D

Synchro

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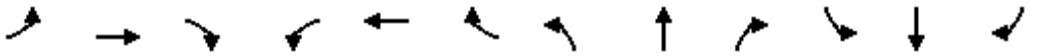
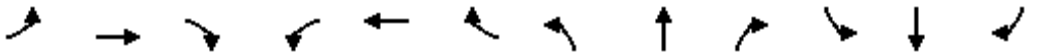
Existing Network 2021 AM



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	266	251	111	288	0	0	0	0	66	28	38
Future Volume (vph)	0	266	251	111	288	0	0	0	0	66	28	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected					0.986						0.966	
Satd. Flow (prot)	0	1712	1369	0	1662	0	0	0	0	0	1757	1122
Flt Permitted					0.986						0.966	
Satd. Flow (perm)	0	1712	1369	0	1662	0	0	0	0	0	1757	1122
Link Speed (mph)		40			40			30			45	
Link Distance (ft)		930			353			1253			1599	
Travel Time (s)		15.9			6.0			28.5			24.2	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	11%	18%	12%	13%	0%	0%	0%	0%	3%	8%	44%
Adj. Flow (vph)	0	299	282	125	324	0	0	0	0	74	31	43
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	299	282	0	449	0	0	0	0	0	105	43
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 52.0%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	266	251	111	288	0	0	0	0	66	28	38
Future Volume (vph)	0	266	251	111	288	0	0	0	0	66	28	38
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	0	299	282	125	324	0	0	0	0	74	31	43

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total (vph)	299	282	449	105	43
Volume Left (vph)	0	0	125	74	0
Volume Right (vph)	0	282	0	0	43
Hadj (s)	0.19	-0.29	0.27	0.22	0.15
Departure Headway (s)	5.0	3.2	4.9	5.9	3.2
Degree Utilization, x	0.41	0.25	0.61	0.17	0.04
Capacity (veh/h)	701	1112	724	538	1121
Control Delay (s)	11.4	7.3	15.1	10.1	6.3
Approach Delay (s)	9.4		15.1	9.0	
Approach LOS	A		C	A	

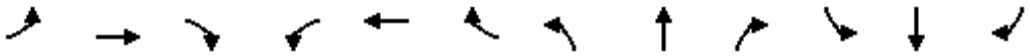
Intersection Summary				
Delay	11.5			
Level of Service	B			
Intersection Capacity Utilization	52.0%	ICU Level of Service	A	
Analysis Period (min)	15			

Intersection	
Intersection Delay, s/veh	16.8
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	266	251	111	288	0	0	0	0	66	28	38
Future Vol, veh/h	0	266	251	111	288	0	0	0	0	66	28	38
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	0	11	18	12	13	0	0	0	0	3	8	44
Mvmt Flow	0	299	282	125	324	0	0	0	0	74	31	43
Number of Lanes	0	1	1	0	1	0	0	0	0	0	1	1

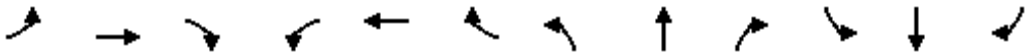
Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	2
HCM Control Delay	12.6	24	11.5
HCM LOS	B	C	B

Lane	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	0%	0%	28%	70%	0%
Vol Thru, %	100%	0%	72%	30%	0%
Vol Right, %	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	266	251	399	94	38
LT Vol	0	0	111	66	0
Through Vol	266	0	288	28	0
RT Vol	0	251	0	0	38
Lane Flow Rate	299	282	448	106	43
Geometry Grp	7	7	6	7	7
Degree of Util (X)	0.479	0.405	0.74	0.217	0.076
Departure Headway (Hd)	5.764	5.176	5.941	7.39	6.405
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	628	697	610	486	560
Service Time	3.49	2.901	3.965	5.127	4.14
HCM Lane V/C Ratio	0.476	0.405	0.734	0.218	0.077
HCM Control Delay	13.7	11.4	24	12.2	9.7
HCM Lane LOS	B	B	C	B	A
HCM 95th-tile Q	2.6	2	6.4	0.8	0.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	264	0	0	231	24	179	11	94	0	0	0
Future Volume (vph)	66	264	0	0	231	24	179	11	94	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Frt					0.987			0.950				
Flt Protected		0.990						0.969				
Satd. Flow (prot)	0	1725	0	0	1850	0	0	2786	0	0	0	0
Flt Permitted		0.990						0.969				
Satd. Flow (perm)	0	1725	0	0	1850	0	0	2786	0	0	0	0
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		353			1397			1065			1401	
Travel Time (s)		6.0			23.8			16.1			21.2	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	33%	3%	0%	0%	1%	5%	28%	0%	5%	0%	0%	0%
Adj. Flow (vph)	76	303	0	0	266	28	206	13	108	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	379	0	0	294	0	0	327	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 51.1%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	66	264	0	0	231	24	179	11	94	0	0	0
Future Volume (vph)	66	264	0	0	231	24	179	11	94	0	0	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	76	303	0	0	266	28	206	13	108	0	0	0

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total (vph)	379	294	213	115
Volume Left (vph)	76	0	206	0
Volume Right (vph)	0	28	0	108
Hadj (s)	0.19	-0.03	0.95	-0.58
Departure Headway (s)	5.6	5.5	7.3	5.7
Degree Utilization, x	0.59	0.45	0.43	0.18
Capacity (veh/h)	622	625	464	589
Control Delay (s)	16.3	13.0	14.5	8.8
Approach Delay (s)	16.3	13.0	12.5	
Approach LOS	C	B	B	

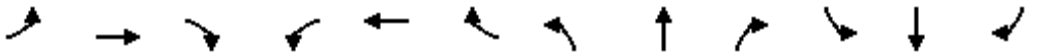
Intersection Summary				
Delay	14.1			
Level of Service	B			
Intersection Capacity Utilization	51.1%	ICU Level of Service	A	
Analysis Period (min)	15			

Intersection	
Intersection Delay, s/veh	15.4
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	66	264	0	0	231	24	179	11	94	0	0	0
Future Vol, veh/h	66	264	0	0	231	24	179	11	94	0	0	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	33	3	0	0	1	5	28	0	5	0	0	0
Mvmt Flow	76	303	0	0	266	28	206	13	108	0	0	0
Number of Lanes	0	1	0	0	1	0	0	2	0	0	0	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	1
HCM Control Delay	18.8	13.1	13.6
HCM LOS	C	B	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1
Vol Left, %	97%	0%	20%	0%
Vol Thru, %	3%	6%	80%	91%
Vol Right, %	0%	94%	0%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	185	100	330	255
LT Vol	179	0	66	0
Through Vol	6	6	264	231
RT Vol	0	94	0	24
Lane Flow Rate	212	114	379	293
Geometry Grp	7	7	2	2
Degree of Util (X)	0.434	0.182	0.632	0.451
Departure Headway (Hd)	7.364	5.715	6.001	5.542
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	490	627	603	648
Service Time	5.108	3.458	4.041	3.586
HCM Lane V/C Ratio	0.433	0.182	0.629	0.452
HCM Control Delay	15.7	9.7	18.8	13.1
HCM Lane LOS	C	A	C	B
HCM 95th-tile Q	2.2	0.7	4.4	2.3

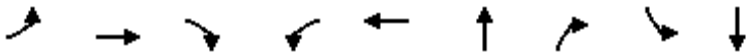


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	182	252	279	273	3	309	13	265	6	18	33
Future Volume (vph)	20	182	252	279	273	3	309	13	265	6	18	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	500		500	560		0	0		300	175		0
Storage Lanes	1		1	1		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt			0.850		0.998				0.850		0.904	
Flt Protected	0.950			0.950				0.954		0.950		
Satd. Flow (prot)	1719	1727	1442	1626	1807	0	0	1730	1455	1805	3136	0
Flt Permitted	0.950			0.222				0.061		0.551		
Satd. Flow (perm)	1719	1727	1442	380	1807	0	0	111	1455	1047	3136	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			274						288		36	
Link Speed (mph)		55			60			60			30	
Link Distance (ft)		1108			19133			2711			551	
Travel Time (s)		13.7			217.4			30.8			12.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	10%	12%	11%	5%	0%	5%	0%	11%	0%	6%	3%
Adj. Flow (vph)	22	198	274	303	297	3	336	14	288	7	20	36
Shared Lane Traffic (%)												
Lane Group Flow (vph)	22	198	274	303	300	0	0	350	288	7	56	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			4			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			3			4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			2	6			3		3	4		
Detector Phase	5	2	2	1	6		3	3	3	4	4	
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		5.0	5.0	5.0	10.0	10.0	
Minimum Split (s)	11.0	16.0	16.0	11.0	16.0		11.0	11.0	11.0	16.0	16.0	
Total Split (s)	11.0	19.0	19.0	15.0	23.0		70.0	70.0	70.0	16.0	16.0	
Total Split (%)	9.2%	15.8%	15.8%	12.5%	19.2%		58.3%	58.3%	58.3%	13.3%	13.3%	
Maximum Green (s)	6.0	13.0	13.0	9.0	17.0		64.0	64.0	64.0	11.0	11.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	6.0	6.0	6.0	6.0			6.0	6.0	5.0	5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lead	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	4.0	4.0	3.0	4.0		3.0	3.0	3.0	4.0	4.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	
Act Effct Green (s)	6.5	13.0	13.0	30.8	24.8			64.0	64.0	10.0	10.0	
Actuated g/C Ratio	0.05	0.11	0.11	0.26	0.21			0.53	0.53	0.08	0.08	
v/c Ratio	0.24	1.06	0.69	1.31	0.80			5.93	0.32	0.08	0.19	
Control Delay	60.5	133.4	15.4	200.7	65.0			2264.8	2.6	53.2	26.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	
Total Delay	60.5	133.4	15.4	200.7	65.0			2264.8	2.6	53.2	26.2	
LOS	E	F	B	F	E			F	A	D	C	
Approach Delay		64.7			133.2			1243.6			29.2	
Approach LOS		E			F			F			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 5.93			
Intersection Signal Delay: 504.7		Intersection LOS: F	
Intersection Capacity Utilization 64.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 103: SH 105 & Houston Street

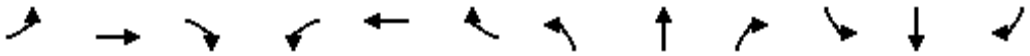


Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	22	198	274	303	300	350	288	7	56
v/c Ratio	0.24	1.06	0.69	1.31	0.80	5.93	0.32	0.08	0.19
Control Delay	60.5	133.4	15.4	200.7	65.0	2264.8	2.6	53.2	26.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.5	133.4	15.4	200.7	65.0	2264.8	2.6	53.2	26.2
Queue Length 50th (ft)	17	~168	0	~290	~276	~478	0	5	7
Queue Length 95th (ft)	45	#322	87	#476	#455	#670	41	21	29
Internal Link Dist (ft)		1028			19053	2631			471
Turn Bay Length (ft)	500		500	560			300	175	
Base Capacity (vph)	94	187	400	232	373	59	910	95	320
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	0.23	1.06	0.69	1.31	0.80	5.93	0.32	0.07	0.17

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

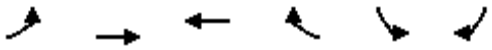
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	182	252	279	273	3	309	13	265	6	18	33
Future Volume (vph)	20	182	252	279	273	3	309	13	265	6	18	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0	6.0	6.0	6.0			6.0	6.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00			1.00	0.85	1.00	0.90	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00	0.95	1.00	
Satd. Flow (prot)	1719	1727	1442	1626	1808			1730	1455	1805	3134	
Flt Permitted	0.95	1.00	1.00	0.22	1.00			0.06	1.00	0.55	1.00	
Satd. Flow (perm)	1719	1727	1442	380	1808			111	1455	1047	3134	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	198	274	303	297	3	336	14	288	7	20	36
RTOR Reduction (vph)	0	0	247	0	0	0	0	0	134	0	34	0
Lane Group Flow (vph)	22	198	27	303	300	0	0	350	154	7	22	0
Heavy Vehicles (%)	5%	10%	12%	11%	5%	0%	5%	0%	11%	0%	6%	3%
Turn Type	Prot	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			3			4	
Permitted Phases			2	6			3		3	4		
Actuated Green, G (s)	4.2	12.0	12.0	31.0	21.8			64.0	64.0	8.0	8.0	
Effective Green, g (s)	4.2	12.0	12.0	31.0	21.8			64.0	64.0	8.0	8.0	
Actuated g/C Ratio	0.04	0.10	0.10	0.26	0.18			0.53	0.53	0.07	0.07	
Clearance Time (s)	5.0	6.0	6.0	6.0	6.0			6.0	6.0	5.0	5.0	
Vehicle Extension (s)	3.0	4.0	4.0	3.0	4.0			3.0	3.0	4.0	4.0	
Lane Grp Cap (vph)	60	172	144	233	328			59	776	69	208	
v/s Ratio Prot	0.01	0.11		c0.14	0.17						c0.01	
v/s Ratio Perm			0.02	c0.19				c3.15	0.11	0.01		
v/c Ratio	0.37	1.15	0.19	1.30	0.91			5.93	0.20	0.10	0.11	
Uniform Delay, d1	56.6	54.0	49.5	40.9	48.2			28.0	14.6	52.6	52.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	1.00	
Incremental Delay, d2	3.8	115.1	2.9	162.9	32.1			2255.6	0.1	0.9	0.3	
Delay (s)	60.4	169.1	52.5	203.8	80.2			2283.6	14.7	53.5	53.0	
Level of Service	E	F	D	F	F			F	B	D	D	
Approach Delay (s)		99.6			142.4			1259.4			53.0	
Approach LOS		F			F			F			D	

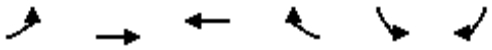
Intersection Summary			
HCM 2000 Control Delay	523.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	4.29		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	23.0
Intersection Capacity Utilization	64.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology expects strict NEMA phasing.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	7	558	540	6	17	18
Future Volume (vph)	7	558	540	6	17	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.996		0.926	
Flt Protected		0.999			0.978	
Satd. Flow (prot)	0	1709	1772	0	1721	0
Flt Permitted		0.999			0.978	
Satd. Flow (perm)	0	1709	1772	0	1721	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		19133	16491		682	
Travel Time (s)		434.8	374.8		15.5	
Peak Hour Factor	0.35	0.82	0.91	0.38	0.85	0.75
Heavy Vehicles (%)	14%	11%	7%	0%	0%	0%
Adj. Flow (vph)	20	680	593	16	20	24
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	700	609	0	44	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60			60	60	60
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 45.0%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	7	558	540	6	17	18
Future Volume (Veh/h)	7	558	540	6	17	18
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.35	0.82	0.91	0.38	0.85	0.75
Hourly flow rate (vph)	20	680	593	16	20	24
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	609				1321	601
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	609				1321	601
tC, single (s)	4.2				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.3				3.5	3.3
p0 queue free %	98				88	95
cM capacity (veh/h)	914				171	504

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	700	609	44
Volume Left	20	0	20
Volume Right	0	16	24
cSH	914	1700	267
Volume to Capacity	0.02	0.36	0.16
Queue Length 95th (ft)	2	0	14
Control Delay (s)	0.6	0.0	21.1
Lane LOS	A		C
Approach Delay (s)	0.6	0.0	21.1
Approach LOS			C

Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	45.0%	ICU Level of Service	A
Analysis Period (min)	15		

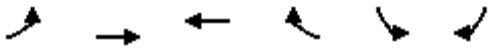
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	558	540	6	17	18
Future Vol, veh/h	7	558	540	6	17	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	35	82	91	38	85	75
Heavy Vehicles, %	14	11	7	0	0	0
Mvmt Flow	20	680	593	16	20	24

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	609	0	-	0	1321	601
Stage 1	-	-	-	-	601	-
Stage 2	-	-	-	-	720	-
Critical Hdwy	4.24	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.326	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	914	-	-	-	174	504
Stage 1	-	-	-	-	551	-
Stage 2	-	-	-	-	486	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	914	-	-	-	168	504
Mov Cap-2 Maneuver	-	-	-	-	168	-
Stage 1	-	-	-	-	532	-
Stage 2	-	-	-	-	486	-

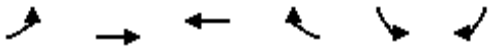
Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	21.3
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	914	-	-	-	264
HCM Lane V/C Ratio	0.022	-	-	-	0.167
HCM Control Delay (s)	9	0	-	-	21.3
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	74	755	1041	129	172	160
Future Volume (vph)	74	755	1041	129	172	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.983		0.935	
Flt Protected	0.950				0.975	
Satd. Flow (prot)	1736	3282	3358	0	1681	0
Flt Permitted	0.950				0.975	
Satd. Flow (perm)	1736	3282	3358	0	1681	0
Link Speed (mph)		65	65		30	
Link Distance (ft)		2030	1363		297	
Travel Time (s)		21.3	14.3		6.8	
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Heavy Vehicles (%)	4%	10%	6%	3%	5%	1%
Adj. Flow (vph)	97	993	1370	170	226	211
Shared Lane Traffic (%)						
Lane Group Flow (vph)	97	993	1540	0	437	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 66.3%		ICU Level of Service C	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	74	755	1041	129	172	160
Future Volume (Veh/h)	74	755	1041	129	172	160
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Hourly flow rate (vph)	97	993	1370	170	226	211
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage veh)		2	2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1540				2146	770
vC1, stage 1 conf vol					1455	
vC2, stage 2 conf vol					690	
vCu, unblocked vol	1540				2146	770
tC, single (s)	4.2				6.9	6.9
tC, 2 stage (s)					5.9	
tF (s)	2.2				3.5	3.3
p0 queue free %	77				0	39
cM capacity (veh/h)	418				154	345

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1
Volume Total	97	496	496	913	627	437
Volume Left	97	0	0	0	0	226
Volume Right	0	0	0	0	170	211
cSH	418	1700	1700	1700	1700	210
Volume to Capacity	0.23	0.29	0.29	0.54	0.37	2.08
Queue Length 95th (ft)	22	0	0	0	0	832
Control Delay (s)	16.2	0.0	0.0	0.0	0.0	539.3
Lane LOS	C					F
Approach Delay (s)	1.4			0.0		539.3
Approach LOS						F

Intersection Summary			
Average Delay	77.4		
Intersection Capacity Utilization	66.3%	ICU Level of Service	C
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	123.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	74	755	1041	129	172	160
Future Vol, veh/h	74	755	1041	129	172	160
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	4	10	6	3	5	1
Mvmt Flow	97	993	1370	170	226	211

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1540	0	-	0	2146	770
Stage 1	-	-	-	-	1455	-
Stage 2	-	-	-	-	691	-
Critical Hdwy	4.18	-	-	-	6.9	6.92
Critical Hdwy Stg 1	-	-	-	-	5.9	-
Critical Hdwy Stg 2	-	-	-	-	5.9	-
Follow-up Hdwy	2.24	-	-	-	3.55	3.31
Pot Cap-1 Maneuver	418	-	-	-	~ 40	345
Stage 1	-	-	-	-	~ 176	-
Stage 2	-	-	-	-	451	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	418	-	-	-	~ 31	345
Mov Cap-2 Maneuver	-	-	-	-	~ 104	-
Stage 1	-	-	-	-	~ 135	-
Stage 2	-	-	-	-	451	-

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	$ 864.4
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	418	-	-	-	157
HCM Lane V/C Ratio	0.233	-	-	-	2.782
HCM Control Delay (s)	16.2	-	-	-	$ 864.4
HCM Lane LOS	C	-	-	-	F
HCM 95th %tile Q(veh)	0.9	-	-	-	39.2

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	812	102	1	107	658	73	115
Future Volume (vph)	812	102	1	107	658	73	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		125		0	225
Storage Lanes		0		1		1	1
Taper Length (ft)				25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.985						0.850
Flt Protected				0.950		0.950	
Satd. Flow (prot)	1749	0	0	1736	1776	1583	1482
Flt Permitted				0.211		0.950	
Satd. Flow (perm)	1749	0	0	386	1776	1583	1482
Right Turn on Red		Yes					Yes
Satd. Flow (RTOR)	12						132
Link Speed (mph)	45				45	30	
Link Distance (ft)	1974				176	2080	
Travel Time (s)	29.9				2.7	47.3	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	7%	7%	0%	4%	7%	14%	9%
Adj. Flow (vph)	933	117	1	123	756	84	132
Shared Lane Traffic (%)							
Lane Group Flow (vph)	1050	0	0	124	756	84	132
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	R NA	Left	Left	Left	Right
Median Width(ft)	12				12	12	
Link Offset(ft)	0				0	0	
Crosswalk Width(ft)	16				16	16	
Two way Left Turn Lane	Yes				Yes		
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	15		15	9
Number of Detectors	2		1	1	2	1	1
Detector Template	Thru		Left	Left	Thru	Left	Right
Leading Detector (ft)	100		20	20	100	20	20
Trailing Detector (ft)	0		0	0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0	0
Detector 1 Size(ft)	6		20	20	6	20	20
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94				94		
Detector 2 Size(ft)	6				6		
Detector 2 Type	Cl+Ex				Cl+Ex		
Detector 2 Channel							
Detector 2 Extend (s)	0.0				0.0		
Turn Type	NA		custom	Prot	NA	Prot	Perm
Protected Phases	2			1	6	8	

Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Permitted Phases			1				8
Detector Phase	2		1	1	6	8	8
Switch Phase							
Minimum Initial (s)	10.0		5.0	5.0	10.0	5.0	5.0
Minimum Split (s)	15.0		10.0	10.0	15.0	10.0	10.0
Total Split (s)	36.0		24.0	24.0	60.0	10.0	10.0
Total Split (%)	51.4%		34.3%	34.3%	85.7%	14.3%	14.3%
Maximum Green (s)	31.0		19.0	19.0	55.0	5.0	5.0
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
Lost Time Adjust (s)	0.0			0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0			5.0	5.0	5.0	5.0
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?	Yes		Yes	Yes			
Vehicle Extension (s)	2.0		2.0	2.0	2.0	2.0	2.0
Recall Mode	C-Max		None	None	Max	None	None
Act Effct Green (s)	31.0			19.0	55.0	5.0	5.0
Actuated g/C Ratio	0.44			0.27	0.79	0.07	0.07
v/c Ratio	1.34			1.19	0.54	0.74	0.58
Control Delay	185.7			179.4	4.5	71.5	18.0
Queue Delay	0.0			0.0	0.0	0.0	0.0
Total Delay	185.7			179.4	4.5	71.5	18.0
LOS	F			F	A	E	B
Approach Delay	185.7				29.2	38.8	
Approach LOS	F				C	D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.34			
Intersection Signal Delay: 106.7		Intersection LOS: F	
Intersection Capacity Utilization 74.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 202: Waco Street & FM 1960

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	1050	124	756	84	132
v/c Ratio	1.34	1.19	0.54	0.74	0.58
Control Delay	185.7	179.4	4.5	71.5	18.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	185.7	179.4	4.5	71.5	18.0
Queue Length 50th (ft)	~609	~66	83	36	0
Queue Length 95th (ft)	#794	#156	126	#101	#47
Internal Link Dist (ft)	1894		96	2000	
Turn Bay Length (ft)		125			225
Base Capacity (vph)	781	104	1395	113	228
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.34	1.19	0.54	0.74	0.58

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

Movement	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	812	102	1	107	658	73	115
Future Volume (vph)	812	102	1	107	658	73	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0			5.0	5.0	5.0	5.0
Lane Util. Factor	1.00			1.00	1.00	1.00	1.00
Frt	0.98			1.00	1.00	1.00	0.85
Flt Protected	1.00			0.95	1.00	0.95	1.00
Satd. Flow (prot)	1749			1736	1776	1583	1482
Flt Permitted	1.00			0.21	1.00	0.95	1.00
Satd. Flow (perm)	1749			385	1776	1583	1482
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	933	117	1	123	756	84	132
RTOR Reduction (vph)	7	0	0	0	0	0	123
Lane Group Flow (vph)	1043	0	0	124	756	84	9
Heavy Vehicles (%)	7%	7%	0%	4%	7%	14%	9%
Turn Type	NA		custom	Prot	NA	Prot	Perm
Protected Phases	2			1	6	8	
Permitted Phases			1				8
Actuated Green, G (s)	31.0			19.0	55.0	5.0	5.0
Effective Green, g (s)	31.0			19.0	55.0	5.0	5.0
Actuated g/C Ratio	0.44			0.27	0.79	0.07	0.07
Clearance Time (s)	5.0			5.0	5.0	5.0	5.0
Vehicle Extension (s)	2.0			2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	774			104	1395	113	105
v/s Ratio Prot	c0.60				0.43	c0.05	
v/s Ratio Perm				c0.32			0.01
v/c Ratio	1.35			1.19	0.54	0.74	0.09
Uniform Delay, d1	19.5			25.5	2.8	31.9	30.4
Progression Factor	1.00			1.00	1.00	1.00	1.00
Incremental Delay, d2	165.1			148.9	1.5	20.4	0.1
Delay (s)	184.6			174.4	4.3	52.3	30.5
Level of Service	F			F	A	D	C
Approach Delay (s)	184.6				28.3	39.0	
Approach LOS	F				C	D	

Intersection Summary			
HCM 2000 Control Delay	105.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	74.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (veh/h)	812	102	1	107	658	73	115
Future Volume (veh/h)	812	102	1	107	658	73	115
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach	No				No	No	
Adj Sat Flow, veh/h/ln	1796	1796		1841	1796	1693	1767
Adj Flow Rate, veh/h	933	117		123	756	84	132
Peak Hour Factor	0.87	0.87		0.87	0.87	0.87	0.87
Percent Heavy Veh, %	7	7		4	7	14	9
Cap, veh/h	964	121		172	1411	115	107
Arrive On Green	0.62	0.62		0.10	0.79	0.07	0.07
Sat Flow, veh/h	1565	196		1753	1796	1612	1497
Grp Volume(v), veh/h	0	1050		123	756	84	132
Grp Sat Flow(s),veh/h/ln	0	1761		1753	1796	1612	1497
Q Serve(g_s), s	0.0	39.7		4.8	10.9	3.6	5.0
Cycle Q Clear(g_c), s	0.0	39.7		4.8	10.9	3.6	5.0
Prop In Lane		0.11		1.00		1.00	1.00
Lane Grp Cap(c), veh/h	0	1085		172	1411	115	107
V/C Ratio(X)	0.00	0.97		0.72	0.54	0.73	1.23
Avail Cap(c_a), veh/h	0	1085		476	1411	115	107
HCM Platoon Ratio	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	12.8		30.6	2.8	31.8	32.5
Incr Delay (d2), s/veh	0.0	20.6		2.1	1.5	18.4	162.9
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	16.4		2.0	1.3	1.9	6.6
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	0.0	33.3		32.7	4.2	50.2	195.4
LnGrp LOS	A	C		C	A	D	F
Approach Vol, veh/h	1050				879	216	
Approach Delay, s/veh	33.3				8.2	138.9	
Approach LOS	C				A	F	

Timer - Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	11.9	48.1				60.0		10.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	19.0	31.0				55.0		5.0
Max Q Clear Time (g_c+I1), s	6.8	41.7				12.9		7.0
Green Ext Time (p_c), s	0.1	0.0				3.2		0.0

Intersection Summary	
HCM 6th Ctrl Delay	33.7
HCM 6th LOS	C

Notes

User approved ignoring U-Turning movement.

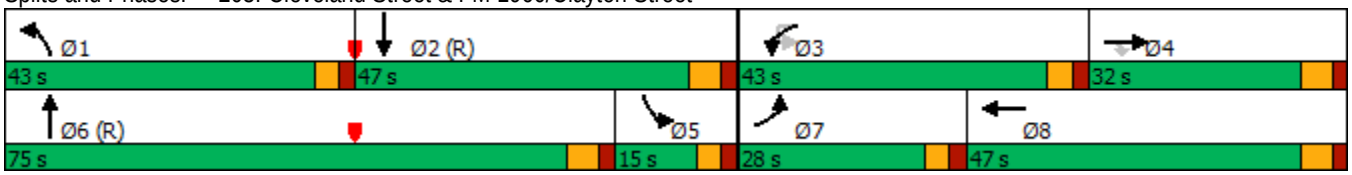
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	167	154	612	1	55	242	52	387	343	60	33	729
Future Volume (vph)	167	154	612	1	55	242	52	387	343	60	33	729
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	600		600		0		0	225		0	100	
Storage Lanes	1		1		1		0	1		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95
Frt			0.850			0.973			0.978			0.980
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1626	1827	1509	0	1404	1814	0	1612	3106	0	1805	3329
Flt Permitted	0.950				0.105			0.950			0.950	
Satd. Flow (perm)	1626	1827	1509	0	155	1814	0	1612	3106	0	1805	3329
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)			638			6			15			10
Link Speed (mph)		35				35			55			45
Link Distance (ft)		1871				1513			495			3038
Travel Time (s)		36.4				29.5			6.1			46.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	11%	4%	7%	0%	29%	1%	6%	12%	11%	29%	0%	6%
Adj. Flow (vph)	182	167	665	1	60	263	57	421	373	65	36	792
Shared Lane Traffic (%)												
Lane Group Flow (vph)	182	167	665	0	61	320	0	421	438	0	36	914
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	2	1	1	1	2		1	2		1	2
Detector Template	Left	Thru	Right	Left	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	100	20	20	20	100		20	100		20	100
Trailing Detector (ft)	0	0	0	0	0	0		0	0		0	0
Detector 1 Position(ft)	0	0	0	0	0	0		0	0		0	0
Detector 1 Size(ft)	20	6	20	20	20	6		20	6		20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94				94			94			94
Detector 2 Size(ft)		6				6			6			6
Detector 2 Type		Cl+Ex				Cl+Ex			Cl+Ex			Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0				0.0			0.0			0.0
Turn Type	Prot	NA	Perm	custom	Prot	NA		Prot	NA		Prot	NA
Protected Phases	7	4			3	8		1	6		5	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	112
Future Volume (vph)	112
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.95
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.92
Heavy Vehicles (%)	8%
Adj. Flow (vph)	122
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Permitted Phases			4	3								
Detector Phase	7	4	4	3	3	8		1	6		5	2
Switch Phase												
Minimum Initial (s)	6.0	10.0	10.0	6.0	6.0	10.0		10.0	10.0		10.0	10.0
Minimum Split (s)	11.0	16.0	16.0	11.0	11.0	16.0		15.0	16.0		15.0	16.0
Total Split (s)	28.0	32.0	32.0	43.0	43.0	47.0		43.0	75.0		15.0	47.0
Total Split (%)	17.0%	19.4%	19.4%	26.1%	26.1%	28.5%		26.1%	45.5%		9.1%	28.5%
Maximum Green (s)	23.0	26.0	26.0	38.0	38.0	41.0		38.0	69.0		10.0	41.0
Yellow Time (s)	3.0	4.0	4.0	3.0	3.0	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		2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0		5.0	6.0		5.0	6.0		5.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lead	Lag		Lead	Lead		Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes
Vehicle Extension (s)	3.0	4.0	4.0	3.0	3.0	5.0		4.0	4.0		4.0	4.0
Recall Mode	None	None	None	None	None	None		None	C-Max		None	C-Max
Act Effct Green (s)	21.4	22.9	22.9		38.0	39.5		41.1	75.1		10.0	41.0
Actuated g/C Ratio	0.13	0.14	0.14		0.23	0.24		0.25	0.46		0.06	0.25
v/c Ratio	0.87	0.66	0.88		1.74	0.73		1.05	0.31		0.33	1.10
Control Delay	104.9	79.9	19.5		463.5	67.3		115.6	29.5		82.9	116.1
Queue Delay	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay	104.9	79.9	19.5		463.5	67.3		115.6	29.5		82.9	116.1
LOS	F	E	B		F	E		F	C		F	F
Approach Delay		44.8				130.8			71.7			114.8
Approach LOS		D				F			E			F

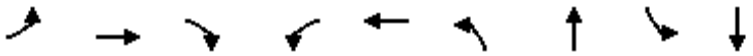
Intersection Summary			
Area Type:	Other		
Cycle Length: 165			
Actuated Cycle Length: 165			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.74			
Intersection Signal Delay: 83.0		Intersection LOS: F	
Intersection Capacity Utilization 88.6%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 203: Cleveland Street & FM 1960/Clayton Street



Lane Group	SBR
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	182	167	665	61	320	421	438	36	914
v/c Ratio	0.87	0.66	0.88	1.74	0.73	1.05	0.31	0.33	1.10
Control Delay	104.9	79.9	19.5	463.5	67.3	115.6	29.5	82.9	116.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	104.9	79.9	19.5	463.5	67.3	115.6	29.5	82.9	116.1
Queue Length 50th (ft)	194	171	26	~97	315	~513	159	38	~581
Queue Length 95th (ft)	#321	254	#215	#204	429	#750	207	80	#720
Internal Link Dist (ft)		1791			1433		415		2958
Turn Bay Length (ft)	600		600			225		100	
Base Capacity (vph)	226	287	775	35	455	402	1422	109	834
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	0.81	0.58	0.86	1.74	0.70	1.05	0.31	0.33	1.10

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	167	154	612	1	55	242	52	387	343	60	33	729
Future Volume (vph)	167	154	612	1	55	242	52	387	343	60	33	729
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0	6.0		5.0	6.0		5.0	6.0		5.0	6.0
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95
Frt	1.00	1.00	0.85		1.00	0.97		1.00	0.98		1.00	0.98
Flt Protected	0.95	1.00	1.00		0.95	1.00		0.95	1.00		0.95	1.00
Satd. Flow (prot)	1626	1827	1509		1404	1815		1612	3105		1805	3329
Flt Permitted	0.95	1.00	1.00		0.11	1.00		0.95	1.00		0.95	1.00
Satd. Flow (perm)	1626	1827	1509		156	1815		1612	3105		1805	3329
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	182	167	665	1	60	263	57	421	373	65	36	792
RTOR Reduction (vph)	0	0	549	0	0	5	0	0	8	0	0	8
Lane Group Flow (vph)	182	167	116	0	61	315	0	421	430	0	36	906
Heavy Vehicles (%)	11%	4%	7%	0%	29%	1%	6%	12%	11%	29%	0%	6%
Turn Type	Prot	NA	Perm	custom	Prot	NA		Prot	NA		Prot	NA
Protected Phases	7	4			3	8		1	6		5	2
Permitted Phases			4	3								
Actuated Green, G (s)	21.4	22.9	22.9		38.0	39.5		41.1	74.1		8.0	41.0
Effective Green, g (s)	21.4	22.9	22.9		38.0	39.5		41.1	74.1		8.0	41.0
Actuated g/C Ratio	0.13	0.14	0.14		0.23	0.24		0.25	0.45		0.05	0.25
Clearance Time (s)	5.0	6.0	6.0		5.0	6.0		5.0	6.0		5.0	6.0
Vehicle Extension (s)	3.0	4.0	4.0		3.0	5.0		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)	210	253	209		35	434		401	1394		87	827
v/s Ratio Prot	0.11	0.09				c0.17		c0.26	0.14		0.02	c0.27
v/s Ratio Perm			0.08		c0.39							
v/c Ratio	0.87	0.66	0.55		1.74	0.73		1.05	0.31		0.41	1.10
Uniform Delay, d1	70.4	67.4	66.3		63.5	57.8		62.0	29.1		76.2	62.0
Progression Factor	1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2	29.1	6.9	3.9		428.4	7.3		58.6	0.6		4.3	60.9
Delay (s)	99.5	74.3	70.1		491.9	65.1		120.6	29.6		80.5	122.9
Level of Service	F	E	E		F	E		F	C		F	F
Approach Delay (s)		76.1				133.4			74.2			121.3
Approach LOS		E				F			E			F

Intersection Summary			
HCM 2000 Control Delay	95.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.20		
Actuated Cycle Length (s)	165.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	88.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	112
Future Volume (vph)	112
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	122
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	8%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	167	154	612	1	55	242	52	387	343	60	33	729
Future Volume (veh/h)	167	154	612	1	55	242	52	387	343	60	33	729
Initial Q (Qb), veh	0	0	0		0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00		1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No				No			No			No
Adj Sat Flow, veh/h/ln	1737	1841	1796		1470	1885	1811	1722	1737	1470	1900	1811
Adj Flow Rate, veh/h	182	167	665		60	263	57	421	373	65	36	792
Peak Hour Factor	0.92	0.92	0.92		0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	11	4	7		29	1	6	12	11	29	0	6
Cap, veh/h	201	491	406		73	295	64	378	1177	203	225	950
Arrive On Green	0.12	0.27	0.27		0.05	0.20	0.20	0.23	0.42	0.42	0.12	0.32
Sat Flow, veh/h	1654	1841	1522		1400	1501	325	1640	2814	486	1810	2988
Grp Volume(v), veh/h	182	167	665		60	0	320	421	217	221	36	456
Grp Sat Flow(s),veh/h/ln	1654	1841	1522		1400	0	1827	1640	1650	1650	1810	1721
Q Serve(g_s), s	17.9	12.1	32.2		7.0	0.0	28.1	38.0	14.6	14.8	2.9	40.6
Cycle Q Clear(g_c), s	17.9	12.1	32.2		7.0	0.0	28.1	38.0	14.6	14.8	2.9	40.6
Prop In Lane	1.00		1.00		1.00		0.18	1.00		0.29	1.00	
Lane Grp Cap(c), veh/h	201	491	406		73	0	360	378	690	690	225	547
V/C Ratio(X)	0.91	0.34	1.64		0.83	0.00	0.89	1.11	0.31	0.32	0.16	0.83
Avail Cap(c_a), veh/h	231	491	406		322	0	454	378	690	690	225	547
HCM Platoon Ratio	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00		1.00	0.00	1.00	1.00	1.00	1.00	0.76	0.76
Uniform Delay (d), s/veh	71.5	48.8	32.4		77.5	0.0	64.5	63.5	32.2	32.2	64.6	52.2
Incr Delay (d2), s/veh	32.5	0.6	298.6		20.2	0.0	19.8	81.0	1.2	1.2	0.4	10.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	5.7	45.5		2.9	0.0	15.1	23.8	5.9	6.0	1.4	18.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	104.0	49.4	331.0		97.7	0.0	84.3	144.5	33.4	33.5	64.9	63.1
LnGrp LOS	F	D	F		F	A	F	F	C	C	E	E
Approach Vol, veh/h		1014				380			859			950
Approach Delay, s/veh		243.9				86.4			87.9			63.2
Approach LOS		F				F			F			E

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	43.0	58.5	13.6	50.0	26.5	75.0	25.1	38.5
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	6.0	* 6	5.0	6.0
Max Green Setting (Gmax), s	38.0	41.0	38.0	26.0	10.0	* 69	23.0	41.0
Max Q Clear Time (g_c+I1), s	40.0	42.6	9.0	34.2	4.9	16.8	19.9	30.1
Green Ext Time (p_c), s	0.0	0.0	0.1	0.0	0.0	3.6	0.1	2.3

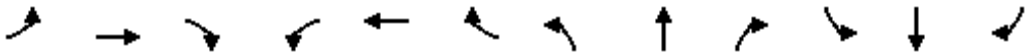
Intersection Summary	
HCM 6th Ctrl Delay	129.8
HCM 6th LOS	F

Notes

User approved ignoring U-Turning movement.

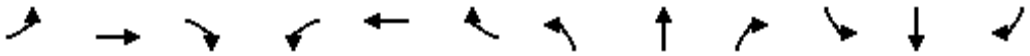
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	112
Future Volume (veh/h)	112
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1781
Adj Flow Rate, veh/h	122
Peak Hour Factor	0.92
Percent Heavy Veh, %	8
Cap, veh/h	146
Arrive On Green	0.32
Sat Flow, veh/h	460
Grp Volume(v), veh/h	458
Grp Sat Flow(s),veh/h/ln	1728
Q Serve(g_s), s	40.6
Cycle Q Clear(g_c), s	40.6
Prop In Lane	0.27
Lane Grp Cap(c), veh/h	550
V/C Ratio(X)	0.83
Avail Cap(c_a), veh/h	550
HCM Platoon Ratio	1.00
Upstream Filter(I)	0.76
Uniform Delay (d), s/veh	52.2
Incr Delay (d2), s/veh	10.9
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	18.9
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	63.1
LnGrp LOS	E
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	108	36	272	320	13	117	181	52	4	233	40
Future Volume (vph)	16	108	36	272	320	13	117	181	52	4	233	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.997			0.980			0.981	
Flt Protected		0.994			0.978			0.984			0.999	
Satd. Flow (prot)	0	1670	1553	0	1830	0	0	1794	0	0	1836	0
Flt Permitted		0.994			0.978			0.984			0.999	
Satd. Flow (perm)	0	1670	1553	0	1830	0	0	1794	0	0	1836	0
Link Speed (mph)		45			30			30			30	
Link Distance (ft)		1513			1036			419			1496	
Travel Time (s)		22.9			23.5			9.5			34.0	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	0%	15%	4%	1%	1%	11%	2%	2%	3%	0%	1%	4%
Adj. Flow (vph)	18	124	41	313	368	15	134	208	60	5	268	46
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	142	41	0	696	0	0	402	0	0	319	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 83.4%		ICU Level of Service E	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	16	108	36	272	320	13	117	181	52	4	233	40
Future Volume (vph)	16	108	36	272	320	13	117	181	52	4	233	40
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	18	124	41	313	368	15	134	208	60	5	268	46

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total (vph)	142	41	696	402	319
Volume Left (vph)	18	0	313	134	5
Volume Right (vph)	0	41	15	60	46
Hadj (s)	0.29	-0.63	0.10	0.01	-0.06
Departure Headway (s)	8.9	8.0	7.5	7.4	7.6
Degree Utilization, x	0.35	0.09	1.45	0.83	0.68
Capacity (veh/h)	364	410	465	475	452
Control Delay (s)	15.5	10.6	234.6	37.5	25.2
Approach Delay (s)	14.4		234.6	37.5	25.2
Approach LOS	B		F	E	D

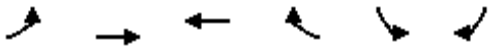
Intersection Summary				
Delay	118.1			
Level of Service	F			
Intersection Capacity Utilization	83.4%	ICU Level of Service	E	
Analysis Period (min)	15			

Intersection	
Intersection Delay, s/veh	117.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	108	36	272	320	13	117	181	52	4	233	40
Future Vol, veh/h	16	108	36	272	320	13	117	181	52	4	233	40
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	0	15	4	1	1	11	2	2	3	0	1	4
Mvmt Flow	18	124	41	313	368	15	134	208	60	5	268	46
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0

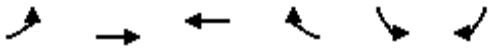
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	2
HCM Control Delay	16.3	229.8	42	28.3
HCM LOS	C	F	E	D

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	33%	13%	0%	45%	1%
Vol Thru, %	52%	87%	0%	53%	84%
Vol Right, %	15%	0%	100%	2%	14%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	350	124	36	605	277
LT Vol	117	16	0	272	4
Through Vol	181	108	0	320	233
RT Vol	52	0	36	13	40
Lane Flow Rate	402	143	41	695	318
Geometry Grp	2	7	7	5	2
Degree of Util (X)	0.832	0.343	0.094	1.438	0.674
Departure Headway (Hd)	8.599	9.646	9.113	7.443	8.849
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	426	375	396	487	411
Service Time	6.599	7.346	6.813	5.505	6.849
HCM Lane V/C Ratio	0.944	0.381	0.104	1.427	0.774
HCM Control Delay	42	17.3	12.8	229.8	28.3
HCM Lane LOS	E	C	B	F	D
HCM 95th-tile Q	7.8	1.5	0.3	33.9	4.8



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	1	177	600	7	0	1
Future Volume (vph)	1	177	600	7	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.999		0.865	
Flt Protected						
Satd. Flow (prot)	0	1776	1880	0	1644	0
Flt Permitted						
Satd. Flow (perm)	0	1776	1880	0	1644	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		1036	1081		1292	
Travel Time (s)		15.7	16.4		29.4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	7%	1%	0%	0%	0%
Adj. Flow (vph)	1	188	638	7	0	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	189	645	0	1	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 42.0%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	1	177	600	7	0	1
Future Volume (Veh/h)	1	177	600	7	0	1
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	1	188	638	7	0	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	645				832	642
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	645				832	642
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	950				342	478

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	189	645	1
Volume Left	1	0	0
Volume Right	0	7	1
cSH	950	1700	478
Volume to Capacity	0.00	0.38	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.1	0.0	12.5
Lane LOS	A		B
Approach Delay (s)	0.1	0.0	12.5
Approach LOS			B

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	42.0%	ICU Level of Service	A
Analysis Period (min)	15		

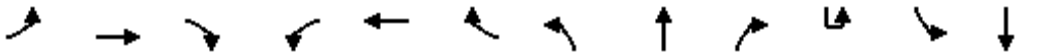
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	177	600	7	0	1
Future Vol, veh/h	1	177	600	7	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	7	1	0	0	0
Mvmt Flow	1	188	638	7	0	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	645	0	-	0	832	642
Stage 1	-	-	-	-	642	-
Stage 2	-	-	-	-	190	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	950	-	-	-	342	478
Stage 1	-	-	-	-	528	-
Stage 2	-	-	-	-	847	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	950	-	-	-	342	478
Mov Cap-2 Maneuver	-	-	-	-	342	-
Stage 1	-	-	-	-	527	-
Stage 2	-	-	-	-	847	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	950	-	-	-	478
HCM Lane V/C Ratio	0.001	-	-	-	0.002
HCM Control Delay (s)	8.8	0	-	-	12.5
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	89	9	39	19	24	33	9	654	16	1	14	982
Future Volume (vph)	89	9	39	19	24	33	9	654	16	1	14	982
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.961			0.941			0.996				0.993
Flt Protected		0.969			0.988			0.999				0.999
Satd. Flow (prot)	0	1769	0	0	1645	0	0	3335	0	0	0	3330
Flt Permitted		0.789			0.894			0.934				0.939
Satd. Flow (perm)	0	1441	0	0	1488	0	0	3118	0	0	0	3130
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)		28			40			6				11
Link Speed (mph)		30			30			45				55
Link Distance (ft)		594			763			3038				1923
Travel Time (s)		13.5			17.3			46.0				23.8
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	0%	0%	0%	0%	18%	4%	0%	8%	0%	0%	0%	8%
Adj. Flow (vph)	109	11	48	23	29	40	11	798	20	1	17	1198
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	168	0	0	92	0	0	829	0	0	0	1272
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Number of Detectors	1	2		1	2		1	2		1	1	2
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Left	Thru
Leading Detector (ft)	20	100		20	100		20	100		20	20	100
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	Perm	NA
Protected Phases		4			8			6				2
Permitted Phases	4			8			6			2	2	
Detector Phase	4	4		8	8		6	6		2	2	2
Switch Phase												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	46
Future Volume (vph)	46
Ideal Flow (vphpl)	1900
Lane Util. Factor	0.95
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.82
Heavy Vehicles (%)	0%
Adj. Flow (vph)	56
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	

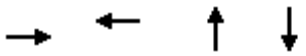
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Minimum Initial (s)	5.0	5.0		5.0	5.0		10.0	10.0		10.0	10.0	10.0
Minimum Split (s)	11.0	11.0		24.0	24.0		16.0	16.0		16.0	16.0	16.0
Total Split (s)	24.0	24.0		24.0	24.0		46.0	46.0		46.0	46.0	46.0
Total Split (%)	34.3%	34.3%		34.3%	34.3%		65.7%	65.7%		65.7%	65.7%	65.7%
Maximum Green (s)	18.0	18.0		18.0	18.0		40.0	40.0		40.0	40.0	40.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)		0.0			0.0			0.0				0.0
Total Lost Time (s)		6.0			6.0			6.0				6.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		4.0	4.0		4.0	4.0	4.0
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	C-Max
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				13.0	13.0							
Pedestrian Calls (#/hr)				0	0							
Act Effct Green (s)		11.6			11.6			46.4				46.4
Actuated g/C Ratio		0.17			0.17			0.66				0.66
v/c Ratio		0.64			0.33			0.40				0.61
Control Delay		33.0			18.1			6.8				9.1
Queue Delay		0.0			0.0			0.0				0.0
Total Delay		33.0			18.1			6.8				9.1
LOS		C			B			A				A
Approach Delay		33.0			18.1			6.8				9.1
Approach LOS		C			B			A				A

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 10.4		Intersection LOS: B	
Intersection Capacity Utilization 63.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 206: Cleveland Street & Linney Street

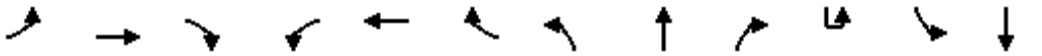
Lane Group	SBR
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	168	92	829	1272
v/c Ratio	0.64	0.33	0.40	0.61
Control Delay	33.0	18.1	6.8	9.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	33.0	18.1	6.8	9.1
Queue Length 50th (ft)	56	20	72	136
Queue Length 95th (ft)	91	45	118	213
Internal Link Dist (ft)	514	683	2958	1843
Turn Bay Length (ft)				
Base Capacity (vph)	391	412	2068	2078
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.43	0.22	0.40	0.61

Intersection Summary

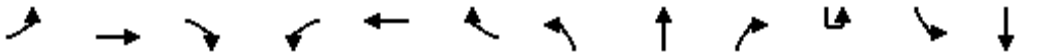


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	89	9	39	19	24	33	9	654	16	1	14	982
Future Volume (vph)	89	9	39	19	24	33	9	654	16	1	14	982
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0			6.0				6.0
Lane Util. Factor		1.00			1.00			0.95				0.95
Frt		0.96			0.94			1.00				0.99
Flt Protected		0.97			0.99			1.00				1.00
Satd. Flow (prot)		1769			1644			3338				3333
Flt Permitted		0.79			0.89			0.93				0.94
Satd. Flow (perm)		1442			1489			3118				3130
Peak-hour factor, PHF	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	109	11	48	23	29	40	11	798	20	1	17	1198
RTOR Reduction (vph)	0	23	0	0	33	0	0	2	0	0	0	4
Lane Group Flow (vph)	0	145	0	0	59	0	0	827	0	0	0	1268
Heavy Vehicles (%)	0%	0%	0%	0%	18%	4%	0%	8%	0%	0%	0%	8%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	Perm	NA
Protected Phases		4			8			6				2
Permitted Phases	4			8			6			2	2	
Actuated Green, G (s)		11.6			11.6			46.4				46.4
Effective Green, g (s)		11.6			11.6			46.4				46.4
Actuated g/C Ratio		0.17			0.17			0.66				0.66
Clearance Time (s)		6.0			6.0			6.0				6.0
Vehicle Extension (s)		2.0			2.0			4.0				4.0
Lane Grp Cap (vph)		238			246			2066				2074
v/s Ratio Prot												
v/s Ratio Perm		c0.10			0.04			0.27				c0.41
v/c Ratio		0.61			0.24			0.40				0.61
Uniform Delay, d1		27.1			25.4			5.4				6.7
Progression Factor		1.00			1.00			1.00				1.00
Incremental Delay, d2		3.0			0.2			0.6				1.4
Delay (s)		30.1			25.5			6.0				8.0
Level of Service		C			C			A				A
Approach Delay (s)		30.1			25.5			6.0				8.0
Approach LOS		C			C			A				A

Intersection Summary			
HCM 2000 Control Delay	9.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	46
Future Volume (vph)	46
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.82
Adj. Flow (vph)	56
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	0%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary



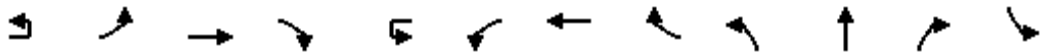
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	89	9	39	19	24	33	9	654	16	1	14	982
Future Volume (veh/h)	89	9	39	19	24	33	9	654	16	1	14	982
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00		1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach		No			No			No				No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1633	1841	1900	1781	1900		1900	1781
Adj Flow Rate, veh/h	109	11	48	23	29	40	11	798	20		17	1198
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82		0.82	0.82
Percent Heavy Veh, %	0	0	0	0	18	4	0	8	0		0	8
Cap, veh/h	216	19	60	95	81	86	61	2272	56		64	2222
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.70	0.70	0.70		0.70	0.70
Sat Flow, veh/h	1009	144	461	237	621	660	12	3255	81		16	3183
Grp Volume(v), veh/h	168	0	0	92	0	0	432	0	397		666	0
Grp Sat Flow(s),veh/h/ln	1614	0	0	1519	0	0	1742	0	1607		1753	0
Q Serve(g_s), s	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.9		0.0	0.0
Cycle Q Clear(g_c), s	6.8	0.0	0.0	3.9	0.0	0.0	6.8	0.0	6.9		12.6	0.0
Prop In Lane	0.65		0.29	0.25		0.43	0.03		0.05		0.03	
Lane Grp Cap(c), veh/h	295	0	0	262	0	0	1269	0	1122		1276	0
V/C Ratio(X)	0.57	0.00	0.00	0.35	0.00	0.00	0.34	0.00	0.35		0.52	0.00
Avail Cap(c_a), veh/h	479	0	0	438	0	0	1269	0	1122		1276	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.88	0.00	0.88		1.00	0.00
Uniform Delay (d), s/veh	29.2	0.0	0.0	28.2	0.0	0.0	4.2	0.0	4.2		5.1	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.3	0.0	0.0	0.6	0.0	0.8		1.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	0.0	1.4	0.0	0.0	1.5	0.0	1.5		2.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.9	0.0	0.0	28.5	0.0	0.0	4.9	0.0	5.0		6.6	0.0
LnGrp LOS	C	A	A	C	A	A	A	A	A		A	A
Approach Vol, veh/h		168			92			829				1271
Approach Delay, s/veh		29.9			28.5			4.9				6.8
Approach LOS		C			C			A				A

