
Queue Length 50th (ft)	~133	118	108	55	179	~181	~143	918		~47	635	
Queue Length 95th (ft)	#254	167	#242	#123	#288	#295	#299	969		#157	709	
Internal Link Dist (ft)		620			1180			1320			2820	
Turn Bay Length (ft)	160		200	116		120	1000			1000		
Base Capacity (vph)	51	389	248	76	205	174	132	4764		50	3416	
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	1.88	0.66	0.81	0.80	0.95	1.05	1.27	0.98		1.48	0.87	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 85 (61%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.88
Intersection Signal Delay: 37.8 Intersection LOS: D
Intersection Capacity Utilization 95.8% ICU Level of Service F
Analysis Period (min) 15
~ 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.

Splits and Phases: 18: SW 22nd Ave & US 1

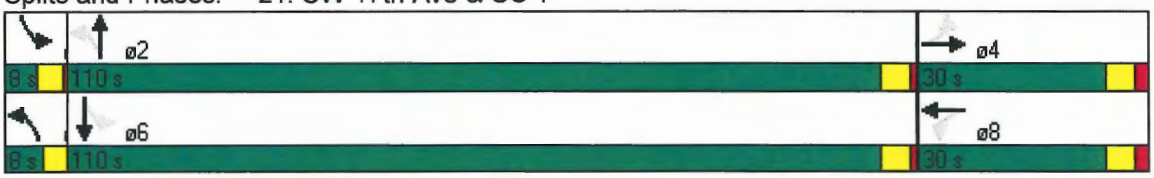
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	165		0	116		0	1000		0	1000		0
Storage Lanes	1		0	1		0	1		0	1		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
Leading Detector (ft)	50	50		50	50		50	0		50	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.86	0.86	1.00	0.91	0.91
Ped Bike Factor												
Frt		0.967			0.954			0.994			0.996	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3293	0	1703	3249	0	1646	5720	0	1646	4549	0
Flt Permitted	0.158			0.187			0.038			0.038		
Satd. Flow (perm)	283	3293	0	335	3249	0	66	5720	0	66	4549	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21			40			14			7	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			30			40	
Link Distance (ft)		611			1465			2900			700	
Travel Time (s)		13.9			33.3			65.9			11.9	
Volume (vph)	80	350	100	130	340	150	110	3740	170	110	2900	80
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.97	0.97	0.97	0.93	0.93	0.93	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	110%	100%	100%	100%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	85	372	106	134	351	155	118	4424	183	113	2990	82
Lane Group Flow (vph)	85	478	0	134	506	0	118	4607	0	113	3072	0
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phases	4	4		8	8		5	2		1	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	22.0	22.0		22.0	22.0		8.0	21.0		8.0	21.0	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	8.0	110.0	0.0	8.0	110.0	0.0
Total Split (%)	20.3%	20.3%	0.0%	20.3%	20.3%	0.0%	5.4%	74.3%	0.0%	5.4%	74.3%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.5	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		0.0	1.0		0.5	1.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	Min	Min		Min	Min		Min	C-Max		None	C-Max	
Act Effct Green (s)	26.0	26.0		26.0	26.0		110.0	106.0		110.0	106.0	
Actuated g/C Ratio	0.18	0.18		0.18	0.18		0.74	0.72		0.74	0.72	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.70	0.80		2.27	0.84		1.28	1.12		1.23	0.94	
Control Delay	421.7	67.1		648.8	67.4		214.2	81.7		194.5	25.9	
Queue Delay	66.2	0.0		0.0	1.6		0.0	44.9		0.0	41.6	
Total Delay	488.0	67.1		648.8	69.0		214.2	126.6		194.5	67.5	
LOS	F	E		F	E		F	F		F	E	
Approach Delay		130.6			190.4			128.8			72.0	
Approach LOS		F			F			F			E	
Queue Length 50th (ft)	~120	226		~209	233		~53	~1489		~43	864	
Queue Length 95th (ft)	#238	293		#351	#316		#188	#1510		#176	956	
Internal Link Dist (ft)		531			1385			2820			620	
Turn Bay Length (ft)	165			116			1000			1000		
Base Capacity (vph)	50	596		59	604		92	4101		92	3260	
Starvation Cap Reductn	0	0		0	0		0	0		0	450	
Spillback Cap Reductn	4	0		0	26		0	337		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	1.85	0.80		2.27	0.88		1.28	1.22		1.23	1.09	

Intersection Summary

Area Type: Other
Cycle Length: 148
Actuated Cycle Length: 148
Offset: 10 (7%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.27
Intersection Signal Delay: 113.4 Intersection LOS: F
Intersection Capacity Utilization 101.9% ICU Level of Service G
Analysis Period (min) 15
~ 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.

Splits and Phases: 21: SW 17th Ave & US 1



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	10	10	10
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	1000			0
Storage Lanes	1	1	1			0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	0	0	
Trailing Detector (ft)	0	0	0	0	0	
Turning Speed (mph)	15	9	15			9
Lane Util. Factor	1.00	1.00	1.00	0.86	0.91	0.91
Ped Bike Factor						
Frt		0.850			0.997	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1703	1524	1646	5755	4553	0
Flt Permitted	0.950		0.036			
Satd. Flow (perm)	1703	1524	62	5755	4553	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		42			6	
Headway Factor	1.00	1.00	1.04	1.09	1.09	1.09
Link Speed (mph)	30			40	37	
Link Distance (ft)	525			700	3993	
Travel Time (s)	11.9			11.9	73.6	
Volume (vph)	200	130	120	3710	2870	70
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.88	0.88	0.95	0.95	0.94	0.94
Growth Factor	110%	100%	100%	110%	115%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	250	148	126	4296	3511	74
Lane Group Flow (vph)	250	148	126	4296	3585	0
Turn Type		custom	pm+pt			
Protected Phases	7		5	2	6	
Permitted Phases		4	2			
Detector Phases	7	4	5	2	6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	9.0	21.0	8.0	22.0	22.0	
Total Split (s)	20.0	20.0	10.0	120.0	110.0	0.0
Total Split (%)	14.3%	14.3%	7.1%	85.7%	78.6%	0.0%
Yellow Time (s)	4.0	4.0	3.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	0.0	2.0	2.0	
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	Min	Min	Min	C-Max	C-Max	
Act Effct Green (s)	16.0	16.0	116.0	116.0	106.0	
Actuated g/C Ratio	0.11	0.11	0.83	0.83	0.76	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	1.28	0.70	1.06	0.90	1.04	
Control Delay	208.0	60.7	139.9	11.8	44.8	
Queue Delay	0.0	3.6	0.0	10.0	59.9	
Total Delay	208.0	64.4	139.9	21.8	104.7	
LOS	F	E	F	C	F	
Approach Delay	154.6			25.1	104.7	
Approach LOS	F			C	F	
Queue Length 50th (ft)	~289	94	~78	618	~1288	
Queue Length 95th (ft)	#451	#178	#216	655	#1352	
Internal Link Dist (ft)	445			620	3913	
Turn Bay Length (ft)			1000			
Base Capacity (vph)	195	211	119	4768	3449	
Starvation Cap Reductn	0	0	0	526	0	
Spillback Cap Reductn	0	22	0	0	405	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	1.28	0.78	1.06	1.01	1.18	

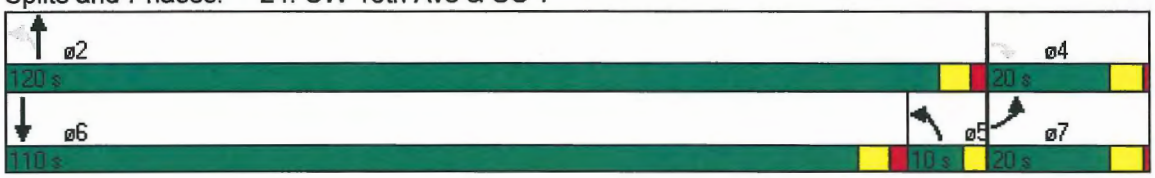
Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.28
Intersection Signal Delay: 65.2 Intersection LOS: E
Intersection Capacity Utilization 94.2% ICU Level of Service F
Analysis Period (min) 15

~ 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.

Splits and Phases: 24: SW 16th Ave & US 1



Arterial Level of Service: NB US 1

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Douglas Rd	II	40	30.9	8.6	39.5	0.30	27.6	C
Bird Rd	II	35	31.6	10.4	42.0	0.27	22.7	C
SW 32nd Ave	II	35	35.4	15.0	50.4	0.32	23.0	C
SW 27th Ave	II	40	49.0	25.3	74.3	0.54	26.4	C
SW 22nd Ave	II	40	48.2	21.6	69.8	0.54	27.6	C
SW 17th Ave	II	40	49.4	25.5	74.9	0.55	26.4	C
SW 16th Ave	II	35	16.6	2.6	19.2	0.13	24.9	C
Total	II		261.1	109.0	370.1	2.65	25.8	C

Arterial Level of Service: SB US 1

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SW 16th Ave	II	35	77.8	89.5	167.3	0.76	16.3	E
SW 17th Ave	II	35	16.6	98.4	115.0	0.13	4.2	F
SW 22nd Ave	II	40	49.4	94.4	143.8	0.55	13.8	E
SW 27th Ave	II	40	48.2	143.0	191.2	0.54	10.1	F
SW 32nd Ave	II	40	49.0	47.7	96.7	0.54	20.3	D
Bird Rd	II	35	35.4	85.7	121.1	0.32	9.6	F
Douglas Rd	II	35	31.6	6.5	38.1	0.27	25.1	C
Total	II		308.0	565.2	873.2	3.10	12.8	F

Existing 2007 PM
From Douglas Rd to I-95 5/30/2007

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	170		170	200		0	170		0	92		0
Storage Lanes	1		1	1		0	1		0	1		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
Leading Detector (ft)	50	50	50	50	50		50	0		50	0	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor												
Frt			0.850		0.962			0.999			0.995	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	1792	1524	1703	3276	0	1646	4563	0	1646	4544	0
Flt Permitted	0.222			0.222			0.036			0.038		
Satd. Flow (perm)	398	1792	1524	398	3276	0	62	4563	0	66	4544	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			52		8			3			11	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			35	
Link Distance (ft)		735			672			1600			1400	
Travel Time (s)		16.7			15.3			27.3			27.3	
Volume (vph)	81	393	169	50	340	115	188	2518	24	33	2680	112
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.87	0.87	0.87	0.83	0.83	0.83	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	110%	100%	100%	115%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	93	452	194	60	410	139	196	2885	25	34	3210	117
Lane Group Flow (vph)	93	452	194	60	549	0	196	2910	0	34	3327	0
Turn Type	Perm		Perm	Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8			2			6		
Detector Phases	4	4	4	8	8		5	2		6	6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0		8.0	21.0		21.0	21.0	
Total Split (s)	22.0	22.0	22.0	22.0	22.0	0.0	8.0	118.0	0.0	110.0	110.0	0.0
Total Split (%)	15.7%	15.7%	15.7%	15.7%	15.7%	0.0%	5.7%	84.3%	0.0%	78.6%	78.6%	0.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0	1.0		1.0	1.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Recall Mode	Min	Min	Min	Min	Min		Min	C-Max		C-Max	C-Max	
Act Effct Green (s)	18.0	18.0	18.0	18.0	18.0		114.0	114.0		106.0	106.0	
Actuated g/C Ratio	0.13	0.13	0.13	0.13	0.13		0.81	0.81		0.76	0.76	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.82	1.97	0.80	1.18	1.28		2.04	0.78		0.68	0.97	
Control Delay	469.9	480.5	67.6	233.2	190.7		524.2	8.6		17.8	6.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	469.9	480.5	67.6	233.2	190.7		524.2	8.6		17.8	6.5	
LOS	F	F	E	F	F		F	A		B	A	
Approach Delay		370.8			194.8			41.1			6.7	
Approach LOS		F			F			D			A	
90th %ile Green (s)	17.0	17.0	17.0	17.0	17.0		5.0	113.0		105.0	105.0	
90th %ile Term Code	Max	Max	Max	Max	Max		Max	Coord		Coord	Coord	
70th %ile Green (s)	17.0	17.0	17.0	17.0	17.0		5.0	113.0		105.0	105.0	
70th %ile Term Code	Max	Max	Max	Max	Max		Max	Coord		Coord	Coord	
50th %ile Green (s)	17.0	17.0	17.0	17.0	17.0		5.0	113.0		105.0	105.0	
50th %ile Term Code	Max	Max	Max	Max	Max		Max	Coord		Coord	Coord	
30th %ile Green (s)	17.0	17.0	17.0	17.0	17.0		5.0	113.0		105.0	105.0	
30th %ile Term Code	Max	Max	Max	Max	Max		Max	Coord		Coord	Coord	
10th %ile Green (s)	17.0	17.0	17.0	17.0	17.0		5.0	113.0		105.0	105.0	
10th %ile Term Code	Max	Max	Max	Max	Max		Max	Coord		Coord	Coord	
Queue Length 50th (ft)	~127	~636	129	~65	~331		~188	409		5	184	
Queue Length 95th (ft)	#237	#816	#239	#148	#401		#349	456		m4	m147	
Internal Link Dist (ft)		655			592			1520			1320	
Turn Bay Length (ft)	170		170	200			170			92		
Base Capacity (vph)	51	230	241	51	428		96	3716		50	3443	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	1.82	1.97	0.80	1.18	1.28		2.04	0.78		0.68	0.97	

Intersection Summary

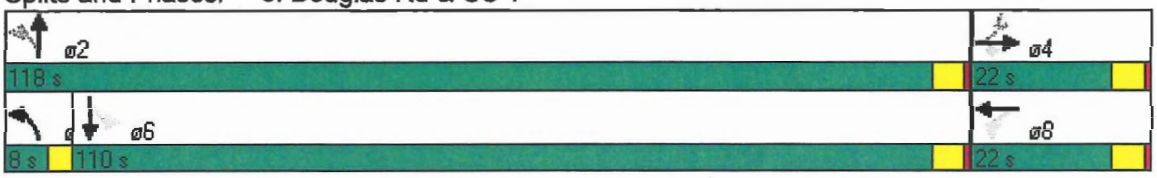
Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 47 (34%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.04
Intersection Signal Delay: 69.5 Intersection LOS: E
Intersection Capacity Utilization 109.8% ICU Level of Service H
Analysis Period (min) 15

~ 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.

Splits and Phases: 3: Douglas Rd & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	350		0	0		90	0		0
Storage Lanes	2		0	1		0	0		1	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
Leading Detector (ft)	50	50		50	50			0	0		0	
Trailing Detector (ft)	0	0		0	0			0	0		0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.91	0.91	1.00	1.00	0.95	0.95	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor												
Frt		0.935			0.951				0.850		0.977	
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3099	1525	0	1703	3239	0	0	4567	1422	0	4462	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3099	1525	0	1703	3239	0	0	4567	1422	0	4462	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			14				73		63	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		833			777			1400			1700	
Travel Time (s)		18.9			17.7			27.3			33.1	
Volume (vph)	419	197	150	204	191	93	0	2152	145	0	2572	541
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.86	0.86	0.86	0.98	0.98	0.98	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	115%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	455	214	163	237	222	108	0	2196	148	0	3081	564
Lane Group Flow (vph)	455	377	0	237	330	0	0	2196	148	0	3645	0
Turn Type	Split			Split					Perm			
Protected Phases	4	4		8	8			2			6	
Permitted Phases									2			
Detector Phases	4	4		8	8			2	2		6	
Minimum Initial (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Minimum Split (s)	22.0	22.0		22.0	22.0			21.0	21.0		21.0	
Total Split (s)	19.0	19.0	0.0	19.0	19.0	0.0	0.0	102.0	102.0	0.0	102.0	0.0
Total Split (%)	13.6%	13.6%	0.0%	13.6%	13.6%	0.0%	0.0%	72.9%	72.9%	0.0%	72.9%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0			1.0	1.0		1.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Min	Min		Min	Min			C-Max	C-Max		C-Max	
Act Effct Green (s)	15.0	15.0		15.0	15.0			98.0	98.0		98.0	
Actuated g/C Ratio	0.11	0.11		0.11	0.11			0.70	0.70		0.70	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.37	2.20		1.30	0.92			0.69	0.15		1.16	
Control Delay	229.8	587.8		217.4	89.3			10.4	3.2		85.7	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	229.8	587.8		217.4	89.3			10.4	3.2		85.7	
LOS	F	F		F	F			B	A		F	
Approach Delay		392.0			142.8			9.9			85.7	
Approach LOS		F			F			A			F	
90th %ile Green (s)	13.0	13.0		13.0	13.0			97.0	97.0		97.0	
90th %ile Term Code	Max	Max		Max	Max			Coord	Coord		Coord	
70th %ile Green (s)	13.0	13.0		13.0	13.0			97.0	97.0		97.0	
70th %ile Term Code	Max	Max		Max	Max			Coord	Coord		Coord	
50th %ile Green (s)	13.0	13.0		13.0	13.0			97.0	97.0		97.0	
50th %ile Term Code	Max	Max		Max	Max			Coord	Coord		Coord	
30th %ile Green (s)	13.0	13.0		13.0	13.0			97.0	97.0		97.0	
30th %ile Term Code	Max	Max		Max	Max			Coord	Coord		Coord	
10th %ile Green (s)	13.0	13.0		13.0	13.0			97.0	97.0		97.0	
10th %ile Term Code	Max	Max		Max	Max			Coord	Coord		Coord	
Queue Length 50th (ft)	~300	~602		~275	152			278	17		~343	
Queue Length 95th (ft)	#419	#829		#421	#228			m295	m26		m#1239	
Internal Link Dist (ft)		753			697			1320			1620	
Turn Bay Length (ft)				350					90			
Base Capacity (vph)	332	171		182	360			3197	1017		3142	
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	1.37	2.20		1.30	0.92			0.69	0.15		1.16	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 32 (23%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.20
Intersection Signal Delay: 100.5 Intersection LOS: F
Intersection Capacity Utilization 104.7% ICU Level of Service G
Analysis Period (min) 15

~ 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.

Splits and Phases: 6: Bird Rd & US 1

Existing 2007 PM
From Douglas Rd to I-95

5/30/2007

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	90		0	70		0	85		0
Storage Lanes	1		0	1		0	1		0	1		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
Leading Detector (ft)	50	50		50	50		50	0		50	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor												
Frt		0.962			0.953			0.999			0.998	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3276	0	1703	3246	0	1646	4563	0	1646	4558	0
Flt Permitted	0.211			0.211			0.038			0.038		
Satd. Flow (perm)	378	3276	0	378	3246	0	66	4563	0	66	4558	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28			43			2			4	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			35			40	
Link Distance (ft)		770			1211			1700			2875	
Travel Time (s)		17.5			27.5			33.1			49.0	
Volume (vph)	49	258	88	38	228	103	158	2532	20	97	2987	48
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.83	0.83	0.83	0.80	0.80	0.80	0.91	0.91	0.91	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	115%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	59	311	106	48	285	129	174	2782	22	102	3616	51
Lane Group Flow (vph)	59	417	0	48	414	0	174	2804	0	102	3667	0
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phases	4	4		8	8		5	2		1	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0		22.0	22.0		8.0	21.0		8.0	21.0	
Total Split (s)	23.0	23.0	0.0	23.0	23.0	0.0	9.0	108.0	0.0	9.0	108.0	0.0
Total Split (%)	16.4%	16.4%	0.0%	16.4%	16.4%	0.0%	6.4%	77.1%	0.0%	6.4%	77.1%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		0.0	1.0		0.0	1.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	Min	Min		Min	Min		Min	C-Max		Min	C-Max	
Act Effct Green (s)	19.0	19.0		19.0	19.0		109.0	104.0		109.0	104.0	
Actuated g/C Ratio	0.14	0.14		0.14	0.14		0.78	0.74		0.78	0.74	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.16	0.89		0.94	0.87		1.61	0.83		0.94	1.08	
Control Delay	227.0	76.9		169.4	71.7		325.0	15.0		54.0	47.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	227.0	76.9		169.4	71.7		325.0	15.0		54.0	47.7	
LOS	F	E		F	E		F	B		D	D	
Approach Delay		95.5			81.8			33.1			47.8	
Approach LOS		F			F			C			D	
90th %ile Green (s)	18.0	18.0		18.0	18.0		6.0	103.0		6.0	103.0	
90th %ile Term Code	Max	Max		Max	Max		Max	Coord		Max	Coord	
70th %ile Green (s)	18.0	18.0		18.0	18.0		6.0	103.0		6.0	103.0	
70th %ile Term Code	Max	Max		Max	Max		Max	Coord		Max	Coord	
50th %ile Green (s)	18.0	18.0		18.0	18.0		6.0	103.0		6.0	103.0	
50th %ile Term Code	Max	Max		Max	Max		Max	Coord		Max	Coord	
30th %ile Green (s)	18.0	18.0		18.0	18.0		6.0	103.0		6.0	103.0	
30th %ile Term Code	Max	Max		Max	Max		Max	Coord		Max	Coord	
10th %ile Green (s)	18.0	18.0		18.0	18.0		6.0	103.0		6.0	103.0	
10th %ile Term Code	Max	Max		Max	Max		Max	Coord		Max	Coord	
Queue Length 50th (ft)	~63	186		44	177		~163	582		58	~1353	
Queue Length 95th (ft)	#144	#238		#112	206		m#262	m581		m40	m106	
Internal Link Dist (ft)		690			1131			1620			2795	
Turn Bay Length (ft)	300			90			70			85		
Base Capacity (vph)	51	469		51	478		108	3390		108	3387	
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	1.16	0.89		0.94	0.87		1.61	0.83		0.94	1.08	

Intersection Summary

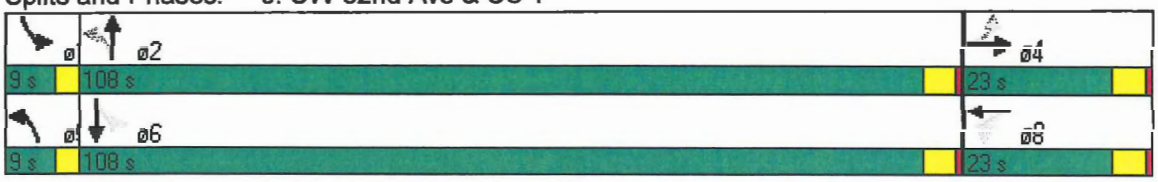
Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 2 (1%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.61
Intersection Signal Delay: 47.1 Intersection LOS: D
Intersection Capacity Utilization 102.8% ICU Level of Service G
Analysis Period (min) 15

~ 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.

Splits and Phases: 9: SW 32nd Ave & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	170		200	80		100	545		0	245		0
Storage Lanes	1		1	1		1	1		0	1		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
Leading Detector (ft)	50	50	50	50	50	50	50	0		50	0	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor												
Frt			0.850			0.850		0.997			0.997	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3406	1524	1703	3406	1524	1646	4553	0	1646	4553	0
Flt Permitted	0.190			0.190			0.043			0.043		
Satd. Flow (perm)	341	3406	1524	341	3406	1524	75	4553	0	75	4553	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			155			23		4			5	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		798			1372			2875			1425	
Travel Time (s)		18.1			31.2			49.0			24.3	
Volume (vph)	41	455	225	52	582	47	148	2534	51	31	3313	84
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.95	0.95	0.95	0.98	0.98	0.98	0.95	0.98	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	115%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	45	500	247	55	613	49	151	2586	52	33	3888	88
Lane Group Flow (vph)	45	500	247	55	613	49	151	2638	0	33	3976	0
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phases	4	4	4	8	8	8	5	2		1	6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	21.0	8.0	22.0		8.0	22.0	
Total Split (s)	25.0	25.0	25.0	25.0	25.0	25.0	18.0	97.0	0.0	18.0	97.0	0.0
Total Split (%)	17.9%	17.9%	17.9%	17.9%	17.9%	17.9%	12.9%	69.3%	0.0%	12.9%	69.3%	0.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	0.0	2.0		0.0	2.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	Min	Min	Min	Min	Min	Min	Min	C-Max		Min	C-Max	
Act Effct Green (s)	21.0	21.0	21.0	21.0	21.0	21.0	110.5	102.1		100.4	95.4	
Actuated g/C Ratio	0.15	0.15	0.15	0.15	0.15	0.15	0.79	0.73		0.72	0.68	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.88	0.98	0.69	1.08	1.20	0.20	0.80	0.79		0.30	1.28	
Control Delay	153.6	93.6	31.7	204.4	157.0	33.9	46.4	25.3		11.7	143.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	153.6	93.6	31.7	204.4	157.0	33.9	46.4	25.3		11.7	143.0	
LOS	F	F	C	F	F	C	D	C		B	F	
Approach Delay		77.7			152.3			26.4			141.9	
Approach LOS		E			F			C			F	
90th %ile Green (s)	20.0	20.0	20.0	20.0	20.0	20.0	15.0	99.0		7.0	91.0	
90th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord		Gap	Coord	
70th %ile Green (s)	20.0	20.0	20.0	20.0	20.0	20.0	15.0	100.2		5.8	91.0	
70th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord		Gap	Coord	
50th %ile Green (s)	20.0	20.0	20.0	20.0	20.0	20.0	14.3	100.3		5.7	91.7	
50th %ile Term Code	Max	Max	Max	Max	Max	Max	Gap	Coord		Gap	Coord	
30th %ile Green (s)	20.0	20.0	20.0	20.0	20.0	20.0	11.5	100.4		5.6	94.5	
30th %ile Term Code	Max	Max	Max	Max	Max	Max	Gap	Coord		Gap	Coord	
10th %ile Green (s)	20.0	20.0	20.0	20.0	20.0	20.0	7.0	100.5		5.5	99.0	
10th %ile Term Code	Max	Max	Max	Max	Max	Max	Gap	Coord		Gap	Coord	
Queue Length 50th (ft)	41	242	79	~56	~355	21	80	775		3	~1695	
Queue Length 95th (ft)	#124	#360	179	#150	#480	60	m109	m841		m2	m#1294	
Internal Link Dist (ft)		718			1292			2795			1345	
Turn Bay Length (ft)	170		200	80		100	545			245		
Base Capacity (vph)	51	511	360	51	511	248	217	3321		215	3105	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.88	0.98	0.69	1.08	1.20	0.20	0.70	0.79		0.15	1.28	

Intersection Summary

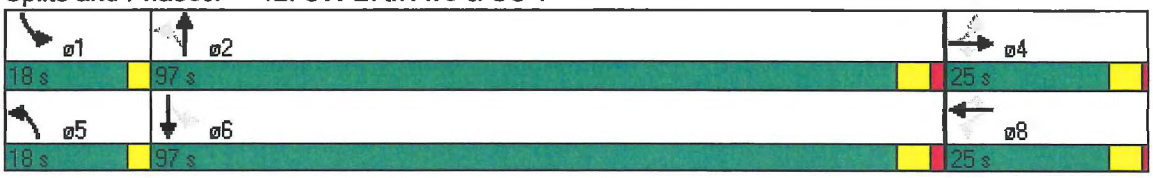
Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 109 (78%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.28
Intersection Signal Delay: 97.9 Intersection LOS: F
Intersection Capacity Utilization 116.4% ICU Level of Service H
Analysis Period (min) 15

~ 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.

Splits and Phases: 12: SW 27th Ave & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	160		200	116		120	165		0	50		0
Storage Lanes	1		1	1		1	1		0	1		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
Leading Detector (ft)	50	50	50	50	50	50	50	0		50	0	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor												
Frt			0.850			0.850		0.999			0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3406	1524	1703	1792	1524	1646	4563	0	1646	4563	0
Flt Permitted	0.508			0.421			0.037			0.046		
Satd. Flow (perm)	911	3406	1524	755	1792	1524	64	4563	0	80	4563	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			50			64		3			2	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		700			1260			1400			2900	
Travel Time (s)		15.9			28.6			23.9			49.4	
Volume (vph)	73	202	128	48	99	83	33	2081	23	70	3198	20
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.88	0.88	0.88	0.89	0.89	0.89	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	110%	100%	100%	125%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	83	230	145	54	111	93	34	2384	24	73	4164	21
Lane Group Flow (vph)	83	230	145	54	111	93	34	2408	0	73	4185	0
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phases	4	4	4	8	8	8	5	2		1	6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	22.0	22.0	22.0	22.0	22.0	22.0	8.0	22.0		8.0	22.0	
Total Split (s)	20.0	20.0	20.0	20.0	20.0	20.0	8.0	112.0	0.0	8.0	112.0	0.0
Total Split (%)	14.3%	14.3%	14.3%	14.3%	14.3%	14.3%	5.7%	80.0%	0.0%	5.7%	80.0%	0.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	0.0	2.0		0.0	2.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	Min	Min	Min	Min	Min	Min	Min	C-Max		Min	C-Max	
Act Effct Green (s)	15.4	15.4	15.4	15.4	15.4	15.4	112.5	108.4		112.7	108.5	
Actuated g/C Ratio	0.11	0.11	0.11	0.11	0.11	0.11	0.80	0.77		0.80	0.78	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.83	0.61	0.68	0.65	0.56	0.41	0.35	0.68		0.65	1.18	
Control Delay	112.7	66.9	55.8	93.6	70.5	27.7	16.0	21.6		24.4	94.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	112.7	66.9	55.8	93.6	70.5	27.7	16.0	21.6		24.4	94.4	
LOS	F	E	E	F	E	C	B	C		C	F	
Approach Delay		71.7			59.9			21.5			93.2	
Approach LOS		E			E			C			F	
90th %ile Green (s)	14.0	14.0	14.0	14.0	14.0	14.0	5.0	106.0		5.0	106.0	
90th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord		Max	Coord	
70th %ile Green (s)	14.0	14.0	14.0	14.0	14.0	14.0	5.0	106.0		5.0	106.0	
70th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord		Max	Coord	
50th %ile Green (s)	14.0	14.0	14.0	14.0	14.0	14.0	5.0	106.0		5.0	106.0	
50th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord		Max	Coord	
30th %ile Green (s)	14.0	14.0	14.0	14.0	14.0	14.0	5.0	106.0		5.0	106.0	
30th %ile Term Code	Max	Max	Max	Hold	Hold	Hold	Max	Coord		Max	Coord	
10th %ile Green (s)	11.1	11.1	11.1	11.1	11.1	11.1	5.5	107.9		6.0	108.4	
10th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Hold	Gap	Coord		Gap	Coord	
Queue Length 50th (ft)	75	106	84	48	97	24	7	618		16	~1672	
Queue Length 95th (ft)	#166	148	156	#111	161	79	m8	779		m15	m#304	
Internal Link Dist (ft)		620			1180			1320			2820	
Turn Bay Length (ft)	160		200	116		120	165			50		
Base Capacity (vph)	104	389	218	86	205	231	97	3533		112	3536	
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	0.80	0.59	0.67	0.63	0.54	0.40	0.35	0.68		0.65	1.18	

Intersection Summary

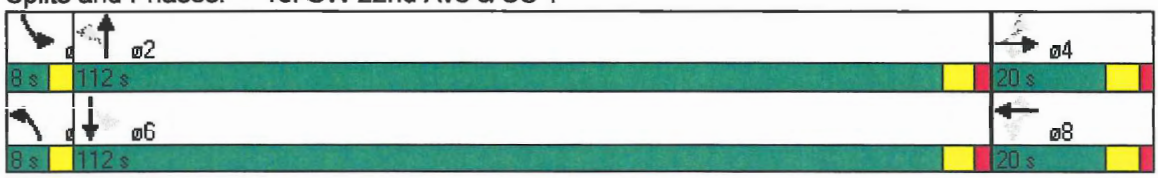
Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 51 (36%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.18
Intersection Signal Delay: 67.1 Intersection LOS: E
Intersection Capacity Utilization 98.9% ICU Level of Service F
Analysis Period (min) 15

~ 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.

Splits and Phases: 18: SW 22nd Ave & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	165		0	116		0	280		0	60		0
Storage Lanes	1		0	1		0	1		0	1		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
Leading Detector (ft)	50	50		50	50		50	0		50	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor												
Frt		0.959			0.973			0.995			0.994	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3266	0	1703	3314	0	1646	4544	0	1646	4540	0
Flt Permitted	0.222			0.222			0.042			0.042		
Satd. Flow (perm)	398	3266	0	398	3314	0	73	4544	0	73	4540	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		32			16			9			10	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			35	
Link Distance (ft)		611			1465			2900			700	
Travel Time (s)		13.9			33.3			49.4			13.6	
Volume (vph)	86	325	122	57	326	73	129	2257	85	120	3107	146
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.93	0.93	0.93	0.92	0.92	0.92	0.97	0.97	0.97	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	115%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	92	349	131	62	354	79	133	2327	88	122	3646	149
Lane Group Flow (vph)	92	480	0	62	433	0	133	2415	0	122	3795	0
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phases	4	4		8	8		5	2		1	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	22.0	22.0		22.0	22.0		8.0	21.0		8.0	21.0	
Total Split (s)	22.0	22.0	0.0	22.0	22.0	0.0	19.0	99.0	0.0	19.0	99.0	0.0
Total Split (%)	15.7%	15.7%	0.0%	15.7%	15.7%	0.0%	13.6%	70.7%	0.0%	13.6%	70.7%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		0.0	1.0		0.0	1.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	Min	Min		Min	Min		Min	C-Max		Min	C-Max	
Act Effct Green (s)	18.0	18.0		18.0	18.0		111.2	100.1		108.8	98.9	
Actuated g/C Ratio	0.13	0.13		0.13	0.13		0.79	0.72		0.78	0.71	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.80	1.07		1.22	0.98		0.73	0.74		0.73	1.18	
Control Delay	462.0	115.6		245.2	97.2		37.7	25.5		40.7	98.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	37.9	
Total Delay	462.0	115.6		245.2	97.2		37.7	25.5		40.7	136.4	
LOS	F	F		F	F		D	C		D	F	
Approach Delay		171.3			115.7			26.1			133.4	
Approach LOS		F			F			C			F	
90th %ile Green (s)	16.0	16.0		16.0	16.0		16.0	94.0		16.0	94.0	
90th %ile Term Code	Max	Max		Max	Max		Max	Coord		Max	Coord	
70th %ile Green (s)	16.0	16.0		16.0	16.0		14.3	96.5		13.5	95.7	
70th %ile Term Code	Max	Max		Max	Max		Gap	Coord		Gap	Coord	
50th %ile Green (s)	16.0	16.0		16.0	16.0		11.8	99.1		10.9	98.2	
50th %ile Term Code	Max	Max		Max	Max		Gap	Coord		Gap	Coord	
30th %ile Green (s)	16.0	16.0		16.0	16.0		10.3	101.5		8.5	99.7	
30th %ile Term Code	Max	Max		Max	Max		Gap	Coord		Gap	Coord	
10th %ile Green (s)	16.0	16.0		16.0	16.0		8.0	104.3		5.7	102.0	
10th %ile Term Code	Max	Max		Max	Max		Gap	Coord		Gap	Coord	
Queue Length 50th (ft)	~126	~241		~69	203		62	525		60	~1511	
Queue Length 95th (ft)	#245	#358		#169	#318		m118	701		m42	m#1162	
Internal Link Dist (ft)		531			1385			2820			620	
Turn Bay Length (ft)	165			116			280			60		
Base Capacity (vph)	51	448		51	440		227	3251		227	3211	
Starvation Cap Reductn	0	0		0	0		0	0		0	215	
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	1.80	1.07		1.22	0.98		0.59	0.74		0.54	1.27	

Intersection Summary

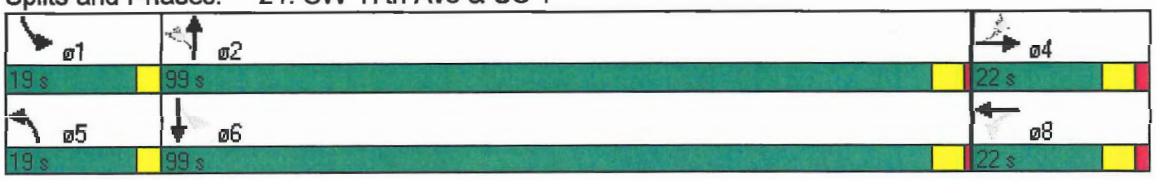
Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 22 (16%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.80
Intersection Signal Delay: 98.8 Intersection LOS: F
Intersection Capacity Utilization 109.0% ICU Level of Service G
Analysis Period (min) 15

~ 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.

Splits and Phases: 21: SW 17th Ave & US 1



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	10	10	10
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	170			0
Storage Lanes	1	1	1			0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	0	0	
Trailing Detector (ft)	0	0	0	0	0	
Turning Speed (mph)	15	9	15			9
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91
Ped Bike Factor						
Frt		0.850			0.991	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1703	1524	1646	4567	4526	0
Flt Permitted	0.950		0.033			
Satd. Flow (perm)	1703	1524	57	4567	4526	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		47			30	
Headway Factor	1.00	1.00	1.04	1.09	1.09	1.09
Link Speed (mph)	30			35	35	
Link Distance (ft)	525			700	3993	
Travel Time (s)	11.9			13.6	77.8	
Volume (vph)	101	215	140	2276	3158	247
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.97	0.97	0.86	0.86	0.93	0.93
Growth Factor	110%	100%	100%	100%	120%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	115	222	163	2647	4075	266
Lane Group Flow (vph)	115	222	163	2647	4341	0
Turn Type		Perm	pm+pt			
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phases	4	4	5	2	6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	22.0	22.0	8.0	22.0	22.0	
Total Split (s)	12.0	12.0	8.0	128.0	120.0	0.0
Total Split (%)	8.6%	8.6%	5.7%	91.4%	85.7%	0.0%
Yellow Time (s)	4.0	4.0	3.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	0.0	2.0	2.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	Min	Min	Min	C-Max	C-Max	
Act Effct Green (s)	8.0	8.0	124.0	124.0	116.0	
Actuated g/C Ratio	0.06	0.06	0.89	0.89	0.83	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	1.19	1.69	1.70	0.65	1.16	
Control Delay	203.8	372.3	368.2	2.6	89.5	
Queue Delay	0.0	49.4	0.0	0.0	126.1	
Total Delay	203.8	421.8	368.2	2.6	215.7	
LOS	F	F	F	A	F	
Approach Delay	347.4			23.8	215.7	
Approach LOS	F			C	F	
90th %ile Green (s)	7.0	7.0	5.0	122.0	114.0	
90th %ile Term Code	Max	Max	Max	Coord	Coord	
70th %ile Green (s)	7.0	7.0	5.0	122.0	114.0	
70th %ile Term Code	Max	Max	Max	Coord	Coord	
50th %ile Green (s)	7.0	7.0	5.0	122.0	114.0	
50th %ile Term Code	Max	Max	Max	Coord	Coord	
30th %ile Green (s)	7.0	7.0	5.0	122.0	114.0	
30th %ile Term Code	Max	Max	Max	Coord	Coord	
10th %ile Green (s)	7.0	7.0	5.0	122.0	114.0	
10th %ile Term Code	Max	Max	Max	Coord	Coord	
Queue Length 50th (ft)	~125	~255	~134	186	~1709	
Queue Length 95th (ft)	#256	#425	m#231	m161	#1752	
Internal Link Dist (ft)	445			620	3913	
Turn Bay Length (ft)			170			
Base Capacity (vph)	97	131	96	4045	3755	
Starvation Cap Reductn	0	0	0	67	0	
Spillback Cap Reductn	0	8	0	0	735	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	1.19	1.80	1.70	0.67	1.44	

Intersection Summary

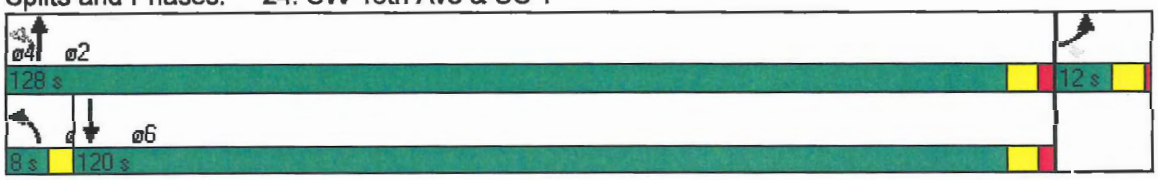
Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 131 (94%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.70
Intersection Signal Delay: 149.6 Intersection LOS: F
Intersection Capacity Utilization 102.6% ICU Level of Service G
Analysis Period (min) 15

~ 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.