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		54.9		15.1		54.9		15.1				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		40.0		18.0		40.0		18.0				
Max Q Clear Time (g_c+I1), s		14.9		8.8		8.9		5.9				
Green Ext Time (p_c), s		12.0		0.4		8.0		0.2				

Intersection Summary		
HCM 6th Ctrl Delay	8.6	
HCM 6th LOS	A	

Notes
User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	46
Future Volume (veh/h)	46
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1900
Adj Flow Rate, veh/h	56
Peak Hour Factor	0.82
Percent Heavy Veh, %	0
Cap, veh/h	103
Arrive On Green	0.70
Sat Flow, veh/h	148
Grp Volume(v), veh/h	605
Grp Sat Flow(s),veh/h/ln	1595
Q Serve(g_s), s	12.9
Cycle Q Clear(g_c), s	12.9
Prop In Lane	0.09
Lane Grp Cap(c), veh/h	1113
V/C Ratio(X)	0.54
Avail Cap(c_a), veh/h	1113
HCM Platoon Ratio	1.00
Upstream Filter(I)	1.00
Uniform Delay (d), s/veh	5.1
Incr Delay (d2), s/veh	1.9
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	2.4
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	7.0
LnGrp LOS	A
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	



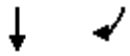
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	86	1045	21	1	5	955	39	12	3	0	34
Future Volume (vph)	1	86	1045	21	1	5	955	39	12	3	0	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		200		0		200		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.997				0.994					
Flt Protected		0.950				0.950				0.961		
Satd. Flow (prot)	0	1753	4752	0	0	1547	4647	0	0	1669	0	0
Flt Permitted		0.259				0.239				0.612		
Satd. Flow (perm)	0	478	4752	0	0	389	4647	0	0	1063	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			10				7					
Link Speed (mph)			55				50			30		
Link Distance (ft)			1682				1949			1310		
Travel Time (s)			20.9				26.6			29.8		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	3%	9%	0%	100%	0%	11%	10%	0%	50%	0%	0%
Adj. Flow (vph)	1	91	1112	22	1	5	1016	41	13	3	0	36
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	92	1134	0	0	6	1057	0	0	16	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane			Yes				Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	2		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	20	100		20	20	100		20	100		20
Trailing Detector (ft)	0	0	0		0	0	0		0	0		0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0		0
Detector 1 Size(ft)	20	20	6		20	20	6		20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	Prot	NA		Perm	Perm	NA		Perm	NA		Perm
Protected Phases		5	2				6			8		

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	93
Future Volume (vph)	0	93
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.901	
Flt Protected	0.987	
Satd. Flow (prot)	1690	0
Flt Permitted	0.904	
Satd. Flow (perm)	1548	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	150	
Link Speed (mph)	30	
Link Distance (ft)	2374	
Travel Time (s)	54.0	
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	99
Shared Lane Traffic (%)		
Lane Group Flow (vph)	135	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	4	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Permitted Phases	5				6	6			8			4
Detector Phase	5	5	2		6	6	6		8	8		4
Switch Phase												
Minimum Initial (s)	8.0	8.0	10.0		10.0	10.0	10.0		8.0	8.0		8.0
Minimum Split (s)	13.0	13.0	17.0		22.5	22.5	22.5		13.5	13.5		13.5
Total Split (s)	40.0	40.0	66.5		26.5	26.5	26.5		13.5	13.5		13.5
Total Split (%)	50.0%	50.0%	83.1%		33.1%	33.1%	33.1%		16.9%	16.9%		16.9%
Maximum Green (s)	35.0	35.0	59.5		19.5	19.5	19.5		8.0	8.0		8.0
Yellow Time (s)	3.5	3.5	5.0		5.0	5.0	5.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	2.0		2.0	2.0	2.0		2.0	2.0		2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	7.0			7.0	7.0			5.5		
Lead/Lag	Lag	Lag			Lead	Lead	Lead					
Lead-Lag Optimize?	Yes	Yes			Yes	Yes	Yes					
Vehicle Extension (s)	5.0	5.0	5.0		5.0	5.0	5.0		5.0	5.0		5.0
Recall Mode	None	None	C-Max		C-Max	C-Max	C-Max		None	None		None
Act Effct Green (s)		29.8	59.5			27.5	27.5			8.0		
Actuated g/C Ratio		0.37	0.74			0.34	0.34			0.10		
v/c Ratio		0.52	0.32			0.05	0.66			0.15		
Control Delay		28.2	3.7			24.8	29.1			36.5		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay		28.2	3.7			24.8	29.1			36.5		
LOS		C	A			C	C			D		
Approach Delay			5.5				29.1			36.5		
Approach LOS			A				C			D		

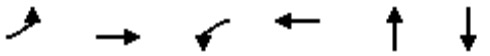
Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 16.3		Intersection LOS: B	
Intersection Capacity Utilization 52.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 301: Bowie Street & US 90



Lane Group	SBT	SBR
Permitted Phases		
Detector Phase	4	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	13.5	
Total Split (s)	13.5	
Total Split (%)	16.9%	
Maximum Green (s)	8.0	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	5.0	
Recall Mode	None	
Act Effct Green (s)	8.0	
Actuated g/C Ratio	0.10	
v/c Ratio	0.47	
Control Delay	11.0	
Queue Delay	0.0	
Total Delay	11.0	
LOS	B	
Approach Delay	11.0	
Approach LOS	B	

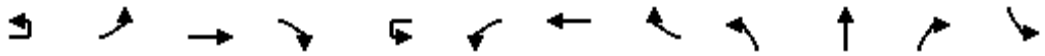
Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	92	1134	6	1057	16	135
v/c Ratio	0.52	0.32	0.05	0.66	0.15	0.47
Control Delay	28.2	3.7	24.8	29.1	36.5	11.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.2	3.7	24.8	29.1	36.5	11.0
Queue Length 50th (ft)	31	54	2	188	7	0
Queue Length 95th (ft)	77	69	12	#272	26	42
Internal Link Dist (ft)		1602		1869	1230	2294
Turn Bay Length (ft)	200		200			
Base Capacity (vph)	209	3536	133	1602	106	289
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	0.44	0.32	0.05	0.66	0.15	0.47

Intersection Summary

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



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	86	1045	21	1	5	955	39	12	3	0	34
Future Volume (vph)	1	86	1045	21	1	5	955	39	12	3	0	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	7.0			7.0	7.0			5.5		
Lane Util. Factor		1.00	0.91			1.00	0.91			1.00		
Frt		1.00	1.00			1.00	0.99			1.00		
Flt Protected		0.95	1.00			0.95	1.00			0.96		
Satd. Flow (prot)		1753	4752			1547	4647			1669		
Flt Permitted		0.26	1.00			0.24	1.00			0.61		
Satd. Flow (perm)		477	4752			388	4647			1063		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	1	91	1112	22	1	5	1016	41	13	3	0	36
RTOR Reduction (vph)	0	0	3	0	0	0	5	0	0	0	0	0
Lane Group Flow (vph)	0	92	1131	0	0	6	1052	0	0	16	0	0
Heavy Vehicles (%)	0%	3%	9%	0%	100%	0%	11%	10%	0%	50%	0%	0%
Turn Type	custom	Prot	NA		Perm	Perm	NA		Perm	NA		Perm
Protected Phases		5	2				6			8		
Permitted Phases	5				6	6			8			4
Actuated Green, G (s)		28.0	59.5			26.5	26.5			8.0		
Effective Green, g (s)		28.0	59.5			26.5	26.5			8.0		
Actuated g/C Ratio		0.35	0.74			0.33	0.33			0.10		
Clearance Time (s)		5.0	7.0			7.0	7.0			5.5		
Vehicle Extension (s)		5.0	5.0			5.0	5.0			5.0		
Lane Grp Cap (vph)		166	3534			128	1539			106		
v/s Ratio Prot			0.24				c0.23					
v/s Ratio Perm		c0.19				0.02				c0.02		
v/c Ratio		0.55	0.32			0.05	0.68			0.15		
Uniform Delay, d1		21.0	3.4			18.2	23.1			32.9		
Progression Factor		1.00	1.00			1.00	1.00			1.00		
Incremental Delay, d2		6.7	0.2			0.7	2.5			1.4		
Delay (s)		27.6	3.7			18.9	25.6			34.3		
Level of Service		C	A			B	C			C		
Approach Delay (s)			5.5				25.6			34.3		
Approach LOS			A				C			C		

Intersection Summary			
HCM 2000 Control Delay	16.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	52.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	93
Future Volume (vph)	0	93
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.5	
Lane Util. Factor	1.00	
Frt	0.90	
Flt Protected	0.99	
Satd. Flow (prot)	1689	
Flt Permitted	0.90	
Satd. Flow (perm)	1547	
Peak-hour factor, PHF	0.94	0.94
Adj. Flow (vph)	0	99
RTOR Reduction (vph)	122	0
Lane Group Flow (vph)	14	0
Heavy Vehicles (%)	0%	0%
Turn Type	NA	
Protected Phases	4	
Permitted Phases		
Actuated Green, G (s)	8.0	
Effective Green, g (s)	8.0	
Actuated g/C Ratio	0.10	
Clearance Time (s)	5.5	
Vehicle Extension (s)	5.0	
Lane Grp Cap (vph)	154	
v/s Ratio Prot		
v/s Ratio Perm	0.01	
v/c Ratio	0.09	
Uniform Delay, d1	32.7	
Progression Factor	1.00	
Incremental Delay, d2	0.5	
Delay (s)	33.2	
Level of Service	C	
Approach Delay (s)	33.2	
Approach LOS	C	

Intersection Summary

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (veh/h)	1	86	1045	21	1	5	955	39	12	3	0	34
Future Volume (veh/h)	1	86	1045	21	1	5	955	39	12	3	0	34
Initial Q (Qb), veh		0	0	0		0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00	1.00		1.00	1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No				No			No		
Adj Sat Flow, veh/h/ln		1856	1767	1900		1900	1737	1752	1900	1159	1900	1900
Adj Flow Rate, veh/h		91	1112	22		5	1016	41	13	3	0	36
Peak Hour Factor		0.94	0.94	0.94		0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %		3	9	0		0	11	10	0	50	0	0
Cap, veh/h		729	3621	72		175	1140	46	143	21	0	89
Arrive On Green		0.41	0.74	0.74		0.24	0.24	0.24	0.10	0.10	0.00	0.10
Sat Flow, veh/h		1767	4868	96		504	4676	189	619	210	0	323
Grp Volume(v), veh/h		91	734	400		5	687	370	16	0	0	135
Grp Sat Flow(s),veh/h/ln		1767	1608	1749		504	1581	1703	829	0	0	1586
Q Serve(g_s), s		2.6	6.1	6.1		0.7	16.8	16.8	0.0	0.0	0.0	4.9
Cycle Q Clear(g_c), s		2.6	6.1	6.1		6.7	16.8	16.8	1.3	0.0	0.0	6.7
Prop In Lane		1.00		0.06		1.00		0.11	0.81		0.00	0.27
Lane Grp Cap(c), veh/h		729	2391	1301		175	771	415	164	0	0	216
V/C Ratio(X)		0.12	0.31	0.31		0.03	0.89	0.89	0.10	0.00	0.00	0.63
Avail Cap(c_a), veh/h		773	2391	1301		175	771	415	164	0	0	216
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00		0.90	0.90	0.90	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh		14.6	3.4	3.4		28.0	29.2	29.2	32.9	0.0	0.0	35.4
Incr Delay (d2), s/veh		0.2	0.3	0.6		0.3	13.5	22.2	0.5	0.0	0.0	8.0
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		0.9	0.9	1.1		0.1	7.1	8.7	0.3	0.0	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		14.7	3.7	4.0		28.2	42.7	51.4	33.5	0.0	0.0	43.3
LnGrp LOS		B	A	A		C	D	D	C	A	A	D
Approach Vol, veh/h			1225				1062			16		
Approach Delay, s/veh			4.6				45.7			33.5		
Approach LOS			A				D			C		

Timer - Assigned Phs	2		4	5	6		8
Phs Duration (G+Y+Rc), s	66.5		13.5	40.0	26.5		13.5
Change Period (Y+Rc), s	7.0		5.5	7.0	* 7		5.5
Max Green Setting (Gmax), s	59.5		8.0	35.0	* 20		8.0
Max Q Clear Time (g_c+I1), s	8.1		8.7	4.6	18.8		3.3
Green Ext Time (p_c), s	18.2		0.0	0.5	0.5		0.0

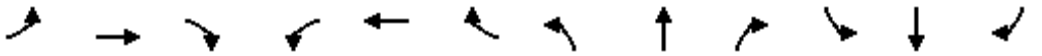
Intersection Summary	
HCM 6th Ctrl Delay	24.8
HCM 6th LOS	C

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	0	93
Future Volume (veh/h)	0	93
Initial Q (Qb), veh	0	0
Ped-Bike Adj(A_pbT)		1.00
Parking Bus, Adj	1.00	1.00
Work Zone On Approach	No	
Adj Sat Flow, veh/h/ln	1900	1900
Adj Flow Rate, veh/h	0	99
Peak Hour Factor	0.94	0.94
Percent Heavy Veh, %	0	0
Cap, veh/h	10	116
Arrive On Green	0.00	0.10
Sat Flow, veh/h	100	1163
Grp Volume(v), veh/h	0	0
Grp Sat Flow(s),veh/h/ln	0	0
Q Serve(g_s), s	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0
Prop In Lane		0.73
Lane Grp Cap(c), veh/h	0	0
V/C Ratio(X)	0.00	0.00
Avail Cap(c_a), veh/h	0	0
HCM Platoon Ratio	1.00	1.00
Upstream Filter(I)	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0
Unsig. Movement Delay, s/veh		
LnGrp Delay(d),s/veh	0.0	0.0
LnGrp LOS	A	A
Approach Vol, veh/h	135	
Approach Delay, s/veh	43.3	
Approach LOS	D	
Timer - Assigned Phs		

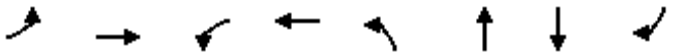


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	680	9	23	706	68	9	19	27	93	14	255
Future Volume (vph)	210	680	9	23	706	68	9	19	27	93	14	255
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	200		0	100		0	0		0
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.987			0.912				0.850
Flt Protected	0.950			0.950			0.950				0.959	
Satd. Flow (prot)	1787	4628	0	1049	4548	0	1583	1327	0	0	1822	1568
Flt Permitted	0.950			0.950			0.681				0.719	
Satd. Flow (perm)	1787	4628	0	1049	4548	0	1135	1327	0	0	1366	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			18			30				283
Link Speed (mph)		55			50			55			30	
Link Distance (ft)		1949			4264			1352			297	
Travel Time (s)		24.2			58.1			16.8			6.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	12%	0%	72%	13%	8%	14%	0%	52%	0%	0%	3%
Adj. Flow (vph)	233	756	10	26	784	76	10	21	30	103	16	283
Shared Lane Traffic (%)												
Lane Group Flow (vph)	233	766	0	26	860	0	10	51	0	0	119	283
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8			4		4
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	8.0	10.0		8.0	10.0		8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	13.0	16.5		13.0	16.5		14.0	14.0		14.0	14.0	14.0
Total Split (s)	29.0	52.0		15.0	38.0		28.0	28.0		28.0	28.0	28.0
Total Split (%)	30.5%	54.7%		15.8%	40.0%		29.5%	29.5%		29.5%	29.5%	29.5%
Maximum Green (s)	24.0	45.5		10.0	31.5		22.0	22.0		22.0	22.0	22.0
Yellow Time (s)	3.5	4.5		3.5	4.5		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.5	2.0		1.5	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)	5.0	6.5		5.0	6.5		6.0	6.0			6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.5	3.5		3.5	3.5		4.5	4.5		4.5	4.5	4.5
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
Act Effct Green (s)	18.0	60.9		8.8	43.8		15.7	15.7			15.7	15.7
Actuated g/C Ratio	0.19	0.64		0.09	0.46		0.17	0.17			0.17	0.17
v/c Ratio	0.69	0.26		0.27	0.41		0.05	0.21			0.53	0.57
Control Delay	46.3	9.5		47.1	19.1		30.8	18.8			43.6	8.9
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Delay	46.3	9.5		47.1	19.1		30.8	18.8			43.6	8.9
LOS	D	A		D	B		C	B			D	A
Approach Delay		18.1			19.9			20.8			19.2	
Approach LOS		B			B			C			B	

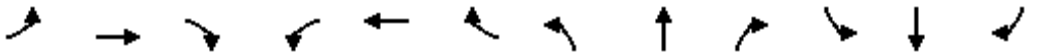
Intersection Summary			
Area Type:	Other		
Cycle Length: 95			
Actuated Cycle Length: 95			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 19.0		Intersection LOS: B	
Intersection Capacity Utilization 53.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 302: Main Street & US 90



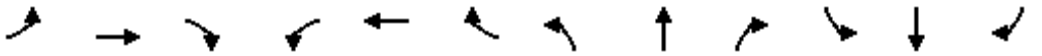
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	233	766	26	860	10	51	119	283
v/c Ratio	0.69	0.26	0.27	0.41	0.05	0.21	0.53	0.57
Control Delay	46.3	9.5	47.1	19.1	30.8	18.8	43.6	8.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.3	9.5	47.1	19.1	30.8	18.8	43.6	8.9
Queue Length 50th (ft)	132	51	15	119	5	11	66	0
Queue Length 95th (ft)	196	130	41	193	18	40	113	63
Internal Link Dist (ft)		1869		4184		1272	217	
Turn Bay Length (ft)	150		200		100			
Base Capacity (vph)	451	2967	110	2108	262	330	316	580
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	0.52	0.26	0.24	0.41	0.04	0.15	0.38	0.49

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	680	9	23	706	68	9	19	27	93	14	255
Future Volume (vph)	210	680	9	23	706	68	9	19	27	93	14	255
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.5		5.0	6.5		6.0	6.0			6.0	6.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00			1.00	1.00
Frt	1.00	1.00		1.00	0.99		1.00	0.91			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.96	1.00
Satd. Flow (prot)	1787	4629		1049	4547		1583	1327			1821	1568
Flt Permitted	0.95	1.00		0.95	1.00		0.68	1.00			0.72	1.00
Satd. Flow (perm)	1787	4629		1049	4547		1134	1327			1365	1568
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	233	756	10	26	784	76	10	21	30	103	16	283
RTOR Reduction (vph)	0	1	0	0	10	0	0	25	0	0	0	236
Lane Group Flow (vph)	233	765	0	26	850	0	10	26	0	0	119	47
Heavy Vehicles (%)	1%	12%	0%	72%	13%	8%	14%	0%	52%	0%	0%	3%
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		4
Actuated Green, G (s)	18.0	57.9		3.9	43.8		15.7	15.7			15.7	15.7
Effective Green, g (s)	18.0	57.9		3.9	43.8		15.7	15.7			15.7	15.7
Actuated g/C Ratio	0.19	0.61		0.04	0.46		0.17	0.17			0.17	0.17
Clearance Time (s)	5.0	6.5		5.0	6.5		6.0	6.0			6.0	6.0
Vehicle Extension (s)	3.5	3.5		3.5	3.5		4.5	4.5			4.5	4.5
Lane Grp Cap (vph)	338	2821		43	2096		187	219			225	259
v/s Ratio Prot	c0.13	0.17		0.02	c0.19			0.02				
v/s Ratio Perm							0.01				c0.09	0.03
v/c Ratio	0.69	0.27		0.60	0.41		0.05	0.12			0.53	0.18
Uniform Delay, d1	35.9	8.7		44.8	17.0		33.4	33.8			36.3	34.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	6.0	0.2		22.7	0.6		0.2	0.4			3.6	0.6
Delay (s)	41.9	8.9		67.5	17.6		33.6	34.2			39.8	34.7
Level of Service	D	A		E	B		C	C			D	C
Approach Delay (s)		16.6			19.0			34.1			36.2	
Approach LOS		B			B			C			D	

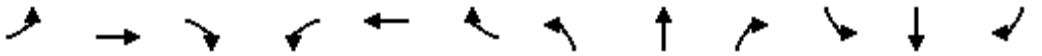
Intersection Summary			
HCM 2000 Control Delay	21.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	95.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	53.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	680	9	23	706	68	9	19	27	93	14	255
Future Volume (veh/h)	210	680	9	23	706	68	9	19	27	93	14	255
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1722	1900	833	1707	1781	1693	1900	1129	1900	1900	1856
Adj Flow Rate, veh/h	233	756	10	26	784	76	10	21	30	103	16	283
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	12	0	72	13	8	14	0	52	0	0	3
Cap, veh/h	274	2721	36	33	1979	191	184	145	207	294	41	322
Arrive On Green	0.15	0.57	0.57	0.04	0.46	0.46	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1795	4782	63	793	4323	417	978	707	1011	1090	200	1572
Grp Volume(v), veh/h	233	495	271	26	562	298	10	0	51	119	0	283
Grp Sat Flow(s),veh/h/ln	1795	1567	1711	793	1554	1632	978	0	1718	1289	0	1572
Q Serve(g_s), s	12.0	7.7	7.7	3.1	11.4	11.5	0.9	0.0	2.3	6.6	0.0	16.6
Cycle Q Clear(g_c), s	12.0	7.7	7.7	3.1	11.4	11.5	9.8	0.0	2.3	8.9	0.0	16.6
Prop In Lane	1.00		0.04	1.00		0.26	1.00		0.59	0.87		1.00
Lane Grp Cap(c), veh/h	274	1783	973	33	1423	747	184	0	352	335	0	322
V/C Ratio(X)	0.85	0.28	0.28	0.78	0.40	0.40	0.05	0.00	0.14	0.36	0.00	0.88
Avail Cap(c_a), veh/h	454	1783	973	84	1423	747	210	0	398	373	0	364
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.96	0.92	0.92	0.92	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.2	10.5	10.5	45.1	17.0	17.1	37.9	0.0	30.9	34.3	0.0	36.6
Incr Delay (d2), s/veh	8.8	0.4	0.7	34.8	0.8	1.5	0.2	0.0	0.3	1.1	0.0	20.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	2.3	2.6	0.9	3.8	4.1	0.2	0.0	0.9	2.5	0.0	7.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.0	10.9	11.2	79.9	17.8	18.5	38.1	0.0	31.3	35.4	0.0	57.5
LnGrp LOS	D	B	B	E	B	B	D	A	C	D	A	E
Approach Vol, veh/h		999			886			61			402	
Approach Delay, s/veh		19.6			19.9			32.4			51.0	
Approach LOS		B			B			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	60.5		25.5	19.5	50.0		25.5				
Change Period (Y+Rc), s	5.0	6.5		6.0	5.0	6.5		6.0				
Max Green Setting (Gmax), s	10.0	45.5		22.0	24.0	31.5		22.0				
Max Q Clear Time (g_c+I1), s	5.1	9.7		18.6	14.0	13.5		11.8				
Green Ext Time (p_c), s	0.0	5.8		0.9	0.6	5.7		0.2				

Intersection Summary		
HCM 6th Ctrl Delay		25.4
HCM 6th LOS		C

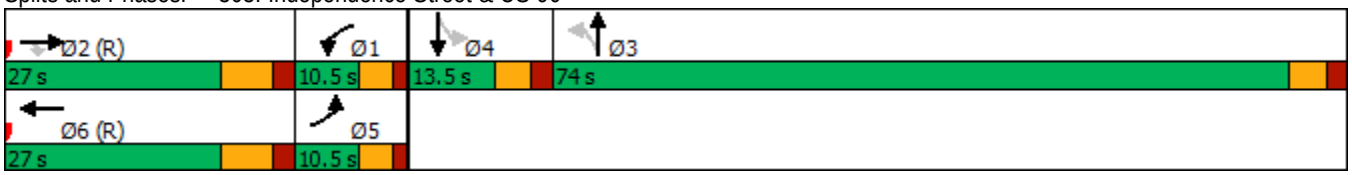


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	562	113	29	605	16	194	70	38	9	27	22
Future Volume (vph)	11	562	113	29	605	16	194	70	38	9	27	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	130		0	100		0	0		0
Storage Lanes	1		1	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.996			0.947			0.950	
Flt Protected	0.950			0.950			0.950				0.992	
Satd. Flow (prot)	1805	3252	1292	1671	4508	0	1583	1776	0	0	1711	0
Flt Permitted	0.950			0.950			0.717				0.192	
Satd. Flow (perm)	1805	3252	1292	1671	4508	0	1195	1776	0	0	331	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			120		3			34			18	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		4264			1976			555			937	
Travel Time (s)		64.6			29.9			12.6			21.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	11%	25%	8%	15%	0%	14%	2%	0%	29%	0%	0%
Adj. Flow (vph)	12	598	120	31	644	17	206	74	40	10	29	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	12	598	120	31	661	0	206	114	0	0	62	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			3			4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			2				3			4		
Detector Phase	5	2	2	1	6		3	3		4	4	
Switch Phase												
Minimum Initial (s)	6.0	10.0	10.0	6.0	10.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	10.5	17.0	17.0	10.5	17.0		13.5	13.5		13.5	13.5	
Total Split (s)	10.5	27.0	27.0	10.5	27.0		74.0	74.0		13.5	13.5	
Total Split (%)	8.4%	21.6%	21.6%	8.4%	21.6%		59.2%	59.2%		10.8%	10.8%	
Maximum Green (s)	6.0	20.0	20.0	6.0	20.0		68.5	68.5		8.0	8.0	
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.5	2.0	2.0	1.5	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	4.5	7.0	7.0	4.5	7.0		5.5	5.5			5.5	
Lead/Lag	Lag	Lead	Lead	Lag	Lead		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.5	5.0	5.0	3.5	5.0		3.5	3.5		3.5	3.5	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Act Effct Green (s)	6.0	59.5	59.5	6.0	61.6		29.0	29.0			12.2	
Actuated g/C Ratio	0.05	0.48	0.48	0.05	0.49		0.23	0.23			0.10	
v/c Ratio	0.14	0.39	0.18	0.39	0.30		0.75	0.26			1.29	
Control Delay	60.8	23.5	4.8	72.0	20.7		59.7	26.3			256.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Delay	60.8	23.5	4.8	72.0	20.7		59.7	26.3			256.6	
LOS	E	C	A	E	C		E	C			F	
Approach Delay		21.0			23.0			47.8			256.6	
Approach LOS		C			C			D			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 125			
Actuated Cycle Length: 125			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.29			
Intersection Signal Delay: 34.6		Intersection LOS: C	
Intersection Capacity Utilization 51.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 303: Independence Street & US 90

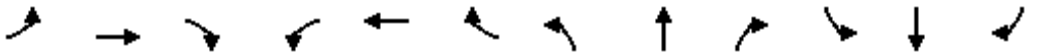


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	12	598	120	31	661	206	114	62
v/c Ratio	0.14	0.39	0.18	0.39	0.30	0.75	0.26	1.29
Control Delay	60.8	23.5	4.8	72.0	20.7	59.7	26.3	256.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.8	23.5	4.8	72.0	20.7	59.7	26.3	256.6
Queue Length 50th (ft)	9	158	0	25	95	156	53	~58
Queue Length 95th (ft)	31	248	40	59	176	216	91	#156
Internal Link Dist (ft)		4184			1896		475	857
Turn Bay Length (ft)	200			130		100		
Base Capacity (vph)	86	1548	678	80	2224	654	988	48
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.39	0.18	0.39	0.30	0.31	0.12	1.29

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

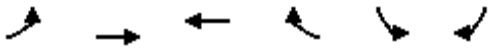
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



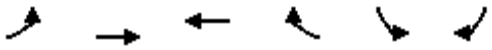
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	562	113	29	605	16	194	70	38	9	27	22
Future Volume (vph)	11	562	113	29	605	16	194	70	38	9	27	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	7.0	7.0	4.5	7.0		5.5	5.5			5.5	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91		1.00	1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.95			0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1805	3252	1292	1671	4508		1583	1777			1710	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.72	1.00			0.19	
Satd. Flow (perm)	1805	3252	1292	1671	4508		1194	1777			331	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	12	598	120	31	644	17	206	74	40	10	29	23
RTOR Reduction (vph)	0	0	65	0	2	0	0	26	0	0	16	0
Lane Group Flow (vph)	12	598	55	31	659	0	206	88	0	0	46	0
Heavy Vehicles (%)	0%	11%	25%	8%	15%	0%	14%	2%	0%	29%	0%	0%
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			3			4	
Permitted Phases			2				3			4		
Actuated Green, G (s)	2.4	56.8	56.8	4.5	58.9		29.0	29.0			12.2	
Effective Green, g (s)	2.4	56.8	56.8	4.5	58.9		29.0	29.0			12.2	
Actuated g/C Ratio	0.02	0.45	0.45	0.04	0.47		0.23	0.23			0.10	
Clearance Time (s)	4.5	7.0	7.0	4.5	7.0		5.5	5.5			5.5	
Vehicle Extension (s)	3.5	5.0	5.0	3.5	5.0		3.5	3.5			3.5	
Lane Grp Cap (vph)	34	1477	587	60	2124		277	412			32	
v/s Ratio Prot	0.01	c0.18		c0.02	0.15			0.05				
v/s Ratio Perm			0.04				c0.17				c0.14	
v/c Ratio	0.35	0.40	0.09	0.52	0.31		0.74	0.21			1.43	
Uniform Delay, d1	60.5	22.8	19.4	59.2	20.5		44.6	38.8			56.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	7.3	0.8	0.3	8.5	0.4		10.6	0.3			310.2	
Delay (s)	67.9	23.6	19.7	67.6	20.9		55.2	39.1			366.6	
Level of Service	E	C	B	E	C		E	D			F	
Approach Delay (s)		23.7			22.9			49.5			366.6	
Approach LOS		C			C			D			F	

Intersection Summary			
HCM 2000 Control Delay	39.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	51.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology expects strict NEMA phasing.



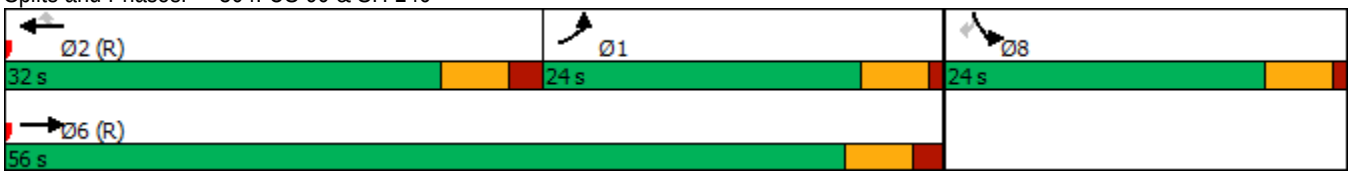
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	203	303	316	93	72	275
Future Volume (vph)	203	303	316	93	72	275
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			300	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1543	1712	1743	1568	1641	1324
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1543	1712	1743	1568	1641	1324
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				102		302
Link Speed (mph)		50	50		55	
Link Distance (ft)		470	2799		7877	
Travel Time (s)		6.4	38.2		97.6	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	17%	11%	9%	3%	10%	22%
Adj. Flow (vph)	223	333	347	102	79	302
Shared Lane Traffic (%)						
Lane Group Flow (vph)	223	333	347	102	79	302
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	1	6	2		8	

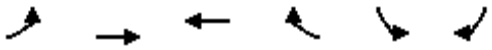


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases				2		8
Detector Phase	1	6	2	2	8	8
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	5.0
Minimum Split (s)	15.0	16.0	16.0	16.0	10.0	10.0
Total Split (s)	24.0	56.0	32.0	32.0	24.0	24.0
Total Split (%)	30.0%	70.0%	40.0%	40.0%	30.0%	30.0%
Maximum Green (s)	19.0	50.0	26.0	26.0	19.0	19.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	6.0	5.0	5.0
Lead/Lag	Lag		Lead	Lead		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	C-Max	C-Max	C-Max	None	None
Act Effct Green (s)	19.0	59.9	35.9	35.9	9.1	9.1
Actuated g/C Ratio	0.24	0.75	0.45	0.45	0.11	0.11
v/c Ratio	0.61	0.26	0.44	0.13	0.42	0.72
Control Delay	35.4	4.3	18.6	4.2	38.5	14.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.4	4.3	18.6	4.2	38.5	14.7
LOS	D	A	B	A	D	B
Approach Delay		16.8	15.3		19.6	
Approach LOS		B	B		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 17.1		Intersection LOS: B	
Intersection Capacity Utilization 45.4%		ICU Level of Service A	
Analysis Period (min) 15			

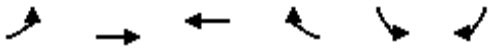
Splits and Phases: 304: US 90 & SH 146





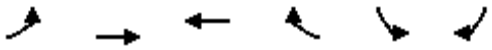
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	223	333	347	102	79	302
v/c Ratio	0.61	0.26	0.44	0.13	0.42	0.72
Control Delay	35.4	4.3	18.6	4.2	38.5	14.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.4	4.3	18.6	4.2	38.5	14.7
Queue Length 50th (ft)	100	38	112	0	38	0
Queue Length 95th (ft)	173	97	217	30	71	68
Internal Link Dist (ft)		390	2719		7797	
Turn Bay Length (ft)	250			300		
Base Capacity (vph)	366	1282	782	759	389	544
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	0.61	0.26	0.44	0.13	0.20	0.56

Intersection Summary



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	203	303	316	93	72	275
Future Volume (vph)	203	303	316	93	72	275
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0	6.0	6.0	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1543	1712	1743	1568	1641	1324
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1543	1712	1743	1568	1641	1324
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	223	333	347	102	79	302
RTOR Reduction (vph)	0	0	0	56	0	268
Lane Group Flow (vph)	223	333	347	46	79	34
Heavy Vehicles (%)	17%	11%	9%	3%	10%	22%
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	1	6	2		8	
Permitted Phases				2		8
Actuated Green, G (s)	19.0	59.9	35.9	35.9	9.1	9.1
Effective Green, g (s)	19.0	59.9	35.9	35.9	9.1	9.1
Actuated g/C Ratio	0.24	0.75	0.45	0.45	0.11	0.11
Clearance Time (s)	5.0	6.0	6.0	6.0	5.0	5.0
Vehicle Extension (s)	3.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	366	1281	782	703	186	150
v/s Ratio Prot	c0.14	0.19	c0.20		c0.05	
v/s Ratio Perm				0.03		0.03
v/c Ratio	0.61	0.26	0.44	0.07	0.42	0.23
Uniform Delay, d1	27.2	3.1	15.2	12.5	33.0	32.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.9	0.5	1.8	0.2	0.6	0.3
Delay (s)	30.1	3.6	17.0	12.7	33.6	32.5
Level of Service	C	A	B	B	C	C
Approach Delay (s)		14.2	16.0		32.8	
Approach LOS		B	B		C	

Intersection Summary			
HCM 2000 Control Delay	19.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	45.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	203	303	316	93	72	275
Future Volume (veh/h)	203	303	316	93	72	275
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1648	1737	1767	1856	1752	1574
Adj Flow Rate, veh/h	223	333	347	0	79	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	17	11	9	3	10	22
Cap, veh/h	632	1394	574		100	
Arrive On Green	0.40	0.80	0.32	0.00	0.06	0.00
Sat Flow, veh/h	1570	1737	1767	1572	1668	1334
Grp Volume(v), veh/h	223	333	347	0	79	0
Grp Sat Flow(s),veh/h/ln	1570	1737	1767	1572	1668	1334
Q Serve(g_s), s	7.9	3.7	13.2	0.0	3.7	0.0
Cycle Q Clear(g_c), s	7.9	3.7	13.2	0.0	3.7	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	632	1394	574		100	
V/C Ratio(X)	0.35	0.24	0.60		0.79	
Avail Cap(c_a), veh/h	632	1394	574		396	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.46	0.00
Uniform Delay (d), s/veh	16.6	1.9	22.7	0.0	37.1	0.0
Incr Delay (d2), s/veh	0.3	0.4	4.7	0.0	2.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.4	5.6	0.0	1.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.0	2.3	27.3	0.0	39.5	0.0
LnGrp LOS	B	A	C		D	
Approach Vol, veh/h		556	347	A	79	A
Approach Delay, s/veh		8.2	27.3		39.5	
Approach LOS		A	C		D	

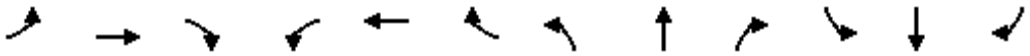
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	38.2	32.0			70.2	9.8
Change Period (Y+Rc), s	6.0	* 6			6.0	5.0
Max Green Setting (Gmax), s	19.0	* 26			50.0	19.0
Max Q Clear Time (g_c+I1), s	9.9	15.2			5.7	5.7
Green Ext Time (p_c), s	0.4	0.8			1.1	0.1

Intersection Summary	
HCM 6th Ctrl Delay	17.5
HCM 6th LOS	B

Notes

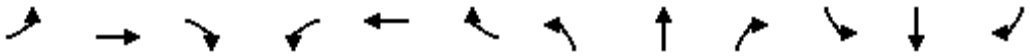
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	15	4	0	0	0	1	104	23	1	32	5
Future Volume (vph)	8	15	4	0	0	0	1	104	23	1	32	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.979						0.976			0.982	
Flt Protected		0.986									0.999	
Satd. Flow (prot)	0	1834	0	0	1900	0	0	1854	0	0	1864	0
Flt Permitted		0.986									0.999	
Satd. Flow (perm)	0	1834	0	0	1900	0	0	1854	0	0	1864	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		803			358			401			590	
Travel Time (s)		18.3			8.1			9.1			13.4	
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	11	21	6	0	0	0	1	146	32	1	45	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	38	0	0	0	0	0	179	0	0	53	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			50			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 17.3%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	8	15	4	0	0	0	1	104	23	1	32	5
Future Volume (vph)	8	15	4	0	0	0	1	104	23	1	32	5
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Hourly flow rate (vph)	11	21	6	0	0	0	1	146	32	1	45	7

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	38	0	179	53
Volume Left (vph)	11	0	1	1
Volume Right (vph)	6	0	32	7
Hadj (s)	-0.04	0.00	-0.11	-0.08
Departure Headway (s)	4.3	4.4	3.9	4.1
Degree Utilization, x	0.05	0.00	0.20	0.06
Capacity (veh/h)	784	778	896	864
Control Delay (s)	7.6	7.4	7.9	7.3
Approach Delay (s)	7.6	0.0	7.9	7.3
Approach LOS	A	A	A	A

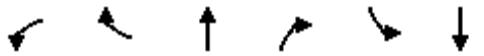
Intersection Summary				
Delay	7.7			
Level of Service	A			
Intersection Capacity Utilization	17.3%	ICU Level of Service	A	
Analysis Period (min)	15			

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	15	4	0	0	0	1	104	23	1	32	5
Future Vol, veh/h	8	15	4	0	0	0	1	104	23	1	32	5
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	11	21	6	0	0	0	1	146	32	1	45	7
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.6	0	7.9	7.3
HCM LOS	A	-	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	30%	0%	3%
Vol Thru, %	81%	56%	100%	84%
Vol Right, %	18%	15%	0%	13%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	128	27	0	38
LT Vol	1	8	0	1
Through Vol	104	15	0	32
RT Vol	23	4	0	5
Lane Flow Rate	180	38	0	54
Geometry Grp	1	1	1	1
Degree of Util (X)	0.195	0.045	0	0.06
Departure Headway (Hd)	3.901	4.271	4.435	4.029
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	918	826	0	883
Service Time	1.933	2.36	2.435	2.081
HCM Lane V/C Ratio	0.196	0.046	0	0.061
HCM Control Delay	7.9	7.6	7.4	7.3
HCM Lane LOS	A	A	N	A
HCM 95th-tile Q	0.7	0.1	0	0.2



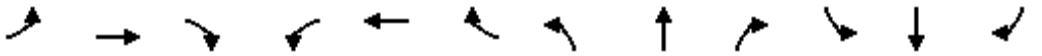
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	86	65	99	88	85	74
Future Volume (vph)	86	65	99	88	85	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.942		0.937			
Flt Protected	0.972					0.974
Satd. Flow (prot)	1488	0	1696	0	0	1580
Flt Permitted	0.972					0.974
Satd. Flow (perm)	1488	0	1696	0	0	1580
Link Speed (mph)	30		30			30
Link Distance (ft)	1292		2374			1487
Travel Time (s)	29.4		54.0			33.8
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles (%)	1%	38%	4%	6%	32%	0%
Adj. Flow (vph)	130	98	150	133	129	112
Shared Lane Traffic (%)						
Lane Group Flow (vph)	228	0	283	0	0	241
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Free		Yield			Yield

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.9%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	86	65	99	88	85	74
Future Volume (Veh/h)	86	65	99	88	85	74
Sign Control	Free		Yield			Yield
Grade	0%		0%			0%
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66
Hourly flow rate (vph)	130	98	150	133	129	112
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	0		358	0	517	309
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0		358	0	517	309
tC, single (s)	4.1		6.5	6.3	7.4	6.5
tC, 2 stage (s)						
tF (s)	2.2		4.0	3.4	3.8	4.0
p0 queue free %	92		71	88	53	80
cM capacity (veh/h)	1630		520	1073	272	560

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	228	283	241
Volume Left	130	0	129
Volume Right	98	133	0
cSH	1630	686	358
Volume to Capacity	0.08	0.41	0.67
Queue Length 95th (ft)	6	51	117
Control Delay (s)	4.5	13.9	33.5
Lane LOS	A	B	D
Approach Delay (s)	4.5	13.9	33.5
Approach LOS		B	D

Intersection Summary			
Average Delay	17.3		
Intersection Capacity Utilization	37.9%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	128	79	53	4	88	40	36	334	4	19	477	156
Future Volume (vph)	128	79	53	4	88	40	36	334	4	19	477	156
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	100		0	100		0	200		125
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.940			0.953			0.998				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1530	1765	0	1805	1782	0	1805	1888	0	1687	1863	1615
Flt Permitted	0.077			0.640			0.714			0.950		
Satd. Flow (perm)	124	1765	0	1216	1782	0	1357	1888	0	1687	1863	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		42			16			1				119
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		345			825			1581			1585	
Travel Time (s)		7.8			18.8			35.9			36.0	
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles (%)	18%	2%	0%	0%	1%	3%	0%	0%	33%	7%	2%	0%
Adj. Flow (vph)	180	111	75	6	124	56	51	470	6	27	672	220
Shared Lane Traffic (%)												
Lane Group Flow (vph)	180	186	0	6	180	0	51	476	0	27	672	220
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		custom	NA		Prot	NA	Perm
Protected Phases		3			4			6		5	2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	3			4			1					2
Detector Phase	3	3		4	4		1	6		5	2	2
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		6.0	10.0		6.0	10.0	10.0
Minimum Split (s)	13.0	13.0		13.0	13.0		10.0	15.0		10.0	15.0	15.0
Total Split (s)	57.0	57.0		13.0	13.0		10.0	30.0		10.0	30.0	30.0
Total Split (%)	51.8%	51.8%		11.8%	11.8%		9.1%	27.3%		9.1%	27.3%	27.3%
Maximum Green (s)	52.0	52.0		8.0	8.0		6.0	25.0		6.0	25.0	25.0
Yellow Time (s)	3.5	3.5		3.5	3.5		3.0	3.5		3.0	3.5	3.5
All-Red Time (s)	1.5	1.5		1.5	1.5		1.0	1.5		1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		4.0	5.0		4.0	5.0	5.0
Lead/Lag	Lead	Lead		Lag	Lag		Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		2.0	2.0		3.5	3.5		2.0	3.5	3.5
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	52.0	52.0		8.0	8.0		6.0	29.0		6.0	27.0	27.0
Actuated g/C Ratio	0.47	0.47		0.07	0.07		0.05	0.26		0.05	0.25	0.25
v/c Ratio	3.10	0.22		0.07	1.25		0.69	0.96		0.29	1.47	0.45
Control Delay	1006.4	13.8		49.5	196.2		94.1	72.6		58.5	256.0	20.1
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	1006.4	13.8		49.5	196.2		94.1	72.6		58.5	256.0	20.1
LOS	F	B		D	F		F	E		E	F	C
Approach Delay		501.9			191.5			74.7			193.7	
Approach LOS		F			F			E			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 3.10			
Intersection Signal Delay: 218.6		Intersection LOS: F	
Intersection Capacity Utilization 56.6%		ICU Level of Service B	
Analysis Period (min) 15			

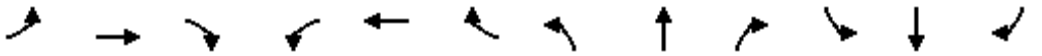
Splits and Phases: 307: Main Street & Grand Avenue

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	180	186	6	180	51	476	27	672	220
v/c Ratio	3.10	0.22	0.07	1.25	0.69	0.96	0.29	1.47	0.45
Control Delay	1006.4	13.8	49.5	196.2	94.1	72.6	58.5	256.0	20.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	1006.4	13.8	49.5	196.2	94.1	72.6	58.5	256.0	20.1
Queue Length 50th (ft)	~184	57	4	~148	36	~385	19	~678	59
Queue Length 95th (ft)	#239	73	14	#204	#69	#397	38	#646	83
Internal Link Dist (ft)		265		745		1501		1505	
Turn Bay Length (ft)	150		100		100		200		125
Base Capacity (vph)	58	856	88	144	74	498	92	457	486
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	3.10	0.22	0.07	1.25	0.69	0.96	0.29	1.47	0.45

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

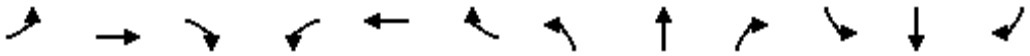
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	128	79	53	4	88	40	36	334	4	19	477	156
Future Volume (vph)	128	79	53	4	88	40	36	334	4	19	477	156
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0		4.0	5.0		4.0	5.0	5.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.94		1.00	0.95		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1530	1764		1805	1782		1805	1889		1687	1863	1615
Flt Permitted	0.08	1.00		0.64	1.00		0.71	1.00		0.95	1.00	1.00
Satd. Flow (perm)	124	1764		1217	1782		1357	1889		1687	1863	1615
Peak-hour factor, PHF	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Adj. Flow (vph)	180	111	75	6	124	56	51	470	6	27	672	220
RTOR Reduction (vph)	0	22	0	0	15	0	0	1	0	0	0	92
Lane Group Flow (vph)	180	164	0	6	165	0	51	475	0	27	672	128
Heavy Vehicles (%)	18%	2%	0%	0%	1%	3%	0%	0%	33%	7%	2%	0%
Turn Type	Perm	NA		Perm	NA		custom	NA		Prot	NA	Perm
Protected Phases		3			4			6		5	2	
Permitted Phases	3			4			1					2
Actuated Green, G (s)	52.0	52.0		8.0	8.0		5.6	27.4		3.6	25.4	25.4
Effective Green, g (s)	52.0	52.0		8.0	8.0		5.6	27.4		3.6	25.4	25.4
Actuated g/C Ratio	0.47	0.47		0.07	0.07		0.05	0.25		0.03	0.23	0.23
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	5.0		4.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		2.0	2.0		3.5	3.5		2.0	3.5	3.5
Lane Grp Cap (vph)	58	833		88	129		69	470		55	430	372
v/s Ratio Prot		0.09			c0.09			c0.25		0.02	c0.36	
v/s Ratio Perm	c1.45			0.00			0.04					0.08
v/c Ratio	3.10	0.20		0.07	1.28		0.74	1.01		0.49	1.56	0.35
Uniform Delay, d1	29.0	16.9		47.5	51.0		51.5	41.3		52.3	42.3	35.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	990.3	0.1		0.1	172.7		34.4	44.3		2.5	264.4	2.5
Delay (s)	1019.3	17.0		47.6	223.7		85.9	85.6		54.8	306.7	37.9
Level of Service	F	B		D	F		F	F		D	F	D
Approach Delay (s)		509.9			218.0			85.7			234.9	
Approach LOS		F			F			F			F	

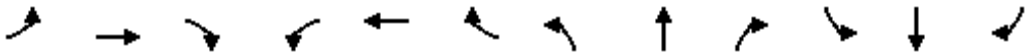
Intersection Summary			
HCM 2000 Control Delay	244.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	2.38		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	56.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology does not support custom phasing.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	84	0	90	0	44	71	148	50	0
Future Volume (vph)	0	0	0	84	0	90	0	44	71	148	50	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.865			0.917				
Flt Protected				0.950							0.964	
Satd. Flow (prot)	0	1900	0	1805	0	0	0	1723	0	0	1818	0
Flt Permitted				0.950							0.964	
Satd. Flow (perm)	0	1900	0	1805	0	0	0	1723	0	0	1818	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		433			707			1487			1399	
Travel Time (s)		9.8			16.1			33.8			31.8	
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	3%	0%
Adj. Flow (vph)	0	0	0	153	0	164	0	80	129	269	91	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	153	164	0	0	209	0	0	360	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization Err%		ICU Level of Service H	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	84	0	90	0	44	71	148	50	0
Future Volume (Veh/h)	0	0	0	84	0	90	0	44	71	148	50	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Hourly flow rate (vph)	0	0	0	153	0	164	0	80	129	269	91	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	938	838	91	774	774	144	91			209		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	938	838	91	774	774	144	91			209		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	43	100	82	100			80		
cM capacity (veh/h)	172	245	972	270	267	908	1517			1374		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	0	317	209	360
Volume Left	0	153	0	269
Volume Right	0	164	129	0
cSH	1700	425	1700	1374
Volume to Capacity	0.00	0.75	0.12	0.20
Queue Length 95th (ft)	0	152	0	18
Control Delay (s)	0.0	34.6	0.0	6.6
Lane LOS	A	D		A
Approach Delay (s)	0.0	34.6	0.0	6.6
Approach LOS	A	D		

Intersection Summary				
Average Delay	15.0			
Intersection Capacity Utilization	Err%	ICU Level of Service	H	
Analysis Period (min)	15			

Intersection	
Int Delay, s/veh	15.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	84	0	90	0	44	71	148	50	0
Future Vol, veh/h	0	0	0	84	0	90	0	44	71	148	50	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	55	55	55	55	55	55	55	55	55	55	55	55
Heavy Vehicles, %	0	0	0	0	0	0	0	3	0	0	3	0
Mvmt Flow	0	0	0	153	0	164	0	80	129	269	91	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	856	838	91	774	-	145	-	0	0	209	0	0
Stage 1	629	629	-	145	-	-	-	-	-	-	-	-
Stage 2	227	209	-	629	-	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	-	6.2	-	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	-	3.3	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	280	305	972	318	0	908	0	-	-	1374	-	0
Stage 1	474	478	-	863	0	-	0	-	-	-	-	0
Stage 2	780	733	-	474	0	-	0	-	-	-	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	193	242	972	267	-	908	-	-	-	1374	-	-
Mov Cap-2 Maneuver	193	242	-	267	-	-	-	-	-	-	-	-
Stage 1	474	380	-	863	-	-	-	-	-	-	-	-
Stage 2	639	733	-	376	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	35.2	0	6.2
HCM LOS	A	E		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	421	1374	-
HCM Lane V/C Ratio	-	-	-	0.751	0.196	-
HCM Control Delay (s)	-	-	0	35.2	8.3	0
HCM Lane LOS	-	-	A	E	A	A
HCM 95th %tile Q(veh)	-	-	-	6.2	0.7	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	5	14	99	0	0	66
Future Volume (vph)	5	14	99	0	0	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.902				0.865	
Flt Protected				0.950		
Satd. Flow (prot)	1714	0	0	1787	1611	0
Flt Permitted				0.950		
Satd. Flow (perm)	1714	0	0	1787	1611	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	720			80	1399	
Travel Time (s)	16.4			1.8	31.8	
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles (%)	0%	0%	1%	0%	0%	2%
Adj. Flow (vph)	8	21	150	0	0	100
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	0	0	150	100	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 22.9%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection Sign configuration not allowed in HCM analysis.