Splits and Phases: 24: SW 16th Ave & US 1



Arterial Level of Service: NB US 1

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Douglas Rd	II	40	30.9	64.4	95.3	0.30	11.4	F
Bird Rd	II	35	31.6	64.3	95.9	0.27	10.0	F
SW 32nd Ave	II	35	35.4	40.7	76.1	0.32	15.2	E
SW 27th Ave	II	40	49.0	1.8	50.8	0.54	38.6	A
SW 22nd Ave	II	40	48.2	10.9	59.1	0.54	32.6	B
SW 17th Ave	II	40	49.4	8.7	58.1	0.55	34.0	B
SW 16th Ave	II	35	16.6	1.3	17.9	0.13	26.7	C
Total	II		261.1	192.1	453.2	2.65	21.1	D

Arterial Level of Service: SB US 1

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SW 16th Ave	II	35	77.8	165.0	242.8	0.76	11.2	F
SW 17th Ave	II	35	16.6	163.7	180.3	0.13	2.6	F
SW 22nd Ave	II	40	49.4	90.2	139.6	0.55	14.2	E
SW 27th Ave	II	40	48.2	122.7	170.9	0.54	11.3	F
SW 32nd Ave	II	40	49.0	192.3	241.3	0.54	8.1	F
Bird Rd	II	35	35.4	320.8	356.2	0.32	3.3	F
Douglas Rd	II	35	31.6	180.4	212.0	0.27	4.5	F
Total	II		308.0	1235.1	1543.1	3.10	7.2	F

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	170		170	200		0	170		0	92		0
Storage Lanes	1		1	1		0	1		0	1		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
Leading Detector (ft)	50	50	50	50	50		50	0		50	0	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor												
Frt			0.850		0.969			0.998			0.995	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	1792	1524	1703	3300	0	1646	4558	0	1646	4544	0
Flt Permitted	0.152			0.089			0.037			0.039		
Satd. Flow (perm)	272	1792	1524	160	3300	0	64	4558	0	68	4544	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			98		1			3			5	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			35	
Link Distance (ft)		735			672			1600			1400	
Travel Time (s)		16.7			15.3			27.3			27.3	
Volume (vph)	120	395	210	60	460	120	200	2850	50	70	3160	115
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.87	0.87	0.87	0.83	0.83	0.83	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	110%	100%	100%	110%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	138	454	241	72	554	145	208	3266	52	73	3621	120
Lane Group Flow (vph)	138	454	241	72	699	0	208	3318	0	73	3741	0
Turn Type	Perm		Perm	Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8			2			6		
Detector Phases	4	4	4	8	8		5	2		6	6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0		8.0	21.0		21.0	21.0	
Total Split (s)	50.0	50.0	50.0	50.0	50.0	0.0	13.0	120.0	0.0	107.0	107.0	0.0
Total Split (%)	29.4%	29.4%	29.4%	29.4%	29.4%	0.0%	7.6%	70.6%	0.0%	62.9%	62.9%	0.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0	1.0		1.0	1.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Recall Mode	Min	Min	Min	Min	Min		Min	C-Max		C-Max	C-Max	
Act Effct Green (s)	46.0	46.0	46.0	46.0	46.0		116.0	116.0		103.0	103.0	
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.27		0.68	0.68		0.61	0.61	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.86	0.94	0.50	1.67	0.78		1.64	1.07		1.78	1.36	
Control Delay	468.7	87.7	34.2	421.4	64.5		350.6	64.4		379.8	180.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	468.7	87.7	34.2	421.4	64.5		350.6	64.4		379.8	180.4	
LOS	F	F	C	F	E		F	E		F	F	
Approach Delay		135.3			97.8			81.3			184.2	
Approach LOS		F			F			F			F	
90th %ile Green (s)	45.0	45.0	45.0	45.0	45.0		10.0	115.0		102.0	102.0	
90th %ile Term Code	Max	Max	Max	Max	Max		Max	Coord		Coord	Coord	
70th %ile Green (s)	45.0	45.0	45.0	45.0	45.0		10.0	115.0		102.0	102.0	
70th %ile Term Code	Max	Max	Max	Max	Max		Max	Coord		Coord	Coord	
50th %ile Green (s)	45.0	45.0	45.0	45.0	45.0		10.0	115.0		102.0	102.0	
50th %ile Term Code	Max	Max	Max	Max	Max		Max	Coord		Coord	Coord	
30th %ile Green (s)	45.0	45.0	45.0	45.0	45.0		10.0	115.0		102.0	102.0	
30th %ile Term Code	Max	Max	Max	Max	Max		Max	Coord		Coord	Coord	
10th %ile Green (s)	45.0	45.0	45.0	45.0	45.0		10.0	115.0		102.0	102.0	
10th %ile Term Code	Max	Max	Max	Max	Max		Max	Coord		Coord	Coord	
Queue Length 50th (ft)	~233	498	134	~116	382		~287	~1490		~81	~2034	
Queue Length 95th (ft)	#370	#675	215	#211	415		#467	#1542		m#68	m116	
Internal Link Dist (ft)		655			592			1520			1320	
Turn Bay Length (ft)	170		170	200			170			92		
Base Capacity (vph)	74	485	484	43	894		127	3111		41	2755	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	1.86	0.94	0.50	1.67	0.78		1.64	1.07		1.78	1.36	

Intersection Summary

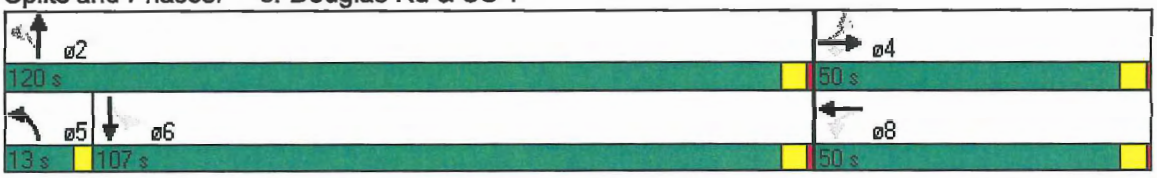
Area Type: Other
Cycle Length: 170
Actuated Cycle Length: 170
Offset: 23 (14%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.86
Intersection Signal Delay: 131.7 Intersection LOS: F
Intersection Capacity Utilization 118.3% ICU Level of Service H
Analysis Period (min) 15

~ 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.

Splits and Phases: 3: Douglas Rd & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	350		0	0		90	0		0
Storage Lanes	2		0	1		0	0		1	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
Leading Detector (ft)	50	50		50	50			0	0		0	
Trailing Detector (ft)	0	0		0	0			0	0		0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.91	0.91	1.00	1.00	0.95	0.95	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor												
Frt		0.956			0.950				0.850		0.977	
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3099	1559	0	1703	3235	0	0	4567	1422	0	4462	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3099	1559	0	1703	3235	0	0	4567	1422	0	4462	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			16				42		29	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		833			777			1400			1700	
Travel Time (s)		18.9			17.7			27.3			33.1	
Volume (vph)	440	390	160	210	192	96	0	2510	210	0	2890	570
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.86	0.86	0.86	0.98	0.98	0.98	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	110%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	478	424	174	244	223	112	0	2561	214	0	3311	594
Lane Group Flow (vph)	478	598	0	244	335	0	0	2561	214	0	3905	0
Turn Type	Split			Split					Perm			
Protected Phases	4	4		8	8			2			6	
Permitted Phases									2			
Detector Phases	4	4		8	8			2	2		6	
Minimum Initial (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Minimum Split (s)	22.0	22.0		22.0	22.0			21.0	21.0		21.0	
Total Split (s)	40.0	40.0	0.0	45.0	45.0	0.0	0.0	85.0	85.0	0.0	85.0	0.0
Total Split (%)	23.5%	23.5%	0.0%	26.5%	26.5%	0.0%	0.0%	50.0%	50.0%	0.0%	50.0%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0			1.0	1.0		1.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Min	Min		Min	Min			C-Max	C-Max		C-Max	
Act Effct Green (s)	36.0	36.0		31.1	31.1			90.9	90.9		90.9	
Actuated g/C Ratio	0.21	0.21		0.18	0.18			0.53	0.53		0.53	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.73	1.76		0.78	0.55			1.05	0.27		1.63	
Control Delay	69.9	391.2		82.8	62.6			64.3	24.9		320.8	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	69.9	391.2		82.8	62.6			64.3	24.9		320.8	
LOS	E	F		F	E			E	C		F	
Approach Delay		248.5			71.1			61.3			320.8	
Approach LOS		F			E			E			F	
90th %ile Green (s)	34.0	34.0		39.0	39.0			80.0	80.0		80.0	
90th %ile Term Code	Max	Max		Max	Max			Coord	Coord		Coord	
70th %ile Green (s)	34.0	34.0		33.6	33.6			85.4	85.4		85.4	
70th %ile Term Code	Max	Max		Gap	Gap			Coord	Coord		Coord	
50th %ile Green (s)	34.0	34.0		28.7	28.7			90.3	90.3		90.3	
50th %ile Term Code	Max	Max		Gap	Gap			Coord	Coord		Coord	
30th %ile Green (s)	34.0	34.0		24.9	24.9			94.1	94.1		94.1	
30th %ile Term Code	Max	Max		Gap	Gap			Coord	Coord		Coord	
10th %ile Green (s)	34.0	34.0		19.5	19.5			99.5	99.5		99.5	
10th %ile Term Code	Max	Max		Gap	Gap			Coord	Coord		Coord	
Queue Length 50th (ft)	275	~1082		264	173			~1119	117		~2271	
Queue Length 95th (ft)	348	#1357		325	201			m#1077	m108		m#1543	
Internal Link Dist (ft)		753			697			1320			1620	
Turn Bay Length (ft)				350					90			
Base Capacity (vph)	656	339		411	792			2441	780		2398	
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	0.73	1.76		0.59	0.42			1.05	0.27		1.63	

Intersection Summary

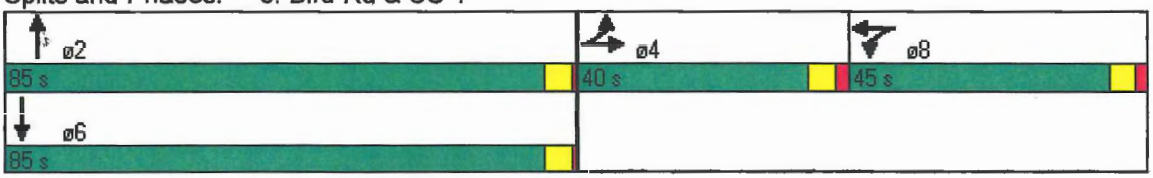
Area Type: Other
Cycle Length: 170
Actuated Cycle Length: 170
Offset: 6 (4%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.76
Intersection Signal Delay: 207.7 Intersection LOS: F
Intersection Capacity Utilization 117.2% ICU Level of Service H
Analysis Period (min) 15

~ 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.

Splits and Phases: 6: Bird Rd & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	90		0	70		0	85		0
Storage Lanes	1		0	1		0	1		0	1		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
Leading Detector (ft)	50	50		50	50		50	0		50	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor												
Frt		0.960			0.963			0.998			0.996	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3269	0	1703	3280	0	1646	4558	0	1646	4549	0
Flt Permitted	0.166			0.292			0.039			0.039		
Satd. Flow (perm)	298	3269	0	523	3280	0	68	4558	0	68	4549	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28			23			2			4	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			35			40	
Link Distance (ft)		770			1211			1700			2875	
Travel Time (s)		17.5			27.5			33.1			49.0	
Volume (vph)	52	260	95	40	340	110	180	2880	30	120	3410	90
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.83	0.83	0.83	0.80	0.80	0.80	0.91	0.91	0.91	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	110%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	63	313	114	50	425	138	198	3165	33	126	3948	95
Lane Group Flow (vph)	63	427	0	50	563	0	198	3198	0	126	4043	0
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phases	4	4		8	8		5	2		1	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0		22.0	22.0		8.0	21.0		8.0	21.0	
Total Split (s)	40.0	40.0	0.0	40.0	40.0	0.0	15.0	118.0	0.0	12.0	115.0	0.0
Total Split (%)	23.5%	23.5%	0.0%	23.5%	23.5%	0.0%	8.8%	69.4%	0.0%	7.1%	67.6%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		0.0	1.0		0.0	1.0	
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	Min	Min		Min	Min		Min	C-Max		Min	C-Max	
Act Effct Green (s)	36.0	36.0		36.0	36.0		114.0	114.0		111.0	111.0	
Actuated g/C Ratio	0.21	0.21		0.21	0.21		0.67	0.67		0.65	0.65	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.00	0.60		0.45	0.79		1.34	1.05		1.06	1.36	
Control Delay	177.6	60.3		73.3	69.8		216.3	40.7		101.0	192.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	177.6	60.3		73.3	69.8		216.3	40.7		101.0	192.3	
LOS	F	E		E	E		F	D		F	F	
Approach Delay		75.4			70.1			50.9			189.6	
Approach LOS		E			E			D			F	
90th %ile Green (s)	35.0	35.0		35.0	35.0		12.0	113.0		9.0	110.0	
90th %ile Term Code	Max	Max		Max	Max		Max	Coord		Max	Coord	
70th %ile Green (s)	35.0	35.0		35.0	35.0		12.0	113.0		9.0	110.0	
70th %ile Term Code	Max	Max		Max	Max		Max	Coord		Max	Coord	
50th %ile Green (s)	35.0	35.0		35.0	35.0		12.0	113.0		9.0	110.0	
50th %ile Term Code	Max	Max		Hold	Hold		Max	Coord		Max	Coord	
30th %ile Green (s)	35.0	35.0		35.0	35.0		12.0	113.0		9.0	110.0	
30th %ile Term Code	Max	Max		Hold	Hold		Max	Coord		Max	Coord	
10th %ile Green (s)	35.0	35.0		35.0	35.0		12.0	113.0		9.0	110.0	
10th %ile Term Code	Max	Max		Hold	Hold		Max	Coord		Max	Coord	
Queue Length 50th (ft)	71	214		49	304		~235	~1412		~104	~2155	
Queue Length 95th (ft)	#163	250		88	325		m#260	m#1335		m77	m#1610	
Internal Link Dist (ft)		690			1131			1620			2795	
Turn Bay Length (ft)	300			90			70			85		
Base Capacity (vph)	63	714		111	713		148	3057		119	2972	
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	1.00	0.60		0.45	0.79		1.34	1.05		1.06	1.36	

Intersection Summary

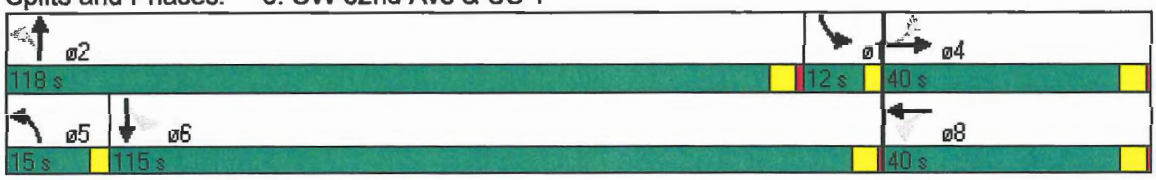
Area Type: Other
Cycle Length: 170
Actuated Cycle Length: 170
Offset: 48 (28%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.36
Intersection Signal Delay: 120.4 Intersection LOS: F
Intersection Capacity Utilization 114.0% ICU Level of Service H
Analysis Period (min) 15

~ 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.

Splits and Phases: 9: SW 32nd Ave & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	170		200	80		100	545		0	245		0
Storage Lanes	1		1	1		1	1		0	1		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
Leading Detector (ft)	50	50	50	50	50	50	50	0		50	0	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor												
Frt			0.850			0.850		0.997			0.996	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3406	1524	1703	3406	1524	1646	4553	0	1646	4549	0
Flt Permitted	0.129			0.129			0.037			0.037		
Satd. Flow (perm)	231	3406	1524	231	3406	1524	64	4553	0	64	4549	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			91			20		4			5	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		798			1372			2875			1425	
Travel Time (s)		18.1			31.2			49.0			24.3	
Volume (vph)	45	500	230	55	630	50	190	2780	60	70	3250	90
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.95	0.95	0.95	0.98	0.98	0.98	0.95	0.98	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	110%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	49	549	253	58	663	53	194	2837	61	74	3648	95
Lane Group Flow (vph)	49	549	253	58	663	53	194	2898	0	74	3743	0
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phases	4	4	4	8	8	8	5	2		1	6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	21.0	8.0	22.0		8.0	22.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	16.0	124.0	0.0	11.0	119.0	0.0
Total Split (%)	20.6%	20.6%	20.6%	20.6%	20.6%	20.6%	9.4%	72.9%	0.0%	6.5%	70.0%	0.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	0.0	2.0		0.0	2.0	
Lead/Lag							Lag	Lag		Lead	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	Min	Min	Min	Min	Min	Min	Min	C-Max		Min	C-Max	
Act Effct Green (s)	31.0	31.0	31.0	31.0	31.0	31.0	120.4	120.4		115.0	115.0	
Actuated g/C Ratio	0.18	0.18	0.18	0.18	0.18	0.18	0.71	0.71		0.68	0.68	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.17	0.88	0.72	1.38	1.07	0.18	1.24	0.90		0.71	1.22	
Control Delay	248.3	84.3	53.9	317.3	119.2	40.3	147.1	1.8		35.2	122.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	248.3	84.3	53.9	317.3	119.2	40.3	147.1	1.8		35.2	122.7	
LOS	F	F	D	F	F	D	F	A		D	F	
Approach Delay		84.7			128.7			11.0			121.0	
Approach LOS		F			F			B			F	
90th %ile Green (s)	30.0	30.0	30.0	30.0	30.0	30.0	13.0	118.0		8.0	113.0	
90th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord		Max	Coord	
70th %ile Green (s)	30.0	30.0	30.0	30.0	30.0	30.0	13.0	118.0		8.0	113.0	
70th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord		Max	Coord	
50th %ile Green (s)	30.0	30.0	30.0	30.0	30.0	30.0	13.0	118.0		8.0	113.0	
50th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord		Max	Coord	
30th %ile Green (s)	30.0	30.0	30.0	30.0	30.0	30.0	13.0	118.6		7.4	113.0	
30th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord		Gap	Coord	
10th %ile Green (s)	30.0	30.0	30.0	30.0	30.0	30.0	13.0	119.5		6.5	113.0	
10th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord		Gap	Coord	
Queue Length 50th (ft)	~64	318	175	~85	~427	31	~217	71		33	~1886	
Queue Length 95th (ft)	#164	#415	285	#191	#560	75	m#204	m67		m24	m#1510	
Internal Link Dist (ft)		718			1292			2795			1345	
Turn Bay Length (ft)	170		200	80		100	545			245		
Base Capacity (vph)	42	621	352	42	621	294	157	3226		108	3079	
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	1.17	0.88	0.72	1.38	1.07	0.18	1.24	0.90		0.69	1.22	

Intersection Summary

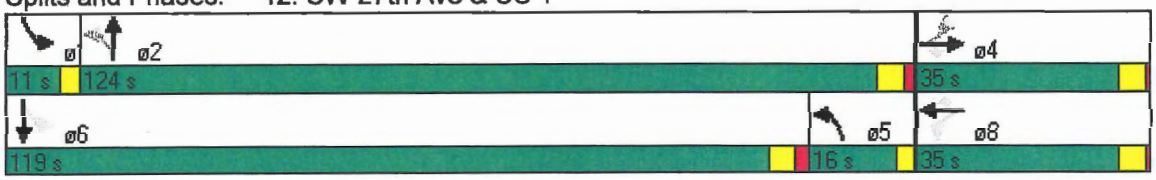
Area Type: Other
Cycle Length: 170
Actuated Cycle Length: 170
Offset: 76 (45%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.38
Intersection Signal Delay: 78.2 Intersection LOS: E
Intersection Capacity Utilization 115.7% ICU Level of Service H
Analysis Period (min) 15

~ 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.

Splits and Phases: 12: SW 27th Ave & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	160		200	116		120	165		0	50		0
Storage Lanes	1		1	1		1	1		0	1		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
Leading Detector (ft)	50	50	50	50	50	50	50	0		50	0	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor												
Frt			0.850			0.850		0.998			0.998	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3406	1524	1703	1792	1524	1646	4558	0	1646	4558	0
Flt Permitted	0.429			0.355			0.034			0.034		
Satd. Flow (perm)	769	3406	1524	636	1792	1524	59	4558	0	59	4558	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			42			96		3			4	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		700			1260			1400			2900	
Travel Time (s)		15.9			28.6			23.9			49.4	
Volume (vph)	80	210	130	50	105	85	70	2350	40	110	3290	50
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.88	0.88	0.88	0.89	0.89	0.89	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	110%	100%	100%	120%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	91	239	148	56	118	96	73	2693	42	115	4112	52
Lane Group Flow (vph)	91	239	148	56	118	96	73	2735	0	115	4164	0
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phases	4	4	4	8	8	8	5	2		1	6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	22.0	22.0	22.0	22.0	22.0	22.0	8.0	22.0		8.0	22.0	
Total Split (s)	22.0	22.0	22.0	22.0	22.0	22.0	8.0	127.0	0.0	21.0	140.0	0.0
Total Split (%)	12.9%	12.9%	12.9%	12.9%	12.9%	12.9%	4.7%	74.7%	0.0%	12.4%	82.4%	0.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	0.0	2.0		0.0	2.0	
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	Min	Min	Min	Min	Min	Min	Min	C-Max		Min	C-Max	
Act Effct Green (s)	18.0	18.0	18.0	18.0	18.0	18.0	123.0	123.0		136.0	136.0	
Actuated g/C Ratio	0.11	0.11	0.11	0.11	0.11	0.11	0.72	0.72		0.80	0.80	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.12	0.66	0.74	0.84	0.62	0.39	0.91	0.83		0.56	1.14	
Control Delay	201.0	82.7	74.6	142.7	87.8	16.6	82.6	10.9		52.2	90.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	201.0	82.7	74.6	142.7	87.8	16.6	82.6	10.9		52.2	90.2	
LOS	F	F	E	F	F	B	F	B		D	F	
Approach Delay		102.7			73.9			12.8			89.2	
Approach LOS		F			E			B			F	
90th %ile Green (s)	16.0	16.0	16.0	16.0	16.0	16.0	5.0	121.0		18.0	134.0	
90th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord		Max	Coord	
70th %ile Green (s)	16.0	16.0	16.0	16.0	16.0	16.0	5.0	121.0		18.0	134.0	
70th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord		Hold	Coord	
50th %ile Green (s)	16.0	16.0	16.0	16.0	16.0	16.0	5.0	121.0		18.0	134.0	
50th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord		Hold	Coord	
30th %ile Green (s)	16.0	16.0	16.0	16.0	16.0	16.0	5.0	121.0		18.0	134.0	
30th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord		Hold	Coord	
10th %ile Green (s)	16.0	16.0	16.0	16.0	16.0	16.0	5.0	121.0		18.0	134.0	
10th %ile Term Code	Max	Max	Max	Hold	Hold	Hold	Max	Coord		Hold	Coord	
Queue Length 50th (ft)	~116	137	117	62	128	0	32	731		68	~1965	
Queue Length 95th (ft)	#236	183	#213	#155	200	58	m#43	m824		m42	m731	
Internal Link Dist (ft)		620			1180			1320			2820	
Turn Bay Length (ft)	160		200	116		120	165			50		
Base Capacity (vph)	81	361	199	67	190	247	80	3299		206	3647	
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	1.12	0.66	0.74	0.84	0.62	0.39	0.91	0.83		0.56	1.14	

Intersection Summary

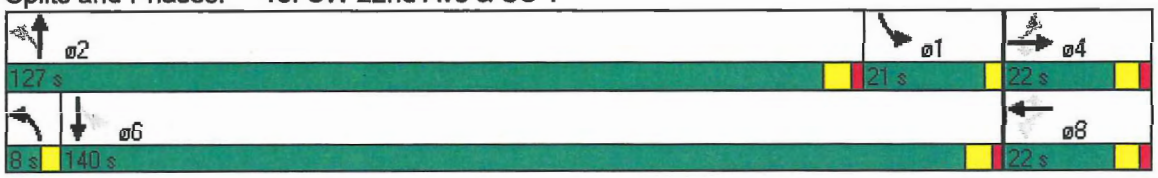
Area Type: Other
Cycle Length: 170
Actuated Cycle Length: 170
Offset: 150 (88%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.14
Intersection Signal Delay: 62.1 Intersection LOS: E
Intersection Capacity Utilization 104.6% ICU Level of Service G
Analysis Period (min) 15

~ 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.

Splits and Phases: 18: SW 22nd Ave & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	165		0	116		0	280		0	60		0
Storage Lanes	1		0	1		0	1		0	1		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
Leading Detector (ft)	50	50		50	50		50	0		50	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor												
Frt		0.957			0.971			0.995			0.994	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3259	0	1703	3307	0	1646	4544	0	1646	4540	0
Flt Permitted	0.221			0.180			0.036			0.035		
Satd. Flow (perm)	396	3259	0	323	3307	0	62	4544	0	61	4540	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		33			16			6			7	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			35	
Link Distance (ft)		611			1465			2900			700	
Travel Time (s)		13.9			33.3			49.4			13.6	
Volume (vph)	130	370	150	90	380	90	140	2610	90	130	3450	150
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.93	0.93	0.93	0.92	0.92	0.92	0.97	0.97	0.97	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	110%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	140	398	161	98	413	98	144	2691	93	133	3872	153
Lane Group Flow (vph)	140	559	0	98	511	0	144	2784	0	133	4025	0
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phases	4	4		8	8		5	2		1	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	22.0	22.0		22.0	22.0		8.0	21.0		8.0	21.0	
Total Split (s)	41.0	41.0	0.0	41.0	41.0	0.0	11.0	115.0	0.0	14.0	118.0	0.0
Total Split (%)	24.1%	24.1%	0.0%	24.1%	24.1%	0.0%	6.5%	67.6%	0.0%	8.2%	69.4%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		0.0	1.0		0.0	1.0	
Lead/Lag							Lag	Lead		Lag	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	Min	Min		Min	Min		Min	C-Max		Min	C-Max	
Act Effct Green (s)	37.0	37.0		37.0	37.0		118.0	111.0		124.0	114.0	
Actuated g/C Ratio	0.22	0.22		0.22	0.22		0.69	0.65		0.73	0.67	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.63	0.76		1.40	0.70		1.33	0.94		0.96	1.32	
Control Delay	368.1	66.2		291.3	65.2		214.6	8.7		58.8	163.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	41.9	
Total Delay	368.1	66.2		291.3	65.2		214.6	8.7		58.8	205.6	
LOS	F	E		F	E		F	A		E	F	
Approach Delay		126.7			101.6			18.8			200.9	
Approach LOS		F			F			B			F	
90th %ile Green (s)	35.0	35.0		35.0	35.0		8.0	110.0		11.0	113.0	
90th %ile Term Code	Max	Max		Max	Max		Max	Coord		Max	Coord	
70th %ile Green (s)	35.0	35.0		35.0	35.0		8.0	110.0		11.0	113.0	
70th %ile Term Code	Max	Max		Max	Max		Max	Coord		Max	Coord	
50th %ile Green (s)	35.0	35.0		35.0	35.0		8.0	110.0		11.0	113.0	
50th %ile Term Code	Max	Max		Max	Max		Max	Coord		Max	Coord	
30th %ile Green (s)	35.0	35.0		35.0	35.0		8.0	110.0		11.0	113.0	
30th %ile Term Code	Max	Max		Max	Max		Max	Coord		Max	Coord	
10th %ile Green (s)	35.0	35.0		35.0	35.0		8.0	110.0		11.0	113.0	
10th %ile Term Code	Max	Max		Max	Max		Max	Coord		Max	Coord	
Queue Length 50th (ft)	~224	294		~145	271		~164	71		99	~2110	
Queue Length 95th (ft)	#378	366		#279	340		m#236	m287		m64	m#1340	
Internal Link Dist (ft)		531			1385			2820			620	
Turn Bay Length (ft)	165			116			280			60		
Base Capacity (vph)	86	735		70	732		108	2969		138	3047	
Starvation Cap Reductn	0	0		0	0		0	0		0	201	
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	1.63	0.76		1.40	0.70		1.33	0.94		0.96	1.41	

Intersection Summary

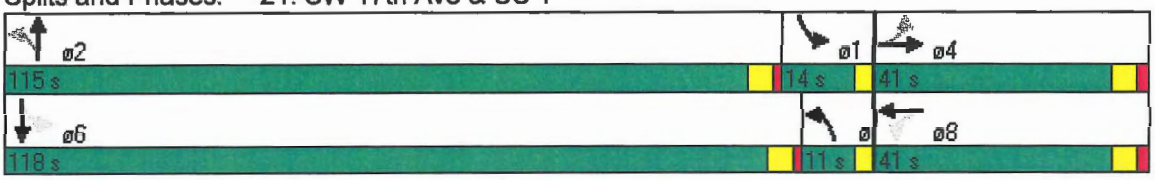
Area Type: Other
Cycle Length: 170
Actuated Cycle Length: 170
Offset: 13 (8%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.63
Intersection Signal Delay: 124.0 Intersection LOS: F
Intersection Capacity Utilization 118.3% ICU Level of Service H
Analysis Period (min) 15

~ 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.

Splits and Phases: 21: SW 17th Ave & US 1



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	10	10	10
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	170			0
Storage Lanes	1	1	1			0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	0	0	
Trailing Detector (ft)	0	0	0	0	0	
Turning Speed (mph)	15	9	15			9
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91
Ped Bike Factor						
Frt		0.850			0.991	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1703	1524	1646	4567	4526	0
Flt Permitted	0.950		0.030			
Satd. Flow (perm)	1703	1524	52	4567	4526	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		81			18	
Headway Factor	1.00	1.00	1.04	1.09	1.09	1.09
Link Speed (mph)	30			35	35	
Link Distance (ft)	525			700	3993	
Travel Time (s)	11.9			13.6	77.8	
Volume (vph)	120	220	190	2550	3390	260
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.97	0.97	0.86	0.86	0.93	0.93
Growth Factor	110%	100%	100%	100%	115%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	136	227	221	2965	4192	280
Lane Group Flow (vph)	136	227	221	2965	4472	0
Turn Type		Perm	pm+pt			
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phases	4	4	5	2	6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	22.0	22.0	8.0	22.0	22.0	
Total Split (s)	22.0	22.0	16.0	148.0	132.0	0.0
Total Split (%)	12.9%	12.9%	9.4%	87.1%	77.6%	0.0%
Yellow Time (s)	4.0	4.0	3.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	0.0	2.0	2.0	
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	Min	Min	Min	C-Max	C-Max	
Act Effct Green (s)	18.0	18.0	144.0	144.0	128.0	
Actuated g/C Ratio	0.11	0.11	0.85	0.85	0.75	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.76	0.97	1.41	0.77	1.31	
Control Delay	98.8	98.4	235.1	1.3	165.0	
Queue Delay	0.0	0.0	0.0	0.2	0.0	
Total Delay	98.8	98.4	235.1	1.5	165.0	
LOS	F	F	F	A	F	
Approach Delay	98.5			17.7	165.0	
Approach LOS	F			B	F	
90th %ile Green (s)	17.0	17.0	13.0	142.0	126.0	
90th %ile Term Code	Max	Max	Max	Coord	Coord	
70th %ile Green (s)	17.0	17.0	13.0	142.0	126.0	
70th %ile Term Code	Max	Max	Max	Coord	Coord	
50th %ile Green (s)	17.0	17.0	13.0	142.0	126.0	
50th %ile Term Code	Max	Max	Max	Coord	Coord	
30th %ile Green (s)	17.0	17.0	13.0	142.0	126.0	
30th %ile Term Code	Max	Max	Max	Coord	Coord	
10th %ile Green (s)	17.0	17.0	13.0	142.0	126.0	
10th %ile Term Code	Max	Max	Max	Coord	Coord	
Queue Length 50th (ft)	150	170	~288	55	~2345	
Queue Length 95th (ft)	#258	#355	m#325	m46	#2352	
Internal Link Dist (ft)	445			620	3913	
Turn Bay Length (ft)			170			
Base Capacity (vph)	180	234	157	3869	3412	
Starvation Cap Reductn	0	0	0	273	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.76	0.97	1.41	0.82	1.31	

Intersection Summary

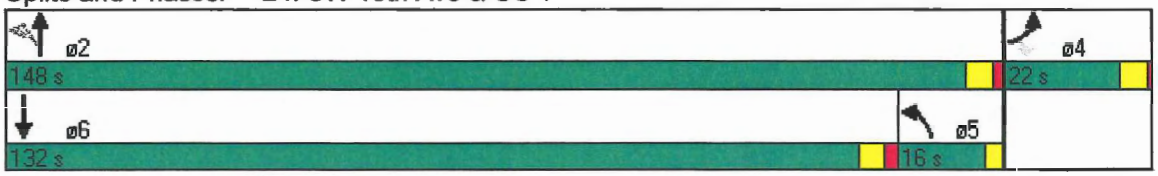
Area Type: Other
Cycle Length: 170
Actuated Cycle Length: 170
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.41
Intersection Signal Delay: 103.5 Intersection LOS: F
Intersection Capacity Utilization 108.9% ICU Level of Service G
Analysis Period (min) 15

~ 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.

Splits and Phases: 24: SW 16th Ave & US 1



Arterial Level of Service: NB US 1

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Douglas Rd	II	40	30.9	32.0	62.9	0.30	17.3	D
Bird Rd	II	35	31.6	25.1	56.7	0.27	16.8	E
SW 32nd Ave	II	35	35.4	16.4	51.8	0.32	22.4	C
SW 27th Ave	II	40	49.0	9.9	58.9	0.54	33.3	B
SW 22nd Ave	II	40	48.2	1.5	49.7	0.54	38.8	A
SW 17th Ave	II	40	49.4	10.3	59.7	0.55	33.1	B
SW 16th Ave	II	35	16.6	3.3	19.9	0.13	24.0	C
Total	II		261.1	98.5	359.6	2.65	26.5	C

Arterial Level of Service: SB US 1

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SW 16th Ave	II	35	77.8	136.4	214.2	0.76	12.7	F
SW 17th Ave	II	35	16.6	14.7	31.3	0.13	15.2	E
SW 22nd Ave	II	40	49.4	32.0	81.4	0.55	24.3	C
SW 27th Ave	II	40	48.2	25.6	73.8	0.54	26.1	C
SW 32nd Ave	II	40	49.0	5.7	54.7	0.54	35.8	A
Bird Rd	II	35	35.4	62.4	97.8	0.32	11.9	F
Douglas Rd	II	35	31.6	239.4	271.0	0.27	3.5	F
Total	II		308.0	516.2	824.2	3.10	13.6	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	170		170	200		0	170		0	0		0
Storage Lanes	1		1	1		0	1		0	1		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
Leading Detector (ft)	50	50	50	50	50		50	0		50	0	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor												
Frt			0.850		0.969			0.998			0.995	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	1792	1524	1703	3300	0	1646	4558	0	1646	4544	0
Flt Permitted	0.190			0.190			0.062			0.067		
Satd. Flow (perm)	341	1792	1524	341	3300	0	107	4558	0	116	4544	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			130		2			6			9	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			35	
Link Distance (ft)		735			672			1600			381	
Travel Time (s)		16.7			15.3			27.3			7.4	
Volume (vph)	120	395	210	60	460	120	200	2850	50	70	3160	115
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.87	0.87	0.87	0.98	0.98	0.98	0.89	0.89	0.89
Growth Factor	100%	100%	100%	100%	100%	100%	100%	110%	100%	100%	110%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	132	434	231	69	529	138	204	3199	51	79	3906	129
Lane Group Flow (vph)	132	434	231	69	667	0	204	3250	0	79	4035	0
Turn Type	Perm		Perm	Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8			2			6		
Detector Phases	4	4	4	8	8		5	2		6	6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0		8.0	21.0		21.0	21.0	
Total Split (s)	25.0	25.0	25.0	25.0	25.0	0.0	11.0	75.0	0.0	64.0	64.0	0.0
Total Split (%)	25.0%	25.0%	25.0%	25.0%	25.0%	0.0%	11.0%	75.0%	0.0%	64.0%	64.0%	0.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0	1.0		1.0	1.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Recall Mode	Min	Min	Min	Min	Min		Min	Max		Max	Max	
Act Effct Green (s)	21.0	21.0	21.0	21.0	21.0		71.0	71.0		60.0	60.0	
Actuated g/C Ratio	0.21	0.21	0.21	0.21	0.21		0.71	0.71		0.60	0.60	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.83	1.15	0.55	0.96	0.96		1.11	1.00		1.13	1.48	
Control Delay	450.7	132.6	20.9	138.7	65.5		123.8	32.0		174.7	239.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	450.7	132.6	20.9	138.7	65.5		123.8	32.0		174.7	239.4	
LOS	F	F	C	F	E		F	C		F	F	
Approach Delay		152.9			72.4			37.5			238.1	
Approach LOS		F			E			D			F	
Queue Length 50th (ft)	~128	~328	55	44	222		~103	~673		~59	~1316	
Queue Length 95th (ft)	#247	#517	132	#127	#320		#248	#887		#109	#1373	
Internal Link Dist (ft)		655			592			1520			301	
Turn Bay Length (ft)	170		170	200			170					
Base Capacity (vph)	72	376	423	72	695		184	3238		70	2730	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	1.83	1.15	0.55	0.96	0.96		1.11	1.00		1.13	1.48	

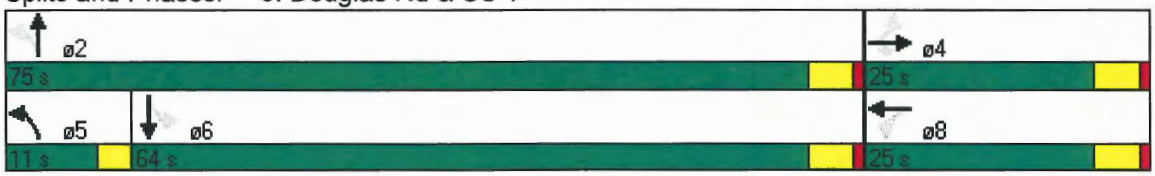
Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Natural Cycle: 150
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 1.83
Intersection Signal Delay: 141.1 Intersection LOS: F
Intersection Capacity Utilization 118.3% ICU Level of Service H
Analysis Period (min) 15

~ 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.

Splits and Phases: 3: Douglas Rd & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	350		0	0		90	0		0
Storage Lanes	2		0	1		0	0		1	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
Leading Detector (ft)	50	50		50	50			50	5		5	
Trailing Detector (ft)	0	0		0	0			0	0		0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.91	0.91	1.00	1.00	0.95	0.95	1.00	0.91	1.00	1.00	0.86	0.86
Ped Bike Factor												
Frt		0.956			0.950				0.850		0.977	
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3099	1559	0	1703	3235	0	0	4567	1422	0	5623	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3099	1559	0	1703	3235	0	0	4567	1422	0	5623	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			6				76		65	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		833			777			1019			1700	
Travel Time (s)		18.9			17.7			19.9			33.1	
Volume (vph)	440	390	160	210	191	96	0	2510	210	0	2890	570
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.97	0.97	0.97	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	110%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	484	429	176	216	197	99	0	2699	226	0	3418	613
Lane Group Flow (vph)	484	605	0	216	296	0	0	2699	226	0	4031	0
Turn Type	Split			Split					Perm			
Protected Phases	4	4		8	8			2			6	
Permitted Phases									2			
Detector Phases	4	4		8	8			2	2		6	
Minimum Initial (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Minimum Split (s)	19.0	19.0		19.0	19.0			102.0	102.0		102.0	
Total Split (s)	27.0	27.0	0.0	19.0	19.0	0.0	0.0	104.0	104.0	0.0	104.0	0.0
Total Split (%)	18.0%	18.0%	0.0%	12.7%	12.7%	0.0%	0.0%	69.3%	69.3%	0.0%	69.3%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0			1.0	1.0		1.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Min	Min		Min	Min			None	None		None	
Act Effct Green (s)	23.0	23.0		15.0	15.0			100.0	100.0		100.0	
Actuated g/C Ratio	0.15	0.15		0.10	0.10			0.67	0.67		0.67	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.02	2.46		1.27	0.90			0.89	0.23		1.07	
Control Delay	107.5	693.5		211.1	94.5			25.1	6.9		62.4	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	107.5	693.5		211.1	94.5			25.1	6.9		62.4	
LOS	F	F		F	F			C	A		E	
Approach Delay		433.0			143.7			23.7			62.4	
Approach LOS		F			F			C			E	
Queue Length 50th (ft)	~274	~1078		~265	150			739	51		~1260	
Queue Length 95th (ft)	#398	#1343		#438	#241			814	88		#1295	
Internal Link Dist (ft)		753			697			939			1620	
Turn Bay Length (ft)				350					90			
Base Capacity (vph)	475	246		170	329			3045	973		3770	
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	1.02	2.46		1.27	0.90			0.89	0.23		1.07	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Natural Cycle: 150
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 2.46
Intersection Signal Delay: 101.2 Intersection LOS: F
Intersection Capacity Utilization 98.7% ICU Level of Service F
Analysis Period (min) 15

~ 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.