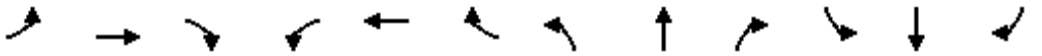
Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	5	14	99	0	0	66
Future Vol, veh/h	5	14	99	0	0	66
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	66	66	66	66	66	66
Heavy Vehicles, %	0	0	1	0	0	2
Mvmt Flow	8	21	150	0	0	100

Major/Minor	Minor2		Major2	
Conflicting Flow All	300	0	0	0
Stage 1	300	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.11	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.209	-
Pot Cap-1 Maneuver	616	-	-	-
Stage 1	669	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	-	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	EB	WB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	EBLn1	WBL	WBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-

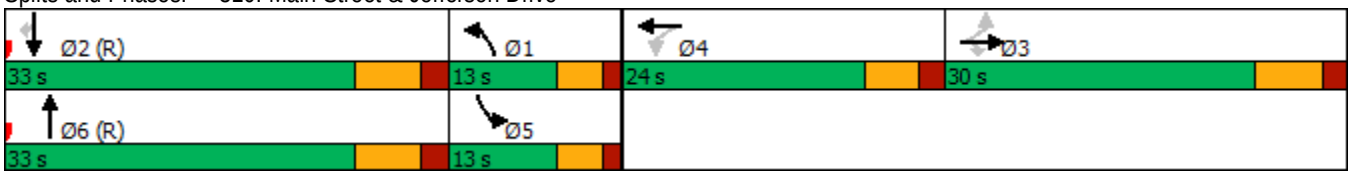


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	215	108	39	88	148	17	73	561	114	0	879	301
Future Volume (vph)	215	108	39	88	148	17	73	561	114	0	879	301
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	200		0	200		250
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.991			0.975				0.850
Flt Protected		0.968			0.983		0.950					
Satd. Flow (prot)	0	1839	1615	0	1822	0	1703	1837	0	1900	1863	1615
Flt Permitted		0.626			0.131		0.950					
Satd. Flow (perm)	0	1189	1615	0	243	0	1703	1837	0	1900	1863	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			164		3			10				183
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1006			727			3897			1103	
Travel Time (s)		17.1			12.4			66.4			18.8	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	0%	0%	0%	2%	0%	13%	6%	1%	0%	0%	2%	0%
Adj. Flow (vph)	262	132	48	107	180	21	89	684	139	0	1072	367
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	394	48	0	308	0	89	823	0	0	1072	367
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		3			4		1	6		5	2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	3		3	4								2
Detector Phase	3	3	3	4	4		1	6		5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	8.0	8.0		8.0	10.0		8.0	10.0	10.0
Minimum Split (s)	25.0	25.0	25.0	24.0	24.0		13.0	25.0		13.0	25.0	25.0
Total Split (s)	30.0	30.0	30.0	24.0	24.0		13.0	33.0		13.0	33.0	33.0
Total Split (%)	30.0%	30.0%	30.0%	24.0%	24.0%		13.0%	33.0%		13.0%	33.0%	33.0%
Maximum Green (s)	23.0	23.0	23.0	18.0	18.0		8.0	26.0		8.0	26.0	26.0
Yellow Time (s)	5.0	5.0	5.0	4.0	4.0		3.5	5.0		3.5	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		1.5	2.0		1.5	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		7.0	7.0		6.0		5.0	7.0		5.0	7.0	7.0
Lead/Lag	Lag	Lag	Lag	Lead	Lead		Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5		3.0	3.5		3.0	3.5	3.5
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)		23.0	23.0		20.6		8.0	36.4			26.0	26.0
Actuated g/C Ratio		0.23	0.23		0.21		0.08	0.36			0.26	0.26
v/c Ratio		1.44	0.10		5.92		0.65	1.22			2.21	0.66
Control Delay		250.4	0.4		2255.4		67.9	141.7			575.8	22.6
Queue Delay		0.0	0.0		0.0		0.0	0.0			0.0	0.0
Total Delay		250.4	0.4		2255.4		67.9	141.7			575.8	22.6
LOS		F	A		F		E	F			F	C
Approach Delay		223.2			2255.4			134.5			434.7	
Approach LOS		F			F			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 5.92			
Intersection Signal Delay: 497.1		Intersection LOS: F	
Intersection Capacity Utilization 100.7%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 310: Main Street & Jefferson Drive

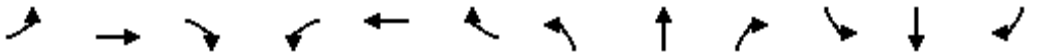


Lane Group	EBT	EBR	WBT	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	394	48	308	89	823	1072	367
v/c Ratio	1.44	0.10	5.92	0.65	1.22	2.21	0.66
Control Delay	250.4	0.4	2255.4	67.9	141.7	575.8	22.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	250.4	0.4	2255.4	67.9	141.7	575.8	22.6
Queue Length 50th (ft)	~343	0	~362	56	~614	~1107	103
Queue Length 95th (ft)	#463	0	#479	#108	#729	#1203	169
Internal Link Dist (ft)	926		647		3817	1023	
Turn Bay Length (ft)				200			250
Base Capacity (vph)	273	497	52	136	675	484	555
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	1.44	0.10	5.92	0.65	1.22	2.21	0.66

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

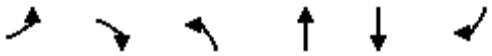
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	215	108	39	88	148	17	73	561	114	0	879	301
Future Volume (vph)	215	108	39	88	148	17	73	561	114	0	879	301
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0	7.0		6.0		5.0	7.0			7.0	7.0
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Frt		1.00	0.85		0.99		1.00	0.97			1.00	0.85
Flt Protected		0.97	1.00		0.98		0.95	1.00			1.00	1.00
Satd. Flow (prot)		1839	1615		1822		1703	1837			1863	1615
Flt Permitted		0.63	1.00		0.13		0.95	1.00			1.00	1.00
Satd. Flow (perm)		1190	1615		242		1703	1837			1863	1615
Peak-hour factor, PHF	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	262	132	48	107	180	21	89	684	139	0	1072	367
RTOR Reduction (vph)	0	0	37	0	2	0	0	6	0	0	0	137
Lane Group Flow (vph)	0	394	11	0	306	0	89	817	0	0	1072	230
Heavy Vehicles (%)	0%	0%	0%	2%	0%	13%	6%	1%	0%	0%	2%	0%
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		3			4		1	6		5	2	
Permitted Phases	3		3	4								2
Actuated Green, G (s)		23.0	23.0		20.6		6.4	36.4			25.0	25.0
Effective Green, g (s)		23.0	23.0		20.6		6.4	36.4			25.0	25.0
Actuated g/C Ratio		0.23	0.23		0.21		0.06	0.36			0.25	0.25
Clearance Time (s)		7.0	7.0		6.0		5.0	7.0			7.0	7.0
Vehicle Extension (s)		3.5	3.5		3.5		3.0	3.5			3.5	3.5
Lane Grp Cap (vph)		273	371		49		108	668			465	403
v/s Ratio Prot							0.05	c0.44			c0.58	
v/s Ratio Perm		c0.33	0.01		c1.26							0.14
v/c Ratio		1.44	0.03		6.24		0.82	1.22			2.31	0.57
Uniform Delay, d1		38.5	29.8		39.7		46.2	31.8			37.5	32.8
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2		219.0	0.0		2399.7		37.7	113.2			594.2	5.8
Delay (s)		257.5	29.9		2439.4		83.9	145.0			631.7	38.6
Level of Service		F	C		F		F	F			F	D
Approach Delay (s)		232.8			2439.4			139.1			480.4	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	539.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	3.00		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	100.7%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology expects strict NEMA phasing.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	17	82	54	701	1161	32
Future Volume (vph)	17	82	54	701	1161	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	200			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.888				0.996	
Flt Protected	0.992		0.950			
Satd. Flow (prot)	1633	0	1805	1881	1871	0
Flt Permitted	0.992		0.069			
Satd. Flow (perm)	1633	0	131	1881	1871	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	92				2	
Link Speed (mph)	30			40	40	
Link Distance (ft)	1219			1103	1788	
Travel Time (s)	27.7			18.8	30.5	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	3%	0%	1%	1%	7%
Adj. Flow (vph)	19	92	61	788	1304	36
Shared Lane Traffic (%)						
Lane Group Flow (vph)	111	0	61	788	1340	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1		1	2	2	
Detector Template	Left		Left	Thru	Thru	
Leading Detector (ft)	20		20	100	100	
Trailing Detector (ft)	0		0	0	0	
Detector 1 Position(ft)	0		0	0	0	
Detector 1 Size(ft)	20		20	6	6	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot		pm+pt	NA	NA	
Protected Phases	4		5	2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases			2			
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	8.0		6.0	10.0	10.0	
Minimum Split (s)	24.0		10.5	25.0	25.0	
Total Split (s)	24.0		10.5	59.0	48.5	
Total Split (%)	28.9%		12.7%	71.1%	58.4%	
Maximum Green (s)	18.0		6.0	52.0	41.5	
Yellow Time (s)	4.0		3.0	5.0	5.0	
All-Red Time (s)	2.0		1.5	2.0	2.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	6.0		4.5	7.0	7.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.5		3.0	4.0	4.0	
Recall Mode	None		None	C-Max	C-Max	
Act Effct Green (s)	8.9		66.4	65.3	56.6	
Actuated g/C Ratio	0.11		0.80	0.79	0.68	
v/c Ratio	0.43		0.26	0.53	1.05	
Control Delay	16.3		5.4	6.3	59.9	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	16.3		5.4	6.3	59.9	
LOS	B		A	A	E	
Approach Delay	16.3			6.3	59.9	
Approach LOS	B			A	E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 83			
Actuated Cycle Length: 83			
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: 1.05			
Intersection Signal Delay: 38.0		Intersection LOS: D	
Intersection Capacity Utilization 80.5%		ICU Level of Service D	
Analysis Period (min) 15			

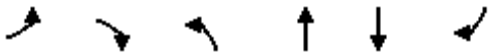
Splits and Phases: 311: Main Street & Cook Road

Lane Group	EBL	NBL	NBT	SBT
Lane Group Flow (vph)	111	61	788	1340
v/c Ratio	0.43	0.26	0.53	1.05
Control Delay	16.3	5.4	6.3	59.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	16.3	5.4	6.3	59.9
Queue Length 50th (ft)	9	6	142	~839
Queue Length 95th (ft)	53	16	260	#1131
Internal Link Dist (ft)	1139		1023	1708
Turn Bay Length (ft)		200		
Base Capacity (vph)	426	232	1480	1276
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.26	0.26	0.53	1.05

Intersection Summary

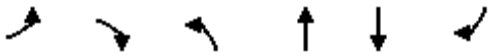
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	17	82	54	701	1161	32
Future Volume (vph)	17	82	54	701	1161	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		4.5	7.0	7.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frt	0.89		1.00	1.00	1.00	
Flt Protected	0.99		0.95	1.00	1.00	
Satd. Flow (prot)	1632		1805	1881	1871	
Flt Permitted	0.99		0.07	1.00	1.00	
Satd. Flow (perm)	1632		132	1881	1871	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	19	92	61	788	1304	36
RTOR Reduction (vph)	84	0	0	0	1	0
Lane Group Flow (vph)	27	0	61	788	1339	0
Heavy Vehicles (%)	0%	3%	0%	1%	1%	7%
Turn Type	Prot		pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases			2			
Actuated Green, G (s)	7.3		62.7	62.7	53.1	
Effective Green, g (s)	7.3		62.7	62.7	53.1	
Actuated g/C Ratio	0.09		0.76	0.76	0.64	
Clearance Time (s)	6.0		4.5	7.0	7.0	
Vehicle Extension (s)	3.5		3.0	4.0	4.0	
Lane Grp Cap (vph)	143		202	1420	1196	
v/s Ratio Prot	c0.02		0.02	c0.42	c0.72	
v/s Ratio Perm			0.21			
v/c Ratio	0.19		0.30	0.55	1.12	
Uniform Delay, d1	35.1		20.5	4.3	14.9	
Progression Factor	1.00		1.00	1.00	1.00	
Incremental Delay, d2	0.8		0.8	1.6	65.5	
Delay (s)	35.9		21.3	5.8	80.4	
Level of Service	D		C	A	F	
Approach Delay (s)	35.9			7.0	80.4	
Approach LOS	D			A	F	

Intersection Summary			
HCM 2000 Control Delay	51.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	83.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	80.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	17	82	54	701	1161	32
Future Volume (veh/h)	17	82	54	701	1161	32
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1856	1900	1885	1885	1796
Adj Flow Rate, veh/h	19	92	61	788	1304	36
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	3	0	1	1	7
Cap, veh/h	25	120	186	1422	1178	33
Arrive On Green	0.09	0.09	0.05	0.75	0.65	0.65
Sat Flow, veh/h	279	1350	1810	1885	1826	50
Grp Volume(v), veh/h	112	0	61	788	0	1340
Grp Sat Flow(s),veh/h/ln	1643	0	1810	1885	0	1876
Q Serve(g_s), s	5.5	0.0	0.8	14.6	0.0	53.6
Cycle Q Clear(g_c), s	5.5	0.0	0.8	14.6	0.0	53.6
Prop In Lane	0.17	0.82	1.00			0.03
Lane Grp Cap(c), veh/h	146	0	186	1422	0	1211
V/C Ratio(X)	0.77	0.00	0.33	0.55	0.00	1.11
Avail Cap(c_a), veh/h	356	0	218	1422	0	1211
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.09	0.09	0.00	1.00
Uniform Delay (d), s/veh	37.0	0.0	21.9	4.3	0.0	14.7
Incr Delay (d2), s/veh	9.6	0.0	0.1	0.1	0.0	60.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	0.7	3.2	0.0	36.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	46.5	0.0	22.0	4.4	0.0	74.9
LnGrp LOS	D	A	C	A	A	F
Approach Vol, veh/h	112			849	1340	
Approach Delay, s/veh	46.5			5.7	74.9	
Approach LOS	D			A	E	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		69.6		13.4	9.0	60.6
Change Period (Y+Rc), s		7.0		6.0	4.5	7.0
Max Green Setting (Gmax), s		52.0		18.0	6.0	41.5
Max Q Clear Time (g_c+I1), s		16.6		7.5	2.8	55.6
Green Ext Time (p_c), s		9.4		0.2	0.0	0.0

Intersection Summary		
HCM 6th Ctrl Delay	48.0	
HCM 6th LOS	D	

Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	114	217	325	91	324	743
Future Volume (vph)	114	217	325	91	324	743
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	135	
Storage Lanes	1	1		1	2	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1719	1302	1863	1583	1388	3539
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1719	1302	1863	1583	1388	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		247		103		
Link Speed (mph)	55		40			40
Link Distance (ft)	7877		885			960
Travel Time (s)	97.6		15.1			16.4
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	5%	24%	2%	2%	30%	2%
Adj. Flow (vph)	130	247	369	103	368	844
Shared Lane Traffic (%)						
Lane Group Flow (vph)	130	247	369	103	368	844
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Turn Type	Perm	Perm	NA	Perm	Split	NA
Protected Phases			2		6	6
Permitted Phases	8	8		2		
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%
Maximum Green (s)	18.0	18.0	18.0	18.0	18.0	18.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	18.0	18.0	18.0	18.0	18.0	18.0
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.27	0.27

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
v/c Ratio	0.28	0.47	0.74	0.21	0.99	0.90
Control Delay	21.7	6.4	33.8	5.9	74.3	38.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.7	6.4	33.8	5.9	74.3	38.2
LOS	C	A	C	A	E	D
Approach Delay	11.7		27.8			49.1
Approach LOS	B		C			D

Intersection Summary			
Area Type:	Other		
Cycle Length: 67.5			
Actuated Cycle Length: 67.5			
Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay: 37.4		Intersection LOS: D	
Intersection Capacity Utilization 52.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 312: Main Street & SH 146

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	130	247	369	103	368	844
v/c Ratio	0.28	0.47	0.74	0.21	0.99	0.90
Control Delay	21.7	6.4	33.8	5.9	74.3	38.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.7	6.4	33.8	5.9	74.3	38.2
Queue Length 50th (ft)	43	0	139	0	151	176
Queue Length 95th (ft)	82	46	#247	31	#301	#268
Internal Link Dist (ft)	7797		805			880
Turn Bay Length (ft)					135	
Base Capacity (vph)	458	528	496	497	370	943
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	0.28	0.47	0.74	0.21	0.99	0.90

Intersection Summary

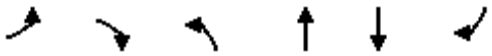
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	114	217	325	91	324	743
Future Volume (vph)	114	217	325	91	324	743
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1719	1302	1863	1583	1388	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1719	1302	1863	1583	1388	3539
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	130	247	369	103	368	844
RTOR Reduction (vph)	0	181	0	76	0	0
Lane Group Flow (vph)	130	66	369	27	368	844
Heavy Vehicles (%)	5%	24%	2%	2%	30%	2%
Turn Type	Perm	Perm	NA	Perm	Split	NA
Protected Phases			2		6	6
Permitted Phases	8	8		2		
Actuated Green, G (s)	18.0	18.0	18.0	18.0	18.0	18.0
Effective Green, g (s)	18.0	18.0	18.0	18.0	18.0	18.0
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.27	0.27
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Grp Cap (vph)	458	347	496	422	370	943
v/s Ratio Prot			c0.20		c0.27	0.24
v/s Ratio Perm	c0.08	0.05		0.02		
v/c Ratio	0.28	0.19	0.74	0.07	0.99	0.90
Uniform Delay, d1	19.6	19.1	22.6	18.5	24.7	23.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.6	1.2	9.7	0.3	45.5	12.8
Delay (s)	21.2	20.3	32.4	18.8	70.2	36.6
Level of Service	C	C	C	B	E	D
Approach Delay (s)	20.6		29.4			46.8
Approach LOS	C		C			D

Intersection Summary			
HCM 2000 Control Delay	38.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	67.5	Sum of lost time (s)	13.5
Intersection Capacity Utilization	52.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM 6th Edition methodology does not support Non-NEMA phasing.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	66	0	22	232	166	242
Future Volume (vph)	66	0	22	232	166	242
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.920	
Flt Protected	0.950			0.996		
Satd. Flow (prot)	1570	0	0	1713	1651	0
Flt Permitted	0.950			0.996		
Satd. Flow (perm)	1570	0	0	1713	1651	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	686			526	1142	
Travel Time (s)	15.6			12.0	26.0	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	15%	100%	5%	11%	13%	1%
Adj. Flow (vph)	69	0	23	242	173	252
Shared Lane Traffic (%)						
Lane Group Flow (vph)	69	0	0	265	425	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Free			Stop	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 40.8%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection Sign configuration not allowed in HCM analysis.

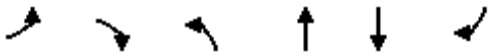
Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	66	0	22	232	166	242
Future Vol, veh/h	66	0	22	232	166	242
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	15	100	5	11	13	1
Mvmt Flow	69	0	23	242	173	252

Major/Minor	Minor2		Major2	
Conflicting Flow All	299	299	-	0
Stage 1	299	299	-	-
Stage 2	0	0	-	-
Critical Hdwy	6.45	6.61	-	-
Critical Hdwy Stg 1	5.45	5.61	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	3.545	4.099	-	-
Pot Cap-1 Maneuver	686	598	-	-
Stage 1	746	650	-	-
Stage 2	-	-	-	-
Platoon blocked, %			-	-
Mov Cap-1 Maneuver	686	0	-	-
Mov Cap-2 Maneuver	686	0	-	-
Stage 1	746	0	-	-
Stage 2	-	0	-	-

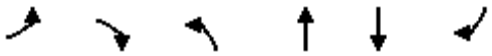
Approach	NB	SB
HCM Control Delay, s	13.5	0
HCM LOS	B	

Minor Lane/Major Mvmt	NBLn1	SBT	SBR
Capacity (veh/h)	686	-	-
HCM Lane V/C Ratio	0.386	-	-
HCM Control Delay (s)	13.5	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	1.8	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	67	362	201	196	1
Future Volume (vph)	0	67	362	201	196	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865				0.999	
Flt Protected				0.969		
Satd. Flow (prot)	1644	0	0	1779	1610	0
Flt Permitted				0.969		
Satd. Flow (perm)	1644	0	0	1779	1610	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	516			1385	526	
Travel Time (s)	11.7			31.5	12.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	1%	8%	18%	0%
Adj. Flow (vph)	0	73	393	218	213	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	73	0	0	611	214	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 55.1%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	67	362	201	196	1
Future Volume (Veh/h)	0	67	362	201	196	1
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	73	393	218	213	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1218	214	214			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1218	214	214			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	91	71			
cM capacity (veh/h)	143	832	1362			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	73	611	214
Volume Left	0	393	0
Volume Right	73	0	1
cSH	832	1362	1700
Volume to Capacity	0.09	0.29	0.13
Queue Length 95th (ft)	7	30	0
Control Delay (s)	9.7	6.6	0.0
Lane LOS	A	A	
Approach Delay (s)	9.7	6.6	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	5.3		
Intersection Capacity Utilization	55.1%	ICU Level of Service	B
Analysis Period (min)	15		

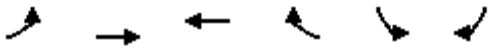
Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	67	362	201	196	1
Future Vol, veh/h	0	67	362	201	196	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	1	8	18	0
Mvmt Flow	0	73	393	218	213	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1218	214	214	0	-	0
Stage 1	214	-	-	-	-	-
Stage 2	1004	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.11	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.209	-	-	-
Pot Cap-1 Maneuver	201	831	1362	-	-	-
Stage 1	826	-	-	-	-	-
Stage 2	357	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	135	831	1362	-	-	-
Mov Cap-2 Maneuver	135	-	-	-	-	-
Stage 1	555	-	-	-	-	-
Stage 2	357	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	5.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1362	-	831	-	-
HCM Lane V/C Ratio	0.289	-	0.088	-	-
HCM Control Delay (s)	8.7	0	9.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	1.2	-	0.3	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	70	65	357	0	0	245
Future Volume (vph)	70	65	357	0	0	245
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.865	
Flt Protected		0.975				
Satd. Flow (prot)	0	1659	1881	0	1627	0
Flt Permitted		0.975				
Satd. Flow (perm)	0	1659	1881	0	1627	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		4107	516		686	
Travel Time (s)		93.3	11.7		15.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	17%	6%	1%	0%	0%	1%
Adj. Flow (vph)	74	69	380	0	0	261
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	143	380	0	261	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Stop		Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 51.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection Sign configuration not allowed in HCM analysis.

Intersection	
Int Delay, s/veh	0

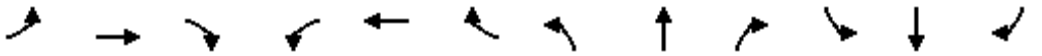
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	70	65	357	0	0	245
Future Vol, veh/h	70	65	357	0	0	245
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	17	6	1	0	0	1
Mvmt Flow	74	69	380	0	0	261

Major/Minor	Major1		Minor2	
Conflicting Flow All	0	0	217	0
Stage 1	-	-	0	-
Stage 2	-	-	217	-
Critical Hdwy	4.27	-	6.51	6.2
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	5.51	-
Follow-up Hdwy	2.353	-	4.009	3.3
Pot Cap-1 Maneuver	-	-	683	-
Stage 1	-	-	-	-
Stage 2	-	-	725	-
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	0	-
Mov Cap-2 Maneuver	-	-	0	-
Stage 1	-	-	0	-
Stage 2	-	-	0	-

Approach	EB	WB
HCM Control Delay, s		
HCM LOS		-

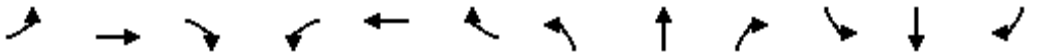
Minor Lane/Major Mvmt	EBL	EBTWBLn1	
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-

Existing Network 2021 PM



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	205	204	59	475	0	0	0	0	50	22	73
Future Volume (vph)	0	205	204	59	475	0	0	0	0	50	22	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected					0.995						0.967	
Satd. Flow (prot)	0	1743	1495	0	1782	0	0	0	0	0	1809	1170
Flt Permitted					0.995						0.967	
Satd. Flow (perm)	0	1743	1495	0	1782	0	0	0	0	0	1809	1170
Link Speed (mph)		40			40			30			45	
Link Distance (ft)		930			353			1253			1599	
Travel Time (s)		15.9			6.0			28.5			24.2	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	9%	8%	7%	6%	0%	0%	0%	0%	0%	5%	38%
Adj. Flow (vph)	0	220	219	63	511	0	0	0	0	54	24	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	220	219	0	574	0	0	0	0	0	78	78
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 54.8%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	205	204	59	475	0	0	0	0	50	22	73
Future Volume (vph)	0	205	204	59	475	0	0	0	0	50	22	73
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	0	220	219	63	511	0	0	0	0	54	24	78

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total (vph)	220	219	574	78	78
Volume Left (vph)	0	0	63	54	0
Volume Right (vph)	0	219	0	0	78
Hadj (s)	0.15	-0.46	0.13	0.16	0.05
Departure Headway (s)	4.9	3.2	4.5	5.9	3.2
Degree Utilization, x	0.30	0.19	0.72	0.13	0.07
Capacity (veh/h)	702	1121	776	551	1121
Control Delay (s)	10.0	7.0	18.4	9.7	6.4
Approach Delay (s)	8.5		18.4	8.1	
Approach LOS	A		C	A	

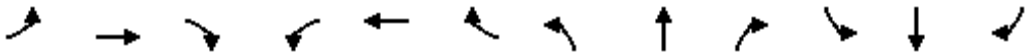
Intersection Summary				
Delay	13.3			
Level of Service	B			
Intersection Capacity Utilization	54.8%	ICU Level of Service	A	
Analysis Period (min)	15			

Intersection	
Intersection Delay, s/veh	25.6
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	205	204	59	475	0	0	0	0	50	22	73
Future Vol, veh/h	0	205	204	59	475	0	0	0	0	50	22	73
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	0	9	8	7	6	0	0	0	0	0	5	38
Mvmt Flow	0	220	219	63	511	0	0	0	0	54	24	78
Number of Lanes	0	1	1	0	1	0	0	0	0	0	1	1

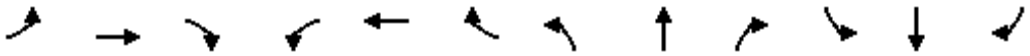
Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	2
HCM Control Delay	11	40.8	10.8
HCM LOS	B	E	B

Lane	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	0%	0%	11%	69%	0%
Vol Thru, %	100%	0%	89%	31%	0%
Vol Right, %	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	205	204	534	72	73
LT Vol	0	0	59	50	0
Through Vol	205	0	475	22	0
RT Vol	0	204	0	0	73
Lane Flow Rate	220	219	574	77	78
Geometry Grp	7	7	6	7	7
Degree of Util (X)	0.358	0.312	0.909	0.158	0.139
Departure Headway (Hd)	5.851	5.124	5.696	7.364	6.382
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	615	702	637	488	562
Service Time	3.578	2.85	3.716	5.104	4.121
HCM Lane V/C Ratio	0.358	0.312	0.901	0.158	0.139
HCM Control Delay	11.8	10.2	40.8	11.5	10.2
HCM Lane LOS	B	B	E	B	B
HCM 95th-tile Q	1.6	1.3	11.5	0.6	0.5



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	193	0	0	262	28	276	27	80	0	0	0
Future Volume (vph)	61	193	0	0	262	28	276	27	80	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Frt					0.987			0.969				
Flt Protected		0.988						0.965				
Satd. Flow (prot)	0	1729	0	0	1803	0	0	3137	0	0	0	0
Flt Permitted		0.988						0.965				
Satd. Flow (perm)	0	1729	0	0	1803	0	0	3137	0	0	0	0
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		353			1397			1065			1401	
Travel Time (s)		6.0			23.8			16.1			21.2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	26%	3%	0%	0%	4%	4%	9%	7%	3%	0%	0%	0%
Adj. Flow (vph)	64	201	0	0	273	29	288	28	83	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	265	0	0	302	0	0	399	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 54.3%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	61	193	0	0	262	28	276	27	80	0	0	0
Future Volume (vph)	61	193	0	0	262	28	276	27	80	0	0	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	64	201	0	0	273	29	288	28	83	0	0	0

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total (vph)	265	302	302	97
Volume Left (vph)	64	0	288	0
Volume Right (vph)	0	29	0	83
Hadj (s)	0.19	0.01	0.63	-0.54
Departure Headway (s)	5.8	5.6	6.7	5.5
Degree Utilization, x	0.43	0.47	0.56	0.15
Capacity (veh/h)	589	615	511	618
Control Delay (s)	13.1	13.4	16.9	8.3
Approach Delay (s)	13.1	13.4	14.8	
Approach LOS	B	B	B	

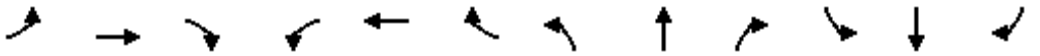
Intersection Summary			
Delay	13.9		
Level of Service	B		
Intersection Capacity Utilization	54.3%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	14.7
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	61	193	0	0	262	28	276	27	80	0	0	0
Future Vol, veh/h	61	193	0	0	262	28	276	27	80	0	0	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	26	3	0	0	4	4	9	7	3	0	0	0
Mvmt Flow	64	201	0	0	273	29	288	28	83	0	0	0
Number of Lanes	0	1	0	0	1	0	0	2	0	0	0	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	1
HCM Control Delay	14.1	13.5	15.9
HCM LOS	B	B	C

Lane	NBLn1	NBLn2	EBLn1	WBLn1
Vol Left, %	95%	0%	24%	0%
Vol Thru, %	5%	14%	76%	90%
Vol Right, %	0%	86%	0%	10%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	290	94	254	290
LT Vol	276	0	61	0
Through Vol	14	14	193	262
RT Vol	0	80	0	28
Lane Flow Rate	302	97	265	302
Geometry Grp	7	7	2	2
Degree of Util (X)	0.566	0.152	0.449	0.47
Departure Headway (Hd)	6.76	5.635	6.112	5.602
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	534	636	590	643
Service Time	4.498	3.372	4.155	3.644
HCM Lane V/C Ratio	0.566	0.153	0.449	0.47
HCM Control Delay	18	9.4	14.1	13.5
HCM Lane LOS	C	A	B	B
HCM 95th-tile Q	3.5	0.5	2.3	2.5

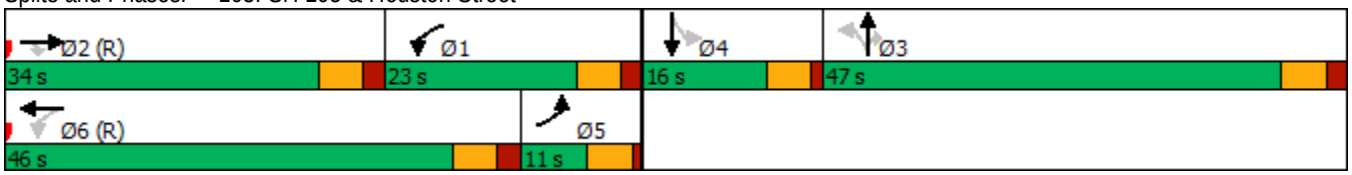


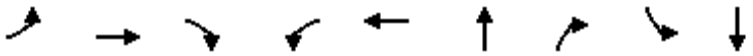
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	488	166	393	396	8	90	8	271	16	34	18
Future Volume (vph)	34	488	166	393	396	8	90	8	271	16	34	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	500		500	560		0	0		300	175		0
Storage Lanes	1		1	1		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt			0.850		0.997				0.850		0.949	
Flt Protected	0.950			0.950				0.956		0.950		
Satd. Flow (prot)	1805	1845	1599	1703	1789	0	0	1800	1538	1805	3295	0
Flt Permitted	0.950			0.333				0.703		0.476		
Satd. Flow (perm)	1805	1845	1599	597	1789	0	0	1324	1538	904	3295	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			182		1				277		18	
Link Speed (mph)		55			60			60			30	
Link Distance (ft)		1108			19133			2711			551	
Travel Time (s)		13.7			217.4			30.8			12.5	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	1%	6%	6%	0%	1%	0%	5%	0%	6%	0%
Adj. Flow (vph)	35	498	169	401	404	8	92	8	277	16	35	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	35	498	169	401	412	0	0	100	277	16	53	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			4			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			3			4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			2	6			3		3	4		
Detector Phase	5	2	2	1	6		3	3	3	4	4	
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		5.0	5.0	5.0	10.0	10.0	
Minimum Split (s)	11.0	16.0	16.0	11.0	16.0		11.0	11.0	11.0	16.0	16.0	
Total Split (s)	11.0	34.0	34.0	23.0	46.0		47.0	47.0	47.0	16.0	16.0	
Total Split (%)	9.2%	28.3%	28.3%	19.2%	38.3%		39.2%	39.2%	39.2%	13.3%	13.3%	
Maximum Green (s)	6.0	28.0	28.0	17.0	40.0		41.0	41.0	41.0	11.0	11.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	6.0	6.0	6.0	6.0			6.0	6.0	5.0	5.0	
Lead/Lag	Lag	Lead	Lead	Lag	Lead		Lag	Lag	Lag	Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	4.0	4.0	3.0	4.0		3.0	3.0	3.0	4.0	4.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	
Act Effct Green (s)	5.9	58.2	58.2	81.2	74.6			14.4	14.4	10.4	10.4	
Actuated g/C Ratio	0.05	0.48	0.48	0.68	0.62			0.12	0.12	0.09	0.09	
v/c Ratio	0.40	0.56	0.19	0.72	0.37			0.63	0.65	0.21	0.18	
Control Delay	68.6	27.1	3.1	30.2	15.3			66.9	12.8	57.4	37.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	
Total Delay	68.6	27.1	3.1	30.2	15.3			66.9	12.8	57.4	37.8	
LOS	E	C	A	C	B			E	B	E	D	
Approach Delay		23.4			22.6			27.2			42.3	
Approach LOS		C			C			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 24.5		Intersection LOS: C	
Intersection Capacity Utilization 74.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 103: SH 105 & Houston Street

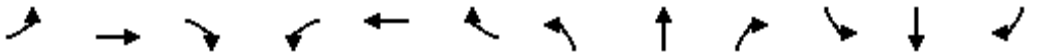




Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	35	498	169	401	412	100	277	16	53
v/c Ratio	0.40	0.56	0.19	0.72	0.37	0.63	0.65	0.21	0.18
Control Delay	68.6	27.1	3.1	30.2	15.3	66.9	12.8	57.4	37.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.6	27.1	3.1	30.2	15.3	66.9	12.8	57.4	37.8
Queue Length 50th (ft)	27	277	0	129	172	75	0	12	13
Queue Length 95th (ft)	62	435	36	#236	285	127	77	35	34
Internal Link Dist (ft)		1028			19053	2631			471
Turn Bay Length (ft)	500		500	560			300	175	
Base Capacity (vph)	90	895	869	560	1112	452	707	82	318
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	0.39	0.56	0.19	0.72	0.37	0.22	0.39	0.20	0.17

Intersection Summary

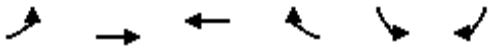
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	488	166	393	396	8	90	8	271	16	34	18
Future Volume (vph)	34	488	166	393	396	8	90	8	271	16	34	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0	6.0	6.0	6.0			6.0	6.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00			1.00	0.85	1.00	0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1805	1845	1599	1703	1789			1800	1538	1805	3296	
Flt Permitted	0.95	1.00	1.00	0.33	1.00			0.70	1.00	0.48	1.00	
Satd. Flow (perm)	1805	1845	1599	598	1789			1323	1538	905	3296	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	35	498	169	401	404	8	92	8	277	16	35	18
RTOR Reduction (vph)	0	0	91	0	0	0	0	0	244	0	17	0
Lane Group Flow (vph)	35	498	78	401	412	0	0	100	33	16	36	0
Heavy Vehicles (%)	0%	3%	1%	6%	6%	0%	1%	0%	5%	0%	6%	0%
Turn Type	Prot	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			3			4	
Permitted Phases			2	6			3		3	4		
Actuated Green, G (s)	3.6	55.2	55.2	80.2	71.6			14.4	14.4	8.4	8.4	
Effective Green, g (s)	3.6	55.2	55.2	80.2	71.6			14.4	14.4	8.4	8.4	
Actuated g/C Ratio	0.03	0.46	0.46	0.67	0.60			0.12	0.12	0.07	0.07	
Clearance Time (s)	5.0	6.0	6.0	6.0	6.0			6.0	6.0	5.0	5.0	
Vehicle Extension (s)	3.0	4.0	4.0	3.0	4.0			3.0	3.0	4.0	4.0	
Lane Grp Cap (vph)	54	848	735	574	1067			158	184	63	230	
v/s Ratio Prot	0.02	0.27		c0.11	0.23						0.01	
v/s Ratio Perm			0.05	c0.36				c0.08	0.02	c0.02		
v/c Ratio	0.65	0.59	0.11	0.70	0.39			0.63	0.18	0.25	0.16	
Uniform Delay, d1	57.6	24.0	18.4	25.0	12.7			50.3	47.5	52.8	52.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	1.00	
Incremental Delay, d2	23.7	3.0	0.3	3.7	1.1			8.0	0.5	2.9	0.4	
Delay (s)	81.3	26.9	18.7	28.7	13.7			58.3	48.0	55.7	52.9	
Level of Service	F	C	B	C	B			E	D	E	D	
Approach Delay (s)		27.7			21.1			50.7			53.6	
Approach LOS		C			C			D			D	

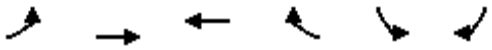
Intersection Summary			
HCM 2000 Control Delay	30.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	23.0
Intersection Capacity Utilization	74.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology expects strict NEMA phasing.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	18	634	632	5	7	18
Future Volume (vph)	18	634	632	5	7	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.998		0.890	
Flt Protected		0.998			0.991	
Satd. Flow (prot)	0	1809	1757	0	1676	0
Flt Permitted		0.998			0.991	
Satd. Flow (perm)	0	1809	1757	0	1676	0
Link Speed (mph)		60	60		30	
Link Distance (ft)		19133	16491		682	
Travel Time (s)		217.4	187.4		15.5	
Peak Hour Factor	0.75	0.89	0.95	0.62	0.88	0.50
Heavy Vehicles (%)	0%	5%	8%	0%	0%	0%
Adj. Flow (vph)	24	712	665	8	8	36
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	736	673	0	44	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 57.9%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	18	634	632	5	7	18
Future Volume (Veh/h)	18	634	632	5	7	18
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.75	0.89	0.95	0.62	0.88	0.50
Hourly flow rate (vph)	24	712	665	8	8	36
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	673				1429	669
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	673				1429	669
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				95	92
cM capacity (veh/h)	927				146	461

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	736	673	44
Volume Left	24	0	8
Volume Right	0	8	36
cSH	927	1700	331
Volume to Capacity	0.03	0.40	0.13
Queue Length 95th (ft)	2	0	11
Control Delay (s)	0.7	0.0	17.5
Lane LOS	A		C
Approach Delay (s)	0.7	0.0	17.5
Approach LOS			C

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	57.9%	ICU Level of Service	B
Analysis Period (min)	15		

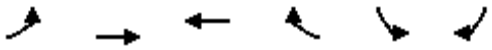
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	18	634	632	5	7	18
Future Vol, veh/h	18	634	632	5	7	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	89	95	62	88	50
Heavy Vehicles, %	0	5	8	0	0	0
Mvmt Flow	24	712	665	8	8	36

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	673	0	-	0	1429	669
Stage 1	-	-	-	-	669	-
Stage 2	-	-	-	-	760	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	927	-	-	-	150	461
Stage 1	-	-	-	-	513	-
Stage 2	-	-	-	-	465	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	927	-	-	-	144	461
Mov Cap-2 Maneuver	-	-	-	-	144	-
Stage 1	-	-	-	-	491	-
Stage 2	-	-	-	-	465	-

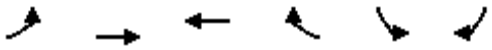
Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	17.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	927	-	-	-	330
HCM Lane V/C Ratio	0.026	-	-	-	0.133
HCM Control Delay (s)	9	0	-	-	17.6
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	218	985	839	304	51	82
Future Volume (vph)	218	985	839	304	51	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.960		0.917	
Flt Protected	0.950				0.981	
Satd. Flow (prot)	1787	3406	3271	0	1577	0
Flt Permitted	0.950				0.981	
Satd. Flow (perm)	1787	3406	3271	0	1577	0
Link Speed (mph)		65	65		30	
Link Distance (ft)		2030	1363		297	
Travel Time (s)		21.3	14.3		6.8	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	1%	6%	7%	3%	9%	8%
Adj. Flow (vph)	232	1048	893	323	54	87
Shared Lane Traffic (%)						
Lane Group Flow (vph)	232	1048	1216	0	141	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 62.9%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	218	985	839	304	51	82
Future Volume (Veh/h)	218	985	839	304	51	82
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	232	1048	893	323	54	87
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage veh)		2	2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1216				2042	608
vC1, stage 1 conf vol					1054	
vC2, stage 2 conf vol					988	
vCu, unblocked vol	1216				2042	608
tC, single (s)	4.1				7.0	7.1
tC, 2 stage (s)					6.0	
tF (s)	2.2				3.6	3.4
p0 queue free %	60				64	79
cM capacity (veh/h)	575				149	424

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1
Volume Total	232	524	524	595	621	141
Volume Left	232	0	0	0	0	54
Volume Right	0	0	0	0	323	87
cSH	575	1700	1700	1700	1700	249
Volume to Capacity	0.40	0.31	0.31	0.35	0.37	0.57
Queue Length 95th (ft)	49	0	0	0	0	79
Control Delay (s)	15.4	0.0	0.0	0.0	0.0	36.8
Lane LOS	C					E
Approach Delay (s)	2.8			0.0		36.8
Approach LOS						E

Intersection Summary			
Average Delay	3.3		
Intersection Capacity Utilization	62.9%	ICU Level of Service	B
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	218	985	839	304	51	82
Future Vol, veh/h	218	985	839	304	51	82
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	1	6	7	3	9	8
Mvmt Flow	232	1048	893	323	54	87

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1216	0	-	0	2043	608
Stage 1	-	-	-	-	1055	-
Stage 2	-	-	-	-	988	-
Critical Hdwy	4.12	-	-	-	6.98	7.06
Critical Hdwy Stg 1	-	-	-	-	5.98	-
Critical Hdwy Stg 2	-	-	-	-	5.98	-
Follow-up Hdwy	2.21	-	-	-	3.59	3.38
Pot Cap-1 Maneuver	575	-	-	-	~ 45	424
Stage 1	-	-	-	-	281	-
Stage 2	-	-	-	-	305	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	575	-	-	-	~ 27	424
Mov Cap-2 Maneuver	-	-	-	-	110	-
Stage 1	-	-	-	-	168	-
Stage 2	-	-	-	-	305	-

Approach	EB	WB	SB
HCM Control Delay, s	2.8	0	56.2
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	575	-	-	-	202
HCM Lane V/C Ratio	0.403	-	-	-	0.7
HCM Control Delay (s)	15.4	-	-	-	56.2
HCM Lane LOS	C	-	-	-	F
HCM 95th %tile Q(veh)	1.9	-	-	-	4.4

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	904	46	99	822	293	438
Future Volume (vph)	904	46	99	822	293	438
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	125		0	225
Storage Lanes		0	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.994					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1845	0	1770	1863	1787	1599
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1845	0	1770	1863	1787	1599
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	6					218
Link Speed (mph)	45			45	30	
Link Distance (ft)	1974			176	2080	
Travel Time (s)	29.9			2.7	47.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	10%	2%	2%	1%	1%
Adj. Flow (vph)	952	48	104	865	308	461
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1000	0	104	865	308	461
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane	Yes			Yes		
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	1
Detector Template	Thru		Left	Thru	Left	Right
Leading Detector (ft)	100		20	100	20	20
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	6		20	6	20	20
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Prot	NA	Prot	Perm
Protected Phases	2		1	6	8	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Permitted Phases						8
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	10.0		5.0	10.0	5.0	5.0
Minimum Split (s)	15.0		10.0	15.0	10.0	10.0
Total Split (s)	42.0		10.0	52.0	18.0	18.0
Total Split (%)	60.0%		14.3%	74.3%	25.7%	25.7%
Maximum Green (s)	37.0		5.0	47.0	13.0	13.0
Yellow Time (s)	4.0		4.0	4.0	4.0	4.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0		5.0	5.0	5.0	5.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	2.0		2.0	2.0	2.0	2.0
Recall Mode	C-Max		None	Max	None	None
Act Effct Green (s)	37.0		5.0	47.0	13.0	13.0
Actuated g/C Ratio	0.53		0.07	0.67	0.19	0.19
v/c Ratio	1.02		0.83	0.69	0.93	0.97
Control Delay	53.9		80.3	10.8	66.1	53.2
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	53.9		80.3	10.8	66.1	53.2
LOS	D		F	B	E	D
Approach Delay	53.9			18.2	58.4	
Approach LOS	D			B	E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay: 42.5		Intersection LOS: D	
Intersection Capacity Utilization 85.8%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 202: Waco Street & FM 1960

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	1000	104	865	308	461
v/c Ratio	1.02	0.83	0.69	0.93	0.97
Control Delay	53.9	80.3	10.8	66.1	53.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	53.9	80.3	10.8	66.1	53.2
Queue Length 50th (ft)	~430	45	191	132	108
Queue Length 95th (ft)	#691	#127	312	#273	#291
Internal Link Dist (ft)	1894		96	2000	
Turn Bay Length (ft)		125			225
Base Capacity (vph)	978	126	1250	331	474
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.02	0.83	0.69	0.93	0.97

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	904	46	99	822	293	438
Future Volume (vph)	904	46	99	822	293	438
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0		5.0	5.0	5.0	5.0
Lane Util. Factor	1.00		1.00	1.00	1.00	1.00
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	1844		1770	1863	1787	1599
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	1844		1770	1863	1787	1599
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	952	48	104	865	308	461
RTOR Reduction (vph)	3	0	0	0	0	178
Lane Group Flow (vph)	997	0	104	865	308	283
Heavy Vehicles (%)	2%	10%	2%	2%	1%	1%
Turn Type	NA		Prot	NA	Prot	Perm
Protected Phases	2		1	6	8	
Permitted Phases						8
Actuated Green, G (s)	37.0		5.0	47.0	13.0	13.0
Effective Green, g (s)	37.0		5.0	47.0	13.0	13.0
Actuated g/C Ratio	0.53		0.07	0.67	0.19	0.19
Clearance Time (s)	5.0		5.0	5.0	5.0	5.0
Vehicle Extension (s)	2.0		2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	974		126	1250	331	296
v/s Ratio Prot	c0.54		0.06	c0.46	0.17	
v/s Ratio Perm						c0.18
v/c Ratio	1.02		0.83	0.69	0.93	0.96
Uniform Delay, d1	16.5		32.1	7.1	28.1	28.2
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	35.0		32.3	3.2	31.6	40.2
Delay (s)	51.5		64.4	10.2	59.7	68.5
Level of Service	D		E	B	E	E
Approach Delay (s)	51.5			16.0	65.0	
Approach LOS	D			B	E	

Intersection Summary			
HCM 2000 Control Delay	42.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	85.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

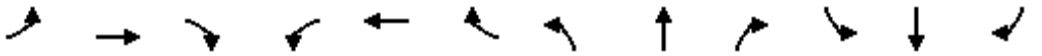
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	904	46	99	822	293	438
Future Volume (veh/h)	904	46	99	822	293	438
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1752	1870	1870	1885	1885
Adj Flow Rate, veh/h	952	48	104	865	308	461
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	10	2	2	1	1
Cap, veh/h	933	47	127	1256	333	297
Arrive On Green	0.53	0.53	0.07	0.67	0.19	0.19
Sat Flow, veh/h	1765	89	1781	1870	1795	1598
Grp Volume(v), veh/h	0	1000	104	865	308	461
Grp Sat Flow(s),veh/h/ln	0	1854	1781	1870	1795	1598
Q Serve(g_s), s	0.0	37.0	4.0	19.8	11.8	13.0
Cycle Q Clear(g_c), s	0.0	37.0	4.0	19.8	11.8	13.0
Prop In Lane		0.05	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	0	980	127	1256	333	297
V/C Ratio(X)	0.00	1.02	0.82	0.69	0.92	1.55
Avail Cap(c_a), veh/h	0	980	127	1256	333	297
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	16.5	32.0	7.0	28.0	28.5
Incr Delay (d2), s/veh	0.0	33.9	30.6	3.1	30.0	265.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	20.9	2.7	5.6	7.6	26.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	50.4	62.7	10.1	58.0	293.7
LnGrp LOS	A	F	E	B	E	F
Approach Vol, veh/h	1000			969	769	
Approach Delay, s/veh	50.4			15.8	199.3	
Approach LOS	D			B	F	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	10.0	42.0				52.0	18.0
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	5.0	37.0				47.0	13.0
Max Q Clear Time (g_c+I1), s	6.0	39.0				21.8	15.0
Green Ext Time (p_c), s	0.0	0.0				3.8	0.0

Intersection Summary	
HCM 6th Ctrl Delay	80.0
HCM 6th LOS	E

Notes

User approved ignoring U-Turning movement.