Splits and Phases: 6: Bird Rd & US 1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	90		0	70		0	85		0
Storage Lanes	1		0	1		0	0		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
Leading Detector (ft)	50	50		50	50			0			0	
Trailing Detector (ft)	0	0		0	0			0			0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.91	0.91	1.00	0.86	0.86
Ped Bike Factor												
Frt		0.970			0.974			0.998			0.992	
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1703	3303	0	1703	3317	0	0	4558	0	0	5709	0
Flt Permitted	0.211			0.211								
Satd. Flow (perm)	378	3303	0	378	3317	0	0	4558	0	0	5709	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			4			4			18	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			35			40	
Link Distance (ft)		770			1211			1700			2875	
Travel Time (s)		17.5			27.5			33.1			49.0	
Volume (vph)	52	380	95	40	520	110	0	2880	30	0	3410	210
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.91	0.91	0.91	0.96	0.96	0.96	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	110%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	57	413	103	44	571	121	0	3000	31	0	3867	216
Lane Group Flow (vph)	57	516	0	44	692	0	0	3031	0	0	4083	0
Turn Type	Perm			Perm								
Protected Phases		4			8			2			6	
Permitted Phases	4			8								
Detector Phases	4	4		8	8			2			6	
Minimum Initial (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Minimum Split (s)	21.0	21.0		21.0	21.0			21.0			21.0	
Total Split (s)	23.0	23.0	0.0	23.0	23.0	0.0	0.0	77.0	0.0	0.0	77.0	0.0
Total Split (%)	23.0%	23.0%	0.0%	23.0%	23.0%	0.0%	0.0%	77.0%	0.0%	0.0%	77.0%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0			1.0			1.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Min	Min		Min	Min			C-Max			C-Max	
Act Effct Green (s)	19.0	19.0		19.0	19.0			73.0			73.0	
Actuated g/C Ratio	0.19	0.19		0.19	0.19			0.73			0.73	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.79	0.82		0.61	1.09			0.91			0.98	
Control Delay	101.7	51.0		74.0	102.7			16.4			5.7	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	101.7	51.0		74.0	102.7			16.4			5.7	
LOS	F	D		E	F			B			A	
Approach Delay		56.0			101.0			16.4			5.7	
Approach LOS		E			F			B			A	
Queue Length 50th (ft)	35	167		26	~263			483			91	
Queue Length 95th (ft)	#111	#247		#83	#381			583			m89	
Internal Link Dist (ft)		690			1131			1620			2795	
Turn Bay Length (ft)	300			90								
Base Capacity (vph)	72	628		72	633			3328			4172	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.79	0.82		0.61	1.09			0.91			0.98	

Intersection Summary

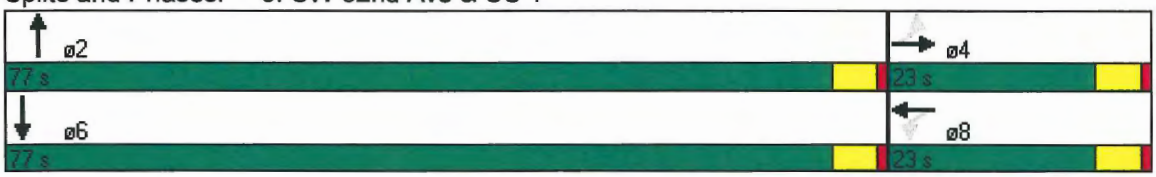
Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 47 (47%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.09
Intersection Signal Delay: 21.3 Intersection LOS: C
Intersection Capacity Utilization 89.1% ICU Level of Service E
Analysis Period (min) 15

~ 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.

Splits and Phases: 9: SW 32nd Ave & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	170		200	80		100	545		0	245		0
Storage Lanes	1		1	1		1	0		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
Leading Detector (ft)	50	50	50	50	50	50		0			0	
Trailing Detector (ft)	0	0	0	0	0	0		0			0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	0.91	1.00	0.86	0.86
Ped Bike Factor												
Frt			0.850			0.850		0.997			0.994	
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1703	3406	1524	1703	3406	1524	0	4553	0	0	5720	0
Flt Permitted	0.190			0.190								
Satd. Flow (perm)	341	3406	1524	341	3406	1524	0	4553	0	0	5720	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						4		8			2	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		798			1372			2875			1425	
Travel Time (s)		18.1			31.2			49.0			24.3	
Volume (vph)	45	570	230	55	820	50	0	2780	60	0	3520	160
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.97	0.97	0.97	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	110%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	51	648	261	62	932	57	0	2866	62	0	4033	167
Lane Group Flow (vph)	51	648	261	62	932	57	0	2928	0	0	4200	0
Turn Type	Perm		Perm	Perm		Perm						
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8						
Detector Phases	4	4	4	8	8	8		2			6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0			4.0	
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	21.0		22.0			22.0	
Total Split (s)	25.0	25.0	25.0	25.0	25.0	25.0	0.0	75.0	0.0	0.0	75.0	0.0
Total Split (%)	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	0.0%	75.0%	0.0%	0.0%	75.0%	0.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0			4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0		2.0			2.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None		C-Max			C-Max	
Act Effct Green (s)	21.0	21.0	21.0	21.0	21.0	21.0		71.0			71.0	
Actuated g/C Ratio	0.21	0.21	0.21	0.21	0.21	0.21		0.71			0.71	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.71	0.91	0.82	0.86	1.30	0.18		0.91			1.03	
Control Delay	86.3	56.6	59.0	115.1	180.6	32.3		9.9			25.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Total Delay	86.3	56.6	59.0	115.1	180.6	32.3		9.9			25.6	
LOS	F	E	E	F	F	C		A			C	
Approach Delay		58.8			168.7			9.9			25.6	
Approach LOS		E			F			A			C	
Queue Length 50th (ft)	30	213	160	38	~403	28		576			~863	
Queue Length 95th (ft)	#94	#304	#280	#116	#510	61		m435			m302	
Internal Link Dist (ft)		718			1292			2795			1345	
Turn Bay Length (ft)	170		200	80		100						
Base Capacity (vph)	72	715	320	72	715	323		3235			4062	
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	0.71	0.91	0.82	0.86	1.30	0.18		0.91			1.03	

Intersection Summary

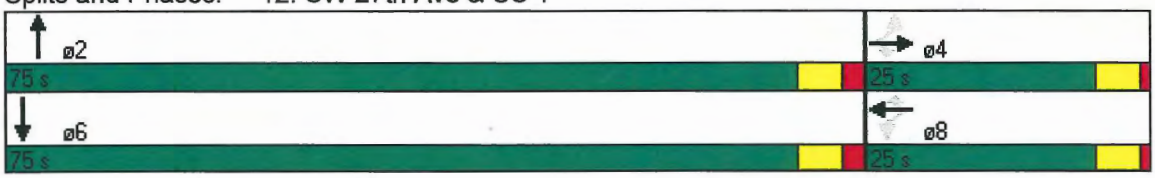
Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 3 (3%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.30
Intersection Signal Delay: 40.5 Intersection LOS: D
Intersection Capacity Utilization 94.8% ICU Level of Service F
Analysis Period (min) 15

~ 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.

Splits and Phases: 12: SW 27th Ave & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	160		200	116		120	165		0	50		0
Storage Lanes	1		1	1		1	0		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
Leading Detector (ft)	50	50	50	50	50	50		0			0	
Trailing Detector (ft)	0	0	0	0	0	0		0			0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.86	0.86
Ped Bike Factor												
Frt			0.850			0.850		0.998			0.994	
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1703	3406	1524	1703	1792	1524	0	4558	0	0	5720	0
Flt Permitted	0.399			0.405								
Satd. Flow (perm)	715	3406	1524	726	1792	1524	0	4558	0	0	5720	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						7		6			20	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		700			1260			1400			2900	
Travel Time (s)		15.9			28.6			23.9			49.4	
Volume (vph)	80	320	130	50	175	85	0	2350	40	0	3290	160
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.82	0.82	0.82	0.96	0.96	0.96	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	110%	100%	100%	125%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	85	340	138	61	213	104	0	2693	42	0	4329	168
Lane Group Flow (vph)	85	340	138	61	213	104	0	2735	0	0	4497	0
Turn Type	Perm		Perm	Perm		Perm						
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8						
Detector Phases	4	4	4	8	8	8		2			6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0			4.0	
Minimum Split (s)	22.0	22.0	22.0	23.0	23.0	23.0		22.0			22.0	
Total Split (s)	23.0	23.0	23.0	23.0	23.0	23.0	0.0	77.0	0.0	0.0	77.0	0.0
Total Split (%)	23.0%	23.0%	23.0%	23.0%	23.0%	23.0%	0.0%	77.0%	0.0%	0.0%	77.0%	0.0%
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	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Min	Min	Min	Min	Min	Min		C-Max			C-Max	
Act Effct Green (s)	17.2	17.2	17.2	17.2	17.2	17.2		74.8			74.8	
Actuated g/C Ratio	0.17	0.17	0.17	0.17	0.17	0.17		0.75			0.75	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.69	0.58	0.52	0.49	0.69	0.39		0.80			1.05	
Control Delay	67.2	42.0	44.9	50.7	50.9	38.1		1.5			32.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Total Delay	67.2	42.0	44.9	50.7	50.9	38.1		1.5			32.0	
LOS	E	D	D	D	D	D		A			C	
Approach Delay		46.5			47.3			1.5			32.0	
Approach LOS		D			D			A			C	
Queue Length 50th (ft)	50	103	79	35	126	54		24			~923	
Queue Length 95th (ft)	#120	149	141	70	182	94		26			m#918	
Internal Link Dist (ft)		620			1180			1320			2820	
Turn Bay Length (ft)	160		200	116		120						
Base Capacity (vph)	136	647	290	138	340	295		3410			4283	
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	0.63	0.53	0.48	0.44	0.63	0.35		0.80			1.05	

Intersection Summary

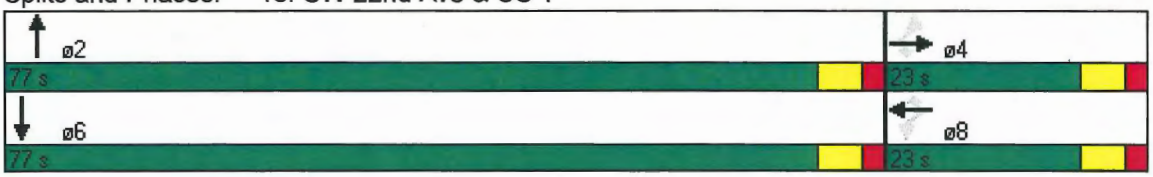
Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 50 (50%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.05
Intersection Signal Delay: 23.5 Intersection LOS: C
Intersection Capacity Utilization 85.9% ICU Level of Service E
Analysis Period (min) 15

~ 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.

Splits and Phases: 18: SW 22nd Ave & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	165		0	116		0	280		0	60		0
Storage Lanes	1		0	1		0	0		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
Leading Detector (ft)	50	50		50	50			0			0	
Trailing Detector (ft)	0	0		0	0			0			0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.91	0.91	1.00	0.86	0.86
Ped Bike Factor												
Frt		0.965			0.983			0.995			0.994	
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1703	3286	0	1703	3348	0	0	4544	0	0	5720	0
Flt Permitted	0.190			0.190								
Satd. Flow (perm)	341	3286	0	341	3348	0	0	4544	0	0	5720	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					4			12			9	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			35	
Link Distance (ft)		611			1465			2900			700	
Travel Time (s)		13.9			33.3			49.4			13.6	
Volume (vph)	130	500	150	90	710	90	0	2610	90	0	3450	150
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.97	0.97	0.97	0.93	0.93	0.93	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	110%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	138	532	160	93	732	93	0	2806	97	0	3912	155
Lane Group Flow (vph)	138	692	0	93	825	0	0	2903	0	0	4067	0
Turn Type	Perm			Perm								
Protected Phases		4			8			2			6	
Permitted Phases	4			8								
Detector Phases	4	4		8	8			2			6	
Minimum Initial (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Minimum Split (s)	22.0	22.0		22.0	22.0			21.0			21.0	
Total Split (s)	25.0	25.0	0.0	25.0	25.0	0.0	0.0	75.0	0.0	0.0	75.0	0.0
Total Split (%)	25.0%	25.0%	0.0%	25.0%	25.0%	0.0%	0.0%	75.0%	0.0%	0.0%	75.0%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0			1.0			1.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Min	Min		Min	Min			C-Max			C-Max	
Act Effct Green (s)	21.0	21.0		21.0	21.0			71.0			71.0	
Actuated g/C Ratio	0.21	0.21		0.21	0.21			0.71			0.71	

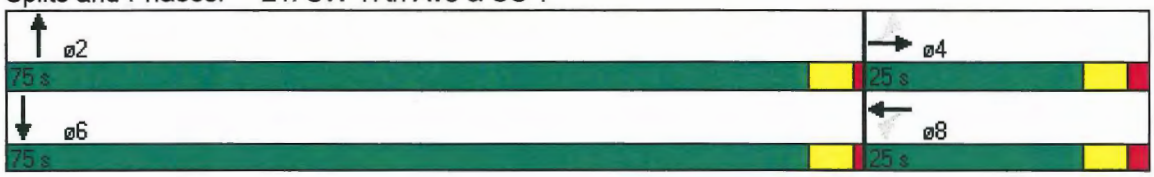
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.92	1.00		1.29	1.17			0.90			1.00	
Control Delay	485.4	75.4		238.8	127.0			10.3			14.7	
Queue Delay	0.0	0.0		0.0	0.0			0.0			18.7	
Total Delay	485.4	75.4		238.8	127.0			10.3			33.5	
LOS	F	E		F	F			B			C	
Approach Delay		143.6			138.4			10.3			33.5	
Approach LOS		F			F			B			C	
Queue Length 50th (ft)	~136	~234		~76	~332			430			~477	
Queue Length 95th (ft)	#258	#359		#178	#455			379			m179	
Internal Link Dist (ft)		531			1385			2820			620	
Turn Bay Length (ft)	165			116								
Base Capacity (vph)	72	690		72	706			3230			4064	
Starvation Cap Reductn	0	0		0	0			0			204	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	1.92	1.00		1.29	1.17			0.90			1.05	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 4 (4%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.92
Intersection Signal Delay: 47.3 Intersection LOS: D
Intersection Capacity Utilization 97.2% ICU Level of Service F
Analysis Period (min) 15

~ 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.

Splits and Phases: 21: SW 17th Ave & US 1



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	10	10	10
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	170			0
Storage Lanes	1	1	0			0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		0	0	
Trailing Detector (ft)	0	0		0	0	
Turning Speed (mph)	15	9	15			9
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91
Ped Bike Factor						
Frt		0.850			0.986	
Flt Protected	0.950					
Satd. Flow (prot)	1703	1524	0	4567	4503	0
Flt Permitted	0.950					
Satd. Flow (perm)	1703	1524	0	4567	4503	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		1			59	
Headway Factor	1.00	1.00	1.04	1.09	1.09	1.09
Link Speed (mph)	30			35	35	
Link Distance (ft)	525			700	3993	
Travel Time (s)	11.9			13.6	77.8	
Volume (vph)	120	220	0	2550	3390	390
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.88	0.88	0.95	0.95	0.94	0.94
Growth Factor	110%	100%	100%	100%	115%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	150	250	0	2684	4147	415
Lane Group Flow (vph)	150	250	0	2684	4562	0
Turn Type		Perm				
Protected Phases	7			2	6	
Permitted Phases		7				
Detector Phases	7	7		2	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0	
Minimum Split (s)	9.0	9.0		22.0	22.0	
Total Split (s)	16.0	16.0	0.0	84.0	84.0	0.0
Total Split (%)	16.0%	16.0%	0.0%	84.0%	84.0%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		2.0	2.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	Min	Min		C-Max	C-Max	
Act Effct Green (s)	12.0	12.0		80.0	80.0	
Actuated g/C Ratio	0.12	0.12		0.80	0.80	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.74	1.36		0.73	1.26	
Control Delay	64.6	228.2		3.3	136.4	
Queue Delay	0.0	0.0		0.1	35.3	
Total Delay	64.6	228.2		3.4	171.7	
LOS	E	F		A	F	
Approach Delay	166.9			3.4	171.7	
Approach LOS	F			A	F	
Queue Length 50th (ft)	94	~212		96	~1352	
Queue Length 95th (ft)	#181	#358		m174	#1424	
Internal Link Dist (ft)	445			620	3913	
Turn Bay Length (ft)						
Base Capacity (vph)	204	184		3654	3614	
Starvation Cap Reductn	0	0		158	0	
Spillback Cap Reductn	0	0		0	212	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.74	1.36		0.77	1.34	

Intersection Summary

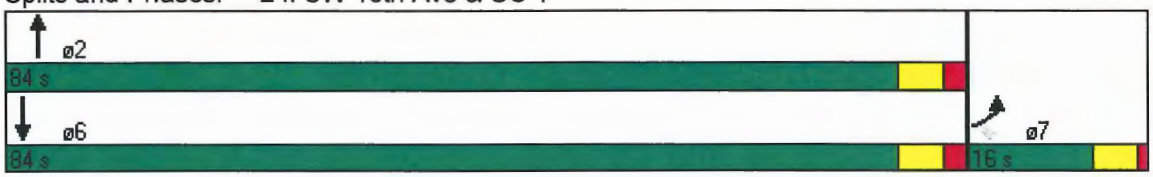
Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 92 (92%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.36
Intersection Signal Delay: 112.4 Intersection LOS: F
Intersection Capacity Utilization 104.3% ICU Level of Service G
Analysis Period (min) 15

~ 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.

Splits and Phases: 24: SW 16th Ave & US 1



Arterial Level of Service: NB US 1

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Douglas Rd	II	40	30.9	50.6	81.5	0.30	13.4	E
Bird Rd	II	35	31.6	79.1	110.7	0.27	8.6	F
SW 32nd Ave	II	35	35.4	19.1	54.5	0.32	21.3	D
SW 27th Ave	II	40	49.0	23.2	72.2	0.54	27.1	C
SW 22nd Ave	II	40	48.2	11.3	59.5	0.54	32.4	B
SW 17th Ave	II	40	49.4	26.6	76.0	0.55	26.0	C
SW 16th Ave	II	35	16.6	7.9	24.5	0.13	19.5	D
Total	II		261.1	217.8	478.9	2.65	19.9	D

Arterial Level of Service: SB US 1

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SW 16th Ave	II	35	77.8	123.2	201.0	0.76	13.5	E
SW 17th Ave	II	35	16.6	15.7	32.3	0.13	14.8	E
SW 22nd Ave	II	40	49.4	11.9	61.3	0.55	32.3	B
SW 27th Ave	II	40	48.2	17.2	65.4	0.54	29.5	B
SW 32nd Ave	II	40	49.0	17.2	66.2	0.54	29.6	B
Bird Rd	II	35	35.4	188.7	224.1	0.32	5.2	F
Douglas Rd	II	35	31.6	180.9	212.5	0.27	4.5	F
Total	II		308.0	554.8	862.8	3.10	13.0	F

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	170		170	200		0	170		0	0		0
Storage Lanes	1		1	1		0	1		0	1		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
Leading Detector (ft)	50	50	50	50	50		50	0		50	0	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor												
Frt			0.850		0.969			0.998			0.995	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	1792	1524	1703	3300	0	1646	4558	0	1646	4544	0
Flt Permitted	0.154			0.154			0.057			0.061		
Satd. Flow (perm)	276	1792	1524	276	3300	0	99	4558	0	106	4544	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			106		1			5			8	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			35	
Link Distance (ft)		735			672			1600			1400	
Travel Time (s)		16.7			15.3			27.3			27.3	
Volume (vph)	120	395	210	60	460	120	200	2850	50	70	3160	115
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.87	0.87	0.87	0.83	0.83	0.83	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	110%	100%	100%	110%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	138	454	241	72	554	145	208	3266	52	73	3621	120
Lane Group Flow (vph)	138	454	241	72	699	0	208	3318	0	73	3741	0
Turn Type	Perm		Perm	Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8			2			6		
Detector Phases	4	4	4	8	8		5	2		6	6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0		8.0	21.0		21.0	21.0	
Total Split (s)	30.0	30.0	30.0	30.0	30.0	0.0	10.0	80.0	0.0	70.0	70.0	0.0
Total Split (%)	27.3%	27.3%	27.3%	27.3%	27.3%	0.0%	9.1%	72.7%	0.0%	63.6%	63.6%	0.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0	1.0		1.0	1.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Recall Mode	Min	Min	Min	Min	Min		Min	C-Max		C-Max	C-Max	
Act Effct Green (s)	26.0	26.0	26.0	26.0	26.0		76.0	76.0		66.0	66.0	
Actuated g/C Ratio	0.24	0.24	0.24	0.24	0.24		0.69	0.69		0.60	0.60	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	2.12	1.07	0.55	1.11	0.90		1.36	1.05		1.14	1.37	
Control Delay	577.5	104.8	25.4	186.3	56.1		222.1	50.6		98.6	180.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	577.5	104.8	25.4	186.3	56.1		222.1	50.6		98.6	180.9	
LOS	F	F	C	F	E		F	D		F	F	
Approach Delay		160.1			68.3			60.7			179.3	
Approach LOS		F			E			E			F	
90th %ile Green (s)	25.0	25.0	25.0	25.0	25.0		7.0	75.0		65.0	65.0	
90th %ile Term Code	Max	Max	Max	Max	Max		Max	Coord		Coord	Coord	
70th %ile Green (s)	25.0	25.0	25.0	25.0	25.0		7.0	75.0		65.0	65.0	
70th %ile Term Code	Max	Max	Max	Max	Max		Max	Coord		Coord	Coord	
50th %ile Green (s)	25.0	25.0	25.0	25.0	25.0		7.0	75.0		65.0	65.0	
50th %ile Term Code	Max	Max	Max	Max	Max		Max	Coord		Coord	Coord	
30th %ile Green (s)	25.0	25.0	25.0	25.0	25.0		7.0	75.0		65.0	65.0	
30th %ile Term Code	Max	Max	Max	Max	Max		Max	Coord		Coord	Coord	
10th %ile Green (s)	25.0	25.0	25.0	25.0	25.0		7.0	75.0		65.0	65.0	
10th %ile Term Code	Max	Max	Max	Max	Max		Max	Coord		Coord	Coord	
Queue Length 50th (ft)	~155	~357	82	~58	252		~147	~941		~62	~1308	
Queue Length 95th (ft)	#272	#528	155	#138	#297		#300	#1027		m5	m#810	
Internal Link Dist (ft)		655			592			1520			1320	
Turn Bay Length (ft)	170		170	200			170					
Base Capacity (vph)	65	424	441	65	781		153	3151		64	2730	
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	2.12	1.07	0.55	1.11	0.90		1.36	1.05		1.14	1.37	

Intersection Summary

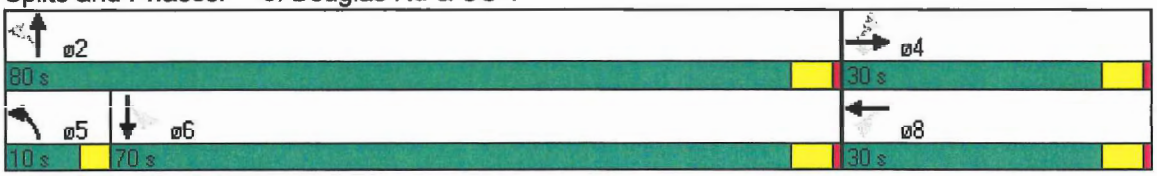
Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 20 (18%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.12
Intersection Signal Delay: 121.2 Intersection LOS: F
Intersection Capacity Utilization 118.3% ICU Level of Service H
Analysis Period (min) 15

~ 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.