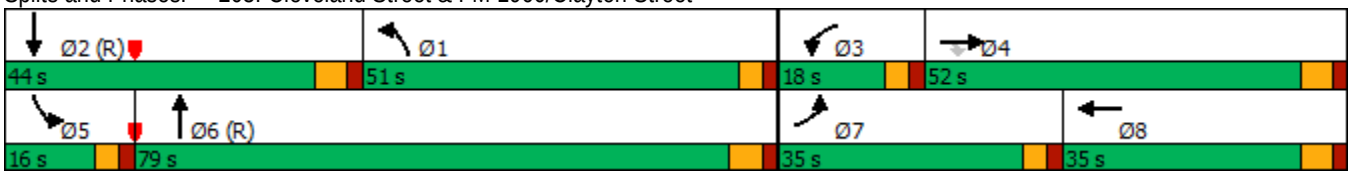


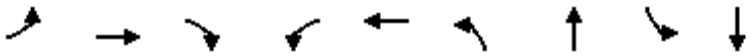
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	322	365	538	65	299	40	488	939	71	55	588	135
Future Volume (vph)	322	365	538	65	299	40	488	939	71	55	588	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	600		600	0		0	225		0	100		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.982			0.989			0.972	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	1900	1568	1517	1825	0	1736	3495	0	1805	3283	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1752	1900	1568	1517	1825	0	1736	3495	0	1805	3283	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			555		4			6			16	
Link Speed (mph)		35			35			55			45	
Link Distance (ft)		1871			1513			495			3038	
Travel Time (s)		36.4			29.5			6.1			46.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	3%	0%	3%	19%	2%	4%	4%	2%	4%	0%	8%	2%
Adj. Flow (vph)	332	376	555	67	308	41	503	968	73	57	606	139
Shared Lane Traffic (%)												
Lane Group Flow (vph)	332	376	555	67	349	0	503	1041	0	57	745	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		1	6		5	2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			4									
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0	10.0	6.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	16.0	16.0	11.0	16.0		15.0	16.0		15.0	16.0	
Total Split (s)	35.0	52.0	52.0	18.0	35.0		51.0	79.0		16.0	44.0	
Total Split (%)	21.2%	31.5%	31.5%	10.9%	21.2%		30.9%	47.9%		9.7%	26.7%	
Maximum Green (s)	30.0	46.0	46.0	13.0	29.0		46.0	73.0		11.0	38.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	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	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0		5.0	6.0		5.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	4.0	4.0	3.0	5.0		4.0	4.0		4.0	4.0	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	30.0	47.7	47.7	11.3	29.0		46.0	76.4		10.6	38.0	
Actuated g/C Ratio	0.18	0.29	0.29	0.07	0.18		0.28	0.46		0.06	0.23	
v/c Ratio	1.04	0.68	0.66	0.65	1.08		1.04	0.64		0.49	0.97	
Control Delay	125.4	59.9	7.4	102.1	132.9		108.3	36.7		89.3	86.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	125.4	59.9	7.4	102.1	132.9		108.3	36.7		89.3	86.7	
LOS	F	E	A	F	F		F	D		F	F	
Approach Delay		54.1			127.9			60.0			86.9	
Approach LOS		D			F			E			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 165			
Actuated Cycle Length: 165			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay: 70.5		Intersection LOS: E	
Intersection Capacity Utilization 101.9%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 203: Cleveland Street & FM 1960/Clayton Street



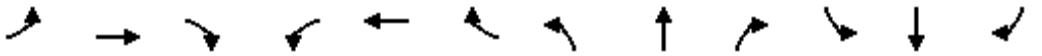


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	332	376	555	67	349	503	1041	57	745
v/c Ratio	1.04	0.68	0.66	0.65	1.08	1.04	0.64	0.49	0.97
Control Delay	125.4	59.9	7.4	102.1	132.9	108.3	36.7	89.3	86.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	125.4	59.9	7.4	102.1	132.9	108.3	36.7	89.3	86.7
Queue Length 50th (ft)	~386	366	0	71	~415	~584	463	61	416
Queue Length 95th (ft)	#594	494	106	129	#630	#819	543	113	#554
Internal Link Dist (ft)		1791			1433		415		2958
Turn Bay Length (ft)	600		600			225		100	
Base Capacity (vph)	318	549	847	119	324	483	1621	120	768
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	1.04	0.68	0.66	0.56	1.08	1.04	0.64	0.47	0.97

Intersection Summary

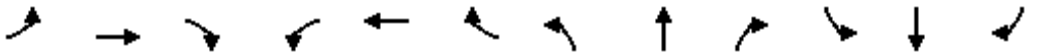
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	322	365	538	65	299	40	488	939	71	55	588	135
Future Volume (vph)	322	365	538	65	299	40	488	939	71	55	588	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0	6.0	5.0	6.0		5.0	6.0		5.0	6.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1752	1900	1568	1517	1826		1736	3497		1805	3283	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1752	1900	1568	1517	1826		1736	3497		1805	3283	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	332	376	555	67	308	41	503	968	73	57	606	139
RTOR Reduction (vph)	0	0	395	0	3	0	0	3	0	0	12	0
Lane Group Flow (vph)	332	376	160	67	346	0	503	1038	0	57	733	0
Heavy Vehicles (%)	3%	0%	3%	19%	2%	4%	4%	2%	4%	0%	8%	2%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases			4									
Actuated Green, G (s)	30.0	47.7	47.7	11.3	29.0		47.0	75.4		8.6	37.0	
Effective Green, g (s)	30.0	47.7	47.7	11.3	29.0		47.0	75.4		8.6	37.0	
Actuated g/C Ratio	0.18	0.29	0.29	0.07	0.18		0.28	0.46		0.05	0.22	
Clearance Time (s)	5.0	6.0	6.0	5.0	6.0		5.0	6.0		5.0	6.0	
Vehicle Extension (s)	3.0	4.0	4.0	3.0	5.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	318	549	453	103	320		494	1598		94	736	
v/s Ratio Prot	c0.19	0.20		0.04	c0.19		c0.29	0.30		0.03	c0.22	
v/s Ratio Perm			0.10									
v/c Ratio	1.04	0.68	0.35	0.65	1.08		1.02	0.65		0.61	1.00	
Uniform Delay, d1	67.5	52.0	46.5	74.9	68.0		59.0	34.6		76.5	63.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	62.4	3.8	0.7	13.8	73.4		45.2	2.1		12.1	32.1	
Delay (s)	129.9	55.8	47.1	88.7	141.4		104.2	36.7		88.7	96.0	
Level of Service	F	E	D	F	F		F	D		F	F	
Approach Delay (s)		71.5			132.9			58.6			95.5	
Approach LOS		E			F			E			F	

Intersection Summary			
HCM 2000 Control Delay	77.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	165.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	101.9%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	322	365	538	65	299	40	488	939	71	55	588	135
Future Volume (veh/h)	322	365	538	65	299	40	488	939	71	55	588	135
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1900	1856	1618	1870	1841	1841	1870	1841	1900	1781	1870
Adj Flow Rate, veh/h	332	376	555	67	308	41	503	968	73	57	606	139
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	0	3	19	2	4	4	2	4	0	8	2
Cap, veh/h	321	579	479	81	284	38	628	1803	136	102	630	144
Arrive On Green	0.18	0.30	0.30	0.05	0.18	0.18	0.36	0.54	0.54	0.06	0.23	0.23
Sat Flow, veh/h	1767	1900	1572	1541	1616	215	1753	3349	253	1810	2735	626
Grp Volume(v), veh/h	332	376	555	67	0	349	503	514	527	57	374	371
Grp Sat Flow(s),veh/h/ln	1767	1900	1572	1541	0	1832	1753	1777	1825	1810	1692	1669
Q Serve(g_s), s	30.0	28.3	50.3	7.1	0.0	29.0	42.6	31.0	31.0	5.1	36.1	36.2
Cycle Q Clear(g_c), s	30.0	28.3	50.3	7.1	0.0	29.0	42.6	31.0	31.0	5.1	36.1	36.2
Prop In Lane	1.00		1.00	1.00		0.12	1.00		0.14	1.00		0.38
Lane Grp Cap(c), veh/h	321	579	479	81	0	322	628	957	983	102	390	384
V/C Ratio(X)	1.03	0.65	1.16	0.82	0.00	1.08	0.80	0.54	0.54	0.56	0.96	0.96
Avail Cap(c_a), veh/h	321	579	479	121	0	322	628	957	983	121	390	384
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Uniform Delay (d), s/veh	67.5	49.7	57.4	77.4	0.0	68.0	47.6	24.7	24.7	75.9	62.8	62.8
Incr Delay (d2), s/veh	59.1	2.9	92.3	23.6	0.0	74.5	7.7	2.2	2.1	6.1	34.7	35.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.8	14.0	32.1	3.4	0.0	20.2	19.3	13.0	13.3	2.5	19.0	18.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	126.6	52.6	149.7	100.9	0.0	142.5	55.3	26.9	26.8	82.0	97.5	98.5
LnGrp LOS	F	D	F	F	A	F	E	C	C	F	F	F
Approach Vol, veh/h		1263			416			1544			802	
Approach Delay, s/veh		114.7			135.8			36.1			96.9	
Approach LOS		F			F			D			F	

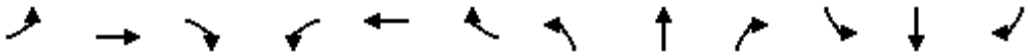
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	65.1	44.0	13.7	56.3	14.3	94.8	35.0	35.0
Change Period (Y+Rc), s	6.0	* 6	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	46.0	* 38	13.0	46.0	11.0	73.0	30.0	29.0
Max Q Clear Time (g_c+I1), s	44.6	38.2	9.1	52.3	7.1	33.0	32.0	31.0
Green Ext Time (p_c), s	0.4	0.0	0.0	0.0	0.0	10.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	83.2
HCM 6th LOS	F

Notes

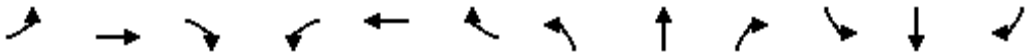
User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	567	58	175	193	3	85	220	391	21	182	41
Future Volume (vph)	32	567	58	175	193	3	85	220	391	21	182	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.999			0.924			0.977	
Flt Protected		0.997			0.977			0.994			0.996	
Satd. Flow (prot)	0	1867	1615	0	1809	0	0	1741	0	0	1823	0
Flt Permitted		0.997			0.977			0.994			0.996	
Satd. Flow (perm)	0	1867	1615	0	1809	0	0	1741	0	0	1823	0
Link Speed (mph)		45			30			30			30	
Link Distance (ft)		1513			1036			419			1496	
Travel Time (s)		22.9			23.5			9.5			34.0	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	10%	1%	0%	2%	3%	0%	2%	0%	0%	0%	1%	4%
Adj. Flow (vph)	33	579	59	179	197	3	87	224	399	21	186	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	612	59	0	379	0	0	710	0	0	249	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 118.4%		ICU Level of Service H	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	32	567	58	175	193	3	85	220	391	21	182	41
Future Volume (vph)	32	567	58	175	193	3	85	220	391	21	182	41
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	33	579	59	179	197	3	87	224	399	21	186	42

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total (vph)	612	59	379	710	249
Volume Left (vph)	33	0	179	87	21
Volume Right (vph)	0	59	3	399	42
Hadj (s)	0.05	-0.70	0.13	-0.31	-0.06
Departure Headway (s)	8.9	8.1	8.8	8.2	9.3
Degree Utilization, x	1.51	0.13	0.93	1.61	0.64
Capacity (veh/h)	413	438	400	444	373
Control Delay (s)	262.1	11.1	59.2	307.1	27.6
Approach Delay (s)	240.0		59.2	307.1	27.6
Approach LOS	F		F	F	D

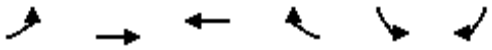
Intersection Summary				
Delay	203.3			
Level of Service	F			
Intersection Capacity Utilization	118.4%	ICU Level of Service	H	
Analysis Period (min)	15			

Intersection	
Intersection Delay, s/veh	214.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	567	58	175	193	3	85	220	391	21	182	41
Future Vol, veh/h	32	567	58	175	193	3	85	220	391	21	182	41
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles, %	10	1	0	2	3	0	2	0	0	0	1	4
Mvmt Flow	33	579	59	179	197	3	87	224	399	21	186	42
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0

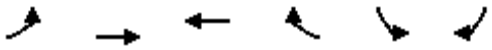
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	2
HCM Control Delay	255.2	73	314.6	36.2
HCM LOS	F	F	F	E

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	12%	5%	0%	47%	9%
Vol Thru, %	32%	95%	0%	52%	75%
Vol Right, %	56%	0%	100%	1%	17%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	696	599	58	371	244
LT Vol	85	32	0	175	21
Through Vol	220	567	0	193	182
RT Vol	391	0	58	3	41
Lane Flow Rate	710	611	59	379	249
Geometry Grp	2	7	7	5	2
Degree of Util (X)	1.621	1.528	0.133	0.935	0.644
Departure Headway (Hd)	9.418	10.666	9.74	12.024	12.742
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	391	348	370	307	286
Service Time	7.418	8.366	7.44	10.024	10.742
HCM Lane V/C Ratio	1.816	1.756	0.159	1.235	0.871
HCM Control Delay	314.6	278.6	13.9	73	36.2
HCM Lane LOS	F	F	B	F	E
HCM 95th-tile Q	36.1	29	0.5	9.1	4.1



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	12	980	430	0	0	41
Future Volume (vph)	12	980	430	0	0	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.865	
Flt Protected		0.999				
Satd. Flow (prot)	0	1880	1881	0	1644	0
Flt Permitted		0.999				
Satd. Flow (perm)	0	1880	1881	0	1644	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		1036	1081		1292	
Travel Time (s)		15.7	16.4		29.4	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	1%	1%	0%	0%	0%
Adj. Flow (vph)	13	1101	483	0	0	46
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1114	483	0	46	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 71.2%		ICU Level of Service C	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	12	980	430	0	0	41
Future Volume (Veh/h)	12	980	430	0	0	41
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	13	1101	483	0	0	46
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	483				1610	483
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	483				1610	483
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				100	92
cM capacity (veh/h)	1090				115	588

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	1114	483	46
Volume Left	13	0	0
Volume Right	0	0	46
cSH	1090	1700	588
Volume to Capacity	0.01	0.28	0.08
Queue Length 95th (ft)	1	0	6
Control Delay (s)	0.4	0.0	11.6
Lane LOS	A		B
Approach Delay (s)	0.4	0.0	11.6
Approach LOS			B

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	71.2%	ICU Level of Service	C
Analysis Period (min)	15		

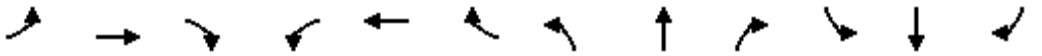
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	12	980	430	0	0	41
Future Vol, veh/h	12	980	430	0	0	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	1	1	0	0	0
Mvmt Flow	13	1101	483	0	0	46

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	483	0	-	0	1610	483
Stage 1	-	-	-	-	483	-
Stage 2	-	-	-	-	1127	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1090	-	-	-	116	588
Stage 1	-	-	-	-	625	-
Stage 2	-	-	-	-	312	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1090	-	-	-	112	588
Mov Cap-2 Maneuver	-	-	-	-	112	-
Stage 1	-	-	-	-	606	-
Stage 2	-	-	-	-	312	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	11.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1090	-	-	-	588
HCM Lane V/C Ratio	0.012	-	-	-	0.078
HCM Control Delay (s)	8.3	0	-	-	11.6
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.3

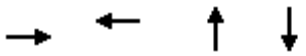


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	103	26	27	15	38	81	27	1184	26	17	757	36
Future Volume (vph)	103	26	27	15	38	81	27	1184	26	17	757	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.977			0.918			0.997			0.993	
Flt Protected		0.968			0.994			0.999			0.999	
Satd. Flow (prot)	0	1785	0	0	1676	0	0	3463	0	0	3391	0
Flt Permitted		0.734			0.956			0.922			0.912	
Satd. Flow (perm)	0	1354	0	0	1612	0	0	3196	0	0	3096	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			55			5			11	
Link Speed (mph)		30			30			45			55	
Link Distance (ft)		594			763			3038			1923	
Travel Time (s)		13.5			17.3			46.0			23.8	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	1%	0%	0%	20%	0%	2%	0%	4%	0%	0%	6%	0%
Adj. Flow (vph)	111	28	29	16	41	87	29	1273	28	18	814	39
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	168	0	0	144	0	0	1330	0	0	871	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4			8			6			2		
Detector Phase	4	4		8	8		6	6		2	2	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	5.0	5.0		5.0	5.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	11.0		24.0	24.0		16.0	16.0		16.0	16.0	
Total Split (s)	24.0	24.0		24.0	24.0		46.0	46.0		46.0	46.0	
Total Split (%)	34.3%	34.3%		34.3%	34.3%		65.7%	65.7%		65.7%	65.7%	
Maximum Green (s)	18.0	18.0		18.0	18.0		40.0	40.0		40.0	40.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		4.0	4.0		4.0	4.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				13.0	13.0							
Pedestrian Calls (#/hr)				0	0							
Act Effct Green (s)		12.2			12.2			45.8			45.8	
Actuated g/C Ratio		0.17			0.17			0.65			0.65	
v/c Ratio		0.68			0.44			0.64			0.43	
Control Delay		38.1			19.7			9.8			7.3	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		38.1			19.7			9.8			7.3	
LOS		D			B			A			A	
Approach Delay		38.1			19.7			9.8			7.3	
Approach LOS		D			B			A			A	

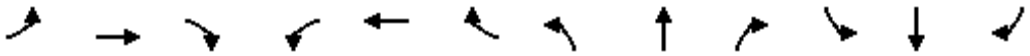
Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 11.4		Intersection LOS: B	
Intersection Capacity Utilization 78.3%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 206: Cleveland Street & Linney Street



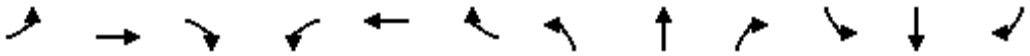
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	168	144	1330	871
v/c Ratio	0.68	0.44	0.64	0.43
Control Delay	38.1	19.7	9.8	7.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	38.1	19.7	9.8	7.3
Queue Length 50th (ft)	63	34	151	79
Queue Length 95th (ft)	111	74	274	147
Internal Link Dist (ft)	514	683	2958	1843
Turn Bay Length (ft)				
Base Capacity (vph)	358	455	2094	2031
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.47	0.32	0.64	0.43

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	103	26	27	15	38	81	27	1184	26	17	757	36
Future Volume (vph)	103	26	27	15	38	81	27	1184	26	17	757	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0			6.0			6.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frt		0.98			0.92			1.00			0.99	
Flt Protected		0.97			0.99			1.00			1.00	
Satd. Flow (prot)		1785			1678			3462			3392	
Flt Permitted		0.73			0.96			0.92			0.91	
Satd. Flow (perm)		1354			1612			3195			3097	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	111	28	29	16	41	87	29	1273	28	18	814	39
RTOR Reduction (vph)	0	12	0	0	45	0	0	2	0	0	4	0
Lane Group Flow (vph)	0	156	0	0	99	0	0	1328	0	0	867	0
Heavy Vehicles (%)	1%	0%	0%	20%	0%	2%	0%	4%	0%	0%	6%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4			8			6			2		
Actuated Green, G (s)		12.2			12.2			45.8			45.8	
Effective Green, g (s)		12.2			12.2			45.8			45.8	
Actuated g/C Ratio		0.17			0.17			0.65			0.65	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Vehicle Extension (s)		2.0			2.0			4.0			4.0	
Lane Grp Cap (vph)		235			280			2090			2026	
v/s Ratio Prot												
v/s Ratio Perm		c0.12			0.06			c0.42			0.28	
v/c Ratio		0.67			0.35			0.64			0.43	
Uniform Delay, d1		27.0			25.4			7.2			5.8	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		5.4			0.3			1.5			0.7	
Delay (s)		32.4			25.7			8.6			6.5	
Level of Service		C			C			A			A	
Approach Delay (s)		32.4			25.7			8.6			6.5	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	10.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	78.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	26	27	15	38	81	27	1184	26	17	757	36
Future Volume (veh/h)	103	26	27	15	38	81	27	1184	26	17	757	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1900	1604	1900	1870	1900	1841	1900	1900	1811	1900
Adj Flow Rate, veh/h	111	28	29	16	41	87	29	1273	28	18	814	39
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	0	0	20	0	2	0	4	0	0	6	0
Cap, veh/h	216	43	36	72	82	149	78	2291	50	70	2185	103
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.69	0.69	0.69	0.69	0.69	0.69
Sat Flow, veh/h	933	303	258	107	586	1058	35	3330	73	24	3175	150
Grp Volume(v), veh/h	168	0	0	144	0	0	689	0	641	450	0	421
Grp Sat Flow(s),veh/h/ln	1494	0	0	1751	0	0	1775	0	1662	1728	0	1621
Q Serve(g_s), s	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.7	0.0	0.0	7.7
Cycle Q Clear(g_c), s	7.5	0.0	0.0	5.4	0.0	0.0	13.0	0.0	13.7	7.2	0.0	7.7
Prop In Lane	0.66		0.17	0.11		0.60	0.04		0.04	0.04		0.09
Lane Grp Cap(c), veh/h	295	0	0	303	0	0	1275	0	1144	1243	0	1116
V/C Ratio(X)	0.57	0.00	0.00	0.48	0.00	0.00	0.54	0.00	0.56	0.36	0.00	0.38
Avail Cap(c_a), veh/h	460	0	0	496	0	0	1275	0	1144	1243	0	1116
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.59	0.00	0.59	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.0	0.0	0.0	28.2	0.0	0.0	5.4	0.0	5.5	4.5	0.0	4.6
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.4	0.0	0.0	1.0	0.0	1.2	0.8	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	0.0	2.2	0.0	0.0	3.1	0.0	3.0	1.5	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.6	0.0	0.0	28.7	0.0	0.0	6.4	0.0	6.7	5.3	0.0	5.6
LnGrp LOS	C	A	A	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		168			144			1330			871	
Approach Delay, s/veh		29.6			28.7			6.6			5.5	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		54.2		15.8		54.2		15.8				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		40.0		18.0		40.0		18.0				
Max Q Clear Time (g_c+I1), s		9.7		9.5		15.7		7.4				
Green Ext Time (p_c), s		8.1		0.4		13.2		0.3				

Intersection Summary												
HCM 6th Ctrl Delay			9.0									
HCM 6th LOS			A									

Notes
User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.

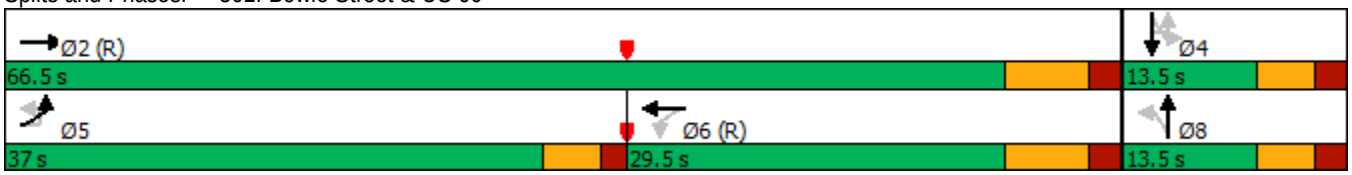
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	4	94	1432	26	5	1261	45	11	3	5	1	35
Future Volume (vph)	4	94	1432	26	5	1261	45	11	3	5	1	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		200		0	200		0	0		0		0
Storage Lanes		1		0	1		0	0		0		0
Taper Length (ft)		25			25			25				25
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00
Frt			0.997			0.995			0.961			
Flt Protected		0.950			0.950				0.972			
Satd. Flow (prot)	0	1734	5023	0	1805	4969	0	0	1462	0	0	0
Flt Permitted		0.125			0.178				0.535			
Satd. Flow (perm)	0	228	5023	0	338	4969	0	0	804	0	0	0
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			9			7			6			
Link Speed (mph)			55			50			30			
Link Distance (ft)			1682			1949			1310			
Travel Time (s)			20.9			26.6			29.8			
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	33%	3%	3%	0%	0%	4%	0%	25%	0%	25%	0%	0%
Adj. Flow (vph)	4	106	1609	29	6	1417	51	12	3	6	1	39
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	110	1638	0	6	1468	0	0	21	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left
Median Width(ft)			12			12			0			
Link Offset(ft)			0			0			0			
Crosswalk Width(ft)			16			16			16			
Two way Left Turn Lane			Yes			Yes						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	9	15
Number of Detectors	1	1	2		1	2		1	2		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Left
Leading Detector (ft)	20	20	100		20	100		20	100		20	20
Trailing Detector (ft)	0	0	0		0	0		0	0		0	0
Detector 1 Position(ft)	0	0	0		0	0		0	0		0	0
Detector 1 Size(ft)	20	20	6		20	6		20	6		20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94			94			
Detector 2 Size(ft)			6			6			6			
Detector 2 Type			Cl+Ex			Cl+Ex			Cl+Ex			
Detector 2 Channel												
Detector 2 Extend (s)			0.0			0.0			0.0			
Turn Type	custom	Prot	NA		Perm	NA		Perm	NA		Perm	Perm
Protected Phases		5	2			6			8			

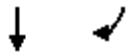
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	8	116
Future Volume (vph)	8	116
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.902	
Flt Protected	0.989	
Satd. Flow (prot)	1671	0
Flt Permitted	0.917	
Satd. Flow (perm)	1549	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	130	
Link Speed (mph)	30	
Link Distance (ft)	2374	
Travel Time (s)	54.0	
Peak Hour Factor	0.89	0.89
Heavy Vehicles (%)	0%	2%
Adj. Flow (vph)	9	130
Shared Lane Traffic (%)		
Lane Group Flow (vph)	179	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	4	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Permitted Phases	5				6			8			4	4
Detector Phase	5	5	2		6	6		8	8		4	4
Switch Phase												
Minimum Initial (s)	8.0	8.0	10.0		10.0	10.0		8.0	8.0		8.0	8.0
Minimum Split (s)	13.0	13.0	17.0		22.5	22.5		13.5	13.5		13.5	13.5
Total Split (s)	37.0	37.0	66.5		29.5	29.5		13.5	13.5		13.5	13.5
Total Split (%)	46.3%	46.3%	83.1%		36.9%	36.9%		16.9%	16.9%		16.9%	16.9%
Maximum Green (s)	32.0	32.0	59.5		22.5	22.5		8.0	8.0		8.0	8.0
Yellow Time (s)	3.5	3.5	5.0		5.0	5.0		3.5	3.5		3.5	3.5
All-Red Time (s)	1.5	1.5	2.0		2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0			0.0			
Total Lost Time (s)		5.0	7.0		7.0	7.0			5.5			
Lead/Lag	Lead	Lead			Lag	Lag						
Lead-Lag Optimize?	Yes	Yes			Yes	Yes						
Vehicle Extension (s)	5.0	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Recall Mode	None	None	C-Max		C-Max	C-Max		None	None		None	None
Act Effct Green (s)		32.0	59.5		22.5	22.5			8.0			
Actuated g/C Ratio		0.40	0.74		0.28	0.28			0.10			
v/c Ratio		1.21	0.44		0.06	1.05			0.25			
Control Delay		190.1	4.3		23.2	67.0			34.6			
Queue Delay		0.0	0.0		0.0	0.0			0.0			
Total Delay		190.1	4.3		23.2	67.0			34.6			
LOS		F	A		C	E			C			
Approach Delay			16.0			66.8			34.6			
Approach LOS			B			E			C			

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.21			
Intersection Signal Delay: 38.5		Intersection LOS: D	
Intersection Capacity Utilization 62.5%		ICU Level of Service B	
Analysis Period (min) 15			

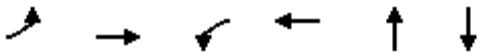
Splits and Phases: 301: Bowie Street & US 90





Lane Group	SBT	SBR
Permitted Phases		
Detector Phase	4	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	13.5	
Total Split (s)	13.5	
Total Split (%)	16.9%	
Maximum Green (s)	8.0	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	5.0	
Recall Mode	None	
Act Effct Green (s)	8.0	
Actuated g/C Ratio	0.10	
v/c Ratio	0.66	
Control Delay	24.8	
Queue Delay	0.0	
Total Delay	24.8	
LOS	C	
Approach Delay	24.8	
Approach LOS	C	

Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	110	1638	6	1468	21	179
v/c Ratio	1.21	0.44	0.06	1.05	0.25	0.66
Control Delay	190.1	4.3	23.2	67.0	34.6	24.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	190.1	4.3	23.2	67.0	34.6	24.8
Queue Length 50th (ft)	~68	89	2	~296	7	23
Queue Length 95th (ft)	#164	108	11	#381	29	#99
Internal Link Dist (ft)		1602		1869	1230	2294
Turn Bay Length (ft)	200		200			
Base Capacity (vph)	91	3738	95	1402	85	271
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	1.21	0.44	0.06	1.05	0.25	0.66

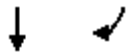
Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	4	94	1432	26	5	1261	45	11	3	5	1	35
Future Volume (vph)	4	94	1432	26	5	1261	45	11	3	5	1	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	7.0		7.0	7.0			5.5			
Lane Util. Factor		1.00	0.91		1.00	0.91			1.00			
Frt		1.00	1.00		1.00	0.99			0.96			
Flt Protected		0.95	1.00		0.95	1.00			0.97			
Satd. Flow (prot)		1734	5025		1805	4968			1463			
Flt Permitted		0.12	1.00		0.18	1.00			0.53			
Satd. Flow (perm)		228	5025		338	4968			805			
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	4	106	1609	29	6	1417	51	12	3	6	1	39
RTOR Reduction (vph)	0	0	2	0	0	5	0	0	5	0	0	0
Lane Group Flow (vph)	0	110	1636	0	6	1463	0	0	16	0	0	0
Heavy Vehicles (%)	33%	3%	3%	0%	0%	4%	0%	25%	0%	25%	0%	0%
Turn Type	custom	Prot	NA		Perm	NA		Perm	NA		Perm	Perm
Protected Phases		5	2			6			8			
Permitted Phases	5				6			8			4	4
Actuated Green, G (s)		32.0	59.5		22.5	22.5			8.0			
Effective Green, g (s)		32.0	59.5		22.5	22.5			8.0			
Actuated g/C Ratio		0.40	0.74		0.28	0.28			0.10			
Clearance Time (s)		5.0	7.0		7.0	7.0			5.5			
Vehicle Extension (s)		5.0	5.0		5.0	5.0			5.0			
Lane Grp Cap (vph)		91	3737		95	1397			80			
v/s Ratio Prot			0.33			c0.29						
v/s Ratio Perm		c0.48			0.02				0.02			
v/c Ratio		1.21	0.44		0.06	1.05			0.20			
Uniform Delay, d1		24.0	3.9		21.0	28.8			33.0			
Progression Factor		1.00	1.00		1.00	1.00			1.00			
Incremental Delay, d2		160.8	0.4		1.3	37.5			2.5			
Delay (s)		184.8	4.3		22.3	66.2			35.5			
Level of Service		F	A		C	E			D			
Approach Delay (s)			15.6			66.0			35.5			
Approach LOS			B			E			D			

Intersection Summary			
HCM 2000 Control Delay	38.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	8	116
Future Volume (vph)	8	116
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.5	
Lane Util. Factor	1.00	
Frt	0.90	
Flt Protected	0.99	
Satd. Flow (prot)	1671	
Flt Permitted	0.92	
Satd. Flow (perm)	1549	
Peak-hour factor, PHF	0.89	0.89
Adj. Flow (vph)	9	130
RTOR Reduction (vph)	117	0
Lane Group Flow (vph)	62	0
Heavy Vehicles (%)	0%	2%
Turn Type	NA	
Protected Phases	4	
Permitted Phases		
Actuated Green, G (s)	8.0	
Effective Green, g (s)	8.0	
Actuated g/C Ratio	0.10	
Clearance Time (s)	5.5	
Vehicle Extension (s)	5.0	
Lane Grp Cap (vph)	154	
v/s Ratio Prot		
v/s Ratio Perm	c0.04	
v/c Ratio	0.40	
Uniform Delay, d1	33.8	
Progression Factor	1.00	
Incremental Delay, d2	3.6	
Delay (s)	37.3	
Level of Service	D	
Approach Delay (s)	37.3	
Approach LOS	D	

Intersection Summary

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (veh/h)	4	94	1432	26	5	1261	45	11	3	5	1	35
Future Volume (veh/h)	4	94	1432	26	5	1261	45	11	3	5	1	35
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0		0
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00	1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
Work Zone On Approach			No			No			No			
Adj Sat Flow, veh/h/ln		1856	1856	1900	1900	1841	1900	1530	1900	1530		1900
Adj Flow Rate, veh/h		106	1609	29	6	1417	51	12	3	6		39
Peak Hour Factor		0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89		0.89
Percent Heavy Veh, %		3	3	0	0	4	0	25	0	25		0
Cap, veh/h		160	3811	69	274	2941	106	135	40	42		82
Arrive On Green		0.09	0.74	0.74	0.59	0.59	0.59	0.10	0.10	0.10		0.10
Sat Flow, veh/h		1767	5124	92	311	4979	179	647	396	417		275
Grp Volume(v), veh/h		106	1060	578	6	953	515	21	0	0		178
Grp Sat Flow(s),veh/h/ln		1767	1689	1839	311	1675	1808	1460	0	0		1599
Q Serve(g_s), s		4.6	9.4	9.4	0.6	13.0	13.0	0.0	0.0	0.0		6.4
Cycle Q Clear(g_c), s		4.6	9.4	9.4	0.6	13.0	13.0	0.8	0.0	0.0		8.0
Prop In Lane		1.00		0.05	1.00		0.10	0.57		0.29		0.22
Lane Grp Cap(c), veh/h		160	2512	1368	274	1979	1068	217	0	0		215
V/C Ratio(X)		0.66	0.42	0.42	0.02	0.48	0.48	0.10	0.00	0.00		0.83
Avail Cap(c_a), veh/h		707	2512	1368	274	1979	1068	217	0	0		215
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
Upstream Filter(I)		1.00	1.00	1.00	0.83	0.83	0.83	1.00	0.00	0.00		1.00
Uniform Delay (d), s/veh		35.2	3.8	3.8	6.8	9.4	9.4	32.8	0.0	0.0		36.4
Incr Delay (d2), s/veh		9.6	0.5	1.0	0.1	0.7	1.3	0.4	0.0	0.0		25.0
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
%ile BackOfQ(50%),veh/ln		2.3	1.5	1.8	0.0	3.7	4.2	0.4	0.0	0.0		4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		44.8	4.4	4.8	7.0	10.1	10.7	33.2	0.0	0.0		61.4
LnGrp LOS		D	A	A	A	B	B	C	A	A		E
Approach Vol, veh/h			1744			1474			21			
Approach Delay, s/veh			7.0			10.3			33.2			
Approach LOS			A			B			C			

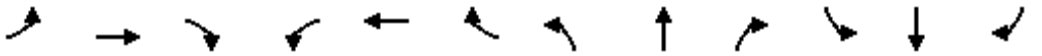
Timer - Assigned Phs	2		4	5	6		8					
Phs Duration (G+Y+Rc), s	66.5		13.5	12.2	54.3		13.5					
Change Period (Y+Rc), s	7.0		5.5	5.0	7.0		5.5					
Max Green Setting (Gmax), s	59.5		8.0	32.0	22.5		8.0					
Max Q Clear Time (g_c+I1), s	11.4		10.0	6.6	15.0		2.8					
Green Ext Time (p_c), s	29.4		0.0	0.6	6.3		0.0					

Intersection Summary												
HCM 6th Ctrl Delay		11.4										
HCM 6th LOS		B										

Notes

User approved ignoring U-Turning movement.

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	8	116
Future Volume (veh/h)	8	116
Initial Q (Qb), veh	0	0
Ped-Bike Adj(A_pbT)		1.00
Parking Bus, Adj	1.00	1.00
Work Zone On Approach	No	
Adj Sat Flow, veh/h/ln	1900	1870
Adj Flow Rate, veh/h	9	130
Peak Hour Factor	0.89	0.89
Percent Heavy Veh, %	0	2
Cap, veh/h	16	117
Arrive On Green	0.10	0.10
Sat Flow, veh/h	157	1168
Grp Volume(v), veh/h	0	0
Grp Sat Flow(s),veh/h/ln	0	0
Q Serve(g_s), s	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0
Prop In Lane		0.73
Lane Grp Cap(c), veh/h	0	0
V/C Ratio(X)	0.00	0.00
Avail Cap(c_a), veh/h	0	0
HCM Platoon Ratio	1.00	1.00
Upstream Filter(I)	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0
Unsig. Movement Delay, s/veh		
LnGrp Delay(d),s/veh	0.0	0.0
LnGrp LOS	A	A
Approach Vol, veh/h	178	
Approach Delay, s/veh	61.4	
Approach LOS	E	
Timer - Assigned Phs		

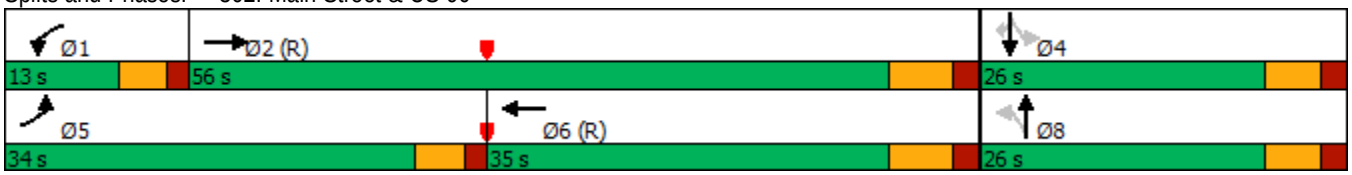


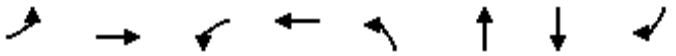
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	325	1092	11	12	868	42	14	24	33	122	22	325
Future Volume (vph)	325	1092	11	12	868	42	14	24	33	122	22	325
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	200		0	100		0	0		0
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.993			0.913				0.850
Flt Protected	0.950			0.950			0.950				0.959	
Satd. Flow (prot)	1805	4973	0	1626	4948	0	1641	1735	0	0	1822	1599
Flt Permitted	0.950			0.950			0.602				0.715	
Satd. Flow (perm)	1805	4973	0	1626	4948	0	1040	1735	0	0	1358	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			8			36				353
Link Speed (mph)		55			50			55			30	
Link Distance (ft)		1949			4264			1352			297	
Travel Time (s)		24.2			58.1			16.8			6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	13%	11%	4%	6%	10%	0%	0%	0%	0%	1%
Adj. Flow (vph)	353	1187	12	13	943	46	15	26	36	133	24	353
Shared Lane Traffic (%)												
Lane Group Flow (vph)	353	1199	0	13	989	0	15	62	0	0	157	353
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8			4		4
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	8.0	10.0		8.0	10.0		8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	13.0	16.5		13.0	16.5		14.0	14.0		14.0	14.0	14.0
Total Split (s)	34.0	56.0		13.0	35.0		26.0	26.0		26.0	26.0	26.0
Total Split (%)	35.8%	58.9%		13.7%	36.8%		27.4%	27.4%		27.4%	27.4%	27.4%
Maximum Green (s)	29.0	49.5		8.0	28.5		20.0	20.0		20.0	20.0	20.0
Yellow Time (s)	3.5	4.5		3.5	4.5		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.5	2.0		1.5	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)	5.0	6.5		5.0	6.5		6.0	6.0			6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.5	3.5		3.5	3.5		4.5	4.5		4.5	4.5	4.5
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
Act Effct Green (s)	23.6	62.8		8.0	36.8		17.1	17.1			17.1	17.1
Actuated g/C Ratio	0.25	0.66		0.08	0.39		0.18	0.18			0.18	0.18
v/c Ratio	0.79	0.36		0.10	0.52		0.08	0.18			0.64	0.61
Control Delay	46.0	8.7		42.0	24.9		31.6	17.7			48.0	8.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Delay	46.0	8.7		42.0	24.9		31.6	17.7			48.0	8.7
LOS	D	A		D	C		C	B			D	A
Approach Delay		17.1			25.1			20.4			20.8	
Approach LOS		B			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 95			
Actuated Cycle Length: 95			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 20.4		Intersection LOS: C	
Intersection Capacity Utilization 64.9%		ICU Level of Service C	
Analysis Period (min) 15			

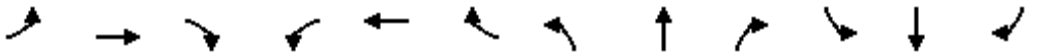
Splits and Phases: 302: Main Street & US 90





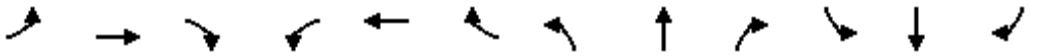
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	353	1199	13	989	15	62	157	353
v/c Ratio	0.79	0.36	0.10	0.52	0.08	0.18	0.64	0.61
Control Delay	46.0	8.7	42.0	24.9	31.6	17.7	48.0	8.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.0	8.7	42.0	24.9	31.6	17.7	48.0	8.7
Queue Length 50th (ft)	198	102	7	171	7	13	86	0
Queue Length 95th (ft)	280	194	26	235	25	47	151	73
Internal Link Dist (ft)		1869		4184		1272	217	
Turn Bay Length (ft)	150		200		100			
Base Capacity (vph)	551	3286	136	1919	218	393	285	615
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	0.64	0.36	0.10	0.52	0.07	0.16	0.55	0.57

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	325	1092	11	12	868	42	14	24	33	122	22	325
Future Volume (vph)	325	1092	11	12	868	42	14	24	33	122	22	325
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.5		5.0	6.5		6.0	6.0			6.0	6.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00			1.00	1.00
Frt	1.00	1.00		1.00	0.99		1.00	0.91			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.96	1.00
Satd. Flow (prot)	1805	4976		1626	4948		1641	1735			1823	1599
Flt Permitted	0.95	1.00		0.95	1.00		0.60	1.00			0.72	1.00
Satd. Flow (perm)	1805	4976		1626	4948		1040	1735			1359	1599
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	353	1187	12	13	943	46	15	26	36	133	24	353
RTOR Reduction (vph)	0	1	0	0	5	0	0	30	0	0	0	289
Lane Group Flow (vph)	353	1198	0	13	984	0	15	32	0	0	157	64
Heavy Vehicles (%)	0%	4%	13%	11%	4%	6%	10%	0%	0%	0%	0%	1%
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		4
Actuated Green, G (s)	23.6	58.8		1.6	36.8		17.1	17.1			17.1	17.1
Effective Green, g (s)	23.6	58.8		1.6	36.8		17.1	17.1			17.1	17.1
Actuated g/C Ratio	0.25	0.62		0.02	0.39		0.18	0.18			0.18	0.18
Clearance Time (s)	5.0	6.5		5.0	6.5		6.0	6.0			6.0	6.0
Vehicle Extension (s)	3.5	3.5		3.5	3.5		4.5	4.5			4.5	4.5
Lane Grp Cap (vph)	448	3079		27	1916		187	312			244	287
v/s Ratio Prot	c0.20	0.24		0.01	c0.20			0.02				
v/s Ratio Perm							0.01				c0.12	0.04
v/c Ratio	0.79	0.39		0.48	0.51		0.08	0.10			0.64	0.22
Uniform Delay, d1	33.4	9.1		46.3	22.3		32.4	32.5			36.1	33.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	9.2	0.4		15.1	1.0		0.3	0.3			7.0	0.7
Delay (s)	42.5	9.5		61.4	23.2		32.7	32.8			43.1	33.9
Level of Service	D	A		E	C		C	C			D	C
Approach Delay (s)		17.0			23.7			32.8			36.8	
Approach LOS		B			C			C			D	

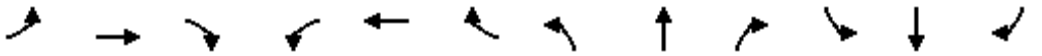
Intersection Summary			
HCM 2000 Control Delay	22.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	95.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	64.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	325	1092	11	12	868	42	14	24	33	122	22	325
Future Volume (veh/h)	325	1092	11	12	868	42	14	24	33	122	22	325
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1841	1707	1737	1841	1811	1752	1900	1900	1900	1900	1885
Adj Flow Rate, veh/h	353	1187	12	13	943	46	15	26	36	133	24	353
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	4	13	11	4	6	10	0	0	0	0	1
Cap, veh/h	397	2979	30	40	1893	92	155	152	210	288	45	336
Arrive On Green	0.22	0.58	0.58	0.02	0.39	0.39	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1810	5130	52	1654	4909	239	942	721	999	1037	214	1598
Grp Volume(v), veh/h	353	775	424	13	643	346	15	0	62	157	0	353
Grp Sat Flow(s),veh/h/ln	1810	1675	1831	1654	1675	1798	942	0	1720	1251	0	1598
Q Serve(g_s), s	18.0	12.0	12.0	0.7	13.9	13.9	1.4	0.0	2.8	9.2	0.0	20.0
Cycle Q Clear(g_c), s	18.0	12.0	12.0	0.7	13.9	13.9	13.4	0.0	2.8	12.0	0.0	20.0
Prop In Lane	1.00		0.03	1.00		0.13	1.00		0.58	0.85		1.00
Lane Grp Cap(c), veh/h	397	1946	1064	40	1292	693	155	0	362	333	0	336
V/C Ratio(X)	0.89	0.40	0.40	0.32	0.50	0.50	0.10	0.00	0.17	0.47	0.00	1.05
Avail Cap(c_a), veh/h	552	1946	1064	139	1292	693	155	0	362	333	0	336
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.90	0.90	0.91	0.91	0.91	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.9	10.9	10.9	45.6	22.2	22.2	40.5	0.0	30.7	35.4	0.0	37.5
Incr Delay (d2), s/veh	12.2	0.6	1.0	4.9	1.2	2.3	0.5	0.0	0.4	1.8	0.0	62.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	3.7	4.2	0.3	5.2	5.8	0.3	0.0	1.1	3.5	0.0	13.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.1	11.4	11.9	50.5	23.4	24.5	41.0	0.0	31.1	37.1	0.0	100.1
LnGrp LOS	D	B	B	D	C	C	D	A	C	D	A	F
Approach Vol, veh/h		1552			1002			77			510	
Approach Delay, s/veh		19.9			24.2			33.0			80.7	
Approach LOS		B			C			C			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.3	61.7		26.0	25.9	43.1		26.0				
Change Period (Y+Rc), s	5.0	6.5		6.0	5.0	6.5		6.0				
Max Green Setting (Gmax), s	8.0	49.5		20.0	29.0	28.5		20.0				
Max Q Clear Time (g_c+I1), s	2.7	14.0		22.0	20.0	15.9		15.4				
Green Ext Time (p_c), s	0.0	10.3		0.0	0.9	5.4		0.1				

Intersection Summary												
HCM 6th Ctrl Delay			31.5									
HCM 6th LOS			C									

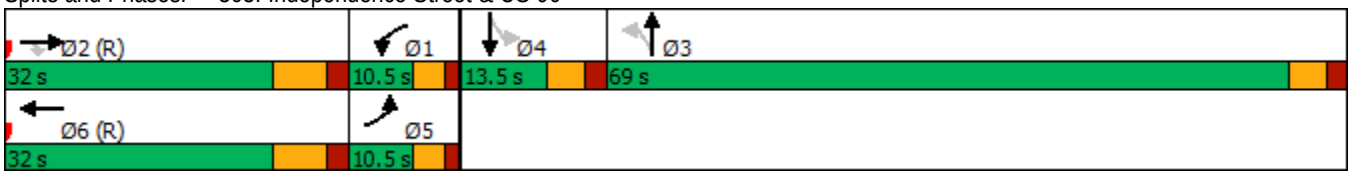


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	1017	207	66	798	35	176	53	144	9	68	20
Future Volume (vph)	35	1017	207	66	798	35	176	53	144	9	68	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	130		0	100		0	0		0
Storage Lanes	1		1	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.994			0.890			0.972	
Flt Protected	0.950			0.950			0.950				0.995	
Satd. Flow (prot)	1805	3471	1599	1805	4920	0	1752	1642	0	0	1787	0
Flt Permitted	0.950			0.950			0.687				0.273	
Satd. Flow (perm)	1805	3471	1599	1805	4920	0	1267	1642	0	0	490	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			153		5			159			8	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		4264			1976			555			937	
Travel Time (s)		64.6			29.9			12.6			21.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	4%	1%	0%	5%	0%	3%	3%	3%	0%	2%	7%
Adj. Flow (vph)	39	1130	230	73	887	39	196	59	160	10	76	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	39	1130	230	73	926	0	196	219	0	0	108	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			3			4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			2				3			4		
Detector Phase	5	2	2	1	6		3	3		4	4	
Switch Phase												
Minimum Initial (s)	6.0	10.0	10.0	6.0	10.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	10.5	17.0	17.0	10.5	17.0		13.5	13.5		13.5	13.5	
Total Split (s)	10.5	32.0	32.0	10.5	32.0		69.0	69.0		13.5	13.5	
Total Split (%)	8.4%	25.6%	25.6%	8.4%	25.6%		55.2%	55.2%		10.8%	10.8%	
Maximum Green (s)	6.0	25.0	25.0	6.0	25.0		63.5	63.5		8.0	8.0	
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.5	2.0	2.0	1.5	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	4.5	7.0	7.0	4.5	7.0		5.5	5.5			5.5	
Lead/Lag	Lag	Lead	Lead	Lag	Lead		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.5	5.0	5.0	3.5	5.0		3.5	3.5		3.5	3.5	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Act Effct Green (s)	6.0	61.9	61.9	6.0	64.0		26.6	26.6			8.0	
Actuated g/C Ratio	0.05	0.50	0.50	0.05	0.51		0.21	0.21			0.06	
v/c Ratio	0.45	0.66	0.26	0.85	0.37		0.73	0.46			2.84	
Control Delay	74.9	27.4	8.3	120.8	20.5		60.3	14.7			915.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Delay	74.9	27.4	8.3	120.8	20.5		60.3	14.7			915.9	
LOS	E	C	A	F	C		E	B			F	
Approach Delay		25.6			27.8			36.3			915.9	
Approach LOS		C			C			D			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 125			
Actuated Cycle Length: 125			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 2.84			
Intersection Signal Delay: 60.8		Intersection LOS: E	
Intersection Capacity Utilization 63.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 303: Independence Street & US 90

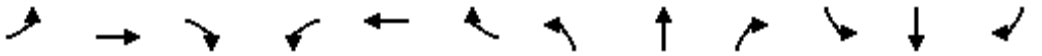


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	39	1130	230	73	926	196	219	108
v/c Ratio	0.45	0.66	0.26	0.85	0.37	0.73	0.46	2.84
Control Delay	74.9	27.4	8.3	120.8	20.5	60.3	14.7	915.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.9	27.4	8.3	120.8	20.5	60.3	14.7	915.9
Queue Length 50th (ft)	31	345	32	60	163	150	40	~144
Queue Length 95th (ft)	70	510	97	#151	238	210	101	#267
Internal Link Dist (ft)		4184			1896		475	857
Turn Bay Length (ft)	200			130		100		
Base Capacity (vph)	86	1719	869	86	2522	643	912	38
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	0.45	0.66	0.26	0.85	0.37	0.30	0.24	2.84

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

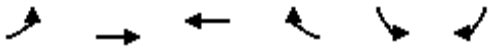
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



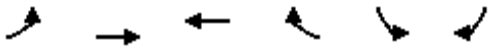
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	1017	207	66	798	35	176	53	144	9	68	20
Future Volume (vph)	35	1017	207	66	798	35	176	53	144	9	68	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	7.0	7.0	4.5	7.0		5.5	5.5			5.5	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91		1.00	1.00			1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.89			0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1805	3471	1599	1805	4919		1752	1643			1789	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.69	1.00			0.27	
Satd. Flow (perm)	1805	3471	1599	1805	4919		1268	1643			491	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	39	1130	230	73	887	39	196	59	160	10	76	22
RTOR Reduction (vph)	0	0	78	0	2	0	0	125	0	0	7	0
Lane Group Flow (vph)	39	1130	152	73	924	0	196	94	0	0	101	0
Heavy Vehicles (%)	0%	4%	1%	0%	5%	0%	3%	3%	3%	0%	2%	7%
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			3			4	
Permitted Phases			2				3			4		
Actuated Green, G (s)	4.8	61.0	61.0	6.9	63.1		26.6	26.6			8.0	
Effective Green, g (s)	4.8	61.0	61.0	6.9	63.1		26.6	26.6			8.0	
Actuated g/C Ratio	0.04	0.49	0.49	0.06	0.50		0.21	0.21			0.06	
Clearance Time (s)	4.5	7.0	7.0	4.5	7.0		5.5	5.5			5.5	
Vehicle Extension (s)	3.5	5.0	5.0	3.5	5.0		3.5	3.5			3.5	
Lane Grp Cap (vph)	69	1693	780	99	2483		269	349			31	
v/s Ratio Prot	0.02	c0.33		c0.04	0.19			0.06				
v/s Ratio Perm			0.09				c0.15				c0.20	
v/c Ratio	0.57	0.67	0.19	0.74	0.37		0.73	0.27			3.24	
Uniform Delay, d1	59.1	24.3	18.1	58.2	18.9		45.8	41.1			58.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	11.0	2.1	0.6	25.3	0.4		9.8	0.5			1087.0	
Delay (s)	70.1	26.4	18.7	83.5	19.3		55.6	41.6			1145.5	
Level of Service	E	C	B	F	B		E	D			F	
Approach Delay (s)		26.3			24.0			48.2			1145.5	
Approach LOS		C			C			D			F	

Intersection Summary			
HCM 2000 Control Delay	70.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	63.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology expects strict NEMA phasing.



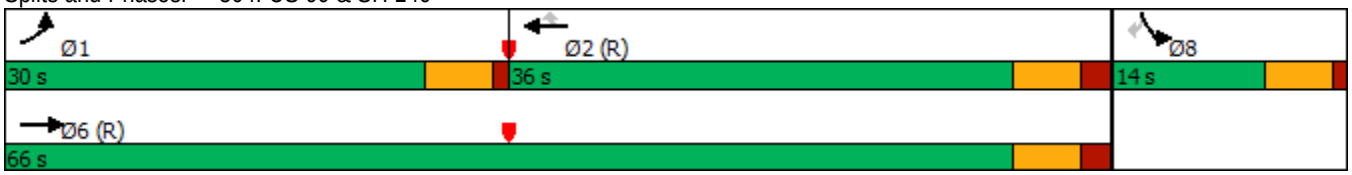
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	425	403	501	126	112	269
Future Volume (vph)	425	403	501	126	112	269
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			300	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1752	1827	1792	1524	1752	1568
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1752	1827	1792	1524	1752	1568
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				134		286
Link Speed (mph)		50	50		55	
Link Distance (ft)		470	2799		7877	
Travel Time (s)		6.4	38.2		97.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	3%	4%	6%	6%	3%	3%
Adj. Flow (vph)	452	429	533	134	119	286
Shared Lane Traffic (%)						
Lane Group Flow (vph)	452	429	533	134	119	286
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	1	6	2		8	

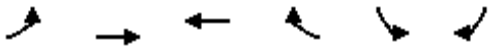


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases				2		8
Detector Phase	1	6	2	2	8	8
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	5.0
Minimum Split (s)	15.0	16.0	16.0	16.0	10.0	10.0
Total Split (s)	30.0	66.0	36.0	36.0	14.0	14.0
Total Split (%)	37.5%	82.5%	45.0%	45.0%	17.5%	17.5%
Maximum Green (s)	25.0	60.0	30.0	30.0	9.0	9.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	6.0	5.0	5.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	C-Max	C-Max	C-Max	None	None
Act Effct Green (s)	23.3	60.8	32.5	32.5	8.2	8.2
Actuated g/C Ratio	0.29	0.76	0.41	0.41	0.10	0.10
v/c Ratio	0.88	0.31	0.73	0.19	0.66	0.69
Control Delay	47.6	3.8	28.7	4.1	53.2	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.6	3.8	28.7	4.1	53.2	13.9
LOS	D	A	C	A	D	B
Approach Delay		26.3	23.8		25.4	
Approach LOS		C	C		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 25.3		Intersection LOS: C	
Intersection Capacity Utilization 69.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 304: US 90 & SH 146

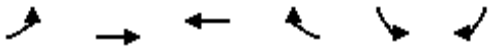




Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	452	429	533	134	119	286
v/c Ratio	0.88	0.31	0.73	0.19	0.66	0.69
Control Delay	47.6	3.8	28.7	4.1	53.2	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.6	3.8	28.7	4.1	53.2	13.9
Queue Length 50th (ft)	207	55	232	0	58	0
Queue Length 95th (ft)	#364	85	#394	33	#123	71
Internal Link Dist (ft)		390	2719		7797	
Turn Bay Length (ft)	250			300		
Base Capacity (vph)	547	1389	727	698	197	430
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	0.83	0.31	0.73	0.19	0.60	0.67

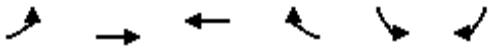
Intersection Summary

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



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	425	403	501	126	112	269
Future Volume (vph)	425	403	501	126	112	269
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0	6.0	6.0	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1752	1827	1792	1524	1752	1568
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1752	1827	1792	1524	1752	1568
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	452	429	533	134	119	286
RTOR Reduction (vph)	0	0	0	80	0	257
Lane Group Flow (vph)	452	429	533	54	119	29
Heavy Vehicles (%)	3%	4%	6%	6%	3%	3%
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	1	6	2		8	
Permitted Phases				2		8
Actuated Green, G (s)	23.3	60.8	32.5	32.5	8.2	8.2
Effective Green, g (s)	23.3	60.8	32.5	32.5	8.2	8.2
Actuated g/C Ratio	0.29	0.76	0.41	0.41	0.10	0.10
Clearance Time (s)	5.0	6.0	6.0	6.0	5.0	5.0
Vehicle Extension (s)	3.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	510	1388	728	619	179	160
v/s Ratio Prot	c0.26	0.23	c0.30		c0.07	
v/s Ratio Perm				0.04		0.02
v/c Ratio	0.89	0.31	0.73	0.09	0.66	0.18
Uniform Delay, d1	27.1	3.0	20.1	14.6	34.6	32.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	16.7	0.6	6.4	0.3	7.0	0.2
Delay (s)	43.8	3.6	26.5	14.9	41.6	33.0
Level of Service	D	A	C	B	D	C
Approach Delay (s)		24.2	24.2		35.6	
Approach LOS		C	C		D	

Intersection Summary			
HCM 2000 Control Delay	26.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



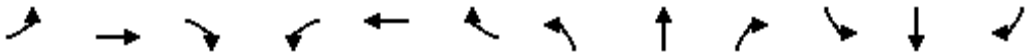
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	425	403	501	126	112	269
Future Volume (veh/h)	425	403	501	126	112	269
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1856	1841	1811	1811	1856	1856
Adj Flow Rate, veh/h	452	429	533	0	119	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	4	6	6	3	3
Cap, veh/h	493	1431	790		150	
Arrive On Green	0.28	0.78	0.44	0.00	0.08	0.00
Sat Flow, veh/h	1767	1841	1811	1535	1767	1572
Grp Volume(v), veh/h	452	429	533	0	119	0
Grp Sat Flow(s),veh/h/ln	1767	1841	1811	1535	1767	1572
Q Serve(g_s), s	19.8	5.4	18.8	0.0	5.3	0.0
Cycle Q Clear(g_c), s	19.8	5.4	18.8	0.0	5.3	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	493	1431	790		150	
V/C Ratio(X)	0.92	0.30	0.67		0.79	
Avail Cap(c_a), veh/h	552	1431	790		199	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.93	0.00
Uniform Delay (d), s/veh	27.9	2.6	18.0	0.0	35.9	0.0
Incr Delay (d2), s/veh	19.1	0.5	4.6	0.0	10.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.0	0.9	7.6	0.0	2.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	47.1	3.1	22.6	0.0	46.1	0.0
LnGrp LOS	D	A	C		D	
Approach Vol, veh/h		881	533	A	119	A
Approach Delay, s/veh		25.7	22.6		46.1	
Approach LOS		C	C		D	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	27.3	40.9				68.2	11.8
Change Period (Y+Rc), s	5.0	6.0				6.0	5.0
Max Green Setting (Gmax), s	25.0	30.0				60.0	9.0
Max Q Clear Time (g_c+I1), s	21.8	20.8				7.4	7.3
Green Ext Time (p_c), s	0.5	1.3				1.4	0.0

Intersection Summary	
HCM 6th Ctrl Delay	26.2
HCM 6th LOS	C

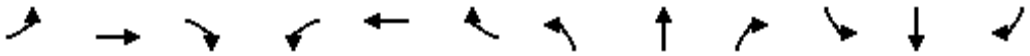
Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	29	15	4	0	0	3	60	20	16	65	19
Future Volume (vph)	1	29	15	4	0	0	3	60	20	16	65	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.955						0.968			0.974	
Flt Protected		0.999			0.950			0.998			0.992	
Satd. Flow (prot)	0	1813	0	0	1805	0	0	1836	0	0	1836	0
Flt Permitted		0.999			0.950			0.998			0.992	
Satd. Flow (perm)	0	1813	0	0	1805	0	0	1836	0	0	1836	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		803			358			401			590	
Travel Time (s)		18.3			8.1			9.1			13.4	
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	44	23	6	0	0	5	91	30	24	98	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	69	0	0	6	0	0	126	0	0	151	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			50			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 21.8%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	1	29	15	4	0	0	3	60	20	16	65	19
Future Volume (vph)	1	29	15	4	0	0	3	60	20	16	65	19
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Hourly flow rate (vph)	2	44	23	6	0	0	5	91	30	24	98	29

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	69	6	126	151
Volume Left (vph)	2	6	5	24
Volume Right (vph)	23	0	30	29
Hadj (s)	-0.19	0.20	-0.13	-0.08
Departure Headway (s)	4.3	4.8	4.1	4.1
Degree Utilization, x	0.08	0.01	0.14	0.17
Capacity (veh/h)	775	696	852	854
Control Delay (s)	7.7	7.8	7.8	8.0
Approach Delay (s)	7.7	7.8	7.8	8.0
Approach LOS	A	A	A	A

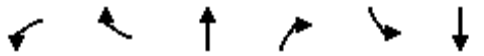
Intersection Summary			
Delay	7.8		
Level of Service	A		
Intersection Capacity Utilization	21.8%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	29	15	4	0	0	3	60	20	16	65	19
Future Vol, veh/h	1	29	15	4	0	0	3	60	20	16	65	19
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	44	23	6	0	0	5	91	30	24	98	29
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.7	7.8	7.7	8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	4%	2%	100%	16%
Vol Thru, %	72%	64%	0%	65%
Vol Right, %	24%	33%	0%	19%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	83	45	4	100
LT Vol	3	1	4	16
Through Vol	60	29	0	65
RT Vol	20	15	0	19
Lane Flow Rate	126	68	6	152
Geometry Grp	1	1	1	1
Degree of Util (X)	0.14	0.081	0.008	0.17
Departure Headway (Hd)	4.008	4.302	4.771	4.043
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	883	838	754	877
Service Time	2.084	2.302	2.773	2.114
HCM Lane V/C Ratio	0.143	0.081	0.008	0.173
HCM Control Delay	7.7	7.7	7.8	8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.5	0.3	0	0.6



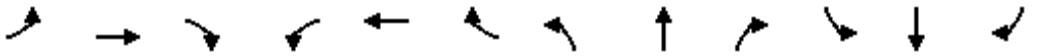
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	124	15	80	75	15	76
Future Volume (vph)	124	15	80	75	15	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.985		0.935			
Flt Protected	0.957					0.992
Satd. Flow (prot)	1758	0	1749	0	0	1854
Flt Permitted	0.957					0.992
Satd. Flow (perm)	1758	0	1749	0	0	1854
Link Speed (mph)	30		30			30
Link Distance (ft)	1292		2374			1487
Travel Time (s)	29.4		54.0			33.8
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	9%	3%	0%	0%	2%
Adj. Flow (vph)	138	17	89	83	17	84
Shared Lane Traffic (%)						
Lane Group Flow (vph)	155	0	172	0	0	101
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Free		Yield			Yield

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 31.3%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	124	15	80	75	15	76
Future Volume (Veh/h)	124	15	80	75	15	76
Sign Control	Free		Yield			Yield
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	138	17	89	83	17	84
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	0		293	0	412	284
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0		293	0	412	284
tC, single (s)	4.1		6.5	6.2	7.1	6.5
tC, 2 stage (s)						
tF (s)	2.2		4.0	3.3	3.5	4.0
p0 queue free %	92		84	92	96	85
cM capacity (veh/h)	1630		564	1091	421	572

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	155	172	101
Volume Left	138	0	17
Volume Right	17	83	0
cSH	1630	735	539
Volume to Capacity	0.08	0.23	0.19
Queue Length 95th (ft)	7	23	17
Control Delay (s)	6.7	11.4	13.2
Lane LOS	A	B	B
Approach Delay (s)	6.7	11.4	13.2
Approach LOS		B	B

Intersection Summary			
Average Delay	10.1		
Intersection Capacity Utilization	31.3%	ICU Level of Service	A
Analysis Period (min)	15		

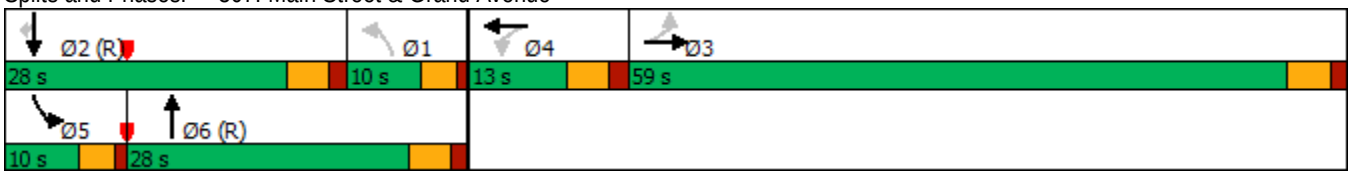


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	146	31	44	10	41	48	12	529	7	15	487	106
Future Volume (vph)	146	31	44	10	41	48	12	529	7	15	487	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	100		0	100		0	200		125
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.912			0.919			0.998				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	1733	0	1805	1722	0	1626	1859	0	1805	1881	1615
Flt Permitted	0.691			0.500						0.950		
Satd. Flow (perm)	1300	1733	0	950	1722	0	1712	1859	0	1805	1881	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		50			41			1				119
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		345			825			1581			1585	
Travel Time (s)		7.8			18.8			35.9			36.0	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	1%	0%	0%	0%	3%	0%	11%	2%	0%	0%	1%	0%
Adj. Flow (vph)	166	35	50	11	47	55	14	601	8	17	553	120
Shared Lane Traffic (%)												
Lane Group Flow (vph)	166	85	0	11	102	0	14	609	0	17	553	120
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		custom	NA		Prot	NA	Perm
Protected Phases		3			4			6		5	2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	3			4			1					2
Detector Phase	3	3		4	4		1	6		5	2	2
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		6.0	10.0		6.0	10.0	10.0
Minimum Split (s)	13.0	13.0		13.0	13.0		10.0	15.0		10.0	15.0	15.0
Total Split (s)	59.0	59.0		13.0	13.0		10.0	28.0		10.0	28.0	28.0
Total Split (%)	53.6%	53.6%		11.8%	11.8%		9.1%	25.5%		9.1%	25.5%	25.5%
Maximum Green (s)	54.0	54.0		8.0	8.0		6.0	23.0		6.0	23.0	23.0
Yellow Time (s)	3.5	3.5		3.5	3.5		3.0	3.5		3.0	3.5	3.5
All-Red Time (s)	1.5	1.5		1.5	1.5		1.0	1.5		1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		4.0	5.0		4.0	5.0	5.0
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		2.0	2.0		3.5	3.5		2.0	3.5	3.5
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	20.0	20.0		8.0	8.0		6.0	62.7		6.3	63.0	63.0
Actuated g/C Ratio	0.18	0.18		0.07	0.07		0.05	0.57		0.06	0.57	0.57
v/c Ratio	0.71	0.24		0.16	0.63		0.15	0.57		0.17	0.51	0.12
Control Delay	57.3	18.4		53.5	48.2		53.4	20.7		52.9	18.9	3.6
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	57.3	18.4		53.5	48.2		53.4	20.7		52.9	18.9	3.6
LOS	E	B		D	D		D	C		D	B	A
Approach Delay		44.1			48.7			21.4			17.1	
Approach LOS		D			D			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 24.9		Intersection LOS: C	
Intersection Capacity Utilization 51.4%		ICU Level of Service A	
Analysis Period (min) 15			

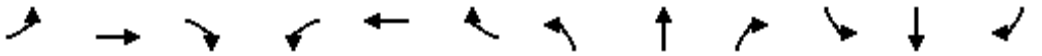
Splits and Phases: 307: Main Street & Grand Avenue



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	166	85	11	102	14	609	17	553	120
v/c Ratio	0.71	0.24	0.16	0.63	0.15	0.57	0.17	0.51	0.12
Control Delay	57.3	18.4	53.5	48.2	53.4	20.7	52.9	18.9	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.3	18.4	53.5	48.2	53.4	20.7	52.9	18.9	3.6
Queue Length 50th (ft)	111	21	7	42	10	232	12	201	0
Queue Length 95th (ft)	165	56	26	#106	30	486	34	413	31
Internal Link Dist (ft)		265		745		1501		1505	
Turn Bay Length (ft)	150		100		100		200		125
Base Capacity (vph)	638	876	69	163	93	1060	103	1078	976
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	0.26	0.10	0.16	0.63	0.15	0.57	0.17	0.51	0.12

Intersection Summary

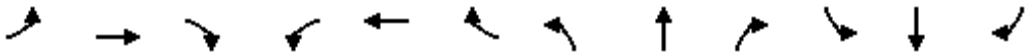
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	146	31	44	10	41	48	12	529	7	15	487	106
Future Volume (vph)	146	31	44	10	41	48	12	529	7	15	487	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0		4.0	5.0		4.0	5.0	5.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.91		1.00	0.92		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1787	1732		1805	1723		1626	1860		1805	1881	1615
Flt Permitted	0.69	1.00		0.50	1.00		1.00	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1300	1732		950	1723		1712	1860		1805	1881	1615
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	166	35	50	11	47	55	14	601	8	17	553	120
RTOR Reduction (vph)	0	41	0	0	38	0	0	0	0	0	0	53
Lane Group Flow (vph)	166	44	0	11	64	0	14	609	0	17	553	67
Heavy Vehicles (%)	1%	0%	0%	0%	3%	0%	11%	2%	0%	0%	1%	0%
Turn Type	Perm	NA		Perm	NA		custom	NA		Prot	NA	Perm
Protected Phases		3			4			6		5	2	
Permitted Phases	3			4			1					2
Actuated Green, G (s)	20.0	20.0		8.0	8.0		2.4	60.3		2.7	60.6	60.6
Effective Green, g (s)	20.0	20.0		8.0	8.0		2.4	60.3		2.7	60.6	60.6
Actuated g/C Ratio	0.18	0.18		0.07	0.07		0.02	0.55		0.02	0.55	0.55
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	5.0		4.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		2.0	2.0		3.5	3.5		2.0	3.5	3.5
Lane Grp Cap (vph)	236	314		69	125		37	1019		44	1036	889
v/s Ratio Prot		0.03			c0.04			c0.33		0.01	c0.29	
v/s Ratio Perm	c0.13			0.01			0.01					0.04
v/c Ratio	0.70	0.14		0.16	0.51		0.38	0.60		0.39	0.53	0.07
Uniform Delay, d1	42.2	37.8		47.8	49.1		53.1	16.7		52.8	15.7	11.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	9.1	0.2		0.4	1.5		7.5	2.6		2.0	2.0	0.2
Delay (s)	51.4	38.0		48.2	50.6		60.6	19.3		54.9	17.7	11.7
Level of Service	D	D		D	D		E	B		D	B	B
Approach Delay (s)		46.8			50.4			20.2			17.6	
Approach LOS		D			D			C			B	

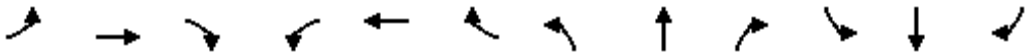
Intersection Summary			
HCM 2000 Control Delay	25.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	51.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology does not support custom phasing.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	0	30	1	1	0	91	5	3	52	0
Future Volume (vph)	1	0	0	30	1	1	0	91	5	3	52	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.932			0.993				
Flt Protected		0.950		0.950							0.997	
Satd. Flow (prot)	0	1805	0	1805	0	0	0	1834	0	0	1894	0
Flt Permitted		0.950		0.950							0.997	
Satd. Flow (perm)	0	1805	0	1805	0	0	0	1834	0	0	1894	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		433			707			1487			1399	
Travel Time (s)		9.8			16.1			33.8			31.8	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%
Adj. Flow (vph)	1	0	0	37	1	1	0	112	6	4	64	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1	0	37	2	0	0	118	0	0	68	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization Err%		ICU Level of Service H	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	0	30	1	1	0	91	5	3	52	0
Future Volume (Veh/h)	1	0	0	30	1	1	0	91	5	3	52	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Hourly flow rate (vph)	1	0	0	37	1	1	0	112	6	4	64	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	188	190	64	187	187	115	64			118		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	188	190	64	187	187	115	64			118		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	95	100	100	100			100		
cM capacity (veh/h)	773	707	1006	776	709	943	1551			1483		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	1	38	118	68
Volume Left	1	37	0	4
Volume Right	0	1	6	0
cSH	773	780	1700	1483
Volume to Capacity	0.00	0.05	0.07	0.00
Queue Length 95th (ft)	0	4	0	0
Control Delay (s)	9.7	9.9	0.0	0.5
Lane LOS	A	A		A
Approach Delay (s)	9.7	Err	0.0	0.5
Approach LOS	A	F		

Intersection Summary				
Average Delay	Err			
Intersection Capacity Utilization	Err%	ICU Level of Service	H	
Analysis Period (min)	15			

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	0	30	1	1	0	91	5	3	52	0
Future Vol, veh/h	1	0	0	30	1	1	0	91	5	3	52	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0	0	3	0	0	0	0
Mvmt Flow	1	0	0	37	1	1	0	112	6	4	64	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	188	190	64	187	187	115	-	0	0	118	0	0
Stage 1	72	72	-	115	115	-	-	-	-	-	-	-
Stage 2	116	118	-	72	72	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	-	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	777	708	1006	778	711	943	0	-	-	1483	-	0
Stage 1	943	839	-	895	804	-	0	-	-	-	-	0
Stage 2	894	802	-	943	839	-	0	-	-	-	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	773	706	1006	776	709	943	-	-	-	1483	-	-
Mov Cap-2 Maneuver	773	706	-	776	709	-	-	-	-	-	-	-
Stage 1	943	836	-	895	804	-	-	-	-	-	-	-
Stage 2	891	802	-	940	836	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.7	9.9	0	0.4
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	773	780	1483	-
HCM Lane V/C Ratio	-	-	0.002	0.049	0.002	-
HCM Control Delay (s)	-	-	9.7	9.9	7.4	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0.2	0	-

Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	8	7	1	34	0	0	78
Future Volume (vph)	8	7	1	34	0	0	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.936					0.865	
Flt Protected					0.950		
Satd. Flow (prot)	1778	0	0	0	1805	1580	0
Flt Permitted					0.950		
Satd. Flow (perm)	1778	0	0	0	1805	1580	0
Link Speed (mph)	30				30	30	
Link Distance (ft)	720				80	1399	
Travel Time (s)	16.4				1.8	31.8	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	4%
Adj. Flow (vph)	9	8	1	40	0	0	91
Shared Lane Traffic (%)							
Lane Group Flow (vph)	17	0	0	0	41	91	0
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	R NA	Left	Left	Left	Right
Median Width(ft)	0				0	12	
Link Offset(ft)	0				0	0	
Crosswalk Width(ft)	16				16	16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	15		15	9
Sign Control	Stop				Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 20.0%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection Sign configuration not allowed in HCM analysis.

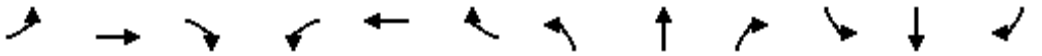
Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Vol, veh/h	8	7	1	34	0	0	78
Future Vol, veh/h	8	7	1	34	0	0	78
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	-	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	-	0	0	-
Grade, %	0	-	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0	4
Mvmt Flow	9	8	1	40	0	0	91

Major/Minor	Minor2		Major2		
Conflicting Flow All	82	0	-	0	0
Stage 1	82	-	-	-	-
Stage 2	0	-	-	-	-
Critical Hdwy	6.5	6.2	-	4.1	-
Critical Hdwy Stg 1	5.5	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	4	3.3	-	2.2	-
Pot Cap-1 Maneuver	812	-	-	-	-
Stage 1	831	-	-	-	-
Stage 2	-	-	-	-	-
Platoon blocked, %					-
Mov Cap-1 Maneuver	0	-	-	-	-
Mov Cap-2 Maneuver	0	-	-	-	-
Stage 1	0	-	-	-	-
Stage 2	0	-	-	-	-

Approach	EB	WB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	EBLn1	WBL	WBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-

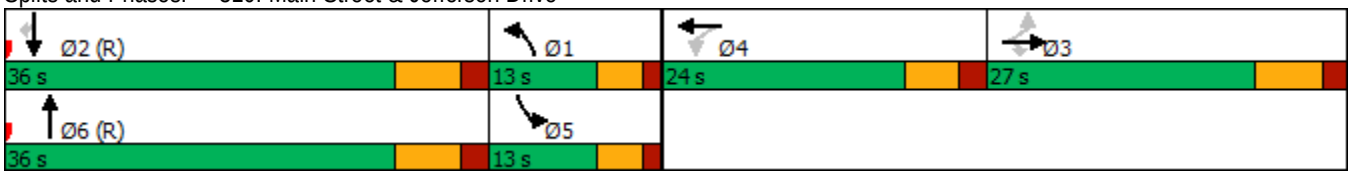


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	211	98	32	105	70	36	26	859	103	17	641	139
Future Volume (vph)	211	98	32	105	70	36	26	859	103	17	641	139
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	200		0	200		250
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.977			0.984				0.850
Flt Protected		0.967			0.976		0.950			0.950		
Satd. Flow (prot)	0	1826	1615	0	1782	0	1805	1849	0	1805	1881	1553
Flt Permitted		0.657			0.129		0.950			0.950		
Satd. Flow (perm)	0	1240	1615	0	236	0	1805	1849	0	1805	1881	1553
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			164		9			6				164
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1006			727			3897			1103	
Travel Time (s)		17.1			12.4			66.4			18.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	2%	0%	0%	5%	0%	0%	1%	2%	0%	1%	4%
Adj. Flow (vph)	237	110	36	118	79	40	29	965	116	19	720	156
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	347	36	0	237	0	29	1081	0	19	720	156
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		3			4		1	6		5	2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	3		3	4								2
Detector Phase	3	3	3	4	4		1	6		5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	8.0	8.0		8.0	10.0		8.0	10.0	10.0
Minimum Split (s)	25.0	25.0	25.0	24.0	24.0		13.0	25.0		13.0	25.0	25.0
Total Split (s)	27.0	27.0	27.0	24.0	24.0		13.0	36.0		13.0	36.0	36.0
Total Split (%)	27.0%	27.0%	27.0%	24.0%	24.0%		13.0%	36.0%		13.0%	36.0%	36.0%
Maximum Green (s)	20.0	20.0	20.0	18.0	18.0		8.0	29.0		8.0	29.0	29.0
Yellow Time (s)	5.0	5.0	5.0	4.0	4.0		3.5	5.0		3.5	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		1.5	2.0		1.5	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		7.0	7.0		6.0		5.0	7.0		5.0	7.0	7.0
Lead/Lag	Lag	Lag	Lag	Lead	Lead		Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5		3.0	3.5		3.0	3.5	3.5
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)		20.0	20.0		23.2		8.0	31.6		8.0	29.0	29.0
Actuated g/C Ratio		0.20	0.20		0.23		0.08	0.32		0.08	0.29	0.29
v/c Ratio		1.40	0.08		3.89		0.20	1.84		0.13	1.32	0.28
Control Delay		235.1	0.3		1350.5		46.7	408.7		45.1	188.4	5.3
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Delay		235.1	0.3		1350.5		46.7	408.7		45.1	188.4	5.3
LOS		F	A		F		D	F		D	F	A
Approach Delay		213.1			1350.5			399.2			153.5	
Approach LOS		F			F			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 3.89			
Intersection Signal Delay: 374.1		Intersection LOS: F	
Intersection Capacity Utilization 86.6%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 310: Main Street & Jefferson Drive

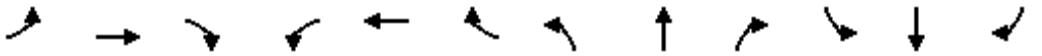


Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	347	36	237	29	1081	19	720	156
v/c Ratio	1.40	0.08	3.89	0.20	1.84	0.13	1.32	0.28
Control Delay	235.1	0.3	1350.5	46.7	408.7	45.1	188.4	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	235.1	0.3	1350.5	46.7	408.7	45.1	188.4	5.3
Queue Length 50th (ft)	~298	0	~260	18	~928	11	~597	0
Queue Length 95th (ft)	#466	0	#408	46	#1325	34	#806	40
Internal Link Dist (ft)	926		647		3817		1023	
Turn Bay Length (ft)				200		200		250
Base Capacity (vph)	248	454	61	144	588	144	545	566
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	1.40	0.08	3.89	0.20	1.84	0.13	1.32	0.28

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

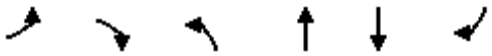
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	211	98	32	105	70	36	26	859	103	17	641	139
Future Volume (vph)	211	98	32	105	70	36	26	859	103	17	641	139
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0	7.0		6.0		5.0	7.0		5.0	7.0	7.0
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85		0.98		1.00	0.98		1.00	1.00	0.85
Flt Protected		0.97	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1826	1615		1782		1805	1849		1805	1881	1553
Flt Permitted		0.66	1.00		0.13		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1240	1615		236		1805	1849		1805	1881	1553
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	237	110	36	118	79	40	29	965	116	19	720	156
RTOR Reduction (vph)	0	0	29	0	7	0	0	4	0	0	0	115
Lane Group Flow (vph)	0	347	7	0	230	0	29	1077	0	19	720	41
Heavy Vehicles (%)	0%	2%	0%	0%	5%	0%	0%	1%	2%	0%	1%	4%
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		3			4		1	6		5	2	
Permitted Phases	3		3	4								2
Actuated Green, G (s)		20.0	20.0		23.2		5.8	28.6		3.2	26.0	26.0
Effective Green, g (s)		20.0	20.0		23.2		5.8	28.6		3.2	26.0	26.0
Actuated g/C Ratio		0.20	0.20		0.23		0.06	0.29		0.03	0.26	0.26
Clearance Time (s)		7.0	7.0		6.0		5.0	7.0		5.0	7.0	7.0
Vehicle Extension (s)		3.5	3.5		3.5		3.0	3.5		3.0	3.5	3.5
Lane Grp Cap (vph)		248	323		54		104	528		57	489	403
v/s Ratio Prot							c0.02	c0.58		0.01	0.38	
v/s Ratio Perm		c0.28	0.00		c0.98							0.03
v/c Ratio		1.40	0.02		4.26		0.28	2.04		0.33	1.47	0.10
Uniform Delay, d1		40.0	32.1		38.4		45.1	35.7		47.4	37.0	28.1
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		202.2	0.0		1509.7		1.5	474.3		3.4	223.5	0.5
Delay (s)		242.2	32.2		1548.1		46.6	510.0		50.8	260.5	28.6
Level of Service		F	C		F		D	F		D	F	C
Approach Delay (s)		222.5			1548.1			497.8			215.6	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	456.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	2.47		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	86.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology expects strict NEMA phasing.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	96	68	66	1049	791	70
Future Volume (vph)	96	68	66	1049	791	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	200			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.944				0.989	
Flt Protected	0.971		0.950			
Satd. Flow (prot)	1742	0	1805	1881	1845	0
Flt Permitted	0.971		0.079			
Satd. Flow (perm)	1742	0	150	1881	1845	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	39				8	
Link Speed (mph)	30			40	40	
Link Distance (ft)	1219			1103	1788	
Travel Time (s)	27.7			18.8	30.5	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	0%	1%	2%	0%
Adj. Flow (vph)	108	76	74	1179	889	79
Shared Lane Traffic (%)						
Lane Group Flow (vph)	184	0	74	1179	968	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1		1	2	2	
Detector Template	Left		Left	Thru	Thru	
Leading Detector (ft)	20		20	100	100	
Trailing Detector (ft)	0		0	0	0	
Detector 1 Position(ft)	0		0	0	0	
Detector 1 Size(ft)	20		20	6	6	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot		pm+pt	NA	NA	
Protected Phases	4		5	2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases			2			
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	8.0		6.0	10.0	10.0	
Minimum Split (s)	24.0		10.5	25.0	25.0	
Total Split (s)	24.0		10.5	59.0	48.5	
Total Split (%)	28.9%		12.7%	71.1%	58.4%	
Maximum Green (s)	18.0		6.0	52.0	41.5	
Yellow Time (s)	4.0		3.0	5.0	5.0	
All-Red Time (s)	2.0		1.5	2.0	2.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	6.0		4.5	7.0	7.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.5		3.0	4.0	4.0	
Recall Mode	None		None	C-Max	C-Max	
Act Effct Green (s)	12.9		59.6	57.1	48.4	
Actuated g/C Ratio	0.16		0.72	0.69	0.58	
v/c Ratio	0.61		0.32	0.91	0.90	
Control Delay	33.6		7.9	25.0	30.8	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	33.6		7.9	25.0	30.8	
LOS	C		A	C	C	
Approach Delay	33.6			24.0	30.8	
Approach LOS	C			C	C	

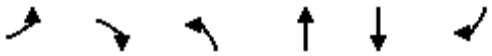
Intersection Summary			
Area Type:	Other		
Cycle Length: 83			
Actuated Cycle Length: 83			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay: 27.5		Intersection LOS: C	
Intersection Capacity Utilization 75.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 311: Main Street & Cook Road

Lane Group	EBL	NBL	NBT	SBT
Lane Group Flow (vph)	184	74	1179	968
v/c Ratio	0.61	0.32	0.91	0.90
Control Delay	33.6	7.9	25.0	30.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	33.6	7.9	25.0	30.8
Queue Length 50th (ft)	71	9	435	430
Queue Length 95th (ft)	124	25	#868	#770
Internal Link Dist (ft)	1139		1023	1708
Turn Bay Length (ft)		200		
Base Capacity (vph)	408	233	1294	1080
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.45	0.32	0.91	0.90

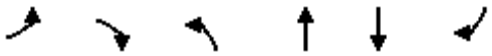
Intersection Summary

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



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	96	68	66	1049	791	70
Future Volume (vph)	96	68	66	1049	791	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		4.5	7.0	7.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frt	0.94		1.00	1.00	0.99	
Flt Protected	0.97		0.95	1.00	1.00	
Satd. Flow (prot)	1743		1805	1881	1845	
Flt Permitted	0.97		0.08	1.00	1.00	
Satd. Flow (perm)	1743		150	1881	1845	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	108	76	74	1179	889	79
RTOR Reduction (vph)	33	0	0	0	3	0
Lane Group Flow (vph)	151	0	74	1179	965	0
Heavy Vehicles (%)	0%	0%	0%	1%	2%	0%
Turn Type	Prot		pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases			2			
Actuated Green, G (s)	12.9		57.1	57.1	47.5	
Effective Green, g (s)	12.9		57.1	57.1	47.5	
Actuated g/C Ratio	0.16		0.69	0.69	0.57	
Clearance Time (s)	6.0		4.5	7.0	7.0	
Vehicle Extension (s)	3.5		3.0	4.0	4.0	
Lane Grp Cap (vph)	270		204	1294	1055	
v/s Ratio Prot	c0.09		0.02	c0.63	0.52	
v/s Ratio Perm			0.23			
v/c Ratio	0.56		0.36	0.91	0.91	
Uniform Delay, d1	32.4		14.6	10.8	15.9	
Progression Factor	1.00		1.00	1.00	1.00	
Incremental Delay, d2	2.8		1.1	11.2	13.5	
Delay (s)	35.2		15.7	22.0	29.4	
Level of Service	D		B	C	C	
Approach Delay (s)	35.2			21.6	29.4	
Approach LOS	D			C	C	

Intersection Summary			
HCM 2000 Control Delay	25.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	83.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	75.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	96	68	66	1049	791	70
Future Volume (veh/h)	96	68	66	1049	791	70
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1885	1870	1900
Adj Flow Rate, veh/h	108	76	74	1179	889	79
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	1	2	0
Cap, veh/h	132	93	285	1342	1014	90
Arrive On Green	0.13	0.13	0.06	0.71	0.60	0.60
Sat Flow, veh/h	1005	708	1810	1885	1693	150
Grp Volume(v), veh/h	185	0	74	1179	0	968
Grp Sat Flow(s),veh/h/ln	1722	0	1810	1885	0	1843
Q Serve(g_s), s	8.7	0.0	1.1	39.9	0.0	36.8
Cycle Q Clear(g_c), s	8.7	0.0	1.1	39.9	0.0	36.8
Prop In Lane	0.58	0.41	1.00			0.08
Lane Grp Cap(c), veh/h	226	0	285	1342	0	1104
V/C Ratio(X)	0.82	0.00	0.26	0.88	0.00	0.88
Avail Cap(c_a), veh/h	374	0	309	1342	0	1104
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.09	0.09	0.00	1.00
Uniform Delay (d), s/veh	35.1	0.0	14.8	9.2	0.0	14.1
Incr Delay (d2), s/veh	8.5	0.0	0.0	0.9	0.0	9.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.0	0.6	10.7	0.0	15.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	43.6	0.0	14.8	10.0	0.0	23.9
LnGrp LOS	D	A	B	B	A	C
Approach Vol, veh/h	185			1253	968	
Approach Delay, s/veh	43.6			10.3	23.9	
Approach LOS	D			B	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		66.1		16.9	9.4	56.7
Change Period (Y+Rc), s		7.0		6.0	4.5	7.0
Max Green Setting (Gmax), s		52.0		18.0	6.0	41.5
Max Q Clear Time (g_c+I1), s		41.9		10.7	3.1	38.8
Green Ext Time (p_c), s		7.6		0.4	0.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	18.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	116	424	508	139	180	416
Future Volume (vph)	116	424	508	139	180	416
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	135	
Storage Lanes	1	1		1	2	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1787	1553	1900	1615	1641	3574
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1787	1553	1900	1615	1641	3574
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		476		156		
Link Speed (mph)	55		40			40
Link Distance (ft)	7877		885			960
Travel Time (s)	97.6		15.1			16.4
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	1%	4%	0%	0%	10%	1%
Adj. Flow (vph)	130	476	571	156	202	467
Shared Lane Traffic (%)						
Lane Group Flow (vph)	130	476	571	156	202	467
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Turn Type	Perm	Perm	NA	Perm	Split	NA
Protected Phases			2		6	6
Permitted Phases	8	8		2		
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%
Maximum Green (s)	18.0	18.0	18.0	18.0	18.0	18.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	18.0	18.0	18.0	18.0	18.0	18.0
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.27	0.27

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
v/c Ratio	0.27	0.62	1.13	0.29	0.46	0.49
Control Delay	21.5	6.4	107.5	5.4	24.8	23.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.5	6.4	107.5	5.4	24.8	23.0
LOS	C	A	F	A	C	C
Approach Delay	9.7		85.6			23.5
Approach LOS	A		F			C

Intersection Summary			
Area Type:	Other		
Cycle Length: 67.5			
Actuated Cycle Length: 67.5			
Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 1.13			
Intersection Signal Delay: 41.9		Intersection LOS: D	
Intersection Capacity Utilization 60.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 312: Main Street & SH 146

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	130	476	571	156	202	467
v/c Ratio	0.27	0.62	1.13	0.29	0.46	0.49
Control Delay	21.5	6.4	107.5	5.4	24.8	23.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.5	6.4	107.5	5.4	24.8	23.0
Queue Length 50th (ft)	42	0	~280	0	70	85
Queue Length 95th (ft)	83	62	#451	38	126	125
Internal Link Dist (ft)	7797		805			880
Turn Bay Length (ft)					135	
Base Capacity (vph)	476	763	506	545	437	953
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	0.27	0.62	1.13	0.29	0.46	0.49

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

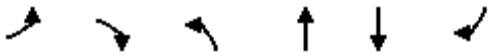
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	116	424	508	139	180	416
Future Volume (vph)	116	424	508	139	180	416
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1787	1553	1900	1615	1641	3574
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1787	1553	1900	1615	1641	3574
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	130	476	571	156	202	467
RTOR Reduction (vph)	0	349	0	114	0	0
Lane Group Flow (vph)	130	127	571	42	202	467
Heavy Vehicles (%)	1%	4%	0%	0%	10%	1%
Turn Type	Perm	Perm	NA	Perm	Split	NA
Protected Phases			2		6	6
Permitted Phases	8	8		2		
Actuated Green, G (s)	18.0	18.0	18.0	18.0	18.0	18.0
Effective Green, g (s)	18.0	18.0	18.0	18.0	18.0	18.0
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.27	0.27
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Grp Cap (vph)	476	414	506	430	437	953
v/s Ratio Prot			c0.30		0.12	c0.13
v/s Ratio Perm	0.07	c0.08		0.03		
v/c Ratio	0.27	0.31	1.13	0.10	0.46	0.49
Uniform Delay, d1	19.6	19.8	24.8	18.6	20.7	20.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.4	1.9	80.3	0.4	3.5	1.8
Delay (s)	21.0	21.7	105.1	19.1	24.2	22.7
Level of Service	C	C	F	B	C	C
Approach Delay (s)	21.5		86.6			23.1
Approach LOS	C		F			C

Intersection Summary			
HCM 2000 Control Delay	45.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	67.5	Sum of lost time (s)	13.5
Intersection Capacity Utilization	60.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

HCM 6th Edition methodology does not support Non-NEMA phasing.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	231	0	9	142	204	110
Future Volume (vph)	231	0	9	142	204	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.953	
Flt Protected	0.950			0.997		
Satd. Flow (prot)	1770	0	0	1583	1683	0
Flt Permitted	0.950			0.997		
Satd. Flow (perm)	1770	0	0	1583	1683	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	686			526	1142	
Travel Time (s)	15.6			12.0	26.0	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	0%	0%	21%	9%	5%
Adj. Flow (vph)	246	0	10	151	217	117
Shared Lane Traffic (%)						
Lane Group Flow (vph)	246	0	0	161	334	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Free			Stop	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.9%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection Sign configuration not allowed in HCM analysis.

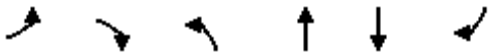
Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	231	0	9	142	204	110
Future Vol, veh/h	231	0	9	142	204	110
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	0	0	21	9	5
Mvmt Flow	246	0	10	151	217	117

Major/Minor	Minor2		Major2	
Conflicting Flow All	276	276	-	0
Stage 1	276	276	-	-
Stage 2	0	0	-	-
Critical Hdwy	6.4	6.71	-	-
Critical Hdwy Stg 1	5.4	5.71	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	3.5	4.189	-	-
Pot Cap-1 Maneuver	718	601	-	-
Stage 1	775	649	-	-
Stage 2	-	-	-	-
Platoon blocked, %			-	-
Mov Cap-1 Maneuver	718	0	-	-
Mov Cap-2 Maneuver	718	0	-	-
Stage 1	775	0	-	-
Stage 2	-	0	-	-

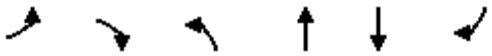
Approach	NB	SB
HCM Control Delay, s	11.5	0
HCM LOS	B	

Minor Lane/Major Mvmt	NBLn1	SBT	SBR
Capacity (veh/h)	718	-	-
HCM Lane V/C Ratio	0.224	-	-
HCM Control Delay (s)	11.5	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.9	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2	291	132	151	219	2
Future Volume (vph)	2	291	132	151	219	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.866				0.999	
Flt Protected				0.977		
Satd. Flow (prot)	1645	0	0	1671	1743	0
Flt Permitted				0.977		
Satd. Flow (perm)	1645	0	0	1671	1743	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	516			1385	526	
Travel Time (s)	11.7			31.5	12.0	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	2%	19%	9%	0%
Adj. Flow (vph)	2	297	135	154	223	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	299	0	0	289	225	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 55.0%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	291	132	151	219	2
Future Volume (Veh/h)	2	291	132	151	219	2
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	2	297	135	154	223	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	648	224	225			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	648	224	225			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	64	90			
cM capacity (veh/h)	394	820	1344			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	299	289	225
Volume Left	2	135	0
Volume Right	297	0	2
cSH	815	1344	1700
Volume to Capacity	0.37	0.10	0.13
Queue Length 95th (ft)	42	8	0
Control Delay (s)	12.0	4.2	0.0
Lane LOS	B	A	
Approach Delay (s)	12.0	4.2	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	5.9		
Intersection Capacity Utilization	55.0%	ICU Level of Service	B
Analysis Period (min)	15		

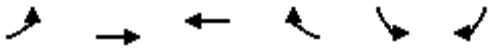
Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	291	132	151	219	2
Future Vol, veh/h	2	291	132	151	219	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	0	0	2	19	9	0
Mvmt Flow	2	297	135	154	223	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	648	224	225	0	-	0
Stage 1	224	-	-	-	-	-
Stage 2	424	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.12	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.218	-	-	-
Pot Cap-1 Maneuver	438	820	1344	-	-	-
Stage 1	818	-	-	-	-	-
Stage 2	664	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	390	820	1344	-	-	-
Mov Cap-2 Maneuver	390	-	-	-	-	-
Stage 1	728	-	-	-	-	-
Stage 2	664	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12	3.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1344	-	814	-	-
HCM Lane V/C Ratio	0.1	-	0.367	-	-
HCM Control Delay (s)	8	0	12	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.3	-	1.7	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	236	287	131	0	0	117
Future Volume (vph)	236	287	131	0	0	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.865	
Flt Protected		0.978				
Satd. Flow (prot)	0	1832	1845	0	1580	0
Flt Permitted		0.978				
Satd. Flow (perm)	0	1832	1845	0	1580	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		4107	516		686	
Travel Time (s)		93.3	11.7		15.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	1%	3%	0%	0%	4%
Adj. Flow (vph)	268	326	149	0	0	133
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	594	149	0	133	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Stop		Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 52.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection Sign configuration not allowed in HCM analysis.

Intersection	
Int Delay, s/veh	0

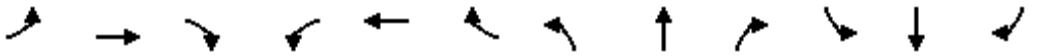
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	236	287	131	0	0	117
Future Vol, veh/h	236	287	131	0	0	117
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	1	3	0	0	4
Mvmt Flow	268	326	149	0	0	133

Major/Minor	Major1		Minor2	
Conflicting Flow All	0	0	862	0
Stage 1	-	-	0	-
Stage 2	-	-	862	-
Critical Hdwy	4.12	-	6.53	6.2
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	5.53	-
Follow-up Hdwy	2.218	-	4.027	3.3
Pot Cap-1 Maneuver	-	-	292	-
Stage 1	-	-	-	-
Stage 2	-	-	371	-
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	0	-
Mov Cap-2 Maneuver	-	-	0	-
Stage 1	-	-	0	-
Stage 2	-	-	0	-

Approach	EB	WB
HCM Control Delay, s		
HCM LOS		-

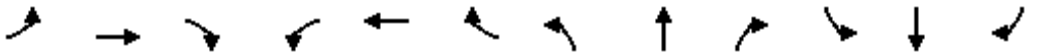
Minor Lane/Major Mvmt	EBL	EBTWBLn1
Capacity (veh/h)	-	- -
HCM Lane V/C Ratio	-	- -
HCM Control Delay (s)	-	- -
HCM Lane LOS	-	- -
HCM 95th %tile Q(veh)	-	- -

Existing Network 2045 AM



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	428	404	179	463	0	0	0	0	106	45	61
Future Volume (vph)	0	428	404	179	463	0	0	0	0	106	45	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected					0.986						0.966	
Satd. Flow (prot)	0	1712	1369	0	1662	0	0	0	0	0	1756	1122
Flt Permitted					0.986						0.966	
Satd. Flow (perm)	0	1712	1369	0	1662	0	0	0	0	0	1756	1122
Link Speed (mph)		40			40			30			45	
Link Distance (ft)		930			353			1253			1599	
Travel Time (s)		15.9			6.0			28.5			24.2	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	11%	18%	12%	13%	0%	0%	0%	0%	3%	8%	44%
Adj. Flow (vph)	0	481	454	201	520	0	0	0	0	119	51	69
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	481	454	0	721	0	0	0	0	0	170	69
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 77.5%		ICU Level of Service D	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	428	404	179	463	0	0	0	0	106	45	61
Future Volume (vph)	0	428	404	179	463	0	0	0	0	106	45	61
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	0	481	454	201	520	0	0	0	0	119	51	69

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total (vph)	481	454	721	170	69
Volume Left (vph)	0	0	201	119	0
Volume Right (vph)	0	454	0	0	69
Hadj (s)	0.19	-0.29	0.27	0.22	0.15
Departure Headway (s)	5.6	3.2	5.5	6.9	3.2
Degree Utilization, x	0.75	0.40	1.11	0.33	0.06
Capacity (veh/h)	627	1115	652	500	1121
Control Delay (s)	23.7	8.3	91.7	13.2	6.4
Approach Delay (s)	16.2		91.7	11.2	
Approach LOS	C		F	B	

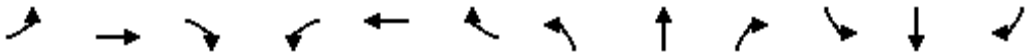
Intersection Summary				
Delay	44.3			
Level of Service	E			
Intersection Capacity Utilization	77.5%	ICU Level of Service	D	
Analysis Period (min)	15			

Intersection	
Intersection Delay, s/veh	86.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	428	404	179	463	0	0	0	0	106	45	61
Future Vol, veh/h	0	428	404	179	463	0	0	0	0	106	45	61
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	0	11	18	12	13	0	0	0	0	3	8	44
Mvmt Flow	0	481	454	201	520	0	0	0	0	119	51	69
Number of Lanes	0	1	1	0	1	0	0	0	0	0	1	1

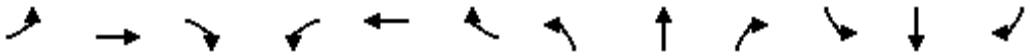
Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	2
HCM Control Delay	30.7	183.5	15
HCM LOS	D	F	B

Lane	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	0%	0%	28%	70%	0%
Vol Thru, %	100%	0%	72%	30%	0%
Vol Right, %	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	428	404	642	151	61
LT Vol	0	0	179	106	0
Through Vol	428	0	463	45	0
RT Vol	0	404	0	0	61
Lane Flow Rate	481	454	721	170	69
Geometry Grp	7	7	6	7	7
Degree of Util (X)	0.853	0.732	1.335	0.381	0.135
Departure Headway (Hd)	6.79	6.195	6.662	8.557	7.554
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	539	590	548	422	478
Service Time	4.49	3.895	4.682	6.257	5.254
HCM Lane V/C Ratio	0.892	0.769	1.316	0.403	0.144
HCM Control Delay	37.2	23.9	183.5	16.4	11.4
HCM Lane LOS	E	C	F	C	B
HCM 95th-tile Q	9	6.2	31.2	1.8	0.5



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	425	0	0	372	39	288	18	151	0	0	0
Future Volume (vph)	106	425	0	0	372	39	288	18	151	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Frt					0.987			0.950				
Flt Protected		0.990						0.969				
Satd. Flow (prot)	0	1726	0	0	1850	0	0	2786	0	0	0	0
Flt Permitted		0.990						0.969				
Satd. Flow (perm)	0	1726	0	0	1850	0	0	2786	0	0	0	0
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		353			1397			1065			1401	
Travel Time (s)		6.0			23.8			16.1			21.2	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	33%	3%	0%	0%	1%	5%	28%	0%	5%	0%	0%	0%
Adj. Flow (vph)	122	489	0	0	428	45	331	21	174	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	611	0	0	473	0	0	526	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 76.1%		ICU Level of Service D	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	106	425	0	0	372	39	288	18	151	0	0	0
Future Volume (vph)	106	425	0	0	372	39	288	18	151	0	0	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	122	489	0	0	428	45	331	21	174	0	0	0

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total (vph)	611	473	342	185
Volume Left (vph)	122	0	331	0
Volume Right (vph)	0	45	0	174
Hadj (s)	0.19	-0.03	0.95	-0.58
Departure Headway (s)	6.8	6.6	8.4	6.9
Degree Utilization, x	1.16	0.87	0.79	0.35
Capacity (veh/h)	527	537	423	516
Control Delay (s)	115.7	39.5	35.6	12.3
Approach Delay (s)	115.7	39.5	27.4	
Approach LOS	F	E	D	

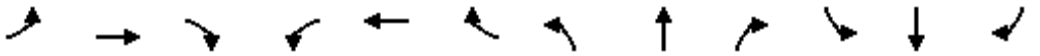
Intersection Summary			
Delay	64.5		
Level of Service	F		
Intersection Capacity Utilization	76.1%	ICU Level of Service	D
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	76
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	106	425	0	0	372	39	288	18	151	0	0	0
Future Vol, veh/h	106	425	0	0	372	39	288	18	151	0	0	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	33	3	0	0	1	5	28	0	5	0	0	0
Mvmt Flow	122	489	0	0	428	45	331	21	174	0	0	0
Number of Lanes	0	1	0	0	1	0	0	2	0	0	0	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	1
HCM Control Delay	142.7	41.1	29.8
HCM LOS	F	E	D

Lane	NBLn1	NBLn2	EBLn1	WBLn1
Vol Left, %	97%	0%	20%	0%
Vol Thru, %	3%	6%	80%	91%
Vol Right, %	0%	94%	0%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	297	160	531	411
LT Vol	288	0	106	0
Through Vol	9	9	425	372
RT Vol	0	151	0	39
Lane Flow Rate	341	184	610	472
Geometry Grp	7	7	2	2
Degree of Util (X)	0.797	0.346	1.227	0.871
Departure Headway (Hd)	8.878	7.204	7.236	7.053
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	410	502	507	520
Service Time	6.578	4.904	5.275	5.053
HCM Lane V/C Ratio	0.832	0.367	1.203	0.908
HCM Control Delay	38.5	13.7	142.7	41.1
HCM Lane LOS	E	B	F	E
HCM 95th-tile Q	7	1.5	23.7	9.4

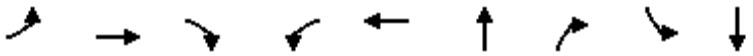


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	293	405	449	439	5	497	21	426	10	29	53
Future Volume (vph)	32	293	405	449	439	5	497	21	426	10	29	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	500		500	560		0	0		300	175		0
Storage Lanes	1		1	1		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt			0.850		0.998				0.850		0.903	
Flt Protected	0.950			0.950				0.954		0.950		
Satd. Flow (prot)	1719	1727	1442	1626	1807	0	0	1730	1455	1805	3132	0
Flt Permitted	0.950			0.211				0.061		0.453		
Satd. Flow (perm)	1719	1727	1442	361	1807	0	0	111	1455	861	3132	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			440						463		58	
Link Speed (mph)		55			60			60			30	
Link Distance (ft)		1108			19133			2711			551	
Travel Time (s)		13.7			217.4			30.8			12.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	10%	12%	11%	5%	0%	5%	0%	11%	0%	6%	3%
Adj. Flow (vph)	35	318	440	488	477	5	540	23	463	11	32	58
Shared Lane Traffic (%)												
Lane Group Flow (vph)	35	318	440	488	482	0	0	563	463	11	90	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			4			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			3			4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			2	6			3		3	4		
Detector Phase	5	2	2	1	6		3	3	3	4	4	
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		5.0	5.0	5.0	10.0	10.0	
Minimum Split (s)	11.0	16.0	16.0	11.0	16.0		11.0	11.0	11.0	16.0	16.0	
Total Split (s)	11.0	19.0	19.0	15.0	23.0		70.0	70.0	70.0	16.0	16.0	
Total Split (%)	9.2%	15.8%	15.8%	12.5%	19.2%		58.3%	58.3%	58.3%	13.3%	13.3%	
Maximum Green (s)	6.0	13.0	13.0	9.0	17.0		64.0	64.0	64.0	11.0	11.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	6.0	6.0	6.0	6.0			6.0	6.0	5.0	5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lead	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	4.0	4.0	3.0	4.0		3.0	3.0	3.0	4.0	4.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	
Act Effct Green (s)	6.4	13.0	13.0	27.6	21.8			64.0	64.0	10.2	10.2	
Actuated g/C Ratio	0.05	0.11	0.11	0.23	0.18			0.53	0.53	0.08	0.08	
v/c Ratio	0.38	1.70	0.80	2.62	1.47			9.54	0.47	0.15	0.28	
Control Delay	67.1	370.1	16.9	767.2	263.9			3883.8	3.0	55.9	24.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	
Total Delay	67.1	370.1	16.9	767.2	263.9			3883.8	3.0	55.9	24.4	
LOS	E	F	B	F	F			F	A	E	C	
Approach Delay		160.7			517.1			2132.5			27.8	
Approach LOS		F			F			F			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 9.54			
Intersection Signal Delay: 975.7		Intersection LOS: F	
Intersection Capacity Utilization 90.6%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 103: SH 105 & Houston Street

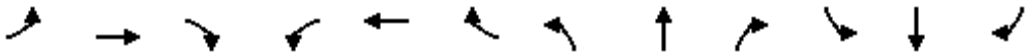


Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	35	318	440	488	482	563	463	11	90
v/c Ratio	0.38	1.70	0.80	2.62	1.47	9.54	0.47	0.15	0.28
Control Delay	67.1	370.1	16.9	767.2	263.9	3883.8	3.0	55.9	24.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.1	370.1	16.9	767.2	263.9	3883.8	3.0	55.9	24.4
Queue Length 50th (ft)	27	~362	0	~602	~571	~827	0	8	12
Queue Length 95th (ft)	62	#544	#144	#826	#780	#1050	49	28	38
Internal Link Dist (ft)		1028			19053	2631			471
Turn Bay Length (ft)	500		500	560			300	175	
Base Capacity (vph)	93	187	548	186	327	59	992	78	339
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.38	1.70	0.80	2.62	1.47	9.54	0.47	0.14	0.27

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

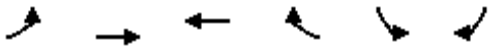
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	293	405	449	439	5	497	21	426	10	29	53
Future Volume (vph)	32	293	405	449	439	5	497	21	426	10	29	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0	6.0	6.0	6.0			6.0	6.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00			1.00	0.85	1.00	0.90	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00	0.95	1.00	
Satd. Flow (prot)	1719	1727	1442	1626	1808			1730	1455	1805	3134	
Flt Permitted	0.95	1.00	1.00	0.21	1.00			0.06	1.00	0.45	1.00	
Satd. Flow (perm)	1719	1727	1442	360	1808			111	1455	861	3134	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	35	318	440	488	477	5	540	23	463	11	32	58
RTOR Reduction (vph)	0	0	392	0	0	0	0	0	216	0	53	0
Lane Group Flow (vph)	35	318	48	488	482	0	0	563	247	11	37	0
Heavy Vehicles (%)	5%	10%	12%	11%	5%	0%	5%	0%	11%	0%	6%	3%
Turn Type	Prot	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			3			4	
Permitted Phases			2	6			3		3	4		
Actuated Green, G (s)	4.0	13.0	13.0	28.8	19.8			64.0	64.0	10.2	10.2	
Effective Green, g (s)	4.0	13.0	13.0	28.8	19.8			64.0	64.0	10.2	10.2	
Actuated g/C Ratio	0.03	0.11	0.11	0.24	0.17			0.53	0.53	0.08	0.08	
Clearance Time (s)	5.0	6.0	6.0	6.0	6.0			6.0	6.0	5.0	5.0	
Vehicle Extension (s)	3.0	4.0	4.0	3.0	4.0			3.0	3.0	4.0	4.0	
Lane Grp Cap (vph)	57	187	156	189	298			59	776	73	266	
v/s Ratio Prot	0.02	0.18		c0.21	0.27						0.01	
v/s Ratio Perm			0.03	c0.41				c5.07	0.17	c0.01		
v/c Ratio	0.61	1.70	0.31	2.58	1.62			9.54	0.32	0.15	0.14	
Uniform Delay, d1	57.2	53.5	49.3	42.6	50.1			28.0	15.7	50.9	50.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	1.00	
Incremental Delay, d2	18.0	337.1	5.0	727.1	292.9			3877.9	0.2	1.3	0.3	
Delay (s)	75.3	390.6	54.3	769.7	343.0			3905.9	16.0	52.2	51.2	
Level of Service	E	F	D	F	F			F	B	D	D	
Approach Delay (s)		190.1			557.7			2150.5			51.3	
Approach LOS		F			F			F			D	