Splits and Phases: 3: Douglas Rd & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	350		0	0		90	0		0
Storage Lanes	2		0	1		0	0		1	1		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
Leading Detector (ft)	50	50		50	50			0	0	50	0	
Trailing Detector (ft)	0	0		0	0			0	0	0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.91	0.91	1.00	1.00	0.95	0.95	1.00	0.91	1.00	1.00	0.86	0.86
Ped Bike Factor												
Frt		0.956			0.950				0.850		0.977	
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	3099	1559	0	1703	3235	0	0	4567	1422	1646	5623	0
Flt Permitted	0.950			0.950						0.071		
Satd. Flow (perm)	3099	1559	0	1703	3235	0	0	4567	1422	123	5623	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18			23				70		60	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		833			777			1400			1700	
Travel Time (s)		18.9			17.7			27.3			33.1	
Volume (vph)	440	390	160	210	192	96	0	2510	210	100	2890	570
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.86	0.86	0.86	0.98	0.98	0.98	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	110%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	478	424	174	244	223	112	0	2561	214	104	3311	594
Lane Group Flow (vph)	478	598	0	244	335	0	0	2561	214	104	3905	0
Turn Type	Split			Split					Perm	Perm		
Protected Phases	4	4		8	8			2			6	
Permitted Phases									2	6		
Detector Phases	4	4		8	8			2	2	6	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0			4.0	4.0	4.0	4.0	
Minimum Split (s)	22.0	22.0		22.0	22.0			21.0	21.0	21.0	21.0	
Total Split (s)	30.0	30.0	0.0	20.0	20.0	0.0	0.0	60.0	60.0	60.0	60.0	0.0
Total Split (%)	27.3%	27.3%	0.0%	18.2%	18.2%	0.0%	0.0%	54.5%	54.5%	54.5%	54.5%	0.0%
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			1.0	1.0	1.0	1.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Min	Min		Min	Min			C-Max	C-Max	C-Max	C-Max	
Act Effct Green (s)	26.0	26.0		16.0	16.0			56.0	56.0	56.0	56.0	
Actuated g/C Ratio	0.24	0.24		0.15	0.15			0.51	0.51	0.51	0.51	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.65	1.57		0.98	0.68			1.10	0.28	1.65	1.35	
Control Delay	42.8	297.0		101.2	49.4			79.1	16.3	349.1	188.7	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	
Total Delay	42.8	297.0		101.2	49.4			79.1	16.3	349.1	188.7	
LOS	D	F		F	D			E	B	F	F	
Approach Delay		184.1			71.2			74.3			192.8	
Approach LOS		F			E			E			F	
90th %ile Green (s)	24.0	24.0		14.0	14.0			55.0	55.0	55.0	55.0	
90th %ile Term Code	Max	Max		Max	Max			Coord	Coord	Coord	Coord	
70th %ile Green (s)	24.0	24.0		14.0	14.0			55.0	55.0	55.0	55.0	
70th %ile Term Code	Max	Max		Max	Max			Coord	Coord	Coord	Coord	
50th %ile Green (s)	24.0	24.0		14.0	14.0			55.0	55.0	55.0	55.0	
50th %ile Term Code	Max	Max		Max	Max			Coord	Coord	Coord	Coord	
30th %ile Green (s)	24.0	24.0		14.0	14.0			55.0	55.0	55.0	55.0	
30th %ile Term Code	Max	Max		Max	Max			Coord	Coord	Coord	Coord	
10th %ile Green (s)	24.0	24.0		14.0	14.0			55.0	55.0	55.0	55.0	
10th %ile Term Code	Max	Max		Max	Max			Coord	Coord	Coord	Coord	
Queue Length 50th (ft)	168	~653		174	111			~747	86	~100	~1065	
Queue Length 95th (ft)	228	#895		#313	153			m#658	m78	m#103	#1140	
Internal Link Dist (ft)		753			697			1320			1620	
Turn Bay Length (ft)				350					90			
Base Capacity (vph)	732	382		248	490			2325	758	63	2892	
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	0.65	1.57		0.98	0.68			1.10	0.28	1.65	1.35	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.65
Intersection Signal Delay: 144.4 Intersection LOS: F
Intersection Capacity Utilization 100.5% ICU Level of Service G
Analysis Period (min) 15

~ 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.

Splits and Phases: 6: Bird Rd & US 1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	90		0	70		0	85		0
Storage Lanes	1		0	1		0	0		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
Leading Detector (ft)	50	50		50	50			0			0	
Trailing Detector (ft)	0	0		0	0			0			0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.91	0.91	1.00	0.81	0.81
Ped Bike Factor												
Frt		0.970			0.974			0.998			0.992	
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1703	3303	0	1703	3317	0	0	4558	0	0	6721	0
Flt Permitted	0.154			0.221								
Satd. Flow (perm)	276	3303	0	396	3317	0	0	4558	0	0	6721	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2			3			26	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			35			40	
Link Distance (ft)		770			1211			1700			2875	
Travel Time (s)		17.5			27.5			33.1			49.0	
Volume (vph)	52	380	95	40	520	110	0	2880	30	0	3410	210
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.83	0.83	0.83	0.80	0.80	0.80	0.91	0.91	0.91	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	110%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	63	458	114	50	650	138	0	3165	33	0	3948	221
Lane Group Flow (vph)	63	572	0	50	788	0	0	3198	0	0	4169	0
Turn Type	Perm			Perm								
Protected Phases		4			8			2			6	
Permitted Phases	4			8								
Detector Phases	4	4		8	8			2			6	
Minimum Initial (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Minimum Split (s)	21.0	21.0		22.0	22.0			21.0			21.0	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	0.0	80.0	0.0	0.0	80.0	0.0
Total Split (%)	27.3%	27.3%	0.0%	27.3%	27.3%	0.0%	0.0%	72.7%	0.0%	0.0%	72.7%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0			1.0			1.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Min	Min		Min	Min			C-Max			C-Max	
Act Effct Green (s)	26.0	26.0		26.0	26.0			76.0			76.0	
Actuated g/C Ratio	0.24	0.24		0.24	0.24			0.69			0.69	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.97	0.73		0.53	1.00			1.02			0.90	
Control Delay	148.8	45.2		59.8	75.2			19.1			17.2	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	148.8	45.2		59.8	75.2			19.1			17.2	
LOS	F	D		E	E			B			B	
Approach Delay		55.5			74.2			19.1			17.2	
Approach LOS		E			E			B			B	
90th %ile Green (s)	25.0	25.0		25.0	25.0			75.0			75.0	
90th %ile Term Code	Max	Max		Max	Max			Coord			Coord	
70th %ile Green (s)	25.0	25.0		25.0	25.0			75.0			75.0	
70th %ile Term Code	Max	Max		Max	Max			Coord			Coord	
50th %ile Green (s)	25.0	25.0		25.0	25.0			75.0			75.0	
50th %ile Term Code	Max	Max		Max	Max			Coord			Coord	
30th %ile Green (s)	25.0	25.0		25.0	25.0			75.0			75.0	
30th %ile Term Code	Max	Max		Max	Max			Coord			Coord	
10th %ile Green (s)	25.0	25.0		25.0	25.0			75.0			75.0	
10th %ile Term Code	Max	Max		Max	Max			Coord			Coord	
Queue Length 50th (ft)	44	197		31	~295			~886			523	
Queue Length 95th (ft)	#121	235		#67	#348			m741			569	
Internal Link Dist (ft)		690			1131			1620			2795	
Turn Bay Length (ft)	300			90								
Base Capacity (vph)	65	781		94	786			3150			4652	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.97	0.73		0.53	1.00			1.02			0.90	

Intersection Summary

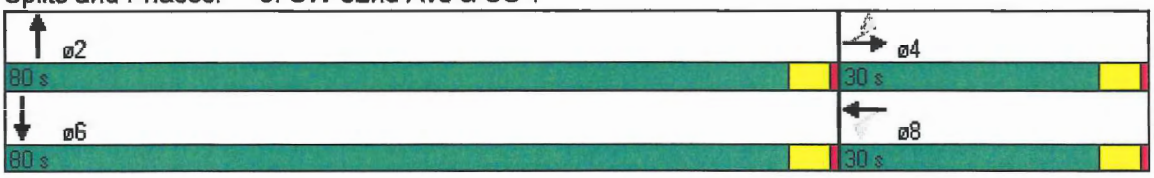
Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 34 (31%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.02
Intersection Signal Delay: 26.0 Intersection LOS: C
Intersection Capacity Utilization 87.5% ICU Level of Service E
Analysis Period (min) 15

~ 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.

Splits and Phases: 9: SW 32nd Ave & US 1



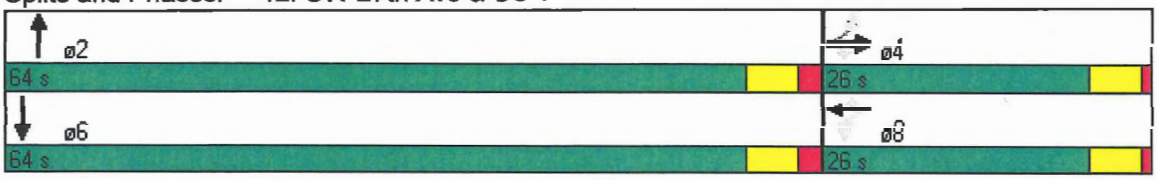
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	170		200	80		100	545		0	245		0
Storage Lanes	1		1	1		1	0		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
Leading Detector (ft)	50	50	50	50	50	50		0			0	
Trailing Detector (ft)	0	0	0	0	0	0		0			0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	0.91	1.00	0.81	0.81
Ped Bike Factor												
Frt			0.850			0.850		0.997			0.994	
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1703	3406	1524	1703	3406	1524	0	4553	0	0	6735	0
Flt Permitted	0.182			0.203								
Satd. Flow (perm)	326	3406	1524	364	3406	1524	0	4553	0	0	6735	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						3		7			8	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		798			1372			2875			1425	
Travel Time (s)		18.1			31.2			49.0			24.3	
Volume (vph)	45	570	230	55	820	50	0	2780	60	0	3520	160
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.95	0.95	0.95	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	110%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	49	626	253	58	863	53	0	2837	61	0	3951	163
Lane Group Flow (vph)	49	626	253	58	863	53	0	2898	0	0	4114	0
Turn Type	Perm		Perm	Perm		Perm						
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8						
Detector Phases	4	4	4	8	8	8		2			6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0			4.0	
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	21.0		22.0			22.0	
Total Split (s)	26.0	26.0	26.0	26.0	26.0	26.0	0.0	64.0	0.0	0.0	64.0	0.0
Total Split (%)	28.9%	28.9%	28.9%	28.9%	28.9%	28.9%	0.0%	71.1%	0.0%	0.0%	71.1%	0.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0			4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0		2.0			2.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Min	Min	Min	Min	Min	Min		Max			Max	
Act Effct Green (s)	22.0	22.0	22.0	22.0	22.0	22.0		60.0			60.0	
Actuated g/C Ratio	0.24	0.24	0.24	0.24	0.24	0.24		0.67			0.67	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.61	0.75	0.68	0.65	1.04	0.14		0.95			0.92	
Control Delay	65.3	38.1	41.3	66.7	75.6	26.7		23.2			17.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Total Delay	65.3	38.1	41.3	66.7	75.6	26.7		23.2			17.2	
LOS	E	D	D	E	E	C		C			B	
Approach Delay		40.4			72.4			23.2			17.2	
Approach LOS		D			E			C			B	
90th %ile Green (s)	21.0	21.0	21.0	21.0	21.0	21.0		58.0			58.0	
90th %ile Term Code	Max	Max	Max	Max	Max	Max		MaxR			MaxR	
70th %ile Green (s)	21.0	21.0	21.0	21.0	21.0	21.0		58.0			58.0	
70th %ile Term Code	Max	Max	Max	Max	Max	Max		MaxR			MaxR	
50th %ile Green (s)	21.0	21.0	21.0	21.0	21.0	21.0		58.0			58.0	
50th %ile Term Code	Max	Max	Max	Max	Max	Max		MaxR			MaxR	
30th %ile Green (s)	21.0	21.0	21.0	21.0	21.0	21.0		58.0			58.0	
30th %ile Term Code	Hold	Hold	Hold	Max	Max	Max		MaxR			MaxR	
10th %ile Green (s)	21.0	21.0	21.0	21.0	21.0	21.0		58.0			58.0	
10th %ile Term Code	Hold	Hold	Hold	Max	Max	Max		MaxR			MaxR	
Queue Length 50th (ft)	25	174	131	30	~281	22		486			434	
Queue Length 95th (ft)	#84	235	#218	#94	#400	53		#697			490	
Internal Link Dist (ft)		718			1292			2795			1345	
Turn Bay Length (ft)	170		200	80		100						
Base Capacity (vph)	80	833	373	89	833	375		3038			4493	
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	0.61	0.75	0.68	0.65	1.04	0.14		0.95			0.92	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Natural Cycle: 90
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 1.04
Intersection Signal Delay: 27.6 Intersection LOS: C
Intersection Capacity Utilization 91.0% ICU Level of Service F
Analysis Period (min) 15
90th %ile Actuated Cycle: 90
70th %ile Actuated Cycle: 90
50th %ile Actuated Cycle: 90
30th %ile Actuated Cycle: 90
10th %ile Actuated Cycle: 90
~ 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.

Splits and Phases: 12: SW 27th Ave & US 1



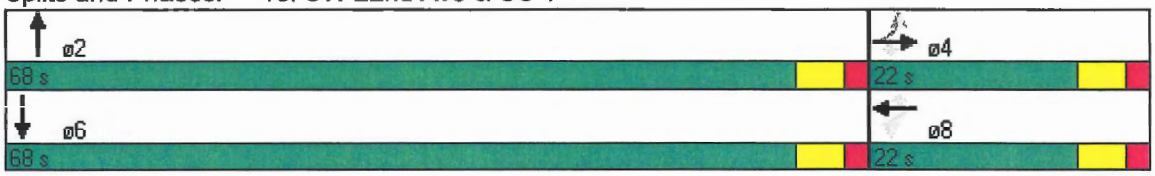
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	160		200	116		120	165		0	50		0
Storage Lanes	1		1	1		1	0		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
Leading Detector (ft)	50	50	50	50	50	50		0			0	
Trailing Detector (ft)	0	0	0	0	0	0		0			0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.81	0.81
Ped Bike Factor												
Frt			0.850			0.850		0.998			0.994	
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1703	3406	1524	1703	1792	1524	0	4558	0	0	6735	0
Flt Permitted	0.463			0.399								
Satd. Flow (perm)	830	3406	1524	715	1792	1524	0	4558	0	0	6735	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						6		6			26	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		700			1260			1400			2900	
Travel Time (s)		15.9			28.6			23.9			49.4	
Volume (vph)	80	320	130	50	175	85	0	2350	40	0	3290	160
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.88	0.88	0.88	0.89	0.89	0.89	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	110%	100%	100%	120%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	91	364	148	56	197	96	0	2693	42	0	4112	167
Lane Group Flow (vph)	91	364	148	56	197	96	0	2735	0	0	4279	0
Turn Type	Perm		Perm	Perm		Perm						
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8						
Detector Phases	4	4	4	8	8	8		2			6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0			4.0	
Minimum Split (s)	22.0	22.0	22.0	22.0	22.0	22.0		22.0			22.0	
Total Split (s)	22.0	22.0	22.0	22.0	22.0	22.0	0.0	68.0	0.0	0.0	68.0	0.0
Total Split (%)	24.4%	24.4%	24.4%	24.4%	24.4%	24.4%	0.0%	75.6%	0.0%	0.0%	75.6%	0.0%
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	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Min	Min	Min	Min	Min	Min		Max			Max	
Act Effct Green (s)	16.0	16.0	16.0	16.0	16.0	16.0		64.0			64.0	
Actuated g/C Ratio	0.18	0.18	0.18	0.18	0.18	0.18		0.73			0.73	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.60	0.59	0.54	0.43	0.61	0.34		0.82			0.87	
Control Delay	50.9	37.2	40.3	43.1	41.6	32.9		11.3			11.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Total Delay	50.9	37.2	40.3	43.1	41.6	32.9		11.3			11.9	
LOS	D	D	D	D	D	C		B			B	
Approach Delay		40.0			39.5			11.3			11.9	
Approach LOS		D			D			B			B	
90th %ile Green (s)	16.0	16.0	16.0	16.0	16.0	16.0		62.0			62.0	
90th %ile Term Code	Max	Max	Max	Max	Max	Max		MaxR			MaxR	
70th %ile Green (s)	16.0	16.0	16.0	16.0	16.0	16.0		62.0			62.0	
70th %ile Term Code	Max	Max	Max	Max	Max	Max		MaxR			MaxR	
50th %ile Green (s)	14.9	14.9	14.9	14.9	14.9	14.9		62.0			62.0	
50th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Gap		MaxR			MaxR	
30th %ile Green (s)	12.8	12.8	12.8	12.8	12.8	12.8		62.0			62.0	
30th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Hold		MaxR			MaxR	
10th %ile Green (s)	10.3	10.3	10.3	10.3	10.3	10.3		62.0			62.0	
10th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Hold		MaxR			MaxR	
Queue Length 50th (ft)	47	98	75	28	101	44		328			378	
Queue Length 95th (ft)	#97	140	132	65	168	88		425			452	
Internal Link Dist (ft)		620			1180			1320			2820	
Turn Bay Length (ft)	160		200	116		120						
Base Capacity (vph)	166	681	305	143	358	310		3319			4908	
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	0.55	0.53	0.49	0.39	0.55	0.31		0.82			0.87	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 88
Natural Cycle: 75
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.87
Intersection Signal Delay: 15.1 Intersection LOS: B
Intersection Capacity Utilization 74.5% ICU Level of Service D
Analysis Period (min) 15
90th %ile Actuated Cycle: 90
70th %ile Actuated Cycle: 90
50th %ile Actuated Cycle: 88.9
30th %ile Actuated Cycle: 86.8
10th %ile Actuated Cycle: 84.3
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 18: SW 22nd Ave & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	165		0	116		0	280		0	60		0
Storage Lanes	1		0	1		0	0		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
Leading Detector (ft)	50	50		50	50			0			0	
Trailing Detector (ft)	0	0		0	0			0			0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.91	0.91	1.00	0.81	0.81
Ped Bike Factor												
Frt		0.965			0.983			0.995			0.994	
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1703	3286	0	1703	3348	0	0	4544	0	0	6735	0
Flt Permitted	0.129			0.183								
Satd. Flow (perm)	231	3286	0	328	3348	0	0	4544	0	0	6735	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					3			9			17	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			35	
Link Distance (ft)		611			1465			2900			700	
Travel Time (s)		13.9			33.3			49.4			13.6	
Volume (vph)	130	500	150	90	710	90	0	2610	90	0	3450	150
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.93	0.93	0.93	0.92	0.92	0.92	0.97	0.97	0.97	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	110%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	140	538	161	98	772	98	0	2691	93	0	3872	153
Lane Group Flow (vph)	140	699	0	98	870	0	0	2784	0	0	4025	0
Turn Type	Perm			Perm								
Protected Phases		4			8			2			6	
Permitted Phases	4			8								
Detector Phases	4	4		8	8			2			6	
Minimum Initial (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Minimum Split (s)	22.0	22.0		22.0	22.0			21.0			21.0	
Total Split (s)	35.0	35.0	0.0	35.0	35.0	0.0	0.0	75.0	0.0	0.0	75.0	0.0
Total Split (%)	31.8%	31.8%	0.0%	31.8%	31.8%	0.0%	0.0%	68.2%	0.0%	0.0%	68.2%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0			1.0			1.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Min	Min		Min	Min			C-Max			C-Max	
Act Effct Green (s)	31.0	31.0		31.0	31.0			71.0			71.0	
Actuated g/C Ratio	0.28	0.28		0.28	0.28			0.65			0.65	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	2.15	0.75		1.07	0.92			0.95			0.92	
Control Delay	590.1	42.2		153.5	54.0			26.6			15.7	
Queue Delay	0.0	0.0		0.0	0.0			0.0			7.8	
Total Delay	590.1	42.2		153.5	54.0			26.6			23.5	
LOS	F	D		F	D			C			C	
Approach Delay		133.6			64.1			26.6			23.5	
Approach LOS		F			E			C			C	
90th %ile Green (s)	29.0	29.0		29.0	29.0			70.0			70.0	
90th %ile Term Code	Max	Max		Max	Max			Coord			Coord	
70th %ile Green (s)	29.0	29.0		29.0	29.0			70.0			70.0	
70th %ile Term Code	Max	Max		Max	Max			Coord			Coord	
50th %ile Green (s)	29.0	29.0		29.0	29.0			70.0			70.0	
50th %ile Term Code	Max	Max		Max	Max			Coord			Coord	
30th %ile Green (s)	29.0	29.0		29.0	29.0			70.0			70.0	
30th %ile Term Code	Max	Max		Max	Max			Coord			Coord	
10th %ile Green (s)	29.0	29.0		29.0	29.0			70.0			70.0	
10th %ile Term Code	Max	Max		Max	Max			Coord			Coord	
Queue Length 50th (ft)	~158	236		~76	312			601			593	
Queue Length 95th (ft)	#285	307		#185	#434			#720			m333	
Internal Link Dist (ft)		531			1385			2820			620	
Turn Bay Length (ft)	165			116								
Base Capacity (vph)	65	926		92	946			2936			4353	
Starvation Cap Reductn	0	0		0	0			0			352	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	2.15	0.75		1.07	0.92			0.95			1.01	