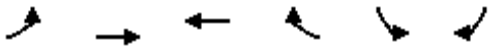
Intersection Summary			
HCM 2000 Control Delay	1004.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	6.98		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	23.0
Intersection Capacity Utilization	90.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology expects strict NEMA phasing.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	11	898	869	10	27	29
Future Volume (vph)	11	898	869	10	27	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.998		0.929	
Flt Protected		0.999			0.977	
Satd. Flow (prot)	0	1861	1859	0	1691	0
Flt Permitted		0.999			0.977	
Satd. Flow (perm)	0	1861	1859	0	1691	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		19133	16491		682	
Travel Time (s)		434.8	374.8		15.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	12	976	945	11	29	32
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	988	956	0	61	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60			60	60	60
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 66.0%		ICU Level of Service C	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	11	898	869	10	27	29
Future Volume (Veh/h)	11	898	869	10	27	29
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	976	945	11	29	32
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	956				1950	950
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	956				1950	950
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				58	90
cM capacity (veh/h)	719				70	315

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	988	956	61
Volume Left	12	0	29
Volume Right	0	11	32
cSH	719	1700	118
Volume to Capacity	0.02	0.56	0.52
Queue Length 95th (ft)	1	0	60
Control Delay (s)	0.5	0.0	64.7
Lane LOS	A		F
Approach Delay (s)	0.5	0.0	64.7
Approach LOS			F

Intersection Summary			
Average Delay	2.2		
Intersection Capacity Utilization	66.0%	ICU Level of Service	C
Analysis Period (min)	15		

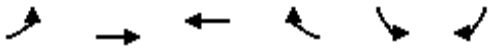
Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	11	898	869	10	27	29
Future Vol, veh/h	11	898	869	10	27	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	976	945	11	29	32

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	956	0	-	0	1951	951
Stage 1	-	-	-	-	951	-
Stage 2	-	-	-	-	1000	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	719	-	-	-	71	315
Stage 1	-	-	-	-	375	-
Stage 2	-	-	-	-	356	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	719	-	-	-	68	315
Mov Cap-2 Maneuver	-	-	-	-	68	-
Stage 1	-	-	-	-	362	-
Stage 2	-	-	-	-	356	-

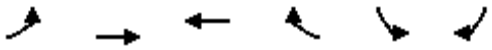
Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	68
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	719	-	-	-	114
HCM Lane V/C Ratio	0.017	-	-	-	0.534
HCM Control Delay (s)	10.1	0	-	-	68
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0.1	-	-	-	2.5



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	119	1214	1674	207	277	257
Future Volume (vph)	119	1214	1674	207	277	257
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.984		0.935	
Flt Protected	0.950				0.975	
Satd. Flow (prot)	1736	3282	3362	0	1680	0
Flt Permitted	0.950				0.975	
Satd. Flow (perm)	1736	3282	3362	0	1680	0
Link Speed (mph)		65	65		30	
Link Distance (ft)		2030	1363		297	
Travel Time (s)		21.3	14.3		6.8	
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Heavy Vehicles (%)	4%	10%	6%	3%	5%	1%
Adj. Flow (vph)	157	1597	2203	272	364	338
Shared Lane Traffic (%)						
Lane Group Flow (vph)	157	1597	2475	0	702	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 100.6%		ICU Level of Service G	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	119	1214	1674	207	277	257
Future Volume (Veh/h)	119	1214	1674	207	277	257
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Hourly flow rate (vph)	157	1597	2203	272	364	338
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage veh)		2	2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2475				3452	1238
vC1, stage 1 conf vol					2339	
vC2, stage 2 conf vol					1112	
vCu, unblocked vol	2475				3452	1238
tC, single (s)	4.2				6.9	6.9
tC, 2 stage (s)					5.9	
tF (s)	2.2				3.5	3.3
p0 queue free %	12				0	0
cM capacity (veh/h)	178				26	169

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1
Volume Total	157	798	798	1469	1006	702
Volume Left	157	0	0	0	0	364
Volume Right	0	0	0	0	272	338
cSH	178	1700	1700	1700	1700	44
Volume to Capacity	0.88	0.47	0.47	0.86	0.59	16.06
Queue Length 95th (ft)	162	0	0	0	0	Err
Control Delay (s)	92.2	0.0	0.0	0.0	0.0	Err
Lane LOS	F					F
Approach Delay (s)	8.3			0.0		Err
Approach LOS						F

Intersection Summary			
Average Delay	1426.4		
Intersection Capacity Utilization	100.6%	ICU Level of Service	G
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	4128.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	119	1214	1674	207	277	257
Future Vol, veh/h	119	1214	1674	207	277	257
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	4	10	6	3	5	1
Mvmt Flow	157	1597	2203	272	364	338

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	2475	0	-	0	3452	1238
Stage 1	-	-	-	-	2339	-
Stage 2	-	-	-	-	1113	-
Critical Hdwy	4.18	-	-	-	6.9	6.92
Critical Hdwy Stg 1	-	-	-	-	5.9	-
Critical Hdwy Stg 2	-	-	-	-	5.9	-
Follow-up Hdwy	2.24	-	-	-	3.55	3.31
Pot Cap-1 Maneuver	178	-	-	-	~ 5	~ 169
Stage 1	-	-	-	-	~ 56	-
Stage 2	-	-	-	-	~ 270	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	178	-	-	-	~ 1	~ 169
Mov Cap-2 Maneuver	-	-	-	-	~ 6	-
Stage 1	-	-	-	-	~ 7	-
Stage 2	-	-	-	-	~ 270	-

Approach	EB	WB	SB
HCM Control Delay, s	8.2	0	$ 28955
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	178	-	-	-	11
HCM Lane V/C Ratio	0.88	-	-	-	63.876
HCM Control Delay (s)	91.6	-	-	-	$ 28955
HCM Lane LOS	F	-	-	-	F
HCM 95th %tile Q(veh)	6.4	-	-	-	89.4

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	1306	164	2	172	1058	117	185
Future Volume (vph)	1306	164	2	172	1058	117	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		125		0	225
Storage Lanes		0		1		1	1
Taper Length (ft)				25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.985						0.850
Flt Protected				0.950		0.950	
Satd. Flow (prot)	1749	0	0	1736	1776	1583	1482
Flt Permitted				0.211		0.950	
Satd. Flow (perm)	1749	0	0	386	1776	1583	1482
Right Turn on Red		Yes					Yes
Satd. Flow (RTOR)	12						213
Link Speed (mph)	45				45	30	
Link Distance (ft)	1974				176	2080	
Travel Time (s)	29.9				2.7	47.3	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	7%	7%	0%	4%	7%	14%	9%
Adj. Flow (vph)	1501	189	2	198	1216	134	213
Shared Lane Traffic (%)							
Lane Group Flow (vph)	1690	0	0	200	1216	134	213
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	R NA	Left	Left	Left	Right
Median Width(ft)	12				12	12	
Link Offset(ft)	0				0	0	
Crosswalk Width(ft)	16				16	16	
Two way Left Turn Lane	Yes				Yes		
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	15		15	9
Number of Detectors	2		1	1	2	1	1
Detector Template	Thru		Left	Left	Thru	Left	Right
Leading Detector (ft)	100		20	20	100	20	20
Trailing Detector (ft)	0		0	0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0	0
Detector 1 Size(ft)	6		20	20	6	20	20
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94				94		
Detector 2 Size(ft)	6				6		
Detector 2 Type	Cl+Ex				Cl+Ex		
Detector 2 Channel							
Detector 2 Extend (s)	0.0				0.0		
Turn Type	NA		custom	Prot	NA	Prot	Perm
Protected Phases	2			1	6	8	

Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Permitted Phases			1				8
Detector Phase	2		1	1	6	8	8
Switch Phase							
Minimum Initial (s)	10.0		5.0	5.0	10.0	5.0	5.0
Minimum Split (s)	15.0		10.0	10.0	15.0	10.0	10.0
Total Split (s)	36.0		24.0	24.0	60.0	10.0	10.0
Total Split (%)	51.4%		34.3%	34.3%	85.7%	14.3%	14.3%
Maximum Green (s)	31.0		19.0	19.0	55.0	5.0	5.0
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
Lost Time Adjust (s)	0.0			0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0			5.0	5.0	5.0	5.0
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?	Yes		Yes	Yes			
Vehicle Extension (s)	2.0		2.0	2.0	2.0	2.0	2.0
Recall Mode	C-Max		None	None	Max	None	None
Act Effct Green (s)	31.0			19.0	55.0	5.0	5.0
Actuated g/C Ratio	0.44			0.27	0.79	0.07	0.07
v/c Ratio	2.16			1.92	0.87	1.19	0.70
Control Delay	547.0			471.1	14.6	177.7	19.7
Queue Delay	0.0			0.0	0.0	0.0	0.0
Total Delay	547.0			471.1	14.6	177.7	19.7
LOS	F			F	B	F	B
Approach Delay	547.0				79.0	80.7	
Approach LOS	F				E	F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 2.16			
Intersection Signal Delay: 308.2		Intersection LOS: F	
Intersection Capacity Utilization 112.3%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 202: Waco Street & FM 1960

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	1690	200	1216	134	213
v/c Ratio	2.16	1.92	0.87	1.19	0.70
Control Delay	547.0	471.1	14.6	177.7	19.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	547.0	471.1	14.6	177.7	19.7
Queue Length 50th (ft)	~1214	~135	242	~71	0
Queue Length 95th (ft)	#1405	#245	#471	#165	#73
Internal Link Dist (ft)	1894		96	2000	
Turn Bay Length (ft)		125			225
Base Capacity (vph)	781	104	1395	113	303
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	2.16	1.92	0.87	1.19	0.70

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

Movement	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	1306	164	2	172	1058	117	185
Future Volume (vph)	1306	164	2	172	1058	117	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0			5.0	5.0	5.0	5.0
Lane Util. Factor	1.00			1.00	1.00	1.00	1.00
Frt	0.98			1.00	1.00	1.00	0.85
Flt Protected	1.00			0.95	1.00	0.95	1.00
Satd. Flow (prot)	1749			1736	1776	1583	1482
Flt Permitted	1.00			0.21	1.00	0.95	1.00
Satd. Flow (perm)	1749			385	1776	1583	1482
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	1501	189	2	198	1216	134	213
RTOR Reduction (vph)	7	0	0	0	0	0	198
Lane Group Flow (vph)	1683	0	0	200	1216	134	15
Heavy Vehicles (%)	7%	7%	0%	4%	7%	14%	9%
Turn Type	NA		custom	Prot	NA	Prot	Perm
Protected Phases	2			1	6	8	
Permitted Phases			1				8
Actuated Green, G (s)	31.0			19.0	55.0	5.0	5.0
Effective Green, g (s)	31.0			19.0	55.0	5.0	5.0
Actuated g/C Ratio	0.44			0.27	0.79	0.07	0.07
Clearance Time (s)	5.0			5.0	5.0	5.0	5.0
Vehicle Extension (s)	2.0			2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	774			104	1395	113	105
v/s Ratio Prot	c0.96				0.68	c0.08	
v/s Ratio Perm				c0.52			0.01
v/c Ratio	2.17			1.92	0.87	1.19	0.14
Uniform Delay, d1	19.5			25.5	5.1	32.5	30.5
Progression Factor	1.00			1.00	1.00	1.00	1.00
Incremental Delay, d2	532.9			448.8	7.7	143.1	0.2
Delay (s)	552.4			474.3	12.8	175.6	30.7
Level of Service	F			F	B	F	C
Approach Delay (s)	552.4				78.0	86.7	
Approach LOS	F				E	F	

Intersection Summary			
HCM 2000 Control Delay	311.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.99		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	112.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (veh/h)	1306	164	2	172	1058	117	185
Future Volume (veh/h)	1306	164	2	172	1058	117	185
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach	No				No	No	
Adj Sat Flow, veh/h/ln	1796	1796		1841	1796	1693	1767
Adj Flow Rate, veh/h	1501	189		198	1216	134	213
Peak Hour Factor	0.87	0.87		0.87	0.87	0.87	0.87
Percent Heavy Veh, %	7	7		4	7	14	9
Cap, veh/h	897	113		246	1411	115	107
Arrive On Green	0.57	0.57		0.14	0.79	0.07	0.07
Sat Flow, veh/h	1564	197		1753	1796	1612	1497
Grp Volume(v), veh/h	0	1690		198	1216	134	213
Grp Sat Flow(s),veh/h/ln	0	1761		1753	1796	1612	1497
Q Serve(g_s), s	0.0	40.2		7.7	31.4	5.0	5.0
Cycle Q Clear(g_c), s	0.0	40.2		7.7	31.4	5.0	5.0
Prop In Lane		0.11		1.00		1.00	1.00
Lane Grp Cap(c), veh/h	0	1010		246	1411	115	107
V/C Ratio(X)	0.00	1.67		0.80	0.86	1.16	1.99
Avail Cap(c_a), veh/h	0	1010		476	1411	115	107
HCM Platoon Ratio	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	14.9		29.1	5.0	32.5	32.5
Incr Delay (d2), s/veh	0.0	307.1		2.3	7.1	134.6	477.9
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	97.4		3.1	5.1	6.2	15.9
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	0.0	322.0		31.5	12.1	167.1	510.4
LnGrp LOS	A	F		C	B	F	F
Approach Vol, veh/h	1690				1414	347	
Approach Delay, s/veh	322.0				14.8	377.8	
Approach LOS	F				B	F	

Timer - Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	14.8	45.2				60.0		10.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	19.0	31.0				55.0		5.0
Max Q Clear Time (g_c+I1), s	9.7	42.2				33.4		7.0
Green Ext Time (p_c), s	0.2	0.0				6.9		0.0

Intersection Summary	
HCM 6th Ctrl Delay	201.7
HCM 6th LOS	F

Notes

User approved ignoring U-Turning movement.

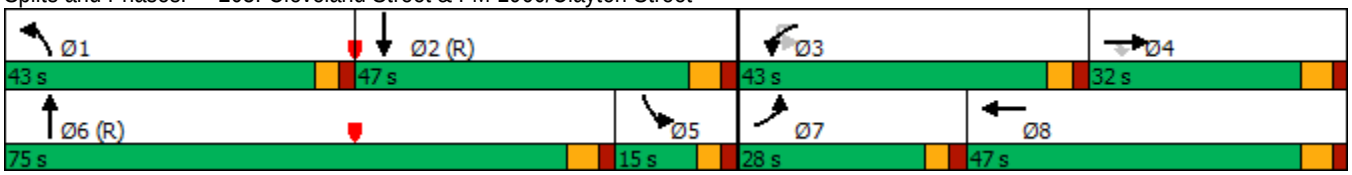
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	269	248	984	2	88	389	84	622	552	97	53	1173
Future Volume (vph)	269	248	984	2	88	389	84	622	552	97	53	1173
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	600		600		0		0	225		0	100	
Storage Lanes	1		1		1		0	1		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95
Frt			0.850			0.973			0.978			0.980
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1626	1827	1509	0	1406	1814	0	1612	3106	0	1805	3329
Flt Permitted	0.950				0.105			0.950			0.950	
Satd. Flow (perm)	1626	1827	1509	0	155	1814	0	1612	3106	0	1805	3329
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)			589			6			15			10
Link Speed (mph)		35				35			55			45
Link Distance (ft)		1871				1513			495			3038
Travel Time (s)		36.4				29.5			6.1			46.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	11%	4%	7%	0%	29%	1%	6%	12%	11%	29%	0%	6%
Adj. Flow (vph)	292	270	1070	2	96	423	91	676	600	105	58	1275
Shared Lane Traffic (%)												
Lane Group Flow (vph)	292	270	1070	0	98	514	0	676	705	0	58	1471
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	2	1	1	1	2		1	2		1	2
Detector Template	Left	Thru	Right	Left	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	100	20	20	20	100		20	100		20	100
Trailing Detector (ft)	0	0	0	0	0	0		0	0		0	0
Detector 1 Position(ft)	0	0	0	0	0	0		0	0		0	0
Detector 1 Size(ft)	20	6	20	20	20	6		20	6		20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94				94			94			94
Detector 2 Size(ft)		6				6			6			6
Detector 2 Type		Cl+Ex				Cl+Ex			Cl+Ex			Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0				0.0			0.0			0.0
Turn Type	Prot	NA	Perm	custom	Prot	NA		Prot	NA		Prot	NA
Protected Phases	7	4			3	8		1	6		5	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	180
Future Volume (vph)	180
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.95
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.92
Heavy Vehicles (%)	8%
Adj. Flow (vph)	196
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Permitted Phases			4	3								
Detector Phase	7	4	4	3	3	8		1	6		5	2
Switch Phase												
Minimum Initial (s)	6.0	10.0	10.0	6.0	6.0	10.0		10.0	10.0		10.0	10.0
Minimum Split (s)	11.0	16.0	16.0	11.0	11.0	16.0		15.0	16.0		15.0	16.0
Total Split (s)	28.0	32.0	32.0	43.0	43.0	47.0		43.0	75.0		15.0	47.0
Total Split (%)	17.0%	19.4%	19.4%	26.1%	26.1%	28.5%		26.1%	45.5%		9.1%	28.5%
Maximum Green (s)	23.0	26.0	26.0	38.0	38.0	41.0		38.0	69.0		10.0	41.0
Yellow Time (s)	3.0	4.0	4.0	3.0	3.0	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		2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0		5.0	6.0		5.0	6.0		5.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lead	Lag		Lead	Lead		Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes
Vehicle Extension (s)	3.0	4.0	4.0	3.0	3.0	5.0		4.0	4.0		4.0	4.0
Recall Mode	None	None	None	None	None	None		None	C-Max		None	C-Max
Act Effct Green (s)	23.0	26.0	26.0		38.0	41.0		38.0	72.0		10.0	41.0
Actuated g/C Ratio	0.14	0.16	0.16		0.23	0.25		0.23	0.44		0.06	0.25
v/c Ratio	1.29	0.94	1.46		2.80	1.13		1.82	0.52		0.53	1.76
Control Delay	212.9	107.4	233.8		905.2	136.2		414.4	35.4		93.3	383.0
Queue Delay	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay	212.9	107.4	233.8		905.2	136.2		414.4	35.4		93.3	383.0
LOS	F	F	F		F	F		F	D		F	F
Approach Delay		209.1				259.3			220.9			372.0
Approach LOS		F				F			F			F

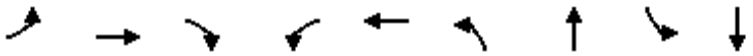
Intersection Summary			
Area Type:	Other		
Cycle Length: 165			
Actuated Cycle Length: 165			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 2.80			
Intersection Signal Delay: 266.6		Intersection LOS: F	
Intersection Capacity Utilization 131.4%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 203: Cleveland Street & FM 1960/Clayton Street



Lane Group	SBR
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	292	270	1070	98	514	676	705	58	1471
v/c Ratio	1.29	0.94	1.46	2.80	1.13	1.82	0.52	0.53	1.76
Control Delay	212.9	107.4	233.8	905.2	136.2	414.4	35.4	93.3	383.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	212.9	107.4	233.8	905.2	136.2	414.4	35.4	93.3	383.0
Queue Length 50th (ft)	~400	293	~1013	~179	~637	~1097	293	62	~1245
Queue Length 95th (ft)	#599	#474	#1283	#278	#875	#1347	357	115	#1385
Internal Link Dist (ft)		1791			1433		415		2958
Turn Bay Length (ft)	600		600			225		100	
Base Capacity (vph)	226	287	733	35	455	371	1363	109	834
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	1.29	0.94	1.46	2.80	1.13	1.82	0.52	0.53	1.76

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	269	248	984	2	88	389	84	622	552	97	53	1173
Future Volume (vph)	269	248	984	2	88	389	84	622	552	97	53	1173
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0	6.0		5.0	6.0		5.0	6.0		5.0	6.0
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95
Frt	1.00	1.00	0.85		1.00	0.97		1.00	0.98		1.00	0.98
Flt Protected	0.95	1.00	1.00		0.95	1.00		0.95	1.00		0.95	1.00
Satd. Flow (prot)	1626	1827	1509		1406	1815		1612	3105		1805	3329
Flt Permitted	0.95	1.00	1.00		0.11	1.00		0.95	1.00		0.95	1.00
Satd. Flow (perm)	1626	1827	1509		156	1815		1612	3105		1805	3329
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	292	270	1070	2	96	423	91	676	600	105	58	1275
RTOR Reduction (vph)	0	0	496	0	0	5	0	0	9	0	0	8
Lane Group Flow (vph)	292	270	574	0	98	509	0	676	696	0	58	1463
Heavy Vehicles (%)	11%	4%	7%	0%	29%	1%	6%	12%	11%	29%	0%	6%
Turn Type	Prot	NA	Perm	custom	Prot	NA		Prot	NA		Prot	NA
Protected Phases	7	4			3	8		1	6		5	2
Permitted Phases			4	3								
Actuated Green, G (s)	23.0	26.0	26.0		38.0	41.0		38.0	71.0		8.0	41.0
Effective Green, g (s)	23.0	26.0	26.0		38.0	41.0		38.0	71.0		8.0	41.0
Actuated g/C Ratio	0.14	0.16	0.16		0.23	0.25		0.23	0.43		0.05	0.25
Clearance Time (s)	5.0	6.0	6.0		5.0	6.0		5.0	6.0		5.0	6.0
Vehicle Extension (s)	3.0	4.0	4.0		3.0	5.0		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)	226	287	237		35	451		371	1336		87	827
v/s Ratio Prot	0.18	0.15				0.28		c0.42	0.22		0.03	c0.44
v/s Ratio Perm			c0.38		c0.63							
v/c Ratio	1.29	0.94	2.42		2.80	1.13		1.82	0.52		0.67	1.77
Uniform Delay, d1	71.0	68.7	69.5		63.5	62.0		63.5	34.5		77.2	62.0
Progression Factor	1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2	160.3	37.8	652.2		883.4	82.9		380.4	1.5		19.2	351.3
Delay (s)	231.3	106.5	721.7		946.9	144.9		443.9	36.0		96.4	413.3
Level of Service	F	F	F		F	F		F	D		F	F
Approach Delay (s)		532.2				273.3			235.7			401.2
Approach LOS		F				F			F			F

Intersection Summary			
HCM 2000 Control Delay	383.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	2.15		
Actuated Cycle Length (s)	165.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	131.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	180
Future Volume (vph)	180
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	196
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	8%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	269	248	984	2	88	389	84	622	552	97	53	1173
Future Volume (veh/h)	269	248	984	2	88	389	84	622	552	97	53	1173
Initial Q (Qb), veh	0	0	0		0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00		1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No				No			No			No
Adj Sat Flow, veh/h/ln	1737	1841	1796		1470	1885	1811	1722	1737	1470	1900	1811
Adj Flow Rate, veh/h	292	270	1070		96	423	91	676	600	105	58	1275
Peak Hour Factor	0.92	0.92	0.92		0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	11	4	7		29	1	6	12	11	29	0	6
Cap, veh/h	231	566	468		112	374	80	378	1174	205	210	928
Arrive On Green	0.14	0.31	0.31		0.08	0.25	0.25	0.23	0.42	0.42	0.12	0.31
Sat Flow, veh/h	1654	1841	1522		1400	1504	323	1640	2808	490	1810	2992
Grp Volume(v), veh/h	292	270	1070		96	0	514	676	352	353	58	729
Grp Sat Flow(s),veh/h/ln	1654	1841	1522		1400	0	1827	1640	1650	1649	1810	1721
Q Serve(g_s), s	23.0	19.6	41.4		11.2	0.0	41.0	38.0	26.0	26.2	4.8	51.2
Cycle Q Clear(g_c), s	23.0	19.6	41.4		11.2	0.0	41.0	38.0	26.0	26.2	4.8	51.2
Prop In Lane	1.00		1.00		1.00		0.18	1.00		0.30	1.00	
Lane Grp Cap(c), veh/h	231	566	468		112	0	454	378	690	689	210	534
V/C Ratio(X)	1.27	0.48	2.28		0.85	0.00	1.13	1.79	0.51	0.51	0.28	1.37
Avail Cap(c_a), veh/h	231	566	468		322	0	454	378	690	689	210	534
HCM Platoon Ratio	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00		1.00	0.00	1.00	1.00	1.00	1.00	0.09	0.09
Uniform Delay (d), s/veh	71.0	46.3	38.1		74.9	0.0	62.0	63.5	35.5	35.5	66.6	56.9
Incr Delay (d2), s/veh	149.6	0.9	585.0		16.3	0.0	83.7	365.8	2.7	2.7	0.1	166.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.3	9.2	91.5		4.5	0.0	29.5	53.7	10.7	10.7	2.2	46.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	220.6	47.2	623.0		91.2	0.0	145.7	429.3	38.2	38.2	66.7	223.0
LnGrp LOS	F	D	F		F	A	F	F	D	D	E	F
Approach Vol, veh/h		1632				610			1381			1529
Approach Delay, s/veh		455.7				137.1			229.7			220.7
Approach LOS		F				F			F			F

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	43.0	57.5	18.2	56.8	25.5	75.0	28.0	47.0
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	6.0	* 6	5.0	6.0
Max Green Setting (Gmax), s	38.0	41.0	38.0	26.0	10.0	* 69	23.0	41.0
Max Q Clear Time (g_c+I1), s	40.0	53.2	13.2	43.4	6.8	28.2	25.0	43.0
Green Ext Time (p_c), s	0.0	0.0	0.2	0.0	0.0	6.3	0.0	0.0

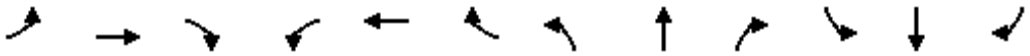
Intersection Summary	
HCM 6th Ctrl Delay	287.7
HCM 6th LOS	F

Notes

User approved ignoring U-Turning movement.

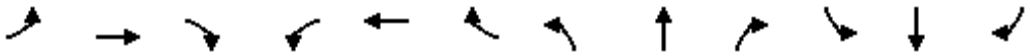
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	180
Future Volume (veh/h)	180
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1781
Adj Flow Rate, veh/h	196
Peak Hour Factor	0.92
Percent Heavy Veh, %	8
Cap, veh/h	142
Arrive On Green	0.31
Sat Flow, veh/h	457
Grp Volume(v), veh/h	742
Grp Sat Flow(s),veh/h/ln	1729
Q Serve(g_s), s	51.2
Cycle Q Clear(g_c), s	51.2
Prop In Lane	0.26
Lane Grp Cap(c), veh/h	536
V/C Ratio(X)	1.38
Avail Cap(c_a), veh/h	536
HCM Platoon Ratio	1.00
Upstream Filter(I)	0.09
Uniform Delay (d), s/veh	56.9
Incr Delay (d2), s/veh	173.5
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	47.6
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	230.4
LnGrp LOS	F
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	174	58	437	515	21	188	291	84	6	375	64
Future Volume (vph)	26	174	58	437	515	21	188	291	84	6	375	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.997			0.980			0.980	
Flt Protected		0.994			0.978			0.984			0.999	
Satd. Flow (prot)	0	1671	1553	0	1830	0	0	1794	0	0	1834	0
Flt Permitted		0.994			0.978			0.984			0.999	
Satd. Flow (perm)	0	1671	1553	0	1830	0	0	1794	0	0	1834	0
Link Speed (mph)		45			30			30			30	
Link Distance (ft)		1513			1036			419			1496	
Travel Time (s)		22.9			23.5			9.5			34.0	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	0%	15%	4%	1%	1%	11%	2%	2%	3%	0%	1%	4%
Adj. Flow (vph)	30	200	67	502	592	24	216	334	97	7	431	74
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	230	67	0	1118	0	0	647	0	0	512	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 131.3%		ICU Level of Service H	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	26	174	58	437	515	21	188	291	84	6	375	64
Future Volume (vph)	26	174	58	437	515	21	188	291	84	6	375	64
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	30	200	67	502	592	24	216	334	97	7	431	74

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total (vph)	230	67	1118	647	512
Volume Left (vph)	30	0	502	216	7
Volume Right (vph)	0	67	24	97	74
Hadj (s)	0.29	-0.63	0.10	0.01	-0.06
Departure Headway (s)	9.9	9.0	8.9	8.7	8.7
Degree Utilization, x	0.64	0.17	2.77	1.57	1.23
Capacity (veh/h)	354	393	413	415	421
Control Delay (s)	27.6	12.7	823.7	291.4	151.4
Approach Delay (s)	24.2		823.7	291.4	151.4
Approach LOS	C		F	F	F

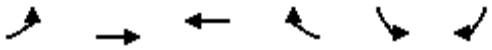
Intersection Summary				
Delay	463.9			
Level of Service	F			
Intersection Capacity Utilization	131.3%	ICU Level of Service	H	
Analysis Period (min)	15			

Intersection	
Intersection Delay, s/veh	482.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	174	58	437	515	21	188	291	84	6	375	64
Future Vol, veh/h	26	174	58	437	515	21	188	291	84	6	375	64
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	0	15	4	1	1	11	2	2	3	0	1	4
Mvmt Flow	30	200	67	502	592	24	216	334	97	7	431	74
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0

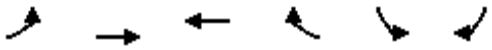
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	2
HCM Control Delay	39.1	835.4	313.7	180.2
HCM LOS	E	F	F	F

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	33%	13%	0%	45%	1%
Vol Thru, %	52%	87%	0%	53%	84%
Vol Right, %	15%	0%	100%	2%	14%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	563	200	58	973	445
LT Vol	188	26	0	437	6
Through Vol	291	174	0	515	375
RT Vol	84	0	58	21	64
Lane Flow Rate	647	230	67	1118	511
Geometry Grp	2	7	7	5	2
Degree of Util (X)	1.58	0.623	0.171	2.788	1.236
Departure Headway (Hd)	14.601	16.898	16.349	11.019	15.944
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	259	216	221	347	235
Service Time	12.601	14.598	14.049	9.019	13.944
HCM Lane V/C Ratio	2.498	1.065	0.303	3.222	2.174
HCM Control Delay	313.7	44	22.4	835.4	180.2
HCM Lane LOS	F	E	C	F	F
HCM 95th-tile Q	24	3.6	0.6	77.4	14.1



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	2	285	965	11	0	2
Future Volume (vph)	2	285	965	11	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.998		0.865	
Flt Protected						
Satd. Flow (prot)	0	1776	1878	0	1644	0
Flt Permitted						
Satd. Flow (perm)	0	1776	1878	0	1644	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		1036	1081		1292	
Travel Time (s)		15.7	16.4		29.4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	7%	1%	0%	0%	0%
Adj. Flow (vph)	2	303	1027	12	0	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	305	1039	0	2	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 61.5%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	285	965	11	0	2
Future Volume (Veh/h)	2	285	965	11	0	2
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	2	303	1027	12	0	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1039				1340	1033
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1039				1340	1033
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	99
cM capacity (veh/h)	677				169	285

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	305	1039	2
Volume Left	2	0	0
Volume Right	0	12	2
cSH	677	1700	285
Volume to Capacity	0.00	0.61	0.01
Queue Length 95th (ft)	0	0	1
Control Delay (s)	0.1	0.0	17.7
Lane LOS	A		C
Approach Delay (s)	0.1	0.0	17.7
Approach LOS			C

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	61.5%	ICU Level of Service	B
Analysis Period (min)	15		

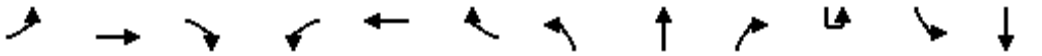
Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	285	965	11	0	2
Future Vol, veh/h	2	285	965	11	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	7	1	0	0	0
Mvmt Flow	2	303	1027	12	0	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1039	0	-	0	1340	1033
Stage 1	-	-	-	-	1033	-
Stage 2	-	-	-	-	307	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	677	-	-	-	170	285
Stage 1	-	-	-	-	346	-
Stage 2	-	-	-	-	751	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	677	-	-	-	169	285
Mov Cap-2 Maneuver	-	-	-	-	169	-
Stage 1	-	-	-	-	345	-
Stage 2	-	-	-	-	751	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	17.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	677	-	-	-	285
HCM Lane V/C Ratio	0.003	-	-	-	0.007
HCM Control Delay (s)	10.3	0	-	-	17.7
HCM Lane LOS	B	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	143	14	63	31	39	53	14	1052	26	2	23	1579
Future Volume (vph)	143	14	63	31	39	53	14	1052	26	2	23	1579
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.961			0.942			0.996				0.993
Flt Protected		0.969			0.988			0.999				0.999
Satd. Flow (prot)	0	1769	0	0	1646	0	0	3335	0	0	0	3330
Flt Permitted		0.740			0.872			0.776				0.912
Satd. Flow (perm)	0	1351	0	0	1453	0	0	2591	0	0	0	3040
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)		11			52			6				11
Link Speed (mph)		30			30			45				55
Link Distance (ft)		594			763			3038				1923
Travel Time (s)		13.5			17.3			46.0				23.8
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	0%	0%	0%	0%	18%	4%	0%	8%	0%	0%	0%	8%
Adj. Flow (vph)	174	17	77	38	48	65	17	1283	32	2	28	1926
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	268	0	0	151	0	0	1332	0	0	0	2046
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Number of Detectors	1	2		1	2		1	2		1	1	2
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Left	Thru
Leading Detector (ft)	20	100		20	100		20	100		20	20	100
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	Perm	NA
Protected Phases		4			8			6				2
Permitted Phases	4			8			6			2	2	
Detector Phase	4	4		8	8		6	6		2	2	2
Switch Phase												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	74
Future Volume (vph)	74
Ideal Flow (vphpl)	1900
Lane Util. Factor	0.95
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.82
Heavy Vehicles (%)	0%
Adj. Flow (vph)	90
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	

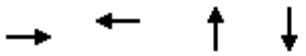
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Minimum Initial (s)	5.0	5.0		5.0	5.0		10.0	10.0		10.0	10.0	10.0
Minimum Split (s)	11.0	11.0		24.0	24.0		16.0	16.0		16.0	16.0	16.0
Total Split (s)	24.0	24.0		24.0	24.0		46.0	46.0		46.0	46.0	46.0
Total Split (%)	34.3%	34.3%		34.3%	34.3%		65.7%	65.7%		65.7%	65.7%	65.7%
Maximum Green (s)	18.0	18.0		18.0	18.0		40.0	40.0		40.0	40.0	40.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)		0.0			0.0			0.0				0.0
Total Lost Time (s)		6.0			6.0			6.0				6.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		4.0	4.0		4.0	4.0	4.0
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	C-Max
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				13.0	13.0							
Pedestrian Calls (#/hr)				0	0							
Act Effct Green (s)		16.0			16.0			42.0				42.0
Actuated g/C Ratio		0.23			0.23			0.60				0.60
v/c Ratio		0.85			0.41			0.86				1.12
Control Delay		49.5			18.1			19.7				79.6
Queue Delay		0.0			0.0			0.0				0.0
Total Delay		49.5			18.1			19.7				79.6
LOS		D			B			B				E
Approach Delay		49.5			18.1			19.7				79.6
Approach LOS		D			B			B				E

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.12			
Intersection Signal Delay: 54.0		Intersection LOS: D	
Intersection Capacity Utilization 93.0%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 206: Cleveland Street & Linney Street

Lane Group	SBR
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

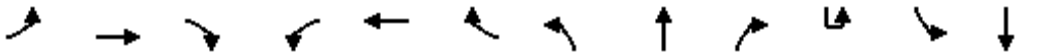


Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	268	151	1332	2046
v/c Ratio	0.85	0.41	0.86	1.12
Control Delay	49.5	18.1	19.7	79.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	49.5	18.1	19.7	79.6
Queue Length 50th (ft)	102	34	239	~570
Queue Length 95th (ft)	#180	71	286	#605
Internal Link Dist (ft)	514	683	2958	1843
Turn Bay Length (ft)				
Base Capacity (vph)	355	412	1557	1829
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.75	0.37	0.86	1.12

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

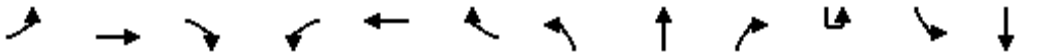


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	143	14	63	31	39	53	14	1052	26	2	23	1579
Future Volume (vph)	143	14	63	31	39	53	14	1052	26	2	23	1579
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0			6.0				6.0
Lane Util. Factor		1.00			1.00			0.95				0.95
Frt		0.96			0.94			1.00				0.99
Flt Protected		0.97			0.99			1.00				1.00
Satd. Flow (prot)		1769			1645			3338				3333
Flt Permitted		0.74			0.87			0.78				0.91
Satd. Flow (perm)		1352			1453			2590				3040
Peak-hour factor, PHF	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	174	17	77	38	48	65	17	1283	32	2	28	1926
RTOR Reduction (vph)	0	8	0	0	40	0	0	2	0	0	0	4
Lane Group Flow (vph)	0	260	0	0	111	0	0	1330	0	0	0	2042
Heavy Vehicles (%)	0%	0%	0%	0%	18%	4%	0%	8%	0%	0%	0%	8%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	Perm	NA
Protected Phases		4			8			6				2
Permitted Phases	4			8			6			2	2	
Actuated Green, G (s)		16.0			16.0			42.0				42.0
Effective Green, g (s)		16.0			16.0			42.0				42.0
Actuated g/C Ratio		0.23			0.23			0.60				0.60
Clearance Time (s)		6.0			6.0			6.0				6.0
Vehicle Extension (s)		2.0			2.0			4.0				4.0
Lane Grp Cap (vph)		309			332			1554				1824
v/s Ratio Prot												
v/s Ratio Perm		c0.19			0.08			0.51				c0.67
v/c Ratio		0.84			0.33			0.86				1.12
Uniform Delay, d1		25.8			22.6			11.5				14.0
Progression Factor		1.00			1.00			1.00				1.00
Incremental Delay, d2		17.1			0.2			6.3				61.7
Delay (s)		42.9			22.8			17.8				75.7
Level of Service		D			C			B				E
Approach Delay (s)		42.9			22.8			17.8				75.7
Approach LOS		D			C			B				E

Intersection Summary			
HCM 2000 Control Delay	51.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	93.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	74
Future Volume (vph)	74
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.82
Adj. Flow (vph)	90
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	0%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary



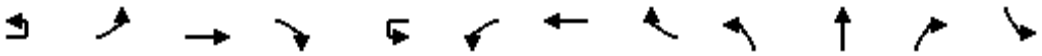
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	143	14	63	31	39	53	14	1052	26	2	23	1579
Future Volume (veh/h)	143	14	63	31	39	53	14	1052	26	2	23	1579
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00		1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach		No			No			No				No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1633	1841	1900	1781	1900		1900	1781
Adj Flow Rate, veh/h	174	17	77	38	48	65	17	1283	32		28	1926
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82		0.82	0.82
Percent Heavy Veh, %	0	0	0	0	18	4	0	8	0		0	8
Cap, veh/h	278	25	88	116	130	137	53	1642	48		65	1929
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.61	0.61	0.61		0.61	0.61
Sat Flow, veh/h	903	118	412	239	606	639	1	2671	77		21	3137
Grp Volume(v), veh/h	268	0	0	151	0	0	667	0	665		1071	0
Grp Sat Flow(s),veh/h/ln	1434	0	0	1485	0	0	1141	0	1607		1710	0
Q Serve(g_s), s	6.5	0.0	0.0	0.0	0.0	0.0	0.8	0.0	19.0		20.7	0.0
Cycle Q Clear(g_c), s	12.6	0.0	0.0	6.1	0.0	0.0	43.0	0.0	19.0		43.0	0.0
Prop In Lane	0.65		0.29	0.25		0.43	0.03		0.05		0.03	
Lane Grp Cap(c), veh/h	391	0	0	382	0	0	755	0	988		1104	0
V/C Ratio(X)	0.69	0.00	0.00	0.40	0.00	0.00	0.88	0.00	0.67		0.97	0.00
Avail Cap(c_a), veh/h	452	0	0	441	0	0	755	0	988		1104	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.59	0.00	0.59		1.00	0.00
Uniform Delay (d), s/veh	26.5	0.0	0.0	24.0	0.0	0.0	15.8	0.0	8.9		13.4	0.0
Incr Delay (d2), s/veh	2.5	0.0	0.0	0.2	0.0	0.0	9.1	0.0	2.2		20.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	0.0	0.0	2.1	0.0	0.0	8.7	0.0	5.1		15.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.0	0.0	0.0	24.3	0.0	0.0	24.9	0.0	11.0		34.1	0.0
LnGrp LOS	C	A	A	C	A	A	C	A	B		C	A
Approach Vol, veh/h		268			151			1332				2044
Approach Delay, s/veh		29.0			24.3			18.0				37.1
Approach LOS		C			C			B				D

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		49.0		21.0		49.0		21.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		40.0		18.0		40.0		18.0				
Max Q Clear Time (g_c+I1), s		45.0		14.6		45.0		8.1				
Green Ext Time (p_c), s		0.0		0.4		0.0		0.4				

Intersection Summary												
HCM 6th Ctrl Delay			29.3									
HCM 6th LOS			C									

Notes
User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	74
Future Volume (veh/h)	74
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1900
Adj Flow Rate, veh/h	90
Peak Hour Factor	0.82
Percent Heavy Veh, %	0
Cap, veh/h	91
Arrive On Green	0.61
Sat Flow, veh/h	147
Grp Volume(v), veh/h	973
Grp Sat Flow(s),veh/h/ln	1595
Q Serve(g_s), s	42.2
Cycle Q Clear(g_c), s	42.2
Prop In Lane	0.09
Lane Grp Cap(c), veh/h	981
V/C Ratio(X)	0.99
Avail Cap(c_a), veh/h	981
HCM Platoon Ratio	1.00
Upstream Filter(I)	1.00
Uniform Delay (d), s/veh	13.3
Incr Delay (d2), s/veh	27.0
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	16.1
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	40.3
LnGrp LOS	D
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	



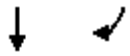
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	138	1681	34	2	8	1536	63	19	5	0	55
Future Volume (vph)	2	138	1681	34	2	8	1536	63	19	5	0	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		200		0		200		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.997				0.994					
Flt Protected		0.950				0.950				0.962		
Satd. Flow (prot)	0	1753	4752	0	0	1527	4647	0	0	1662	0	0
Flt Permitted		0.131				0.205				0.450		
Satd. Flow (perm)	0	242	4752	0	0	330	4647	0	0	777	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			10				7					
Link Speed (mph)			55				50			30		
Link Distance (ft)			1682				1949			1310		
Travel Time (s)			20.9				26.6			29.8		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	3%	9%	0%	100%	0%	11%	10%	0%	50%	0%	0%
Adj. Flow (vph)	2	147	1788	36	2	9	1634	67	20	5	0	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	149	1824	0	0	11	1701	0	0	25	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane			Yes				Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	2		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	20	100		20	20	100		20	100		20
Trailing Detector (ft)	0	0	0		0	0	0		0	0		0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0		0
Detector 1 Size(ft)	20	20	6		20	20	6		20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	Prot	NA		Perm	Perm	NA		Perm	NA		Perm
Protected Phases		5	2				6			8		

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	150
Future Volume (vph)	0	150
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.901	
Flt Protected	0.987	
Satd. Flow (prot)	1690	0
Flt Permitted	0.900	
Satd. Flow (perm)	1541	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	150	
Link Speed (mph)	30	
Link Distance (ft)	2374	
Travel Time (s)	54.0	
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	160
Shared Lane Traffic (%)		
Lane Group Flow (vph)	219	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	4	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Permitted Phases	5				6	6			8			4
Detector Phase	5	5	2		6	6	6		8	8		4
Switch Phase												
Minimum Initial (s)	8.0	8.0	10.0		10.0	10.0	10.0		8.0	8.0		8.0
Minimum Split (s)	13.0	13.0	17.0		22.5	22.5	22.5		13.5	13.5		13.5
Total Split (s)	40.0	40.0	66.5		26.5	26.5	26.5		13.5	13.5		13.5
Total Split (%)	50.0%	50.0%	83.1%		33.1%	33.1%	33.1%		16.9%	16.9%		16.9%
Maximum Green (s)	35.0	35.0	59.5		19.5	19.5	19.5		8.0	8.0		8.0
Yellow Time (s)	3.5	3.5	5.0		5.0	5.0	5.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	2.0		2.0	2.0	2.0		2.0	2.0		2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	7.0			7.0	7.0			5.5		
Lead/Lag	Lag	Lag			Lead	Lead	Lead					
Lead-Lag Optimize?	Yes	Yes			Yes	Yes	Yes					
Vehicle Extension (s)	5.0	5.0	5.0		5.0	5.0	5.0		5.0	5.0		5.0
Recall Mode	None	None	C-Max		C-Max	C-Max	C-Max		None	None		None
Act Effct Green (s)		35.0	59.5			19.5	19.5			8.0		
Actuated g/C Ratio		0.44	0.74			0.24	0.24			0.10		
v/c Ratio		1.42	0.52			0.14	1.49			0.32		
Control Delay		260.6	4.8			28.8	254.1			45.5		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay		260.6	4.8			28.8	254.1			45.5		
LOS		F	A			C	F			D		
Approach Delay			24.2				252.6			45.5		
Approach LOS			C				F			D		

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.49			
Intersection Signal Delay: 124.2		Intersection LOS: F	
Intersection Capacity Utilization 69.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 301: Bowie Street & US 90



Lane Group	SBT	SBR
Permitted Phases		
Detector Phase	4	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	13.5	
Total Split (s)	13.5	
Total Split (%)	16.9%	
Maximum Green (s)	8.0	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	5.0	
Recall Mode	None	
Act Effct Green (s)	8.0	
Actuated g/C Ratio	0.10	
v/c Ratio	0.76	
Control Delay	31.1	
Queue Delay	0.0	
Total Delay	31.1	
LOS	C	
Approach Delay	31.1	
Approach LOS	C	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	149	1824	11	1701	25	219
v/c Ratio	1.42	0.52	0.14	1.49	0.32	0.76
Control Delay	260.6	4.8	28.8	254.1	45.5	31.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	260.6	4.8	28.8	254.1	45.5	31.1
Queue Length 50th (ft)	~102	108	4	~442	12	33
Queue Length 95th (ft)	#166	134	19	#537	36	#137
Internal Link Dist (ft)		1602		1869	1230	2294
Turn Bay Length (ft)	200		200			
Base Capacity (vph)	105	3536	80	1138	77	289
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	1.42	0.52	0.14	1.49	0.32	0.76

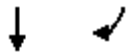
Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

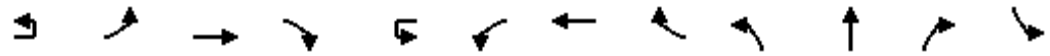
Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	138	1681	34	2	8	1536	63	19	5	0	55
Future Volume (vph)	2	138	1681	34	2	8	1536	63	19	5	0	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	7.0			7.0	7.0			5.5		
Lane Util. Factor		1.00	0.91			1.00	0.91			1.00		
Frt		1.00	1.00			1.00	0.99			1.00		
Flt Protected		0.95	1.00			0.95	1.00			0.96		
Satd. Flow (prot)		1753	4752			1527	4647			1661		
Flt Permitted		0.13	1.00			0.21	1.00			0.45		
Satd. Flow (perm)		241	4752			330	4647			777		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	2	147	1788	36	2	9	1634	67	20	5	0	59
RTOR Reduction (vph)	0	0	3	0	0	0	5	0	0	0	0	0
Lane Group Flow (vph)	0	149	1821	0	0	11	1696	0	0	25	0	0
Heavy Vehicles (%)	0%	3%	9%	0%	100%	0%	11%	10%	0%	50%	0%	0%
Turn Type	custom	Prot	NA		Perm	Perm	NA		Perm	NA		Perm
Protected Phases		5	2				6			8		
Permitted Phases	5				6	6			8			4
Actuated Green, G (s)		35.0	59.5			19.5	19.5			8.0		
Effective Green, g (s)		35.0	59.5			19.5	19.5			8.0		
Actuated g/C Ratio		0.44	0.74			0.24	0.24			0.10		
Clearance Time (s)		5.0	7.0			7.0	7.0			5.5		
Vehicle Extension (s)		5.0	5.0			5.0	5.0			5.0		
Lane Grp Cap (vph)		105	3534			80	1132			77		
v/s Ratio Prot			0.38				c0.36					
v/s Ratio Perm		c0.62				0.03				0.03		
v/c Ratio		1.42	0.52			0.14	1.50			0.32		
Uniform Delay, d1		22.5	4.3			23.7	30.2			33.5		
Progression Factor		1.00	1.00			1.00	1.00			1.00		
Incremental Delay, d2		235.1	0.5			3.6	228.8			5.1		
Delay (s)		257.6	4.8			27.2	259.0			38.6		
Level of Service		F	A			C	F			D		
Approach Delay (s)			23.9				257.5			38.6		
Approach LOS			C				F			D		

Intersection Summary			
HCM 2000 Control Delay	126.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.33		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	69.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	150
Future Volume (vph)	0	150
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.5	
Lane Util. Factor	1.00	
Frt	0.90	
Flt Protected	0.99	
Satd. Flow (prot)	1690	
Flt Permitted	0.90	
Satd. Flow (perm)	1541	
Peak-hour factor, PHF	0.94	0.94
Adj. Flow (vph)	0	160
RTOR Reduction (vph)	135	0
Lane Group Flow (vph)	84	0
Heavy Vehicles (%)	0%	0%
Turn Type	NA	
Protected Phases	4	
Permitted Phases		
Actuated Green, G (s)	8.0	
Effective Green, g (s)	8.0	
Actuated g/C Ratio	0.10	
Clearance Time (s)	5.5	
Vehicle Extension (s)	5.0	
Lane Grp Cap (vph)	154	
v/s Ratio Prot		
v/s Ratio Perm	c0.05	
v/c Ratio	0.55	
Uniform Delay, d1	34.3	
Progression Factor	1.00	
Incremental Delay, d2	6.8	
Delay (s)	41.1	
Level of Service	D	
Approach Delay (s)	41.1	
Approach LOS	D	

Intersection Summary



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (veh/h)	2	138	1681	34	2	8	1536	63	19	5	0	55
Future Volume (veh/h)	2	138	1681	34	2	8	1536	63	19	5	0	55
Initial Q (Qb), veh		0	0	0		0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00	1.00		1.00	1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No				No			No		
Adj Sat Flow, veh/h/ln		1856	1767	1900		1900	1737	1752	1900	1159	1900	1900
Adj Flow Rate, veh/h		147	1788	36		9	1634	67	20	5	0	59
Peak Hour Factor		0.94	0.94	0.94		0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %		3	9	0		0	11	10	0	50	0	0
Cap, veh/h		729	3619	73		115	1139	47	134	21	0	96
Arrive On Green		0.41	0.74	0.74		0.24	0.24	0.24	0.10	0.10	0.00	0.10
Sat Flow, veh/h		1767	4866	98		260	4672	192	535	206	0	388
Grp Volume(v), veh/h		147	1181	643		9	1105	596	25	0	0	219
Grp Sat Flow(s),veh/h/ln		1767	1608	1749		260	1581	1703	741	0	0	1627
Q Serve(g_s), s		4.3	11.9	11.9		2.6	19.5	19.5	0.0	0.0	0.0	5.7
Cycle Q Clear(g_c), s		4.3	11.9	11.9		14.5	19.5	19.5	2.3	0.0	0.0	8.0
Prop In Lane		1.00		0.06		1.00		0.11	0.80		0.00	0.27
Lane Grp Cap(c), veh/h		729	2391	1301		115	771	415	155	0	0	220
V/C Ratio(X)		0.20	0.49	0.49		0.08	1.43	1.44	0.16	0.00	0.00	1.00
Avail Cap(c_a), veh/h		773	2391	1301		115	771	415	155	0	0	220
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00		0.53	0.53	0.53	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh		15.1	4.2	4.2		34.0	30.2	30.3	33.3	0.0	0.0	36.9
Incr Delay (d2), s/veh		0.3	0.7	1.3		0.7	199.5	203.2	1.0	0.0	0.0	59.6
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.5	1.8	2.2		0.2	28.0	30.6	0.5	0.0	0.0	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		15.3	4.9	5.5		34.7	229.8	233.4	34.4	0.0	0.0	96.5
LnGrp LOS		B	A	A		C	F	F	C	A	A	F
Approach Vol, veh/h			1971				1710			25		
Approach Delay, s/veh			5.9				230.0			34.4		
Approach LOS			A				F			C		

Timer - Assigned Phs	2		4	5	6		8					
Phs Duration (G+Y+Rc), s	66.5		13.5	40.0	26.5		13.5					
Change Period (Y+Rc), s	7.0		5.5	7.0	* 7		5.5					
Max Green Setting (Gmax), s	59.5		8.0	35.0	* 20		8.0					
Max Q Clear Time (g_c+I1), s	13.9		10.0	6.3	21.5		4.3					
Green Ext Time (p_c), s	32.3		0.0	0.9	0.0		0.0					

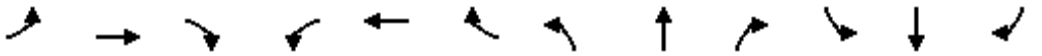
Intersection Summary		
HCM 6th Ctrl Delay	108.8	
HCM 6th LOS	F	

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	0	150
Future Volume (veh/h)	0	150
Initial Q (Qb), veh	0	0
Ped-Bike Adj(A_pbT)		1.00
Parking Bus, Adj	1.00	1.00
Work Zone On Approach	No	
Adj Sat Flow, veh/h/ln	1900	1900
Adj Flow Rate, veh/h	0	160
Peak Hour Factor	0.94	0.94
Percent Heavy Veh, %	0	0
Cap, veh/h	5	119
Arrive On Green	0.00	0.10
Sat Flow, veh/h	50	1189
Grp Volume(v), veh/h	0	0
Grp Sat Flow(s),veh/h/ln	0	0
Q Serve(g_s), s	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0
Prop In Lane		0.73
Lane Grp Cap(c), veh/h	0	0
V/C Ratio(X)	0.00	0.00
Avail Cap(c_a), veh/h	0	0
HCM Platoon Ratio	1.00	1.00
Upstream Filter(I)	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0
Unsig. Movement Delay, s/veh		
LnGrp Delay(d),s/veh	0.0	0.0
LnGrp LOS	A	A
Approach Vol, veh/h	219	
Approach Delay, s/veh	96.5	
Approach LOS	F	
Timer - Assigned Phs		