Intersection Summary

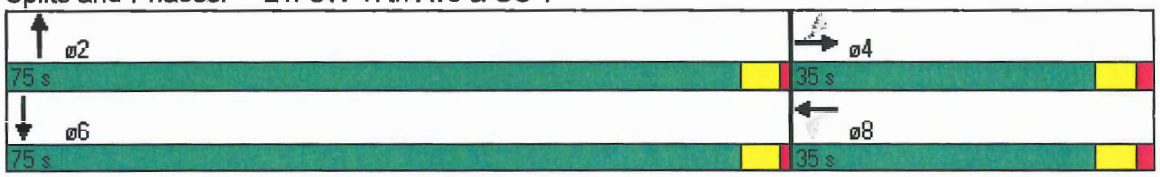
Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 37 (34%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.15
Intersection Signal Delay: 39.8 Intersection LOS: D
Intersection Capacity Utilization 92.1% ICU Level of Service F
Analysis Period (min) 15

~ 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.

Splits and Phases: 21: SW 17th Ave & US 1



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	10	10	10
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	170			0
Storage Lanes	1	1	0			0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		0	0	
Trailing Detector (ft)	0	0		0	0	
Turning Speed (mph)	15	9	15			9
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91
Ped Bike Factor						
Frt		0.850			0.986	
Flt Protected	0.950					
Satd. Flow (prot)	1703	1524	0	4567	4503	0
Flt Permitted	0.950					
Satd. Flow (perm)	1703	1524	0	4567	4503	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		1			63	
Headway Factor	1.00	1.00	1.04	1.09	1.09	1.09
Link Speed (mph)	30			35	35	
Link Distance (ft)	525			700	3993	
Travel Time (s)	11.9			13.6	77.8	
Volume (vph)	120	220	0	2550	3390	390
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.97	0.97	0.86	0.86	0.93	0.93
Growth Factor	110%	100%	100%	100%	115%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	136	227	0	2965	4192	419
Lane Group Flow (vph)	136	227	0	2965	4611	0
Turn Type		Perm				
Protected Phases	4			2	6	
Permitted Phases		4				
Detector Phases	4	4		2	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0	
Minimum Split (s)	22.0	22.0		22.0	22.0	
Total Split (s)	15.0	15.0	0.0	95.0	95.0	0.0
Total Split (%)	13.6%	13.6%	0.0%	86.4%	86.4%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		2.0	2.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	Min	Min		C-Max	C-Max	
Act Effct Green (s)	11.0	11.0		91.0	91.0	
Actuated g/C Ratio	0.10	0.10		0.83	0.83	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.80	1.48		0.78	1.23	
Control Delay	80.9	284.8		7.9	123.2	
Queue Delay	0.0	0.0		0.0	20.4	
Total Delay	80.9	284.8		7.9	143.7	
LOS	F	F		A	F	
Approach Delay	208.4			7.9	143.7	
Approach LOS	F			A	F	
90th %ile Green (s)	10.0	10.0		89.0	89.0	
90th %ile Term Code	Max	Max		Coord	Coord	
70th %ile Green (s)	10.0	10.0		89.0	89.0	
70th %ile Term Code	Max	Max		Coord	Coord	
50th %ile Green (s)	10.0	10.0		89.0	89.0	
50th %ile Term Code	Max	Max		Coord	Coord	
30th %ile Green (s)	10.0	10.0		89.0	89.0	
30th %ile Term Code	Max	Max		Coord	Coord	
10th %ile Green (s)	10.0	10.0		89.0	89.0	
10th %ile Term Code	Max	Max		Coord	Coord	
Queue Length 50th (ft)	95	~223		339	~1485	
Queue Length 95th (ft)	#200	#380		m358	#1548	
Internal Link Dist (ft)	445			620	3913	
Turn Bay Length (ft)						
Base Capacity (vph)	170	153		3778	3736	
Starvation Cap Reductn	0	0		44	0	
Spillback Cap Reductn	0	0		0	133	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.80	1.48		0.79	1.28	

Intersection Summary

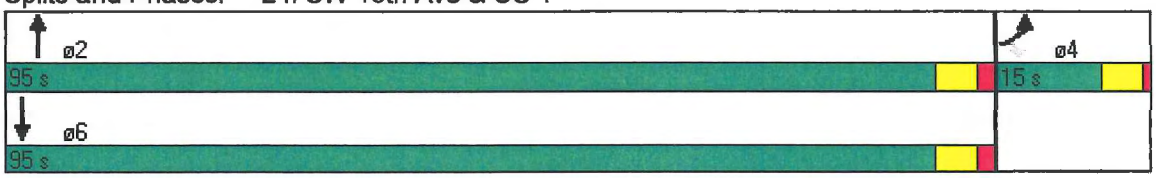
Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 108 (98%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.48
Intersection Signal Delay: 95.9 Intersection LOS: F
Intersection Capacity Utilization 104.3% ICU Level of Service G
Analysis Period (min) 15

~ 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.

Splits and Phases: 24: SW 16th Ave & US 1



Arterial Level of Service: NB US 1

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Douglas Rd	II	40	30.9	37.2	68.1	0.30	16.0	E
Bird Rd	II	35	31.6	73.5	105.1	0.27	9.1	F
SW 32nd Ave	II	35	35.4	20.2	55.6	0.32	20.8	D
SW 27th Ave	II	40	49.0	9.9	58.9	0.54	33.3	B
SW 22nd Ave	II	40	48.2	3.7	51.9	0.54	37.1	A
SW 17th Ave	II	40	49.4	27.0	76.4	0.55	25.9	C
SW 16th Ave	II	35	16.6	1.4	18.0	0.13	26.5	C
Total	II		261.1	172.9	434.0	2.65	22.0	D

Arterial Level of Service: SB US 1

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SW 16th Ave	II	35	77.8	185.7	263.5	0.76	10.3	F
SW 17th Ave	II	35	16.6	37.7	54.3	0.13	8.8	F
SW 22nd Ave	II	40	49.4	3.0	52.4	0.55	37.7	A
SW 27th Ave	II	40	48.2	27.8	76.0	0.54	25.3	C
SW 32nd Ave	II	40	49.0	38.2	87.2	0.54	22.5	C
Bird Rd	II	35	35.4	179.4	214.8	0.32	5.4	F
Douglas Rd	II	35	31.6	191.2	222.8	0.27	4.3	F
Total	II		308.0	663.0	971.0	3.10	11.5	F

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	170		170	200		0	170		0	0		0
Storage Lanes	1		1	1		0	1		0	1		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
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor												
Frt			0.850		0.969			0.997			0.995	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	1792	1524	1703	3300	0	1646	4547	0	1646	4538	0
Flt Permitted	0.160			0.101			0.043			0.045		
Satd. Flow (perm)	287	1792	1524	181	3300	0	75	4547	0	78	4538	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			101		2			4			6	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			35	
Link Distance (ft)		735			672			1600			1400	
Travel Time (s)		16.7			15.3			27.3			27.3	
Volume (vph)	120	395	210	60	460	120	200	2850	50	70	3160	115
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.87	0.87	0.87	0.83	0.83	0.83	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	110%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	1	0	0	1	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	138	454	241	72	554	145	208	2969	52	73	3621	120
Lane Group Flow (vph)	138	454	241	72	699	0	208	3021	0	73	3741	0
Turn Type	Perm		Perm	Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8			2			6		
Detector Phases	4	4	4	8	8		5	2		6	6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0		8.0	21.0		21.0	21.0	
Total Split (s)	45.0	45.0	45.0	45.0	45.0	0.0	12.0	105.0	0.0	93.0	93.0	0.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	30.0%	0.0%	8.0%	70.0%	0.0%	62.0%	62.0%	0.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0	1.0		1.0	1.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Recall Mode	Min	Min	Min	Min	Min		Min	C-Max		C-Max	C-Max	
Act Effct Green (s)	41.0	41.0	41.0	41.0	41.0		101.0	101.0		89.0	89.0	
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.27		0.67	0.67		0.59	0.59	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.77	0.93	0.49	1.47	0.77		1.55	0.99		1.59	1.39	
Control Delay	424.9	78.9	29.7	332.0	56.9		310.5	37.2		292.8	191.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	424.9	78.9	29.7	332.0	56.9		310.5	37.2		292.8	191.2	
LOS	F	E	C	F	E		F	D		F	F	
Approach Delay		122.0			82.6			54.8			193.2	
Approach LOS		F			F			D			F	
90th %ile Green (s)	40.0	40.0	40.0	40.0	40.0		9.0	100.0		88.0	88.0	
90th %ile Term Code	Max	Max	Max	Max	Max		Max	Coord		Coord	Coord	
70th %ile Green (s)	40.0	40.0	40.0	40.0	40.0		9.0	100.0		88.0	88.0	
70th %ile Term Code	Max	Max	Max	Max	Max		Max	Coord		Coord	Coord	
50th %ile Green (s)	40.0	40.0	40.0	40.0	40.0		9.0	100.0		88.0	88.0	
50th %ile Term Code	Max	Max	Max	Max	Max		Max	Coord		Coord	Coord	
30th %ile Green (s)	40.0	40.0	40.0	40.0	40.0		9.0	100.0		88.0	88.0	
30th %ile Term Code	Max	Max	Max	Max	Max		Max	Coord		Coord	Coord	
10th %ile Green (s)	40.0	40.0	40.0	40.0	40.0		9.0	100.0		88.0	88.0	
10th %ile Term Code	Max	Max	Max	Max	Max		Max	Coord		Coord	Coord	
Queue Length 50th (ft)	~200	435	114	~96	333		~239	984		~104	~1820	
Queue Length 95th (ft)	#332	#609	191	#185	368		#412	#1178		m#69	m#1157	
Internal Link Dist (ft)		655			592			1520			1320	
Turn Bay Length (ft)	170		170	200			170					
Base Capacity (vph)	78	490	490	49	903		134	3063		46	2695	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	1.77	0.93	0.49	1.47	0.77		1.55	0.99		1.59	1.39	

Intersection Summary

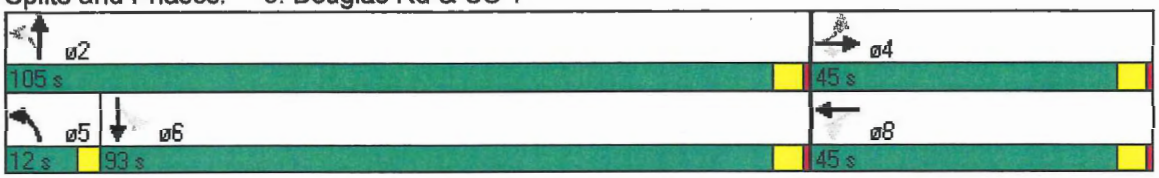
Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 124 (83%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.77
Intersection Signal Delay: 124.8 Intersection LOS: F
Intersection Capacity Utilization 118.3% ICU Level of Service H
Analysis Period (min) 15

~ 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.

Splits and Phases: 3: Douglas Rd & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	350		0	0		90	0		0
Storage Lanes	2		0	1		0	0		1	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
Leading Detector (ft)	50	50		50	50			0	0		0	
Trailing Detector (ft)	0	0		0	0			0	0		0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.91	0.91	1.00	1.00	0.95	0.95	1.00	0.91	1.00	1.00	0.86	0.86
Ped Bike Factor												
Frt		0.956			0.950				0.850		0.977	
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3099	1559	0	1703	3235	0	0	4567	1422	0	5623	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3099	1559	0	1703	3235	0	0	4567	1422	0	5623	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			37				52		45	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		833			777			1400			1700	
Travel Time (s)		18.9			17.7			27.3			33.1	
Volume (vph)	440	390	160	210	192	96	0	2510	210	0	2890	570
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.86	0.86	0.86	0.98	0.98	0.98	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	110%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	478	424	174	244	223	112	0	2561	214	0	3311	594
Lane Group Flow (vph)	478	598	0	244	335	0	0	2561	214	0	3905	0
Turn Type	Split			Split					Perm			
Protected Phases	4	4		8	8			2			6	
Permitted Phases									2			
Detector Phases	4	4		8	8			2	2		6	
Minimum Initial (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Minimum Split (s)	22.0	22.0		22.0	22.0			21.0	21.0		21.0	
Total Split (s)	45.0	45.0	0.0	23.0	23.0	0.0	0.0	82.0	82.0	0.0	82.0	0.0
Total Split (%)	30.0%	30.0%	0.0%	15.3%	15.3%	0.0%	0.0%	54.7%	54.7%	0.0%	54.7%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0			1.0	1.0		1.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Min	Min		Min	Min			C-Max	C-Max		C-Max	
Act Effct Green (s)	41.0	41.0		19.0	19.0			78.0	78.0		78.0	
Actuated g/C Ratio	0.27	0.27		0.13	0.13			0.52	0.52		0.52	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.56	1.37		1.13	0.76			1.08	0.28		1.33	
Control Delay	49.9	221.1		157.2	68.0			73.5	21.5		179.4	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	49.9	221.1		157.2	68.0			73.5	21.5		179.4	
LOS	D	F		F	E			E	C		F	
Approach Delay		145.1			105.6			69.5			179.4	
Approach LOS		F			F			E			F	
90th %ile Green (s)	39.0	39.0		17.0	17.0			77.0	77.0		77.0	
90th %ile Term Code	Max	Max		Max	Max			Coord	Coord		Coord	
70th %ile Green (s)	39.0	39.0		17.0	17.0			77.0	77.0		77.0	
70th %ile Term Code	Max	Max		Max	Max			Coord	Coord		Coord	
50th %ile Green (s)	39.0	39.0		17.0	17.0			77.0	77.0		77.0	
50th %ile Term Code	Max	Max		Max	Max			Coord	Coord		Coord	
30th %ile Green (s)	39.0	39.0		17.0	17.0			77.0	77.0		77.0	
30th %ile Term Code	Max	Max		Max	Max			Coord	Coord		Coord	
10th %ile Green (s)	39.0	39.0		17.0	17.0			77.0	77.0		77.0	
10th %ile Term Code	Max	Max		Max	Max			Coord	Coord		Coord	
Queue Length 50th (ft)	221	~839		~276	151			~1012	101		~1423	
Queue Length 95th (ft)	285	#1106		#426	197			m#1005	m102		m#1325	
Internal Link Dist (ft)		753			697			1320			1620	
Turn Bay Length (ft)				350					90			
Base Capacity (vph)	847	436		216	442			2375	764		2946	
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	0.56	1.37		1.13	0.76			1.08	0.28		1.33	

Intersection Summary

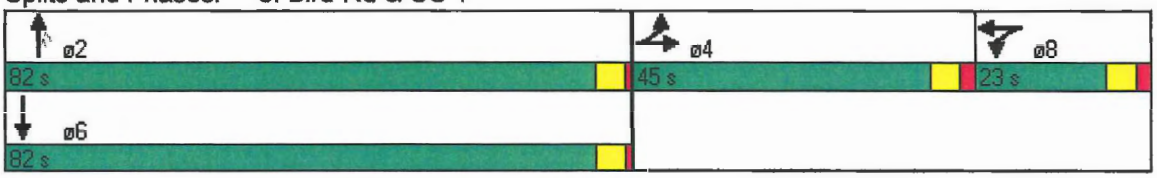
Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 102 (68%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.37
Intersection Signal Delay: 133.2 Intersection LOS: F
Intersection Capacity Utilization 98.7% ICU Level of Service F
Analysis Period (min) 15

~ 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.