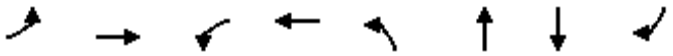


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	338	1094	14	37	1136	109	14	31	43	150	23	410
Future Volume (vph)	338	1094	14	37	1136	109	14	31	43	150	23	410
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	200		0	100		0	0		0
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.987			0.912				0.850
Flt Protected	0.950			0.950			0.950				0.959	
Satd. Flow (prot)	1787	4628	0	1049	4548	0	1583	1328	0	0	1822	1568
Flt Permitted	0.950			0.950			0.538				0.698	
Satd. Flow (perm)	1787	4628	0	1049	4548	0	897	1328	0	0	1326	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			18			48				414
Link Speed (mph)		55			50			55			30	
Link Distance (ft)		1949			4264			1352			297	
Travel Time (s)		24.2			58.1			16.8			6.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	12%	0%	72%	13%	8%	14%	0%	52%	0%	0%	3%
Adj. Flow (vph)	376	1216	16	41	1262	121	16	34	48	167	26	456
Shared Lane Traffic (%)												
Lane Group Flow (vph)	376	1232	0	41	1383	0	16	82	0	0	193	456
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8			4		4
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	8.0	10.0		8.0	10.0		8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	13.0	16.5		13.0	16.5		14.0	14.0		14.0	14.0	14.0
Total Split (s)	29.0	52.0		15.0	38.0		28.0	28.0		28.0	28.0	28.0
Total Split (%)	30.5%	54.7%		15.8%	40.0%		29.5%	29.5%		29.5%	29.5%	29.5%
Maximum Green (s)	24.0	45.5		10.0	31.5		22.0	22.0		22.0	22.0	22.0
Yellow Time (s)	3.5	4.5		3.5	4.5		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.5	2.0		1.5	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)	5.0	6.5		5.0	6.5		6.0	6.0			6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.5	3.5		3.5	3.5		4.5	4.5		4.5	4.5	4.5
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
Act Effct Green (s)	22.8	53.9		9.1	35.0		19.7	19.7			19.7	19.7
Actuated g/C Ratio	0.24	0.57		0.10	0.37		0.21	0.21			0.21	0.21
v/c Ratio	0.88	0.47		0.41	0.82		0.09	0.26			0.70	0.70
Control Delay	57.3	14.6		52.8	32.9		30.2	17.1			48.9	11.3
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Delay	57.3	14.6		52.8	32.9		30.2	17.1			48.9	11.3
LOS	E	B		D	C		C	B			D	B
Approach Delay		24.6			33.5			19.3			22.5	
Approach LOS		C			C			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 95			
Actuated Cycle Length: 95			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 27.4		Intersection LOS: C	
Intersection Capacity Utilization 73.9%		ICU Level of Service D	
Analysis Period (min) 15			

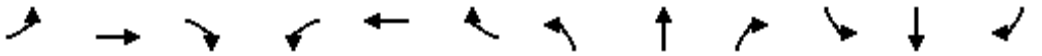
Splits and Phases: 302: Main Street & US 90



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	376	1232	41	1383	16	82	193	456
v/c Ratio	0.88	0.47	0.41	0.82	0.09	0.26	0.70	0.70
Control Delay	57.3	14.6	52.8	32.9	30.2	17.1	48.9	11.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.3	14.6	52.8	32.9	30.2	17.1	48.9	11.3
Queue Length 50th (ft)	215	183	24	286	8	16	105	20
Queue Length 95th (ft)	#366	228	57	#379	25	55	181	117
Internal Link Dist (ft)		1869		4184		1272	217	
Turn Bay Length (ft)	150		200		100			
Base Capacity (vph)	451	2627	110	1688	207	344	307	681
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	0.83	0.47	0.37	0.82	0.08	0.24	0.63	0.67

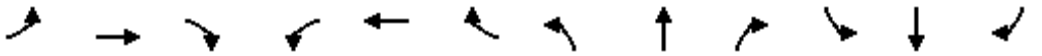
Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	338	1094	14	37	1136	109	14	31	43	150	23	410
Future Volume (vph)	338	1094	14	37	1136	109	14	31	43	150	23	410
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.5		5.0	6.5		6.0	6.0			6.0	6.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00			1.00	1.00
Frt	1.00	1.00		1.00	0.99		1.00	0.91			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.96	1.00
Satd. Flow (prot)	1787	4629		1049	4548		1583	1329			1821	1568
Flt Permitted	0.95	1.00		0.95	1.00		0.54	1.00			0.70	1.00
Satd. Flow (perm)	1787	4629		1049	4548		897	1329			1325	1568
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	376	1216	16	41	1262	121	16	34	48	167	26	456
RTOR Reduction (vph)	0	1	0	0	11	0	0	38	0	0	0	328
Lane Group Flow (vph)	376	1231	0	41	1372	0	16	44	0	0	193	128
Heavy Vehicles (%)	1%	12%	0%	72%	13%	8%	14%	0%	52%	0%	0%	3%
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		4
Actuated Green, G (s)	22.8	51.9		5.9	35.0		19.7	19.7			19.7	19.7
Effective Green, g (s)	22.8	51.9		5.9	35.0		19.7	19.7			19.7	19.7
Actuated g/C Ratio	0.24	0.55		0.06	0.37		0.21	0.21			0.21	0.21
Clearance Time (s)	5.0	6.5		5.0	6.5		6.0	6.0			6.0	6.0
Vehicle Extension (s)	3.5	3.5		3.5	3.5		4.5	4.5			4.5	4.5
Lane Grp Cap (vph)	428	2528		65	1675		186	275			274	325
v/s Ratio Prot	c0.21	0.27		0.04	c0.30			0.03				
v/s Ratio Perm							0.02				c0.15	0.08
v/c Ratio	0.88	0.49		0.63	0.82		0.09	0.16			0.70	0.39
Uniform Delay, d1	34.8	13.3		43.5	27.1		30.4	30.9			34.9	32.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	18.5	0.7		19.0	4.6		0.3	0.5			9.1	1.4
Delay (s)	53.2	14.0		62.5	31.7		30.7	31.3			44.0	33.9
Level of Service	D	B		E	C		C	C			D	C
Approach Delay (s)		23.2			32.6			31.2			36.9	
Approach LOS		C			C			C			D	

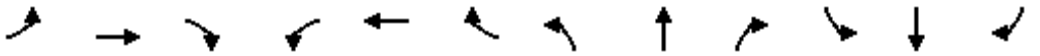
Intersection Summary			
HCM 2000 Control Delay	29.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	95.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	73.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	338	1094	14	37	1136	109	14	31	43	150	23	410
Future Volume (veh/h)	338	1094	14	37	1136	109	14	31	43	150	23	410
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1722	1900	833	1707	1781	1693	1900	1129	1900	1900	1856
Adj Flow Rate, veh/h	376	1216	16	41	1262	121	16	34	48	167	26	456
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	12	0	72	13	8	14	0	52	0	0	3
Cap, veh/h	412	2528	33	44	1535	147	128	165	233	303	36	364
Arrive On Green	0.23	0.53	0.53	0.06	0.35	0.35	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1795	4782	63	793	4325	415	826	713	1006	1005	156	1572
Grp Volume(v), veh/h	376	797	435	41	907	476	16	0	82	193	0	456
Grp Sat Flow(s),veh/h/ln	1795	1567	1711	793	1554	1633	826	0	1719	1161	0	1572
Q Serve(g_s), s	19.4	15.3	15.3	4.9	25.2	25.3	1.8	0.0	3.7	12.3	0.0	22.0
Cycle Q Clear(g_c), s	19.4	15.3	15.3	4.9	25.2	25.3	17.7	0.0	3.7	16.0	0.0	22.0
Prop In Lane	1.00		0.04	1.00		0.25	1.00		0.59	0.87		1.00
Lane Grp Cap(c), veh/h	412	1657	904	44	1103	579	128	0	398	340	0	364
V/C Ratio(X)	0.91	0.48	0.48	0.93	0.82	0.82	0.12	0.00	0.21	0.57	0.00	1.25
Avail Cap(c_a), veh/h	454	1657	904	84	1103	579	128	0	398	340	0	364
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.85	0.85	0.70	0.70	0.70	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.7	14.2	14.2	44.7	27.9	27.9	42.5	0.0	29.5	35.9	0.0	36.5
Incr Delay (d2), s/veh	19.5	0.9	1.6	41.9	5.0	9.0	0.7	0.0	0.4	3.1	0.0	134.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.0	4.7	5.3	1.4	9.2	10.3	0.4	0.0	1.4	4.4	0.0	21.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.2	15.0	15.7	86.6	32.9	37.0	43.2	0.0	29.9	39.0	0.0	170.7
LnGrp LOS	E	B	B	F	C	D	D	A	C	D	A	F
Approach Vol, veh/h		1608			1424			98			649	
Approach Delay, s/veh		24.6			35.8			32.1			131.6	
Approach LOS		C			D			C			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.3	56.7		28.0	26.8	40.2		28.0				
Change Period (Y+Rc), s	5.0	6.5		6.0	5.0	6.5		6.0				
Max Green Setting (Gmax), s	10.0	45.5		22.0	24.0	31.5		22.0				
Max Q Clear Time (g_c+I1), s	6.9	17.3		24.0	21.4	27.3		19.7				
Green Ext Time (p_c), s	0.0	10.0		0.0	0.4	3.1		0.1				

Intersection Summary												
HCM 6th Ctrl Delay			47.4									
HCM 6th LOS			D									

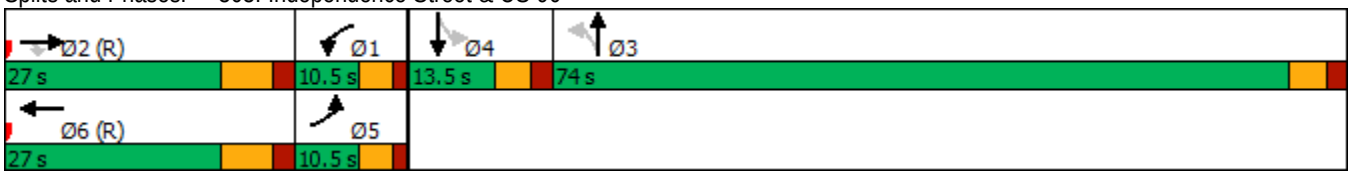


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	904	182	47	973	26	312	113	61	14	43	35
Future Volume (vph)	18	904	182	47	973	26	312	113	61	14	43	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	130		0	100		0	0		0
Storage Lanes	1		1	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.996			0.947			0.949	
Flt Protected	0.950			0.950			0.950				0.992	
Satd. Flow (prot)	1805	3252	1292	1671	4508	0	1583	1776	0	0	1713	0
Flt Permitted	0.950			0.950			0.694				0.228	
Satd. Flow (perm)	1805	3252	1292	1671	4508	0	1157	1776	0	0	394	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			145		3			35			19	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		4264			1976			555			937	
Travel Time (s)		64.6			29.9			12.6			21.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	11%	25%	8%	15%	0%	14%	2%	0%	29%	0%	0%
Adj. Flow (vph)	19	962	194	50	1035	28	332	120	65	15	46	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	19	962	194	50	1063	0	332	185	0	0	98	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			3			4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			2				3			4		
Detector Phase	5	2	2	1	6		3	3		4	4	
Switch Phase												
Minimum Initial (s)	6.0	10.0	10.0	6.0	10.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	10.5	17.0	17.0	10.5	17.0		13.5	13.5		13.5	13.5	
Total Split (s)	10.5	27.0	27.0	10.5	27.0		74.0	74.0		13.5	13.5	
Total Split (%)	8.4%	21.6%	21.6%	8.4%	21.6%		59.2%	59.2%		10.8%	10.8%	
Maximum Green (s)	6.0	20.0	20.0	6.0	20.0		68.5	68.5		8.0	8.0	
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.5	2.0	2.0	1.5	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	4.5	7.0	7.0	4.5	7.0		5.5	5.5			5.5	
Lead/Lag	Lag	Lead	Lead	Lag	Lead		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.5	5.0	5.0	3.5	5.0		3.5	3.5		3.5	3.5	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Act Effct Green (s)	6.0	42.8	42.8	6.0	47.0		45.7	45.7			10.1	
Actuated g/C Ratio	0.05	0.34	0.34	0.05	0.38		0.37	0.37			0.08	
v/c Ratio	0.22	0.86	0.36	0.62	0.63		0.79	0.28			2.00	
Control Delay	63.6	48.9	13.2	90.5	36.1		47.5	21.3			534.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Delay	63.6	48.9	13.2	90.5	36.1		47.5	21.3			534.6	
LOS	E	D	B	F	D		D	C			F	
Approach Delay		43.3			38.6			38.2			534.6	
Approach LOS		D			D			D			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 125			
Actuated Cycle Length: 125			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 2.00			
Intersection Signal Delay: 57.1		Intersection LOS: E	
Intersection Capacity Utilization 68.1%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 303: Independence Street & US 90

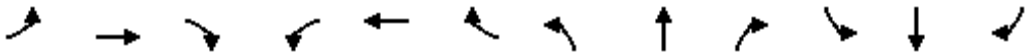


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	19	962	194	50	1063	332	185	98
v/c Ratio	0.22	0.86	0.36	0.62	0.63	0.79	0.28	2.00
Control Delay	63.6	48.9	13.2	90.5	36.1	47.5	21.3	534.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.6	48.9	13.2	90.5	36.1	47.5	21.3	534.6
Queue Length 50th (ft)	15	381	27	40	232	236	83	~115
Queue Length 95th (ft)	41	#670	107	#102	#446	289	112	#233
Internal Link Dist (ft)		4184			1896		475	857
Turn Bay Length (ft)	200			130		100		
Base Capacity (vph)	86	1114	538	80	1698	634	989	49
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	0.22	0.86	0.36	0.63	0.63	0.52	0.19	2.00

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

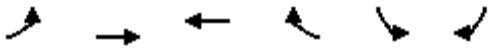
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



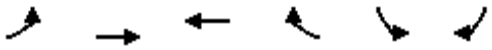
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	904	182	47	973	26	312	113	61	14	43	35
Future Volume (vph)	18	904	182	47	973	26	312	113	61	14	43	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	7.0	7.0	4.5	7.0		5.5	5.5			5.5	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91		1.00	1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.95			0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1805	3252	1292	1671	4508		1583	1777			1713	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.69	1.00			0.23	
Satd. Flow (perm)	1805	3252	1292	1671	4508		1156	1777			394	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	19	962	194	50	1035	28	332	120	65	15	46	37
RTOR Reduction (vph)	0	0	98	0	2	0	0	22	0	0	17	0
Lane Group Flow (vph)	19	962	96	50	1061	0	332	163	0	0	81	0
Heavy Vehicles (%)	0%	11%	25%	8%	15%	0%	14%	2%	0%	29%	0%	0%
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			3			4	
Permitted Phases			2				3			4		
Actuated Green, G (s)	2.4	40.1	40.1	6.6	44.3		45.7	45.7			10.1	
Effective Green, g (s)	2.4	40.1	40.1	6.6	44.3		45.7	45.7			10.1	
Actuated g/C Ratio	0.02	0.32	0.32	0.05	0.35		0.37	0.37			0.08	
Clearance Time (s)	4.5	7.0	7.0	4.5	7.0		5.5	5.5			5.5	
Vehicle Extension (s)	3.5	5.0	5.0	3.5	5.0		3.5	3.5			3.5	
Lane Grp Cap (vph)	34	1043	414	88	1597		422	649			31	
v/s Ratio Prot	0.01	c0.30		c0.03	0.24			0.09				
v/s Ratio Perm			0.07				c0.29				c0.20	
v/c Ratio	0.56	0.92	0.23	0.57	0.66		0.79	0.25			2.60	
Uniform Delay, d1	60.8	40.9	31.1	57.8	34.1		35.3	27.7			57.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	20.1	14.5	1.3	8.9	2.2		9.6	0.2			803.5	
Delay (s)	80.9	55.4	32.4	66.7	36.3		44.9	27.9			861.0	
Level of Service	F	E	C	E	D		D	C			F	
Approach Delay (s)		52.1			37.6			38.8			861.0	
Approach LOS		D			D			D			F	

Intersection Summary			
HCM 2000 Control Delay	71.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	68.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology expects strict NEMA phasing.



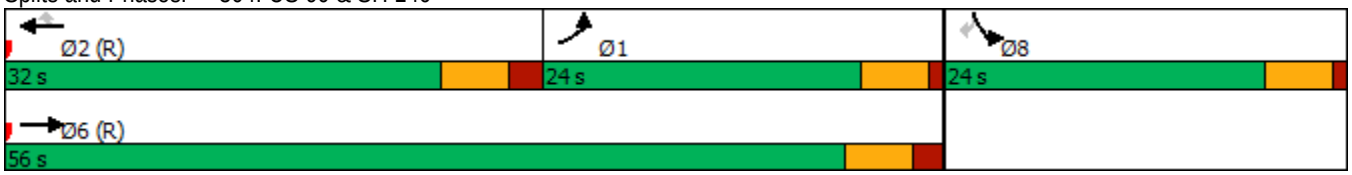
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	327	487	508	150	116	442
Future Volume (vph)	327	487	508	150	116	442
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			300	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1543	1712	1743	1568	1641	1324
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1543	1712	1743	1568	1641	1324
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				165		486
Link Speed (mph)		50	50		55	
Link Distance (ft)		470	2799		7877	
Travel Time (s)		6.4	38.2		97.6	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	17%	11%	9%	3%	10%	22%
Adj. Flow (vph)	359	535	558	165	127	486
Shared Lane Traffic (%)						
Lane Group Flow (vph)	359	535	558	165	127	486
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	1	6	2		8	

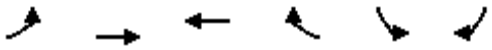


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases				2		8
Detector Phase	1	6	2	2	8	8
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	5.0
Minimum Split (s)	15.0	16.0	16.0	16.0	10.0	10.0
Total Split (s)	24.0	56.0	32.0	32.0	24.0	24.0
Total Split (%)	30.0%	70.0%	40.0%	40.0%	30.0%	30.0%
Maximum Green (s)	19.0	50.0	26.0	26.0	19.0	19.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	6.0	5.0	5.0
Lead/Lag	Lag		Lead	Lead		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	C-Max	C-Max	C-Max	None	None
Act Effct Green (s)	19.0	57.7	33.7	33.7	11.3	11.3
Actuated g/C Ratio	0.24	0.72	0.42	0.42	0.14	0.14
v/c Ratio	0.98	0.43	0.76	0.22	0.55	0.80
Control Delay	75.8	6.7	30.3	4.1	39.7	14.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.8	6.7	30.3	4.1	39.7	14.3
LOS	E	A	C	A	D	B
Approach Delay		34.4	24.3		19.6	
Approach LOS		C	C		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay: 27.1		Intersection LOS: C	
Intersection Capacity Utilization 64.6%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 304: US 90 & SH 146

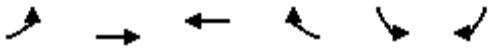




Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	359	535	558	165	127	486
v/c Ratio	0.98	0.43	0.76	0.22	0.55	0.80
Control Delay	75.8	6.7	30.3	4.1	39.7	14.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.8	6.7	30.3	4.1	39.7	14.3
Queue Length 50th (ft)	179	84	225	0	61	0
Queue Length 95th (ft)	#346	203	#479	40	100	89
Internal Link Dist (ft)		390	2719		7797	
Turn Bay Length (ft)	250			300		
Base Capacity (vph)	366	1234	734	755	389	685
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	0.98	0.43	0.76	0.22	0.33	0.71

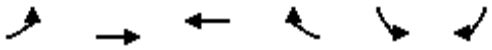
Intersection Summary

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



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	327	487	508	150	116	442
Future Volume (vph)	327	487	508	150	116	442
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0	6.0	6.0	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1543	1712	1743	1568	1641	1324
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1543	1712	1743	1568	1641	1324
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	359	535	558	165	127	486
RTOR Reduction (vph)	0	0	0	95	0	417
Lane Group Flow (vph)	359	535	558	70	127	69
Heavy Vehicles (%)	17%	11%	9%	3%	10%	22%
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	1	6	2		8	
Permitted Phases				2		8
Actuated Green, G (s)	19.0	57.7	33.7	33.7	11.3	11.3
Effective Green, g (s)	19.0	57.7	33.7	33.7	11.3	11.3
Actuated g/C Ratio	0.24	0.72	0.42	0.42	0.14	0.14
Clearance Time (s)	5.0	6.0	6.0	6.0	5.0	5.0
Vehicle Extension (s)	3.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	366	1234	734	660	231	187
v/s Ratio Prot	c0.23	0.31	c0.32		c0.08	
v/s Ratio Perm				0.04		0.05
v/c Ratio	0.98	0.43	0.76	0.11	0.55	0.37
Uniform Delay, d1	30.3	4.5	19.7	14.0	32.0	31.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	41.7	1.1	7.3	0.3	1.4	0.4
Delay (s)	72.1	5.6	27.0	14.3	33.4	31.6
Level of Service	E	A	C	B	C	C
Approach Delay (s)		32.3	24.1		31.9	
Approach LOS		C	C		C	

Intersection Summary			
HCM 2000 Control Delay	29.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	64.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	327	487	508	150	116	442
Future Volume (veh/h)	327	487	508	150	116	442
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1648	1737	1767	1856	1752	1574
Adj Flow Rate, veh/h	359	535	558	0	127	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	17	11	9	3	10	22
Cap, veh/h	577	1333	574		158	
Arrive On Green	0.37	0.77	0.32	0.00	0.09	0.00
Sat Flow, veh/h	1570	1737	1767	1572	1668	1334
Grp Volume(v), veh/h	359	535	558	0	127	0
Grp Sat Flow(s),veh/h/ln	1570	1737	1767	1572	1668	1334
Q Serve(g_s), s	15.0	8.3	24.9	0.0	6.0	0.0
Cycle Q Clear(g_c), s	15.0	8.3	24.9	0.0	6.0	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	577	1333	574		158	
V/C Ratio(X)	0.62	0.40	0.97		0.80	
Avail Cap(c_a), veh/h	577	1333	574		396	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.09	0.00
Uniform Delay (d), s/veh	20.7	3.1	26.6	0.0	35.5	0.0
Incr Delay (d2), s/veh	2.1	0.9	31.2	0.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	1.4	14.1	0.0	2.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.8	4.0	57.9	0.0	35.8	0.0
LnGrp LOS	C	A	E		D	
Approach Vol, veh/h		894	558	A	127	A
Approach Delay, s/veh		11.6	57.9		35.8	
Approach LOS		B	E		D	

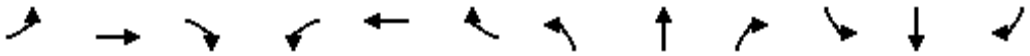
Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	35.4	32.0				67.4	12.6
Change Period (Y+Rc), s	6.0	* 6				6.0	5.0
Max Green Setting (Gmax), s	19.0	* 26				50.0	19.0
Max Q Clear Time (g_c+I1), s	17.0	26.9				10.3	8.0
Green Ext Time (p_c), s	0.2	0.0				1.9	0.1

Intersection Summary	
HCM 6th Ctrl Delay	29.9
HCM 6th LOS	C

Notes

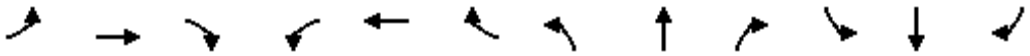
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	24	6	0	0	0	2	167	37	2	51	8
Future Volume (vph)	13	24	6	0	0	0	2	167	37	2	51	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.982						0.976			0.983	
Flt Protected		0.985						0.999			0.998	
Satd. Flow (prot)	0	1838	0	0	1900	0	0	1853	0	0	1864	0
Flt Permitted		0.985						0.999			0.998	
Satd. Flow (perm)	0	1838	0	0	1900	0	0	1853	0	0	1864	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		803			358			401			590	
Travel Time (s)		18.3			8.1			9.1			13.4	
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	18	34	8	0	0	0	3	235	52	3	72	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	60	0	0	0	0	0	290	0	0	86	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			50			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 21.9%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	13	24	6	0	0	0	2	167	37	2	51	8
Future Volume (vph)	13	24	6	0	0	0	2	167	37	2	51	8
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Hourly flow rate (vph)	18	34	8	0	0	0	3	235	52	3	72	11

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	60	0	290	86
Volume Left (vph)	18	0	3	3
Volume Right (vph)	8	0	52	11
Hadj (s)	-0.02	0.00	-0.11	-0.07
Departure Headway (s)	4.7	4.8	4.0	4.3
Degree Utilization, x	0.08	0.00	0.32	0.10
Capacity (veh/h)	705	694	873	810
Control Delay (s)	8.1	7.8	9.0	7.7
Approach Delay (s)	8.1	0.0	9.0	7.7
Approach LOS	A	A	A	A

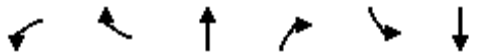
Intersection Summary				
Delay	8.6			
Level of Service	A			
Intersection Capacity Utilization	21.9%	ICU Level of Service	A	
Analysis Period (min)	15			

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	13	24	6	0	0	0	2	167	37	2	51	8
Future Vol, veh/h	13	24	6	0	0	0	2	167	37	2	51	8
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	18	34	8	0	0	0	3	235	52	3	72	11
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.1	0	8.9	7.7
HCM LOS	A	-	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	30%	0%	3%
Vol Thru, %	81%	56%	100%	84%
Vol Right, %	18%	14%	0%	13%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	206	43	0	61
LT Vol	2	13	0	2
Through Vol	167	24	0	51
RT Vol	37	6	0	8
Lane Flow Rate	290	61	0	86
Geometry Grp	1	1	1	1
Degree of Util (X)	0.32	0.079	0	0.102
Departure Headway (Hd)	3.966	4.673	4.779	4.26
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	897	770	0	846
Service Time	2.038	2.678	2.787	2.26
HCM Lane V/C Ratio	0.323	0.079	0	0.102
HCM Control Delay	8.9	8.1	7.8	7.7
HCM Lane LOS	A	A	N	A
HCM 95th-tile Q	1.4	0.3	0	0.3



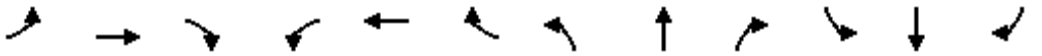
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	138	105	159	142	137	119
Future Volume (vph)	138	105	159	142	137	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.942		0.936			
Flt Protected	0.972					0.974
Satd. Flow (prot)	1487	0	1695	0	0	1580
Flt Permitted	0.972					0.974
Satd. Flow (perm)	1487	0	1695	0	0	1580
Link Speed (mph)	30		30			30
Link Distance (ft)	1292		2374			1487
Travel Time (s)	29.4		54.0			33.8
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles (%)	1%	38%	4%	6%	32%	0%
Adj. Flow (vph)	209	159	241	215	208	180
Shared Lane Traffic (%)						
Lane Group Flow (vph)	368	0	456	0	0	388
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Free		Yield			Yield

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 55.0%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	138	105	159	142	137	119
Future Volume (Veh/h)	138	105	159	142	137	119
Sign Control	Free		Yield			Yield
Grade	0%		0%			0%
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66
Hourly flow rate (vph)	209	159	241	215	208	180
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	0		577	0	833	498
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0		577	0	833	498
tC, single (s)	4.1		6.5	6.3	7.4	6.5
tC, 2 stage (s)						
tF (s)	2.2		4.0	3.4	3.8	4.0
p0 queue free %	87		35	80	0	57
cM capacity (veh/h)	1630		370	1073	89	416

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	368	456	388
Volume Left	209	0	208
Volume Right	159	215	0
cSH	1630	536	141
Volume to Capacity	0.13	0.85	2.76
Queue Length 95th (ft)	11	225	876
Control Delay (s)	4.7	39.0	859.5
Lane LOS	A	E	F
Approach Delay (s)	4.7	39.0	859.5
Approach LOS		E	F

Intersection Summary			
Average Delay	291.3		
Intersection Capacity Utilization	55.0%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	206	127	85	6	142	64	58	537	6	31	767	251
Future Volume (vph)	206	127	85	6	142	64	58	537	6	31	767	251
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	100		0	100		0	200		125
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.940			0.953			0.998				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1530	1765	0	1805	1782	0	1805	1890	0	1687	1863	1615
Flt Permitted	0.077			0.578			0.588			0.950		
Satd. Flow (perm)	124	1765	0	1098	1782	0	1117	1890	0	1687	1863	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		42			16							119
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		345			825			1581			1585	
Travel Time (s)		7.8			18.8			35.9			36.0	
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles (%)	18%	2%	0%	0%	1%	3%	0%	0%	33%	7%	2%	0%
Adj. Flow (vph)	290	179	120	8	200	90	82	756	8	44	1080	354
Shared Lane Traffic (%)												
Lane Group Flow (vph)	290	299	0	8	290	0	82	764	0	44	1080	354
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		custom	NA		Prot	NA	Perm
Protected Phases		3			4			6		5	2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	3			4			1					2
Detector Phase	3	3		4	4		1	6		5	2	2
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		6.0	10.0		6.0	10.0	10.0
Minimum Split (s)	13.0	13.0		13.0	13.0		10.0	15.0		10.0	15.0	15.0
Total Split (s)	57.0	57.0		13.0	13.0		10.0	30.0		10.0	30.0	30.0
Total Split (%)	51.8%	51.8%		11.8%	11.8%		9.1%	27.3%		9.1%	27.3%	27.3%
Maximum Green (s)	52.0	52.0		8.0	8.0		6.0	25.0		6.0	25.0	25.0
Yellow Time (s)	3.5	3.5		3.5	3.5		3.0	3.5		3.0	3.5	3.5
All-Red Time (s)	1.5	1.5		1.5	1.5		1.0	1.5		1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		4.0	5.0		4.0	5.0	5.0
Lead/Lag	Lead	Lead		Lag	Lag		Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		2.0	2.0		3.5	3.5		2.0	3.5	3.5
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	52.0	52.0		8.0	8.0		6.0	27.0		6.0	25.0	25.0
Actuated g/C Ratio	0.47	0.47		0.07	0.07		0.05	0.25		0.05	0.23	0.23
v/c Ratio	5.00	0.35		0.10	2.01		1.37	1.65		0.48	2.55	0.77
Control Delay	1848.7	16.9		50.8	506.0		281.6	331.0		68.0	726.7	38.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	1848.7	16.9		50.8	506.0		281.6	331.0		68.0	726.7	38.7
LOS	F	B		D	F		F	F		E	F	D
Approach Delay		918.8			493.8			326.2			542.3	
Approach LOS		F			F			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 5.00			
Intersection Signal Delay: 549.9		Intersection LOS: F	
Intersection Capacity Utilization 83.5%		ICU Level of Service E	
Analysis Period (min) 15			

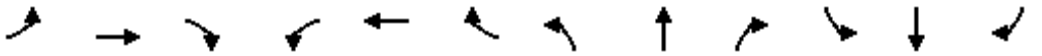
Splits and Phases: 307: Main Street & Grand Avenue

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	290	299	8	290	82	764	44	1080	354
v/c Ratio	5.00	0.35	0.10	2.01	1.37	1.65	0.48	2.55	0.77
Control Delay	1848.7	16.9	50.8	506.0	281.6	331.0	68.0	726.7	38.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	1848.7	16.9	50.8	506.0	281.6	331.0	68.0	726.7	38.7
Queue Length 50th (ft)	~349	110	5	~313	~76	~809	31	~1279	159
Queue Length 95th (ft)	#394	125	17	#358	#130	#755	53	#1141	178
Internal Link Dist (ft)		265		745		1501		1505	
Turn Bay Length (ft)	150		100		100		200		125
Base Capacity (vph)	58	856	79	144	60	463	92	423	459
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	5.00	0.35	0.10	2.01	1.37	1.65	0.48	2.55	0.77

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

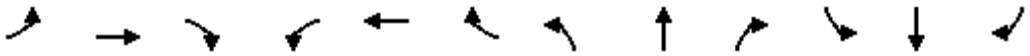
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	206	127	85	6	142	64	58	537	6	31	767	251
Future Volume (vph)	206	127	85	6	142	64	58	537	6	31	767	251
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0		4.0	5.0		4.0	5.0	5.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.94		1.00	0.95		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1530	1764		1805	1783		1805	1890		1687	1863	1615
Flt Permitted	0.08	1.00		0.58	1.00		0.59	1.00		0.95	1.00	1.00
Satd. Flow (perm)	124	1764		1097	1783		1118	1890		1687	1863	1615
Peak-hour factor, PHF	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Adj. Flow (vph)	290	179	120	8	200	90	82	756	8	44	1080	354
RTOR Reduction (vph)	0	22	0	0	15	0	0	0	0	0	0	93
Lane Group Flow (vph)	290	277	0	8	275	0	82	764	0	44	1080	261
Heavy Vehicles (%)	18%	2%	0%	0%	1%	3%	0%	0%	33%	7%	2%	0%
Turn Type	Perm	NA		Perm	NA		custom	NA		Prot	NA	Perm
Protected Phases		3			4			6		5	2	
Permitted Phases	3			4			1					2
Actuated Green, G (s)	52.0	52.0		8.0	8.0		6.8	26.2		4.8	24.2	24.2
Effective Green, g (s)	52.0	52.0		8.0	8.0		6.8	26.2		4.8	24.2	24.2
Actuated g/C Ratio	0.47	0.47		0.07	0.07		0.06	0.24		0.04	0.22	0.22
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	5.0		4.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		2.0	2.0		3.5	3.5		2.0	3.5	3.5
Lane Grp Cap (vph)	58	833		79	129		69	450		73	409	355
v/s Ratio Prot		0.16			c0.15			c0.40		0.03	c0.58	
v/s Ratio Perm	c2.34			0.01			0.07					0.16
v/c Ratio	5.00	0.33		0.10	2.13		1.19	1.70		0.60	2.64	0.74
Uniform Delay, d1	29.0	18.1		47.6	51.0		51.6	41.9		51.7	42.9	39.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1838.0	0.2		0.2	534.9		167.9	323.4		9.2	745.3	12.7
Delay (s)	1867.0	18.4		47.8	585.9		219.5	365.3		60.9	788.2	52.7
Level of Service	F	B		D	F		F	F		E	F	D
Approach Delay (s)		928.6			571.5			351.2			590.4	
Approach LOS		F			F			F			F	

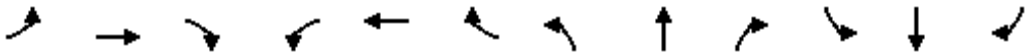
Intersection Summary			
HCM 2000 Control Delay	587.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	3.87		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	83.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology does not support custom phasing.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	135	0	145	0	71	114	238	80	0
Future Volume (vph)	0	0	0	135	0	145	0	71	114	238	80	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.865			0.917				
Flt Protected				0.950							0.964	
Satd. Flow (prot)	0	1900	0	1805	0	0	0	1722	0	0	1818	0
Flt Permitted				0.950							0.964	
Satd. Flow (perm)	0	1900	0	1805	0	0	0	1722	0	0	1818	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		433			707			1487			1399	
Travel Time (s)		9.8			16.1			33.8			31.8	
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	3%	0%
Adj. Flow (vph)	0	0	0	245	0	264	0	129	207	433	145	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	245	264	0	0	336	0	0	578	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization Err%		ICU Level of Service H	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	135	0	145	0	71	114	238	80	0
Future Volume (Veh/h)	0	0	0	135	0	145	0	71	114	238	80	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Hourly flow rate (vph)	0	0	0	245	0	264	0	129	207	433	145	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1508	1347	145	1244	1244	232	145			336		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1508	1347	145	1244	1244	232	145			336		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	0	100	67	100			65		
cM capacity (veh/h)	49	99	908	111	114	812	1450			1235		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	0	509	336	578
Volume Left	0	245	0	433
Volume Right	0	264	207	0
cSH	1700	201	1700	1235
Volume to Capacity	0.00	2.53	0.20	0.35
Queue Length 95th (ft)	0	1074	0	40
Control Delay (s)	0.0	740.8	0.0	8.0
Lane LOS	A	F		A
Approach Delay (s)	0.0	740.8	0.0	8.0
Approach LOS	A	F		

Intersection Summary				
Average Delay	268.2			
Intersection Capacity Utilization	Err%	ICU Level of Service	H	
Analysis Period (min)	15			

Intersection	
Int Delay, s/veh	283

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	135	0	145	0	71	114	238	80	0
Future Vol, veh/h	0	0	0	135	0	145	0	71	114	238	80	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	55	55	55	55	55	55	55	55	55	55	55	55
Heavy Vehicles, %	0	0	0	0	0	0	0	3	0	0	3	0
Mvmt Flow	0	0	0	245	0	264	0	129	207	433	145	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1376	1347	145	1244	-	233	-	0	0	336	0	0
Stage 1	1011	1011	-	233	-	-	-	-	-	-	-	-
Stage 2	365	336	-	1011	-	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	-	6.2	-	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	-	3.3	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	124	152	908	~ 152	0	811	0	-	-	1235	-	0
Stage 1	291	320	-	775	0	-	0	-	-	-	-	0
Stage 2	658	645	-	291	0	-	0	-	-	-	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	59	94	908	~ 107	-	811	-	-	-	1235	-	-
Mov Cap-2 Maneuver	59	94	-	~ 107	-	-	-	-	-	-	-	-
Stage 1	291	198	-	775	-	-	-	-	-	-	-	-
Stage 2	444	645	-	~ 180	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	$ 783.3	0	7.1
HCM LOS	A	F		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	194	1235	-
HCM Lane V/C Ratio	-	-	-	2.624	0.35	-
HCM Control Delay (s)	-	-	0	$ 783.3	9.5	0
HCM Lane LOS	-	-	A	F	A	A
HCM 95th %tile Q(veh)	-	-	-	43.8	1.6	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	8	23	159	0	0	106
Future Volume (vph)	8	23	159	0	0	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.899				0.865	
Flt Protected				0.950		
Satd. Flow (prot)	1708	0	0	1787	1611	0
Flt Permitted				0.950		
Satd. Flow (perm)	1708	0	0	1787	1611	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	720			80	1399	
Travel Time (s)	16.4			1.8	31.8	
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles (%)	0%	0%	1%	0%	0%	2%
Adj. Flow (vph)	12	35	241	0	0	161
Shared Lane Traffic (%)						
Lane Group Flow (vph)	47	0	0	241	161	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 28.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection Sign configuration not allowed in HCM analysis.

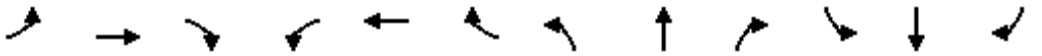
Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	8	23	159	0	0	106
Future Vol, veh/h	8	23	159	0	0	106
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	66	66	66	66	66	66
Heavy Vehicles, %	0	0	1	0	0	2
Mvmt Flow	12	35	241	0	0	161

Major/Minor	Minor2		Major2	
Conflicting Flow All	482	0	0	0
Stage 1	482	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.11	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.209	-
Pot Cap-1 Maneuver	487	-	-	-
Stage 1	557	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	-	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	EB	WB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	EBLn1	WBL	WBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-



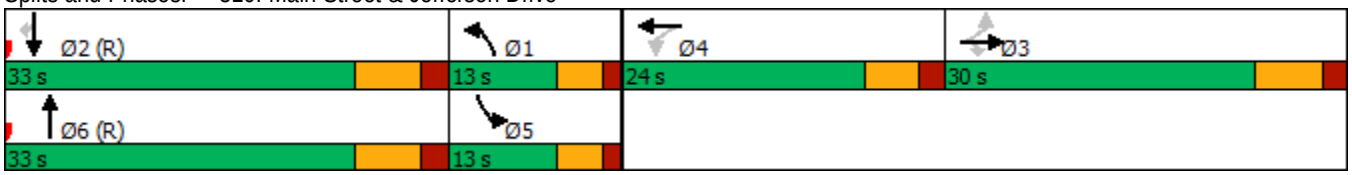
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	346	174	63	142	238	27	117	902	183	0	1414	484
Future Volume (vph)	346	174	63	142	238	27	117	902	183	0	1414	484
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	200		0	200		250
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.991			0.975				0.850
Flt Protected		0.968			0.983		0.950					
Satd. Flow (prot)	0	1839	1615	0	1822	0	1703	1837	0	1900	1863	1615
Flt Permitted		0.538			0.150		0.950					
Satd. Flow (perm)	0	1022	1615	0	278	0	1703	1837	0	1900	1863	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			164		3			10				183
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1006			727			3897			1103	
Travel Time (s)		17.1			12.4			66.4			18.8	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	0%	0%	0%	2%	0%	13%	6%	1%	0%	0%	2%	0%
Adj. Flow (vph)	422	212	77	173	290	33	143	1100	223	0	1724	590
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	634	77	0	496	0	143	1323	0	0	1724	590
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		3			4		1	6		5	2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	3		3	4								2
Detector Phase	3	3	3	4	4		1	6		5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	8.0	8.0		8.0	10.0		8.0	10.0	10.0
Minimum Split (s)	25.0	25.0	25.0	24.0	24.0		13.0	25.0		13.0	25.0	25.0
Total Split (s)	30.0	30.0	30.0	24.0	24.0		13.0	33.0		13.0	33.0	33.0
Total Split (%)	30.0%	30.0%	30.0%	24.0%	24.0%		13.0%	33.0%		13.0%	33.0%	33.0%
Maximum Green (s)	23.0	23.0	23.0	18.0	18.0		8.0	26.0		8.0	26.0	26.0
Yellow Time (s)	5.0	5.0	5.0	4.0	4.0		3.5	5.0		3.5	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		1.5	2.0		1.5	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		7.0	7.0		6.0		5.0	7.0		5.0	7.0	7.0
Lead/Lag	Lag	Lag	Lag	Lead	Lead		Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5		3.0	3.5		3.0	3.5	3.5
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)		23.0	23.0		18.0		8.0	39.0			26.0	26.0
Actuated g/C Ratio		0.23	0.23		0.18		0.08	0.39			0.26	0.26
v/c Ratio		2.70	0.15		9.54		1.05	1.83			3.56	1.06
Control Delay		795.3	0.7		3886.6		137.8	403.8			1173.1	82.3
Queue Delay		0.0	0.0		0.0		0.0	0.0			0.0	0.0
Total Delay		795.3	0.7		3886.6		137.8	403.8			1173.1	82.3
LOS		F	A		F		F	F			F	F
Approach Delay		709.2			3886.6			377.9			895.0	
Approach LOS		F			F			F			F	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 9.54
Intersection Signal Delay: 1014.0 Intersection LOS: F
Intersection Capacity Utilization 152.3% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 310: Main Street & Jefferson Drive

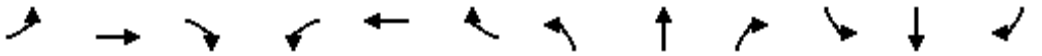


Lane Group	EBT	EBR	WBT	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	634	77	496	143	1323	1724	590
v/c Ratio	2.70	0.15	9.54	1.05	1.83	3.56	1.06
Control Delay	795.3	0.7	3886.6	137.8	403.8	1173.1	82.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	795.3	0.7	3886.6	137.8	403.8	1173.1	82.3
Queue Length 50th (ft)	~689	0	~610	~100	~1295	~1977	~324
Queue Length 95th (ft)	#809	0	#734	#195	#1372	#2011	#448
Internal Link Dist (ft)	926		647		3817	1023	
Turn Bay Length (ft)				200			250
Base Capacity (vph)	235	497	52	136	722	484	555
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	2.70	0.15	9.54	1.05	1.83	3.56	1.06

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

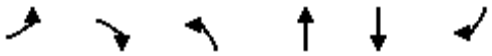
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



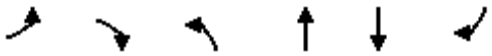
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	346	174	63	142	238	27	117	902	183	0	1414	484
Future Volume (vph)	346	174	63	142	238	27	117	902	183	0	1414	484
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0	7.0		6.0		5.0	7.0			7.0	7.0
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Frt		1.00	0.85		0.99		1.00	0.97			1.00	0.85
Flt Protected		0.97	1.00		0.98		0.95	1.00			1.00	1.00
Satd. Flow (prot)		1839	1615		1822		1703	1837			1863	1615
Flt Permitted		0.54	1.00		0.15		0.95	1.00			1.00	1.00
Satd. Flow (perm)		1022	1615		278		1703	1837			1863	1615
Peak-hour factor, PHF	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	422	212	77	173	290	33	143	1100	223	0	1724	590
RTOR Reduction (vph)	0	0	59	0	2	0	0	6	0	0	0	135
Lane Group Flow (vph)	0	634	18	0	494	0	143	1317	0	0	1724	455
Heavy Vehicles (%)	0%	0%	0%	2%	0%	13%	6%	1%	0%	0%	2%	0%
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		3			4		1	6		5	2	
Permitted Phases	3		3	4								2
Actuated Green, G (s)		23.0	23.0		18.0		8.0	39.0			26.0	26.0
Effective Green, g (s)		23.0	23.0		18.0		8.0	39.0			26.0	26.0
Actuated g/C Ratio		0.23	0.23		0.18		0.08	0.39			0.26	0.26
Clearance Time (s)		7.0	7.0		6.0		5.0	7.0			7.0	7.0
Vehicle Extension (s)		3.5	3.5		3.5		3.0	3.5			3.5	3.5
Lane Grp Cap (vph)		235	371		50		136	716			484	419
v/s Ratio Prot							0.08	c0.72			c0.93	
v/s Ratio Perm		c0.62	0.01		c1.78							0.28
v/c Ratio		2.70	0.05		9.87		1.05	1.84			3.56	1.08
Uniform Delay, d1		38.5	30.0		41.0		46.0	30.5			37.0	37.0
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2		776.0	0.1		4031.5		91.6	383.1			1158.0	68.7
Delay (s)		814.5	30.0		4072.5		137.6	413.6			1195.0	105.7
Level of Service		F	C		F		F	F			F	F
Approach Delay (s)		729.6			4072.5			386.7			917.3	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	1048.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	4.64		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	152.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology expects strict NEMA phasing.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	27	132	87	1128	1867	51
Future Volume (vph)	27	132	87	1128	1867	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	200			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.888				0.996	
Flt Protected	0.992		0.950			
Satd. Flow (prot)	1633	0	1805	1881	1871	0
Flt Permitted	0.992		0.073			
Satd. Flow (perm)	1633	0	139	1881	1871	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	141				2	
Link Speed (mph)	30			40	40	
Link Distance (ft)	1219			1103	1788	
Travel Time (s)	27.7			18.8	30.5	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	3%	0%	1%	1%	7%
Adj. Flow (vph)	30	148	98	1267	2098	57
Shared Lane Traffic (%)						
Lane Group Flow (vph)	178	0	98	1267	2155	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1		1	2	2	
Detector Template	Left		Left	Thru	Thru	
Leading Detector (ft)	20		20	100	100	
Trailing Detector (ft)	0		0	0	0	
Detector 1 Position(ft)	0		0	0	0	
Detector 1 Size(ft)	20		20	6	6	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot		pm+pt	NA	NA	
Protected Phases	4		5	2	6	



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases			2			
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	8.0		6.0	10.0	10.0	
Minimum Split (s)	24.0		10.5	25.0	25.0	
Total Split (s)	24.0		10.5	59.0	48.5	
Total Split (%)	28.9%		12.7%	71.1%	58.4%	
Maximum Green (s)	18.0		6.0	52.0	41.5	
Yellow Time (s)	4.0		3.0	5.0	5.0	
All-Red Time (s)	2.0		1.5	2.0	2.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	6.0		4.5	7.0	7.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.5		3.0	4.0	4.0	
Recall Mode	None		None	C-Max	C-Max	
Act Effct Green (s)	9.7		62.8	60.3	51.0	
Actuated g/C Ratio	0.12		0.76	0.73	0.61	
v/c Ratio	0.57		0.40	0.93	1.87	
Control Delay	17.2		10.7	24.3	415.4	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	17.2		10.7	24.3	415.4	
LOS	B		B	C	F	
Approach Delay	17.2			23.3	415.4	
Approach LOS	B			C	F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 83			
Actuated Cycle Length: 83			
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: 1.87			
Intersection Signal Delay: 251.5		Intersection LOS: F	
Intersection Capacity Utilization 121.8%		ICU Level of Service H	
Analysis Period (min) 15			

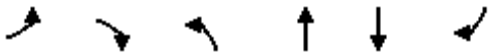
Splits and Phases: 311: Main Street & Cook Road

Lane Group	EBL	NBL	NBT	SBT
Lane Group Flow (vph)	178	98	1267	2155
v/c Ratio	0.57	0.40	0.93	1.87
Control Delay	17.2	10.7	24.3	415.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	17.2	10.7	24.3	415.4
Queue Length 50th (ft)	18	9	406	~1762
Queue Length 95th (ft)	70	42	#918	#2105
Internal Link Dist (ft)	1139		1023	1708
Turn Bay Length (ft)		200		
Base Capacity (vph)	464	243	1367	1151
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.38	0.40	0.93	1.87

Intersection Summary

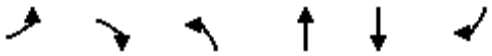
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	27	132	87	1128	1867	51
Future Volume (vph)	27	132	87	1128	1867	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		4.5	7.0	7.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frt	0.89		1.00	1.00	1.00	
Flt Protected	0.99		0.95	1.00	1.00	
Satd. Flow (prot)	1632		1805	1881	1872	
Flt Permitted	0.99		0.07	1.00	1.00	
Satd. Flow (perm)	1632		139	1881	1872	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	30	148	98	1267	2098	57
RTOR Reduction (vph)	125	0	0	0	1	0
Lane Group Flow (vph)	53	0	98	1267	2154	0
Heavy Vehicles (%)	0%	3%	0%	1%	1%	7%
Turn Type	Prot		pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases			2			
Actuated Green, G (s)	9.7		60.3	60.3	50.1	
Effective Green, g (s)	9.7		60.3	60.3	50.1	
Actuated g/C Ratio	0.12		0.73	0.73	0.60	
Clearance Time (s)	6.0		4.5	7.0	7.0	
Vehicle Extension (s)	3.5		3.0	4.0	4.0	
Lane Grp Cap (vph)	190		215	1366	1129	
v/s Ratio Prot	c0.03		0.03	c0.67	c1.15	
v/s Ratio Perm			0.30			
v/c Ratio	0.28		0.46	0.93	1.91	
Uniform Delay, d1	33.5		19.5	9.5	16.4	
Progression Factor	1.00		1.00	1.00	1.00	
Incremental Delay, d2	1.0		1.5	12.3	412.0	
Delay (s)	34.4		21.1	21.8	428.4	
Level of Service	C		C	C	F	
Approach Delay (s)	34.4			21.7	428.4	
Approach LOS	C			C	F	

Intersection Summary			
HCM 2000 Control Delay	259.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.61		
Actuated Cycle Length (s)	83.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	121.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	27	132	87	1128	1867	51
Future Volume (veh/h)	27	132	87	1128	1867	51
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1856	1900	1885	1885	1796
Adj Flow Rate, veh/h	30	148	98	1267	2098	57
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	3	0	1	1	7
Cap, veh/h	36	180	204	1340	1081	29
Arrive On Green	0.13	0.13	0.06	0.71	0.59	0.59
Sat Flow, veh/h	275	1358	1810	1885	1827	50
Grp Volume(v), veh/h	179	0	98	1267	0	2155
Grp Sat Flow(s),veh/h/ln	1642	0	1810	1885	0	1876
Q Serve(g_s), s	8.8	0.0	1.5	49.2	0.0	49.1
Cycle Q Clear(g_c), s	8.8	0.0	1.5	49.2	0.0	49.1
Prop In Lane	0.17	0.83	1.00			0.03
Lane Grp Cap(c), veh/h	218	0	204	1340	0	1111
V/C Ratio(X)	0.82	0.00	0.48	0.95	0.00	1.94
Avail Cap(c_a), veh/h	356	0	218	1340	0	1111
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.09	0.09	0.00	1.00
Uniform Delay (d), s/veh	35.1	0.0	20.2	10.6	0.0	16.9
Incr Delay (d2), s/veh	9.1	0.0	0.2	1.9	0.0	426.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	0.0	1.1	13.5	0.0	148.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	44.2	0.0	20.4	12.5	0.0	443.4
LnGrp LOS	D	A	C	B	A	F
Approach Vol, veh/h	179			1365	2155	
Approach Delay, s/veh	44.2			13.1	443.4	
Approach LOS	D			B	F	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		66.0		17.0	9.9	56.1
Change Period (Y+Rc), s		7.0		6.0	4.5	7.0
Max Green Setting (Gmax), s		52.0		18.0	6.0	41.5
Max Q Clear Time (g_c+I1), s		51.2		10.8	3.5	51.1
Green Ext Time (p_c), s		0.7		0.4	0.0	0.0

Intersection Summary		
HCM 6th Ctrl Delay	265.3	
HCM 6th LOS	F	

Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	183	349	523	146	521	1195
Future Volume (vph)	183	349	523	146	521	1195
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	135	
Storage Lanes	1	1		1	2	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1719	1302	1863	1583	1388	3539
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1719	1302	1863	1583	1388	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		397		166		
Link Speed (mph)	55		40			40
Link Distance (ft)	7877		885			960
Travel Time (s)	97.6		15.1			16.4
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	5%	24%	2%	2%	30%	2%
Adj. Flow (vph)	208	397	594	166	592	1358
Shared Lane Traffic (%)						
Lane Group Flow (vph)	208	397	594	166	592	1358
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Turn Type	Perm	Perm	NA	Perm	Split	NA
Protected Phases			2		6	6
Permitted Phases	8	8		2		
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%
Maximum Green (s)	18.0	18.0	18.0	18.0	18.0	18.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	18.0	18.0	18.0	18.0	18.0	18.0
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.27	0.27

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
v/c Ratio	0.45	0.62	1.20	0.31	1.60	1.44
Control Delay	24.5	7.4	133.7	5.5	306.2	228.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.5	7.4	133.7	5.5	306.2	228.7
LOS	C	A	F	A	F	F
Approach Delay	13.3		105.7			252.2
Approach LOS	B		F			F

Intersection Summary			
Area Type:	Other		
Cycle Length: 67.5			
Actuated Cycle Length: 67.5			
Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green			
Natural Cycle: 130			
Control Type: Pretimed			
Maximum v/c Ratio: 1.60			
Intersection Signal Delay: 175.0		Intersection LOS: F	
Intersection Capacity Utilization 77.8%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 312: Main Street & SH 146

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	208	397	594	166	592	1358
v/c Ratio	0.45	0.62	1.20	0.31	1.60	1.44
Control Delay	24.5	7.4	133.7	5.5	306.2	228.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.5	7.4	133.7	5.5	306.2	228.7
Queue Length 50th (ft)	72	0	~305	0	~359	~411
Queue Length 95th (ft)	126	58	#470	38	#523	#517
Internal Link Dist (ft)	7797		805			880
Turn Bay Length (ft)					135	
Base Capacity (vph)	458	638	496	543	370	943
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	0.45	0.62	1.20	0.31	1.60	1.44

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

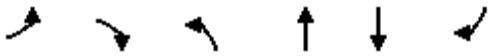
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	183	349	523	146	521	1195
Future Volume (vph)	183	349	523	146	521	1195
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1719	1302	1863	1583	1388	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1719	1302	1863	1583	1388	3539
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	208	397	594	166	592	1358
RTOR Reduction (vph)	0	291	0	122	0	0
Lane Group Flow (vph)	208	106	594	44	592	1358
Heavy Vehicles (%)	5%	24%	2%	2%	30%	2%
Turn Type	Perm	Perm	NA	Perm	Split	NA
Protected Phases			2		6	6
Permitted Phases	8	8		2		
Actuated Green, G (s)	18.0	18.0	18.0	18.0	18.0	18.0
Effective Green, g (s)	18.0	18.0	18.0	18.0	18.0	18.0
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.27	0.27
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Grp Cap (vph)	458	347	496	422	370	943
v/s Ratio Prot			c0.32		c0.43	0.38
v/s Ratio Perm	c0.12	0.08		0.03		
v/c Ratio	0.45	0.31	1.20	0.10	1.60	1.44
Uniform Delay, d1	20.7	19.8	24.8	18.7	24.8	24.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.2	2.3	107.2	0.5	282.4	204.1
Delay (s)	23.9	22.0	131.9	19.2	307.2	228.8
Level of Service	C	C	F	B	F	F
Approach Delay (s)	22.7		107.3			252.6
Approach LOS	C		F			F

Intersection Summary			
HCM 2000 Control Delay	177.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	67.5	Sum of lost time (s)	13.5
Intersection Capacity Utilization	77.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCM 6th Edition methodology does not support Non-NEMA phasing.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	106	0	35	373	267	389
Future Volume (vph)	106	0	35	373	267	389
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.920	
Flt Protected	0.950			0.996		
Satd. Flow (prot)	1570	0	0	1713	1651	0
Flt Permitted	0.950			0.996		
Satd. Flow (perm)	1570	0	0	1713	1651	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	686			526	1142	
Travel Time (s)	15.6			12.0	26.0	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	15%	100%	5%	11%	13%	1%
Adj. Flow (vph)	110	0	36	389	278	405
Shared Lane Traffic (%)						
Lane Group Flow (vph)	110	0	0	425	683	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Free			Stop	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 61.2%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection Sign configuration not allowed in HCM analysis.