Splits and Phases: 6: Bird Rd & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	90		0	1000		0	1000		0
Storage Lanes	1		0	1		0	1		0	1		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
Leading Detector (ft)	50	50		50	50		50	0		50	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.91	0.91	1.00	0.86	0.86
Ped Bike Factor												
Frt		0.960			0.963			0.998			0.996	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3269	0	1703	3280	0	1646	4558	0	1646	5732	0
Flt Permitted	0.154			0.238			0.043			0.043		
Satd. Flow (perm)	276	3269	0	427	3280	0	75	4558	0	75	5732	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30			25			2			6	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			35			40	
Link Distance (ft)		770			1211			1700			2875	
Travel Time (s)		17.5			27.5			33.1			49.0	
Volume (vph)	52	260	95	40	340	110	180	2880	30	120	3410	90
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.83	0.83	0.83	0.80	0.80	0.80	0.91	0.91	0.91	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	110%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	63	313	114	50	425	138	198	3165	33	126	3948	95
Lane Group Flow (vph)	63	427	0	50	563	0	198	3198	0	126	4043	0
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phases	4	4		8	8		5	2		1	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0		22.0	22.0		8.0	21.0		8.0	21.0	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	15.0	109.0	0.0	11.0	105.0	0.0
Total Split (%)	20.0%	20.0%	0.0%	20.0%	20.0%	0.0%	10.0%	72.7%	0.0%	7.3%	70.0%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0		3.5	4.0		3.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		0.5	1.0		0.0	1.0	
Lead/Lag							Lag	Lag		Lead	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	Min	Min		Min	Min		None	C-Max		Min	C-Max	
Act Effct Green (s)	26.0	26.0		26.0	26.0		105.0	105.0		101.0	101.0	
Actuated g/C Ratio	0.17	0.17		0.17	0.17		0.70	0.70		0.67	0.67	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.31	0.72		0.68	0.96		1.18	1.00		1.02	1.05	
Control Delay	281.2	62.2		99.5	85.8		138.5	20.2		86.8	38.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	281.2	62.2		99.5	85.8		138.5	20.2		86.8	38.2	
LOS	F	E		F	F		F	C		F	D	
Approach Delay		90.4			86.9			27.1			39.7	
Approach LOS		F			F			C			D	
90th %ile Green (s)	25.0	25.0		25.0	25.0		11.0	104.0		8.0	100.0	
90th %ile Term Code	Max	Max		Max	Max		Max	Coord		Max	Coord	
70th %ile Green (s)	25.0	25.0		25.0	25.0		11.0	104.0		8.0	100.0	
70th %ile Term Code	Max	Max		Max	Max		Max	Coord		Max	Coord	
50th %ile Green (s)	25.0	25.0		25.0	25.0		11.0	104.0		8.0	100.0	
50th %ile Term Code	Max	Max		Max	Max		Max	Coord		Max	Coord	
30th %ile Green (s)	25.0	25.0		25.0	25.0		11.0	104.0		8.0	100.0	
30th %ile Term Code	Max	Max		Max	Max		Max	Coord		Max	Coord	
10th %ile Green (s)	25.0	25.0		25.0	25.0		11.0	104.0		8.0	100.0	
10th %ile Term Code	Max	Max		Max	Max		Max	Coord		Max	Coord	
Queue Length 50th (ft)	~79	196		46	279		~186	~247		~77	~1270	
Queue Length 95th (ft)	#164	234		#99	#317		m#204	m212		m#84	m#1297	
Internal Link Dist (ft)		690			1131			1620			2795	
Turn Bay Length (ft)	300			90			1000			1000		
Base Capacity (vph)	48	591		74	589		168	3191		124	3862	
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	1.31	0.72		0.68	0.96		1.18	1.00		1.02	1.05	

Intersection Summary

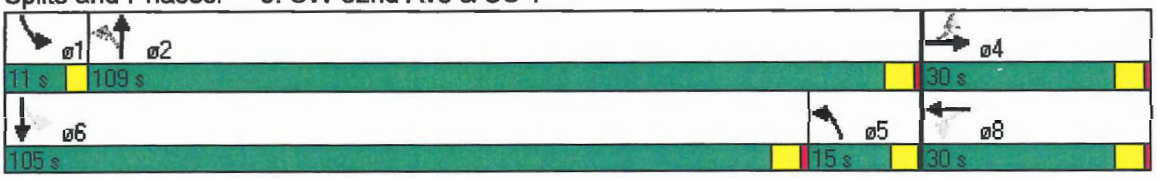
Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 114 (76%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.31
Intersection Signal Delay: 40.9 Intersection LOS: D
Intersection Capacity Utilization 95.4% ICU Level of Service F
Analysis Period (min) 15

~ 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.

Splits and Phases: 9: SW 32nd Ave & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	170		200	80		100	1000		0	1000		0
Storage Lanes	1		1	1		1	1		0	1		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
Leading Detector (ft)	50	50	50	50	50	50	50	0		50	0	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	0.91	1.00	0.86	0.86
Ped Bike Factor												
Frt			0.850			0.850		0.997			0.997	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3406	1524	1703	3406	1524	1646	4553	0	1646	5738	0
Flt Permitted	0.174			0.174			0.036			0.037		
Satd. Flow (perm)	312	3406	1524	312	3406	1524	62	4553	0	64	5738	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			78			8		7			7	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		798			1372			2875			1425	
Travel Time (s)		18.1			31.2			49.0			24.3	
Volume (vph)	45	500	230	55	630	50	190	2780	60	70	3520	90
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.95	0.95	0.95	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	110%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	49	549	253	58	663	53	194	2837	61	71	3951	92
Lane Group Flow (vph)	49	549	253	58	663	53	194	2898	0	71	4043	0
Turn Type	Perm		Perm	Perm		Perm	pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8		8	2			6		
Detector Phases	4	4	4	8	8	8	5	2		6	6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	21.0	8.0	22.0		22.0	22.0	
Total Split (s)	27.0	27.0	27.0	27.0	27.0	27.0	12.0	123.0	0.0	111.0	111.0	0.0
Total Split (%)	18.0%	18.0%	18.0%	18.0%	18.0%	18.0%	8.0%	82.0%	0.0%	74.0%	74.0%	0.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.5	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	0.5	2.0		2.0	2.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Recall Mode	Min	Min	Min	Min	Min	Min	None	C-Max		C-Max	C-Max	
Act Effct Green (s)	23.0	23.0	23.0	23.0	23.0	23.0	119.0	119.0		107.0	107.0	
Actuated g/C Ratio	0.15	0.15	0.15	0.15	0.15	0.15	0.79	0.79		0.71	0.71	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.02	1.05	0.84	1.21	1.27	0.22	1.45	0.80		1.54	0.99	
Control Delay	196.7	113.2	66.6	248.3	185.4	50.1	241.9	9.9		312.6	27.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	196.7	113.2	66.6	248.3	185.4	50.1	241.9	9.9		312.6	27.8	
LOS	F	F	E	F	F	D	F	A		F	C	
Approach Delay		104.2			180.8			24.4			32.8	
Approach LOS		F			F			C			C	
90th %ile Green (s)	22.0	22.0	22.0	22.0	22.0	22.0	8.0	117.0		105.0	105.0	
90th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord		Coord	Coord	
70th %ile Green (s)	22.0	22.0	22.0	22.0	22.0	22.0	8.0	117.0		105.0	105.0	
70th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord		Coord	Coord	
50th %ile Green (s)	22.0	22.0	22.0	22.0	22.0	22.0	8.0	117.0		105.0	105.0	
50th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord		Coord	Coord	
30th %ile Green (s)	22.0	22.0	22.0	22.0	22.0	22.0	8.0	117.0		105.0	105.0	
30th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord		Coord	Coord	
10th %ile Green (s)	22.0	22.0	22.0	22.0	22.0	22.0	8.0	117.0		105.0	105.0	
10th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord		Coord	Coord	
Queue Length 50th (ft)	~51	~307	172	~69	~428	39	~210	756		~95	624	
Queue Length 95th (ft)	#144	#430	#324	#169	#558	83	m#207	m727		m#110	#852	
Internal Link Dist (ft)		718			1292			2795			1345	
Turn Bay Length (ft)	170		200	80		100	1000			1000		
Base Capacity (vph)	48	522	300	48	522	240	134	3613		46	4095	
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	1.02	1.05	0.84	1.21	1.27	0.22	1.45	0.80		1.54	0.99	

Intersection Summary

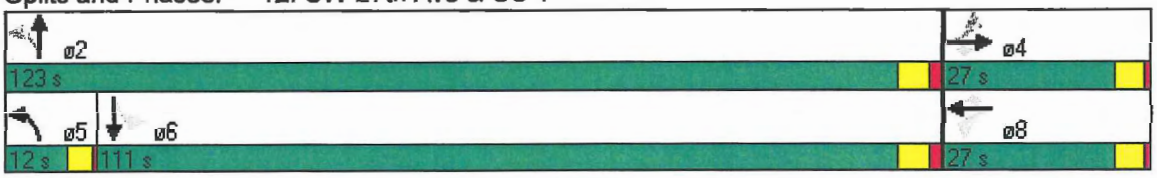
Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 42 (28%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.54
Intersection Signal Delay: 49.7 Intersection LOS: D
Intersection Capacity Utilization 102.2% ICU Level of Service G
Analysis Period (min) 15

~ 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.

Splits and Phases: 12: SW 27th Ave & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	160		200	116		120	1000		0	1000		0
Storage Lanes	1		1	1		1	1		0	1		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
Leading Detector (ft)	50	50	50	50	50	50	50	0		50	0	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.86	0.86
Ped Bike Factor												
Frt			0.850			0.850		0.998			0.998	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3406	1524	1703	1792	1524	1646	4558	0	1646	5743	0
Flt Permitted	0.482			0.405			0.035			0.034		
Satd. Flow (perm)	864	3406	1524	726	1792	1524	61	4558	0	59	5743	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			1			63		4			6	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		700			1260			1400			2900	
Travel Time (s)		15.9			28.6			23.9			49.4	
Volume (vph)	80	210	130	50	105	85	70	2350	40	110	3290	50
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.88	0.88	0.88	0.89	0.89	0.89	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	110%	100%	100%	120%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	91	239	148	56	118	96	73	2693	42	115	4112	52
Lane Group Flow (vph)	91	239	148	56	118	96	73	2735	0	115	4164	0
Turn Type	Perm		Perm	Perm		Perm	Perm			pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phases	4	4	4	8	8	8	2	2		1	6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0		8.0	22.0	
Total Split (s)	22.0	22.0	22.0	22.0	22.0	22.0	119.0	119.0	0.0	9.0	128.0	0.0
Total Split (%)	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	79.3%	79.3%	0.0%	6.0%	85.3%	0.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		0.0	2.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Recall Mode	Min	Min	Min	Min	Min	Min	C-Max	C-Max		Min	C-Max	
Act Effct Green (s)	17.7	17.7	17.7	17.7	17.7	17.7	115.0	115.0		124.3	124.3	
Actuated g/C Ratio	0.12	0.12	0.12	0.12	0.12	0.12	0.77	0.77		0.83	0.83	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.89	0.59	0.82	0.65	0.56	0.41	1.55	0.78		1.10	0.87	
Control Delay	126.7	69.3	95.7	96.5	73.1	29.8	321.5	3.7		101.4	3.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	126.7	69.3	95.7	96.5	73.1	29.8	321.5	3.7		101.4	3.0	
LOS	F	E	F	F	E	C	F	A		F	A	
Approach Delay		88.4			62.6			11.9			5.6	
Approach LOS		F			E			B			A	
90th %ile Green (s)	16.0	16.0	16.0	16.0	16.0	16.0	113.0	113.0		6.0	122.0	
90th %ile Term Code	Max	Max	Max	Max	Max	Max	Coord	Coord		Max	Coord	
70th %ile Green (s)	16.0	16.0	16.0	16.0	16.0	16.0	113.0	113.0		6.0	122.0	
70th %ile Term Code	Max	Max	Max	Max	Max	Max	Coord	Coord		Max	Coord	
50th %ile Green (s)	16.0	16.0	16.0	16.0	16.0	16.0	113.0	113.0		6.0	122.0	
50th %ile Term Code	Max	Max	Max	Max	Max	Max	Coord	Coord		Max	Coord	
30th %ile Green (s)	16.0	16.0	16.0	16.0	16.0	16.0	113.0	113.0		6.0	122.0	
30th %ile Term Code	Max	Max	Max	Hold	Hold	Hold	Coord	Coord		Max	Coord	
10th %ile Green (s)	14.7	14.7	14.7	14.7	14.7	14.7	113.0	113.0		7.3	123.3	
10th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Hold	Coord	Coord		Max	Coord	
Queue Length 50th (ft)	89	118	143	53	111	30	~101	73		~82	31	
Queue Length 95th (ft)	#195	162	#252	#121	178	88	m#138	m180		m#76	m36	
Internal Link Dist (ft)		620			1180			1320			2820	
Turn Bay Length (ft)	160		200	116		120	1000			1000		
Base Capacity (vph)	104	409	184	87	215	238	47	3495		105	4759	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.88	0.58	0.80	0.64	0.55	0.40	1.55	0.78		1.10	0.87	

Intersection Summary

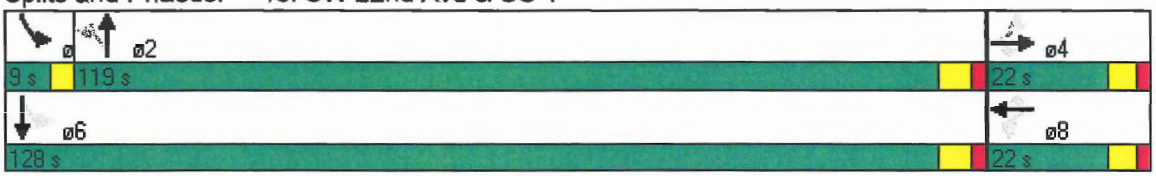
Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 54 (36%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.55
Intersection Signal Delay: 14.9 Intersection LOS: B
Intersection Capacity Utilization 85.2% ICU Level of Service E
Analysis Period (min) 15

~ 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.

Splits and Phases: 18: SW 22nd Ave & US 1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	165		0	116		0	1000		0	1000		0
Storage Lanes	1		0	1		0	1		0	1		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
Leading Detector (ft)	50	50		50	50		50	0		50	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.91	0.91	1.00	0.86	0.86
Ped Bike Factor												
Frt		0.957			0.971			0.995			0.994	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3259	0	1703	3307	0	1646	4544	0	1646	5720	0
Flt Permitted	0.211			0.168			0.046			0.046		
Satd. Flow (perm)	378	3259	0	301	3307	0	80	4544	0	80	5720	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		37			17			6			11	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.09
Link Speed (mph)		30			30			40			35	
Link Distance (ft)		611			1465			2900			700	
Travel Time (s)		13.9			33.3			49.4			13.6	
Volume (vph)	130	370	150	90	380	90	140	2610	90	130	3450	150
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.93	0.93	0.93	0.92	0.92	0.92	0.97	0.97	0.97	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	110%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	140	398	161	98	413	98	144	2691	93	133	3872	153
Lane Group Flow (vph)	140	559	0	98	511	0	144	2784	0	133	4025	0
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phases	4	4		8	8		5	2		1	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	22.0	22.0		22.0	22.0		8.0	21.0		8.0	21.0	
Total Split (s)	35.0	35.0	0.0	35.0	35.0	0.0	11.0	98.0	0.0	17.0	104.0	0.0
Total Split (%)	23.3%	23.3%	0.0%	23.3%	23.3%	0.0%	7.3%	65.3%	0.0%	11.3%	69.3%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0		3.5	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		0.5	1.0		0.0	1.0	
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	Min	Min		Min	Min		None	C-Max		Min	C-Max	
Act Effct Green (s)	31.0	31.0		31.0	31.0		94.0	94.0		100.0	100.0	
Actuated g/C Ratio	0.21	0.21		0.21	0.21		0.63	0.63		0.67	0.67	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.79	0.80		1.58	0.73		1.17	0.98		0.70	1.05	
Control Delay	437.0	62.1		362.3	60.8		155.4	27.0		37.8	37.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	64.5	
Total Delay	437.0	62.1		362.3	60.8		155.4	27.0		37.8	102.2	
LOS	F	E		F	E		F	C		D	F	
Approach Delay		137.2			109.3			33.3			100.1	
Approach LOS		F			F			C			F	
90th %ile Green (s)	29.0	29.0		29.0	29.0		7.0	93.0		14.0	99.0	
90th %ile Term Code	Max	Max		Max	Max		Max	Coord		Max	Coord	
70th %ile Green (s)	29.0	29.0		29.0	29.0		7.0	93.0		14.0	99.0	
70th %ile Term Code	Max	Max		Max	Max		Max	Coord		Max	Coord	
50th %ile Green (s)	29.0	29.0		29.0	29.0		7.0	93.0		14.0	99.0	
50th %ile Term Code	Max	Max		Max	Max		Max	Coord		Hold	Coord	
30th %ile Green (s)	29.0	29.0		29.0	29.0		7.0	93.0		14.0	99.0	
30th %ile Term Code	Max	Max		Max	Max		Max	Coord		Hold	Coord	
10th %ile Green (s)	29.0	29.0		29.0	29.0		7.0	93.0		14.0	99.0	
10th %ile Term Code	Max	Max		Max	Max		Max	Coord		Hold	Coord	
Queue Length 50th (ft)	~205	259		~136	241		~116	1029		75	~1237	
Queue Length 95th (ft)	#351	331		#262	308		m#202	#1098		m44	m196	
Internal Link Dist (ft)		531			1385			2820			620	
Turn Bay Length (ft)	165			116			1000			1000		
Base Capacity (vph)	78	703		62	697		123	2850		189	3817	
Starvation Cap Reductn	0	0		0	0		0	0		0	466	
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	1.79	0.80		1.58	0.73		1.17	0.98		0.70	1.20	

Intersection Summary

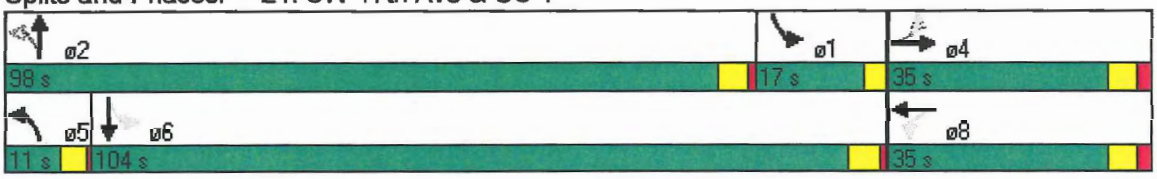
Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 148 (99%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.79
Intersection Signal Delay: 80.6 Intersection LOS: F
Intersection Capacity Utilization 99.2% ICU Level of Service F
Analysis Period (min) 15

~ 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.

Splits and Phases: 21: SW 17th Ave & US 1



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	10	10	10
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	1000			0
Storage Lanes	1	1	1			0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	0	0	
Trailing Detector (ft)	0	0	0	0	0	
Turning Speed (mph)	15	9	15			9
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91
Ped Bike Factor						
Frt		0.850			0.991	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1703	1524	1646	4567	4526	0
Flt Permitted	0.950		0.035			
Satd. Flow (perm)	1703	1524	61	4567	4526	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		102			18	
Headway Factor	1.00	1.00	1.04	1.09	1.09	1.09
Link Speed (mph)	30			35	35	
Link Distance (ft)	525			700	3993	
Travel Time (s)	11.9			13.6	77.8	
Volume (vph)	120	220	190	2550	3390	260
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.97	0.97	0.86	0.86	0.93	0.93
Growth Factor	110%	100%	100%	100%	115%	100%
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	136	227	221	2965	4192	280
Lane Group Flow (vph)	136	227	221	2965	4472	0
Turn Type		Perm	pm+pt			
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phases	4	4	5	2	6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	22.0	22.0	8.0	22.0	22.0	
Total Split (s)	22.0	22.0	15.0	128.0	113.0	0.0
Total Split (%)	14.7%	14.7%	10.0%	85.3%	75.3%	0.0%
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	
All-Red Time (s)	1.0	1.0	0.5	2.0	2.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	Min	Min	None	C-Max	C-Max	
Act Effct Green (s)	16.5	16.5	125.5	125.5	109.0	
Actuated g/C Ratio	0.11	0.11	0.84	0.84	0.73	

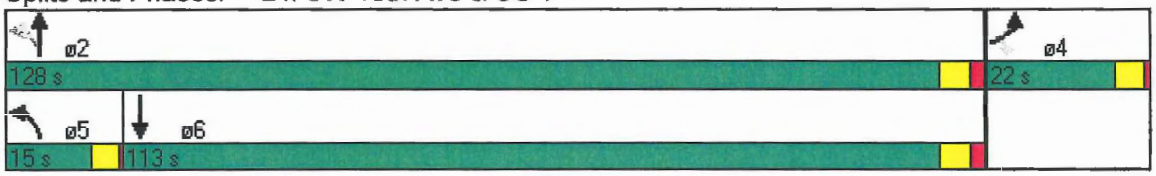
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.73	0.88	1.21	0.78	1.36	
Control Delay	86.1	67.1	155.8	1.4	185.7	
Queue Delay	0.0	0.8	0.0	0.1	33.6	
Total Delay	86.1	67.9	155.8	1.5	219.3	
LOS	F	E	F	A	F	
Approach Delay	74.7			12.2	219.3	
Approach LOS	E			B	F	
90th %ile Green (s)	17.0	17.0	11.0	122.0	107.0	
90th %ile Term Code	Max	Max	Max	Coord	Coord	
70th %ile Green (s)	17.0	17.0	11.0	122.0	107.0	
70th %ile Term Code	Max	Max	Max	Coord	Coord	
50th %ile Green (s)	17.0	17.0	11.0	122.0	107.0	
50th %ile Term Code	Max	Max	Max	Coord	Coord	
30th %ile Green (s)	15.7	15.7	12.3	123.3	107.0	
30th %ile Term Code	Gap	Gap	Max	Coord	Coord	
10th %ile Green (s)	10.9	10.9	17.1	128.1	107.0	
10th %ile Term Code	Gap	Gap	Max	Coord	Coord	
Queue Length 50th (ft)	129	124	~236	14	~2109	
Queue Length 95th (ft)	#209	#266	m#252	m18	#2137	
Internal Link Dist (ft)	445			620	3913	
Turn Bay Length (ft)			1000			
Base Capacity (vph)	204	273	183	3820	3294	
Starvation Cap Reductn	0	0	0	104	0	
Spillback Cap Reductn	0	4	0	0	172	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.67	0.84	1.21	0.80	1.43	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 135 (90%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.36
Intersection Signal Delay: 130.5 Intersection LOS: F
Intersection Capacity Utilization 108.9% ICU Level of Service G
Analysis Period (min) 15

~ 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.

Splits and Phases: 24: SW 16th Ave & US 1