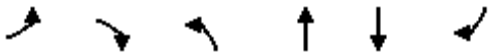
Intersection	
Int Delay, s/veh	12.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	106	0	35	373	267	389
Future Vol, veh/h	106	0	35	373	267	389
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	15	100	5	11	13	1
Mvmt Flow	110	0	36	389	278	405

Major/Minor	Minor2		Major2	
Conflicting Flow All	481	481	-	0
Stage 1	481	481	-	-
Stage 2	0	0	-	-
Critical Hdwy	6.45	6.61	-	-
Critical Hdwy Stg 1	5.45	5.61	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	3.545	4.099	-	-
Pot Cap-1 Maneuver	539	472	-	-
Stage 1	616	539	-	-
Stage 2	-	-	-	-
Platoon blocked, %			-	-
Mov Cap-1 Maneuver	539	0	-	-
Mov Cap-2 Maneuver	539	0	-	-
Stage 1	616	0	-	-
Stage 2	-	0	-	-

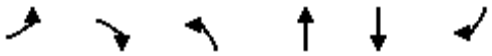
Approach	NB	SB
HCM Control Delay, s	32.2	0
HCM LOS	D	

Minor Lane/Major Mvmt	NBLn1	SBT	SBR
Capacity (veh/h)	539	-	-
HCM Lane V/C Ratio	0.788	-	-
HCM Control Delay (s)	32.2	-	-
HCM Lane LOS	D	-	-
HCM 95th %tile Q(veh)	7.4	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	108	582	323	315	2
Future Volume (vph)	0	108	582	323	315	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865				0.999	
Flt Protected				0.969		
Satd. Flow (prot)	1644	0	0	1779	1610	0
Flt Permitted				0.969		
Satd. Flow (perm)	1644	0	0	1779	1610	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	516			1385	526	
Travel Time (s)	11.7			31.5	12.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	1%	8%	18%	0%
Adj. Flow (vph)	0	117	633	351	342	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	117	0	0	984	344	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 82.6%		ICU Level of Service E	
Analysis Period (min) 15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	108	582	323	315	2
Future Volume (Veh/h)	0	108	582	323	315	2
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	117	633	351	342	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1960	343	344			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1960	343	344			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	83	48			
cM capacity (veh/h)	34	704	1221			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	117	984	344
Volume Left	0	633	0
Volume Right	117	0	2
cSH	704	1221	1700
Volume to Capacity	0.17	0.52	0.20
Queue Length 95th (ft)	15	78	0
Control Delay (s)	11.1	9.7	0.0
Lane LOS	B	A	
Approach Delay (s)	11.1	9.7	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	7.5		
Intersection Capacity Utilization	82.6%	ICU Level of Service	E
Analysis Period (min)	15		

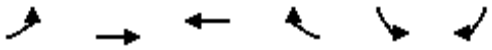
Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	108	582	323	315	2
Future Vol, veh/h	0	108	582	323	315	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	1	8	18	0
Mvmt Flow	0	117	633	351	342	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1960	343	344	0	-	0
Stage 1	343	-	-	-	-	-
Stage 2	1617	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.11	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.209	-	-	-
Pot Cap-1 Maneuver	71	704	1221	-	-	-
Stage 1	723	-	-	-	-	-
Stage 2	180	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	25	704	1221	-	-	-
Mov Cap-2 Maneuver	25	-	-	-	-	-
Stage 1	257	-	-	-	-	-
Stage 2	180	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.1	7.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1221	-	704	-	-
HCM Lane V/C Ratio	0.518	-	0.167	-	-
HCM Control Delay (s)	11.1	0	11.1	-	-
HCM Lane LOS	B	A	B	-	-
HCM 95th %tile Q(veh)	3.1	-	0.6	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	113	105	574	0	0	394
Future Volume (vph)	113	105	574	0	0	394
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.865	
Flt Protected		0.975				
Satd. Flow (prot)	0	1659	1881	0	1627	0
Flt Permitted		0.975				
Satd. Flow (perm)	0	1659	1881	0	1627	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		4107	516		686	
Travel Time (s)		93.3	11.7		15.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	17%	6%	1%	0%	0%	1%
Adj. Flow (vph)	120	112	611	0	0	419
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	232	611	0	419	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Stop		Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 76.4%		ICU Level of Service D	
Analysis Period (min) 15			

Intersection Sign configuration not allowed in HCM analysis.

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	113	105	574	0	0	394
Future Vol, veh/h	113	105	574	0	0	394
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	17	6	1	0	0	1
Mvmt Flow	120	112	611	0	0	419

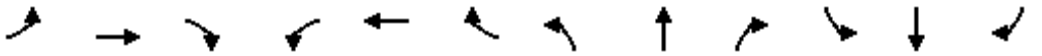
Major/Minor	Major1		Minor2	
Conflicting Flow All	0	0	352	0
Stage 1	-	-	0	-
Stage 2	-	-	352	-
Critical Hdwy	4.27	-	6.51	6.2
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	5.51	-
Follow-up Hdwy	2.353	-	4.009	3.3
Pot Cap-1 Maneuver	-	-	~ 574	-
Stage 1	-	-	-	-
Stage 2	-	-	633	-
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	0	-
Mov Cap-2 Maneuver	-	-	0	-
Stage 1	-	-	0	-
Stage 2	-	-	0	-

Approach	EB	WB
HCM Control Delay, s		
HCM LOS		-

Minor Lane/Major Mvmt	EBL	EBTWBLn1	
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-

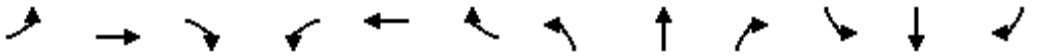
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Existing Network 2045 PM



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	330	328	95	764	0	0	0	0	80	35	117
Future Volume (vph)	0	330	328	95	764	0	0	0	0	80	35	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected					0.995						0.966	
Satd. Flow (prot)	0	1743	1495	0	1782	0	0	0	0	0	1808	1170
Flt Permitted					0.995						0.966	
Satd. Flow (perm)	0	1743	1495	0	1782	0	0	0	0	0	1808	1170
Link Speed (mph)		40			40			30			45	
Link Distance (ft)		930			353			1253			1599	
Travel Time (s)		15.9			6.0			28.5			24.2	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	9%	8%	7%	6%	0%	0%	0%	0%	0%	5%	38%
Adj. Flow (vph)	0	355	353	102	822	0	0	0	0	86	38	126
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	355	353	0	924	0	0	0	0	0	124	126
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 82.0%		ICU Level of Service E	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	330	328	95	764	0	0	0	0	80	35	117
Future Volume (vph)	0	330	328	95	764	0	0	0	0	80	35	117
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	0	355	353	102	822	0	0	0	0	86	38	126

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total (vph)	355	353	924	124	126
Volume Left (vph)	0	0	102	86	0
Volume Right (vph)	0	353	0	0	126
Hadj (s)	0.15	-0.46	0.13	0.16	0.05
Departure Headway (s)	5.4	3.2	5.0	6.6	3.2
Degree Utilization, x	0.53	0.31	1.27	0.23	0.11
Capacity (veh/h)	661	1113	727	526	1121
Control Delay (s)	14.2	7.7	150.3	11.5	6.6
Approach Delay (s)	10.9		150.3	9.0	
Approach LOS	B		F	A	

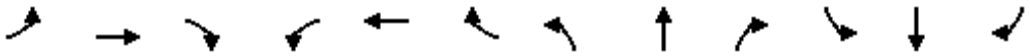
Intersection Summary				
Delay	79.1			
Level of Service	F			
Intersection Capacity Utilization	82.0%	ICU Level of Service	E	
Analysis Period (min)	15			

Intersection	
Intersection Delay, s/veh	160.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	330	328	95	764	0	0	0	0	80	35	117
Future Vol, veh/h	0	330	328	95	764	0	0	0	0	80	35	117
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	0	9	8	7	6	0	0	0	0	0	5	38
Mvmt Flow	0	355	353	102	822	0	0	0	0	86	38	126
Number of Lanes	0	1	1	0	1	0	0	0	0	0	1	1

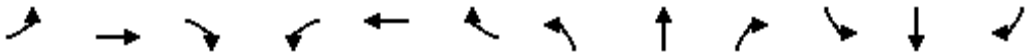
Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	2
HCM Control Delay	18	308.9	13.6
HCM LOS	C	F	B

Lane	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	0%	0%	11%	70%	0%
Vol Thru, %	100%	0%	89%	30%	0%
Vol Right, %	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	330	328	859	115	117
LT Vol	0	0	95	80	0
Through Vol	330	0	764	35	0
RT Vol	0	328	0	0	117
Lane Flow Rate	355	353	924	124	126
Geometry Grp	7	7	6	7	7
Degree of Util (X)	0.614	0.54	1.631	0.265	0.236
Departure Headway (Hd)	6.925	6.188	6.355	8.711	7.71
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	525	585	582	415	469
Service Time	4.625	3.888	4.355	6.411	5.41
HCM Lane V/C Ratio	0.676	0.603	1.588	0.299	0.269
HCM Control Delay	20	15.9	308.9	14.5	12.8
HCM Lane LOS	C	C	F	B	B
HCM 95th-tile Q	4.1	3.2	51.4	1.1	0.9



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	98	310	0	0	421	45	444	43	129	0	0	0
Future Volume (vph)	98	310	0	0	421	45	444	43	129	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Frt					0.987			0.969				
Flt Protected		0.988						0.965				
Satd. Flow (prot)	0	1730	0	0	1803	0	0	3137	0	0	0	0
Flt Permitted		0.988						0.965				
Satd. Flow (perm)	0	1730	0	0	1803	0	0	3137	0	0	0	0
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		353			1397			1065			1401	
Travel Time (s)		6.0			23.8			16.1			21.2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	26%	3%	0%	0%	4%	4%	9%	7%	3%	0%	0%	0%
Adj. Flow (vph)	102	323	0	0	439	47	463	45	134	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	425	0	0	486	0	0	642	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 81.2%		ICU Level of Service D	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	98	310	0	0	421	45	444	43	129	0	0	0
Future Volume (vph)	98	310	0	0	421	45	444	43	129	0	0	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	102	323	0	0	439	47	462	45	134	0	0	0

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total (vph)	425	486	485	157
Volume Left (vph)	102	0	462	0
Volume Right (vph)	0	47	0	134
Hadj (s)	0.19	0.01	0.63	-0.54
Departure Headway (s)	7.1	6.8	8.0	6.8
Degree Utilization, x	0.83	0.92	1.08	0.30
Capacity (veh/h)	503	525	457	520
Control Delay (s)	36.4	47.1	93.2	11.5
Approach Delay (s)	36.4	47.1	73.3	
Approach LOS	E	E	F	

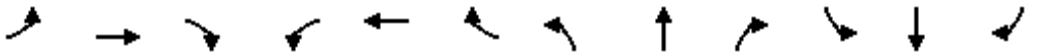
Intersection Summary				
Delay		55.0		
Level of Service		F		
Intersection Capacity Utilization		81.2%	ICU Level of Service	D
Analysis Period (min)		15		

Intersection	
Intersection Delay, s/veh	57.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	98	310	0	0	421	45	444	43	129	0	0	0
Future Vol, veh/h	98	310	0	0	421	45	444	43	129	0	0	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	26	3	0	0	4	4	9	7	3	0	0	0
Mvmt Flow	102	323	0	0	439	47	463	45	134	0	0	0
Number of Lanes	0	1	0	0	1	0	0	2	0	0	0	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	2	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	2	0	1
HCM Control Delay	43.2	48.9	74.2
HCM LOS	E	E	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1
Vol Left, %	95%	0%	24%	0%
Vol Thru, %	5%	14%	76%	90%
Vol Right, %	0%	86%	0%	10%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	466	151	408	466
LT Vol	444	0	98	0
Through Vol	22	22	310	421
RT Vol	0	129	0	45
Lane Flow Rate	485	157	425	485
Geometry Grp	7	7	2	2
Degree of Util (X)	1.08	0.299	0.868	0.918
Departure Headway (Hd)	8.017	6.876	7.668	7.106
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	451	519	476	515
Service Time	5.807	4.666	5.668	5.106
HCM Lane V/C Ratio	1.075	0.303	0.893	0.942
HCM Control Delay	94.1	12.6	43.2	48.9
HCM Lane LOS	F	B	E	E
HCM 95th-tile Q	15.8	1.2	9.1	10.9

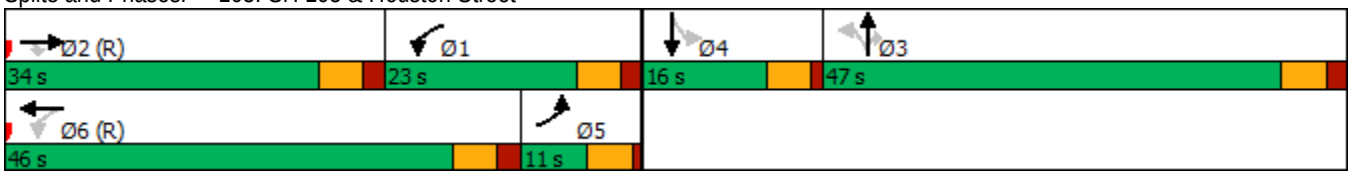


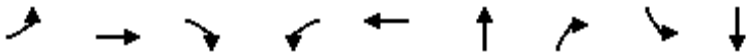
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	785	267	632	637	13	145	13	436	26	55	29
Future Volume (vph)	55	785	267	632	637	13	145	13	436	26	55	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	500		500	560		0	0		300	175		0
Storage Lanes	1		1	1		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt			0.850		0.997				0.850		0.948	
Flt Protected	0.950			0.950				0.956		0.950		
Satd. Flow (prot)	1805	1845	1599	1703	1789	0	0	1800	1538	1805	3294	0
Flt Permitted	0.950			0.073				0.679		0.465		
Satd. Flow (perm)	1805	1845	1599	131	1789	0	0	1278	1538	884	3294	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			272		1				410		30	
Link Speed (mph)		55			60			60			30	
Link Distance (ft)		1108			19133			2711			551	
Travel Time (s)		13.7			217.4			30.8			12.5	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	1%	6%	6%	0%	1%	0%	5%	0%	6%	0%
Adj. Flow (vph)	56	801	272	645	650	13	148	13	445	27	56	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	56	801	272	645	663	0	0	161	445	27	86	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			4			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			3			4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			2	6			3		3	4		
Detector Phase	5	2	2	1	6		3	3	3	4	4	
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		5.0	5.0	5.0	10.0	10.0	
Minimum Split (s)	11.0	16.0	16.0	11.0	16.0		11.0	11.0	11.0	16.0	16.0	
Total Split (s)	11.0	34.0	34.0	23.0	46.0		47.0	47.0	47.0	16.0	16.0	
Total Split (%)	9.2%	28.3%	28.3%	19.2%	38.3%		39.2%	39.2%	39.2%	13.3%	13.3%	
Maximum Green (s)	6.0	28.0	28.0	17.0	40.0		41.0	41.0	41.0	11.0	11.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	6.0	6.0	6.0	6.0			6.0	6.0	5.0	5.0	
Lead/Lag	Lag	Lead	Lead	Lag	Lead		Lag	Lag	Lag	Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	4.0	4.0	3.0	4.0		3.0	3.0	3.0	4.0	4.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	
Act Effct Green (s)	6.0	51.1	51.1	74.1	65.3			21.3	21.3	10.6	10.6	
Actuated g/C Ratio	0.05	0.43	0.43	0.62	0.54			0.18	0.18	0.09	0.09	
v/c Ratio	0.62	1.02	0.32	2.13	0.68			0.71	0.73	0.35	0.27	
Control Delay	84.8	73.3	4.5	543.5	28.5			62.6	13.2	64.1	36.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	
Total Delay	84.8	73.3	4.5	543.5	28.5			62.6	13.2	64.1	36.3	
LOS	F	E	A	F	C			E	B	E	D	
Approach Delay		57.3			282.4			26.3			43.0	
Approach LOS		E			F			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 2.13			
Intersection Signal Delay: 144.1		Intersection LOS: F	
Intersection Capacity Utilization 106.7%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 103: SH 105 & Houston Street



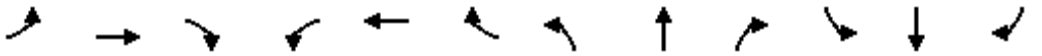


Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	56	801	272	645	663	161	445	27	86
v/c Ratio	0.62	1.02	0.32	2.13	0.68	0.71	0.73	0.35	0.27
Control Delay	84.8	73.3	4.5	543.5	28.5	62.6	13.2	64.1	36.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	84.8	73.3	4.5	543.5	28.5	62.6	13.2	64.1	36.3
Queue Length 50th (ft)	43	~703	0	~759	398	118	23	20	21
Queue Length 95th (ft)	#106	#1055	60	#1008	#694	178	122	52	47
Internal Link Dist (ft)		1028			19053	2631			471
Turn Bay Length (ft)	500		500	560			300	175	
Base Capacity (vph)	90	786	837	303	974	436	795	81	329
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	0.62	1.02	0.32	2.13	0.68	0.37	0.56	0.33	0.26

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

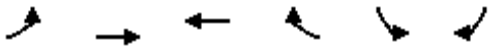
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	785	267	632	637	13	145	13	436	26	55	29
Future Volume (vph)	55	785	267	632	637	13	145	13	436	26	55	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0	6.0	6.0	6.0			6.0	6.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00			1.00	0.85	1.00	0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1805	1845	1599	1703	1789			1800	1538	1805	3292	
Flt Permitted	0.95	1.00	1.00	0.07	1.00			0.68	1.00	0.47	1.00	
Satd. Flow (perm)	1805	1845	1599	130	1789			1278	1538	884	3292	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	56	801	272	645	650	13	148	13	445	27	56	30
RTOR Reduction (vph)	0	0	161	0	0	0	0	0	337	0	28	0
Lane Group Flow (vph)	56	801	111	645	663	0	0	161	108	27	58	0
Heavy Vehicles (%)	0%	3%	1%	6%	6%	0%	1%	0%	5%	0%	6%	0%
Turn Type	Prot	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			3			4	
Permitted Phases			2	6			3		3	4		
Actuated Green, G (s)	4.8	49.1	49.1	73.1	63.3			21.3	21.3	8.6	8.6	
Effective Green, g (s)	4.8	49.1	49.1	73.1	63.3			21.3	21.3	8.6	8.6	
Actuated g/C Ratio	0.04	0.41	0.41	0.61	0.53			0.18	0.18	0.07	0.07	
Clearance Time (s)	5.0	6.0	6.0	6.0	6.0			6.0	6.0	5.0	5.0	
Vehicle Extension (s)	3.0	4.0	4.0	3.0	4.0			3.0	3.0	4.0	4.0	
Lane Grp Cap (vph)	72	754	654	315	943			226	272	63	235	
v/s Ratio Prot	0.03	0.43		c0.31	0.37						0.02	
v/s Ratio Perm			0.07	c0.94				c0.13	0.07	c0.03		
v/c Ratio	0.78	1.06	0.17	2.05	0.70			0.71	0.40	0.43	0.25	
Uniform Delay, d1	57.1	35.5	22.5	46.8	21.3			46.5	43.7	53.3	52.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	1.00	
Incremental Delay, d2	39.9	50.6	0.6	482.3	4.4			10.1	1.0	6.3	0.8	
Delay (s)	97.0	86.1	23.1	529.1	25.6			56.6	44.6	59.6	53.4	
Level of Service	F	F	C	F	C			E	D	E	D	
Approach Delay (s)		71.4			273.9			47.8			54.9	
Approach LOS		E			F			D			D	

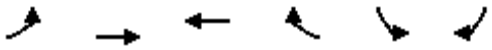
Intersection Summary			
HCM 2000 Control Delay	150.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.69		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	23.0
Intersection Capacity Utilization	106.7%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology expects strict NEMA phasing.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	29	1020	1017	8	11	29
Future Volume (vph)	29	1020	1017	8	11	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.999		0.902	
Flt Protected		0.999			0.987	
Satd. Flow (prot)	0	1861	1861	0	1658	0
Flt Permitted		0.999			0.987	
Satd. Flow (perm)	0	1861	1861	0	1658	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		19133	16491		682	
Travel Time (s)		434.8	374.8		15.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	32	1109	1105	9	12	32
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1141	1114	0	44	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60			60	60	60
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 87.0%		ICU Level of Service E	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	29	1020	1017	8	11	29
Future Volume (Veh/h)	29	1020	1017	8	11	29
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	32	1109	1105	9	12	32
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1114				2282	1110
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1114				2282	1110
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	95				71	87
cM capacity (veh/h)	627				41	255

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	1141	1114	44
Volume Left	32	0	12
Volume Right	0	9	32
cSH	627	1700	106
Volume to Capacity	0.05	0.66	0.42
Queue Length 95th (ft)	4	0	43
Control Delay (s)	1.9	0.0	61.2
Lane LOS	A		F
Approach Delay (s)	1.9	0.0	61.2
Approach LOS			F

Intersection Summary			
Average Delay	2.1		
Intersection Capacity Utilization	87.0%	ICU Level of Service	E
Analysis Period (min)	15		

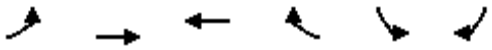
Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	29	1020	1017	8	11	29
Future Vol, veh/h	29	1020	1017	8	11	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	1109	1105	9	12	32

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1114	0	-	0	2283	1110
Stage 1	-	-	-	-	1110	-
Stage 2	-	-	-	-	1173	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	627	-	-	-	44	255
Stage 1	-	-	-	-	315	-
Stage 2	-	-	-	-	294	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	627	-	-	-	38	255
Mov Cap-2 Maneuver	-	-	-	-	38	-
Stage 1	-	-	-	-	273	-
Stage 2	-	-	-	-	294	-

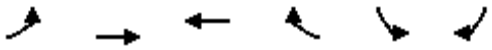
Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	67.2
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	627	-	-	-	99
HCM Lane V/C Ratio	0.05	-	-	-	0.439
HCM Control Delay (s)	11	0	-	-	67.2
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0.2	-	-	-	1.9



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	351	1584	1349	489	82	132
Future Volume (vph)	351	1584	1349	489	82	132
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.960		0.917	
Flt Protected	0.950				0.981	
Satd. Flow (prot)	1787	3406	3271	0	1577	0
Flt Permitted	0.950				0.981	
Satd. Flow (perm)	1787	3406	3271	0	1577	0
Link Speed (mph)		65	65		30	
Link Distance (ft)		2030	1363		297	
Travel Time (s)		21.3	14.3		6.8	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	1%	6%	7%	3%	9%	8%
Adj. Flow (vph)	373	1685	1435	520	87	140
Shared Lane Traffic (%)						
Lane Group Flow (vph)	373	1685	1955	0	227	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 95.0%		ICU Level of Service F	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	351	1584	1349	489	82	132
Future Volume (Veh/h)	351	1584	1349	489	82	132
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	373	1685	1435	520	87	140
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage veh)		2	2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1955				3284	978
vC1, stage 1 conf vol					1695	
vC2, stage 2 conf vol					1588	
vCu, unblocked vol	1955				3284	978
tC, single (s)	4.1				7.0	7.1
tC, 2 stage (s)					6.0	
tF (s)	2.2				3.6	3.4
p0 queue free %	0				0	42
cM capacity (veh/h)	299				0	239

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1
Volume Total	373	842	842	957	998	227
Volume Left	373	0	0	0	0	87
Volume Right	0	0	0	0	520	140
cSH	299	1700	1700	1700	1700	0
Volume to Capacity	1.25	0.50	0.50	0.56	0.59	Err
Queue Length 95th (ft)	434	0	0	0	0	Err
Control Delay (s)	172.7	0.0	0.0	0.0	0.0	Err
Lane LOS	F					F
Approach Delay (s)	31.3			0.0		Err
Approach LOS						F

Intersection Summary			
Average Delay	Err		
Intersection Capacity Utilization	95.0%	ICU Level of Service	F
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	20

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	351	1584	1349	489	82	132
Future Vol, veh/h	351	1584	1349	489	82	132
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	1	6	7	3	9	8
Mvmt Flow	373	1685	1435	520	87	140

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1955	0	-	0	3284	978
Stage 1	-	-	-	-	1695	-
Stage 2	-	-	-	-	1589	-
Critical Hdwy	4.12	-	-	-	6.98	7.06
Critical Hdwy Stg 1	-	-	-	-	5.98	-
Critical Hdwy Stg 2	-	-	-	-	5.98	-
Follow-up Hdwy	2.21	-	-	-	3.59	3.38
Pot Cap-1 Maneuver	~ 299	-	-	-	~ 6	239
Stage 1	-	-	-	-	124	-
Stage 2	-	-	-	-	143	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	~ 299	-	-	-	0	239
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	143	-

Approach	EB	WB	SB
HCM Control Delay, s	31.3	0	90.4
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	~ 299	-	-	-	239
HCM Lane V/C Ratio	1.249	-	-	-	0.953
HCM Control Delay (s)	172.5	-	-	-	90.4
HCM Lane LOS	F	-	-	-	F
HCM 95th %tile Q(veh)	17.4	-	-	-	8.6

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1454	74	159	1322	471	704
Future Volume (vph)	1454	74	159	1322	471	704
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	125		0	225
Storage Lanes		0	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.993					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1843	0	1770	1863	1787	1599
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1843	0	1770	1863	1787	1599
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	6					149
Link Speed (mph)	45			45	30	
Link Distance (ft)	1974			176	2080	
Travel Time (s)	29.9			2.7	47.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	10%	2%	2%	1%	1%
Adj. Flow (vph)	1531	78	167	1392	496	741
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1609	0	167	1392	496	741
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane	Yes			Yes		
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	1
Detector Template	Thru		Left	Thru	Left	Right
Leading Detector (ft)	100		20	100	20	20
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	6		20	6	20	20
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Prot	NA	Prot	Perm
Protected Phases	2		1	6	8	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Permitted Phases						8
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	10.0		5.0	10.0	5.0	5.0
Minimum Split (s)	15.0		10.0	15.0	10.0	10.0
Total Split (s)	42.0		10.0	52.0	18.0	18.0
Total Split (%)	60.0%		14.3%	74.3%	25.7%	25.7%
Maximum Green (s)	37.0		5.0	47.0	13.0	13.0
Yellow Time (s)	4.0		4.0	4.0	4.0	4.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0		5.0	5.0	5.0	5.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	2.0		2.0	2.0	2.0	2.0
Recall Mode	C-Max		None	Max	None	None
Act Effct Green (s)	37.0		5.0	47.0	13.0	13.0
Actuated g/C Ratio	0.53		0.07	0.67	0.19	0.19
v/c Ratio	1.65		1.33	1.11	1.50	1.77
Control Delay	316.8		222.7	78.3	265.9	377.9
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	316.8		222.7	78.3	265.9	377.9
LOS	F		F	E	F	F
Approach Delay	316.8			93.7	333.0	
Approach LOS	F			F	F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.77			
Intersection Signal Delay: 242.4		Intersection LOS: F	
Intersection Capacity Utilization 132.9%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 202: Waco Street & FM 1960

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	1609	167	1392	496	741
v/c Ratio	1.65	1.33	1.11	1.50	1.77
Control Delay	316.8	222.7	78.3	265.9	377.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	316.8	222.7	78.3	265.9	377.9
Queue Length 50th (ft)	~1044	~95	~703	~303	~438
Queue Length 95th (ft)	#1294	#205	#939	#474	#641
Internal Link Dist (ft)	1894		96	2000	
Turn Bay Length (ft)		125			225
Base Capacity (vph)	976	126	1250	331	418
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.65	1.33	1.11	1.50	1.77

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1454	74	159	1322	471	704
Future Volume (vph)	1454	74	159	1322	471	704
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0		5.0	5.0	5.0	5.0
Lane Util. Factor	1.00		1.00	1.00	1.00	1.00
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	1844		1770	1863	1787	1599
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	1844		1770	1863	1787	1599
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1531	78	167	1392	496	741
RTOR Reduction (vph)	3	0	0	0	0	121
Lane Group Flow (vph)	1606	0	167	1392	496	620
Heavy Vehicles (%)	2%	10%	2%	2%	1%	1%
Turn Type	NA		Prot	NA	Prot	Perm
Protected Phases	2		1	6	8	
Permitted Phases						8
Actuated Green, G (s)	37.0		5.0	47.0	13.0	13.0
Effective Green, g (s)	37.0		5.0	47.0	13.0	13.0
Actuated g/C Ratio	0.53		0.07	0.67	0.19	0.19
Clearance Time (s)	5.0		5.0	5.0	5.0	5.0
Vehicle Extension (s)	2.0		2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	974		126	1250	331	296
v/s Ratio Prot	c0.87		0.09	c0.75	0.28	
v/s Ratio Perm						c0.39
v/c Ratio	1.65		1.33	1.11	1.50	2.09
Uniform Delay, d1	16.5		32.5	11.5	28.5	28.5
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	296.7		191.0	62.6	239.6	503.4
Delay (s)	313.2		223.5	74.1	268.1	531.9
Level of Service	F		F	E	F	F
Approach Delay (s)	313.2			90.1	426.2	
Approach LOS	F			F	F	

Intersection Summary			
HCM 2000 Control Delay	266.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.75		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	132.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

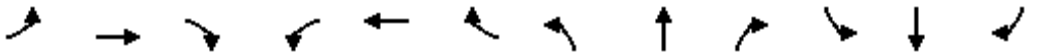
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1454	74	159	1322	471	704
Future Volume (veh/h)	1454	74	159	1322	471	704
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1752	1870	1870	1885	1885
Adj Flow Rate, veh/h	1531	78	167	1392	496	741
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	10	2	2	1	1
Cap, veh/h	933	48	127	1256	333	297
Arrive On Green	0.53	0.53	0.07	0.67	0.19	0.19
Sat Flow, veh/h	1764	90	1781	1870	1795	1598
Grp Volume(v), veh/h	0	1609	167	1392	496	741
Grp Sat Flow(s),veh/h/ln	0	1854	1781	1870	1795	1598
Q Serve(g_s), s	0.0	37.0	5.0	47.0	13.0	13.0
Cycle Q Clear(g_c), s	0.0	37.0	5.0	47.0	13.0	13.0
Prop In Lane		0.05	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	0	980	127	1256	333	297
V/C Ratio(X)	0.00	1.64	1.31	1.11	1.49	2.50
Avail Cap(c_a), veh/h	0	980	127	1256	333	297
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	16.5	32.5	11.5	28.5	28.5
Incr Delay (d2), s/veh	0.0	293.4	185.6	60.6	234.8	683.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	91.5	8.5	31.9	27.0	61.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	309.9	218.1	72.1	263.3	712.3
LnGrp LOS	A	F	F	F	F	F
Approach Vol, veh/h	1609			1559	1237	
Approach Delay, s/veh	309.9			87.7	532.3	
Approach LOS	F			F	F	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	10.0	42.0				52.0	18.0
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	5.0	37.0				47.0	13.0
Max Q Clear Time (g_c+I1), s	7.0	39.0				49.0	15.0
Green Ext Time (p_c), s	0.0	0.0				0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	293.7
HCM 6th LOS	F

Notes

User approved ignoring U-Turning movement.

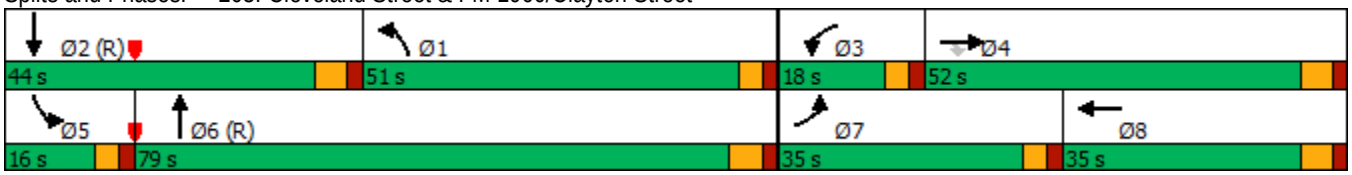


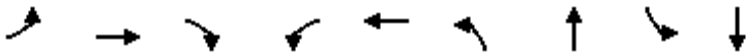
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	518	587	865	105	481	64	785	1510	114	88	946	217
Future Volume (vph)	518	587	865	105	481	64	785	1510	114	88	946	217
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	600		600	0		0	225		0	100		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.982			0.989			0.972	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	1900	1568	1517	1825	0	1736	3495	0	1805	3283	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1752	1900	1568	1517	1825	0	1736	3495	0	1805	3283	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			566		4			6			16	
Link Speed (mph)		35			35			55			45	
Link Distance (ft)		1871			1513			495			3038	
Travel Time (s)		36.4			29.5			6.1			46.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	3%	0%	3%	19%	2%	4%	4%	2%	4%	0%	8%	2%
Adj. Flow (vph)	534	605	892	108	496	66	809	1557	118	91	975	224
Shared Lane Traffic (%)												
Lane Group Flow (vph)	534	605	892	108	562	0	809	1675	0	91	1199	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		1	6		5	2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			4									
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0	10.0	6.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	16.0	16.0	11.0	16.0		15.0	16.0		15.0	16.0	
Total Split (s)	35.0	52.0	52.0	18.0	35.0		51.0	79.0		16.0	44.0	
Total Split (%)	21.2%	31.5%	31.5%	10.9%	21.2%		30.9%	47.9%		9.7%	26.7%	
Maximum Green (s)	30.0	46.0	46.0	13.0	29.0		46.0	73.0		11.0	38.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	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	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0		5.0	6.0		5.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	4.0	4.0	3.0	5.0		4.0	4.0		4.0	4.0	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	30.0	46.0	46.0	13.0	29.0		46.0	73.2		10.8	38.0	
Actuated g/C Ratio	0.18	0.28	0.28	0.08	0.18		0.28	0.44		0.07	0.23	
v/c Ratio	1.68	1.14	1.06	0.91	1.73		1.67	1.08		0.77	1.56	
Control Delay	357.4	136.9	66.9	133.8	380.1		348.3	90.5		112.4	298.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	357.4	136.9	66.9	133.8	380.1		348.3	90.5		112.4	298.2	
LOS	F	F	E	F	F		F	F		F	F	
Approach Delay		164.1			340.4			174.5			285.1	
Approach LOS		F			F			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 165			
Actuated Cycle Length: 165			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.73			
Intersection Signal Delay: 210.4		Intersection LOS: F	
Intersection Capacity Utilization 152.8%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 203: Cleveland Street & FM 1960/Clayton Street



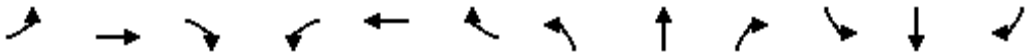


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	534	605	892	108	562	809	1675	91	1199
v/c Ratio	1.68	1.14	1.06	0.91	1.73	1.67	1.08	0.77	1.56
Control Delay	357.4	136.9	66.9	133.8	380.1	348.3	90.5	112.4	298.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	357.4	136.9	66.9	133.8	380.1	348.3	90.5	112.4	298.2
Queue Length 50th (ft)	~838	~761	~583	118	~897	~1268	~1059	99	~957
Queue Length 95th (ft)	#1078	#1007	#848	#244	#1142	#1528	#1196	#196	#1101
Internal Link Dist (ft)		1791			1433		415		2958
Turn Bay Length (ft)	600		600			225		100	
Base Capacity (vph)	318	529	845	119	324	483	1552	120	768
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	1.68	1.14	1.06	0.91	1.73	1.67	1.08	0.76	1.56

Intersection Summary

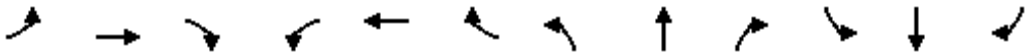
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	518	587	865	105	481	64	785	1510	114	88	946	217
Future Volume (vph)	518	587	865	105	481	64	785	1510	114	88	946	217
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0	6.0	5.0	6.0		5.0	6.0		5.0	6.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1752	1900	1568	1517	1826		1736	3497		1805	3283	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1752	1900	1568	1517	1826		1736	3497		1805	3283	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	534	605	892	108	496	66	809	1557	118	91	975	224
RTOR Reduction (vph)	0	0	408	0	3	0	0	3	0	0	12	0
Lane Group Flow (vph)	534	605	484	108	559	0	809	1672	0	91	1187	0
Heavy Vehicles (%)	3%	0%	3%	19%	2%	4%	4%	2%	4%	0%	8%	2%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases			4									
Actuated Green, G (s)	30.0	46.0	46.0	13.0	29.0		46.0	73.2		10.8	38.0	
Effective Green, g (s)	30.0	46.0	46.0	13.0	29.0		46.0	73.2		10.8	38.0	
Actuated g/C Ratio	0.18	0.28	0.28	0.08	0.18		0.28	0.44		0.07	0.23	
Clearance Time (s)	5.0	6.0	6.0	5.0	6.0		5.0	6.0		5.0	6.0	
Vehicle Extension (s)	3.0	4.0	4.0	3.0	5.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	318	529	437	119	320		483	1551		118	756	
v/s Ratio Prot	c0.30	0.32		0.07	c0.31		c0.47	0.48		0.05	c0.36	
v/s Ratio Perm			0.31									
v/c Ratio	1.68	1.14	1.11	0.91	1.75		1.67	1.08		0.77	1.57	
Uniform Delay, d1	67.5	59.5	59.5	75.4	68.0		59.5	45.9		75.9	63.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	319.1	85.2	75.4	54.2	348.4		312.7	47.0		27.5	262.8	
Delay (s)	386.6	144.7	134.9	129.6	416.4		372.2	92.9		103.4	326.3	
Level of Service	F	F	F	F	F		F	F		F	F	
Approach Delay (s)		204.0			370.1			183.9			310.5	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	234.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.66		
Actuated Cycle Length (s)	165.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	152.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	518	587	865	105	481	64	785	1510	114	88	946	217
Future Volume (veh/h)	518	587	865	105	481	64	785	1510	114	88	946	217
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1900	1856	1618	1870	1841	1841	1870	1841	1900	1781	1870
Adj Flow Rate, veh/h	534	605	892	108	496	66	809	1557	118	91	975	224
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	0	3	19	2	4	4	2	4	0	8	2
Cap, veh/h	321	530	438	121	284	38	839	2191	165	110	630	144
Arrive On Green	0.18	0.28	0.28	0.08	0.18	0.18	0.48	0.65	0.65	0.06	0.23	0.23
Sat Flow, veh/h	1767	1900	1572	1541	1617	215	1753	3350	252	1810	2734	627
Grp Volume(v), veh/h	534	605	892	108	0	562	809	821	854	91	603	596
Grp Sat Flow(s),veh/h/ln	1767	1900	1572	1541	0	1832	1753	1777	1825	1810	1692	1669
Q Serve(g_s), s	30.0	46.0	46.0	11.5	0.0	29.0	73.7	49.0	50.2	8.2	38.0	38.0
Cycle Q Clear(g_c), s	30.0	46.0	46.0	11.5	0.0	29.0	73.7	49.0	50.2	8.2	38.0	38.0
Prop In Lane	1.00		1.00	1.00		0.12	1.00		0.14	1.00		0.38
Lane Grp Cap(c), veh/h	321	530	438	121	0	322	839	1162	1194	110	390	384
V/C Ratio(X)	1.66	1.14	2.03	0.89	0.00	1.75	0.96	0.71	0.72	0.82	1.55	1.55
Avail Cap(c_a), veh/h	321	530	438	121	0	322	839	1162	1194	121	390	384
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09
Uniform Delay (d), s/veh	67.5	59.5	59.5	75.3	0.0	68.0	41.6	18.3	18.5	76.6	63.5	63.5
Incr Delay (d2), s/veh	311.3	84.6	473.6	49.4	0.0	348.2	22.7	3.6	3.7	4.3	247.0	249.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	41.3	34.4	75.9	6.2	0.0	44.7	35.2	19.2	20.2	3.9	42.8	42.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	378.8	144.1	533.1	124.7	0.0	416.2	64.3	22.0	22.2	80.9	310.5	312.9
LnGrp LOS	F	F	F	F	A	F	E	C	C	F	F	F
Approach Vol, veh/h		2031			670			2484			1290	
Approach Delay, s/veh		376.7			369.2			35.8			295.4	
Approach LOS		F			F			D			F	

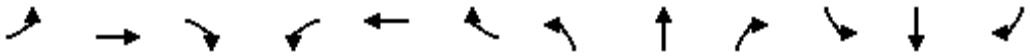
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	86.0	44.0	18.0	52.0	15.1	114.9	35.0	35.0
Change Period (Y+Rc), s	6.0	* 6	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	46.0	* 38	13.0	46.0	11.0	73.0	30.0	29.0
Max Q Clear Time (g_c+I1), s	75.7	40.0	13.5	48.0	10.2	52.2	32.0	31.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	14.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	229.0
HCM 6th LOS	F

Notes

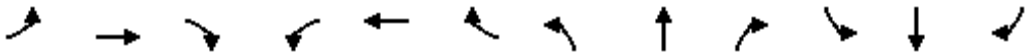
User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	51	912	93	281	310	5	137	354	629	34	293	66
Future Volume (vph)	51	912	93	281	310	5	137	354	629	34	293	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.999			0.924			0.977	
Flt Protected		0.997			0.977			0.994			0.996	
Satd. Flow (prot)	0	1867	1615	0	1809	0	0	1741	0	0	1823	0
Flt Permitted		0.997			0.977			0.994			0.996	
Satd. Flow (perm)	0	1867	1615	0	1809	0	0	1741	0	0	1823	0
Link Speed (mph)		45			30			30			30	
Link Distance (ft)		1513			1036			419			1496	
Travel Time (s)		22.9			23.5			9.5			34.0	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	10%	1%	0%	2%	3%	0%	2%	0%	0%	0%	1%	4%
Adj. Flow (vph)	52	931	95	287	316	5	140	361	642	35	299	67
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	983	95	0	608	0	0	1143	0	0	401	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 182.4%		ICU Level of Service H	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	51	912	93	281	310	5	137	354	629	34	293	66
Future Volume (vph)	51	912	93	281	310	5	137	354	629	34	293	66
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	52	931	95	287	316	5	140	361	642	35	299	67

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total (vph)	983	95	608	1143	401
Volume Left (vph)	52	0	287	140	35
Volume Right (vph)	0	95	5	642	67
Hadj (s)	0.05	-0.70	0.13	-0.31	-0.06
Departure Headway (s)	9.7	9.0	9.8	9.2	9.5
Degree Utilization, x	2.65	0.24	1.65	2.93	1.05
Capacity (veh/h)	380	397	373	402	385
Control Delay (s)	770.6	13.5	327.5	893.7	93.0
Approach Delay (s)	703.9		327.5	893.7	93.0
Approach LOS	F		F	F	F

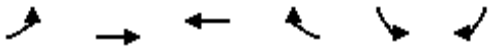
Intersection Summary				
Delay	624.4			
Level of Service	F			
Intersection Capacity Utilization	182.4%	ICU Level of Service	H	
Analysis Period (min)	15			

Intersection	
Intersection Delay, s/veh	663.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	51	912	93	281	310	5	137	354	629	34	293	66
Future Vol, veh/h	51	912	93	281	310	5	137	354	629	34	293	66
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles, %	10	1	0	2	3	0	2	0	0	0	1	4
Mvmt Flow	52	931	95	287	316	5	140	361	642	35	299	67
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0

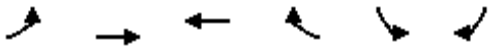
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	2
HCM Control Delay	742	371.6	921.6	158.3
HCM LOS	F	F	F	F

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	12%	5%	0%	47%	9%
Vol Thru, %	32%	95%	0%	52%	75%
Vol Right, %	56%	0%	100%	1%	17%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1120	963	93	596	393
LT Vol	137	51	0	281	34
Through Vol	354	912	0	310	293
RT Vol	629	0	93	5	66
Lane Flow Rate	1143	983	95	608	401
Geometry Grp	2	7	7	5	2
Degree of Util (X)	2.957	2.701	0.238	1.659	1.059
Departure Headway (Hd)	15.345	17.065	16.115	22.819	27.277
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	251	226	225	164	136
Service Time	13.345	14.765	13.815	20.819	25.277
HCM Lane V/C Ratio	4.554	4.35	0.422	3.707	2.949
HCM Control Delay	921.6	811.4	23.8	371.6	158.3
HCM Lane LOS	F	F	C	F	F
HCM 95th-tile Q	61.6	49.2	0.9	18.3	7.7



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	19	1576	692	0	0	66
Future Volume (vph)	19	1576	692	0	0	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.865	
Flt Protected		0.999				
Satd. Flow (prot)	0	1880	1881	0	1644	0
Flt Permitted		0.999				
Satd. Flow (perm)	0	1880	1881	0	1644	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		1036	1081		1292	
Travel Time (s)		15.7	16.4		29.4	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	1%	1%	0%	0%	0%
Adj. Flow (vph)	21	1771	778	0	0	74
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1792	778	0	74	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 108.9%		ICU Level of Service G	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	19	1576	692	0	0	66
Future Volume (Veh/h)	19	1576	692	0	0	66
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	21	1771	778	0	0	74
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	778				2591	778
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	778				2591	778
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				100	81
cM capacity (veh/h)	848				27	400

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	1792	778	74
Volume Left	21	0	0
Volume Right	0	0	74
cSH	848	1700	400
Volume to Capacity	0.02	0.46	0.19
Queue Length 95th (ft)	2	0	17
Control Delay (s)	0.1	0.0	16.0
Lane LOS	A		C
Approach Delay (s)	0.1	0.0	16.0
Approach LOS			C

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	108.9%	ICU Level of Service	G
Analysis Period (min)	15		

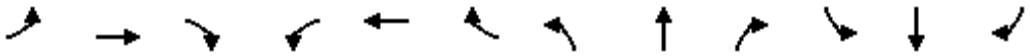
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	19	1576	692	0	0	66
Future Vol, veh/h	19	1576	692	0	0	66
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	1	1	0	0	0
Mvmt Flow	21	1771	778	0	0	74

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	778	0	-	0	2591	778
Stage 1	-	-	-	-	778	-
Stage 2	-	-	-	-	1813	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	848	-	-	-	28	400
Stage 1	-	-	-	-	456	-
Stage 2	-	-	-	-	144	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	848	-	-	-	0	400
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	144	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	16
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	848	-	-	-	400
HCM Lane V/C Ratio	0.025	-	-	-	0.185
HCM Control Delay (s)	9.4	0	-	-	16
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.7

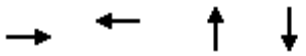


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	166	42	43	24	61	130	43	1904	42	27	1218	58
Future Volume (vph)	166	42	43	24	61	130	43	1904	42	27	1218	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.977			0.919			0.997			0.993	
Flt Protected		0.968			0.994			0.999			0.999	
Satd. Flow (prot)	0	1785	0	0	1678	0	0	3463	0	0	3391	0
Flt Permitted		0.613			0.945			0.851			0.660	
Satd. Flow (perm)	0	1130	0	0	1595	0	0	2950	0	0	2240	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			8			5			11	
Link Speed (mph)		30			30			45			55	
Link Distance (ft)		594			763			3038			1923	
Travel Time (s)		13.5			17.3			46.0			23.8	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	1%	0%	0%	20%	0%	2%	0%	4%	0%	0%	6%	0%
Adj. Flow (vph)	178	45	46	26	66	140	46	2047	45	29	1310	62
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	269	0	0	232	0	0	2138	0	0	1401	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4			8			6			2		
Detector Phase	4	4		8	8		6	6		2	2	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	5.0	5.0		5.0	5.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	11.0		24.0	24.0		16.0	16.0		16.0	16.0	
Total Split (s)	24.0	24.0		24.0	24.0		46.0	46.0		46.0	46.0	
Total Split (%)	34.3%	34.3%		34.3%	34.3%		65.7%	65.7%		65.7%	65.7%	
Maximum Green (s)	18.0	18.0		18.0	18.0		40.0	40.0		40.0	40.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		4.0	4.0		4.0	4.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				13.0	13.0							
Pedestrian Calls (#/hr)				0	0							
Act Effct Green (s)		17.2			17.2			40.8			40.8	
Actuated g/C Ratio		0.25			0.25			0.58			0.58	
v/c Ratio		0.93			0.58			1.24			1.07	
Control Delay		66.6			28.8			133.7			64.1	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		66.6			28.8			133.7			64.1	
LOS		E			C			F			E	
Approach Delay		66.6			28.8			133.7			64.1	
Approach LOS		E			C			F			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.24			
Intersection Signal Delay: 99.1		Intersection LOS: F	
Intersection Capacity Utilization 126.3%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 206: Cleveland Street & Linney Street

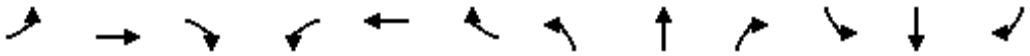


Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	269	232	2138	1401
v/c Ratio	0.93	0.58	1.24	1.07
Control Delay	66.6	28.8	133.7	64.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	66.6	28.8	133.7	64.1
Queue Length 50th (ft)	106	83	~630	~366
Queue Length 95th (ft)	#242	151	#768	#495
Internal Link Dist (ft)	514	683	2958	1843
Turn Bay Length (ft)				
Base Capacity (vph)	300	416	1720	1309
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.90	0.56	1.24	1.07

Intersection Summary

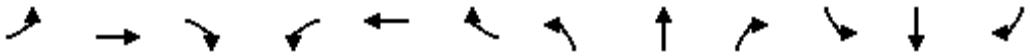
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	166	42	43	24	61	130	43	1904	42	27	1218	58
Future Volume (vph)	166	42	43	24	61	130	43	1904	42	27	1218	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0			6.0			6.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frt		0.98			0.92			1.00			0.99	
Flt Protected		0.97			0.99			1.00			1.00	
Satd. Flow (prot)		1785			1678			3462			3392	
Flt Permitted		0.61			0.95			0.85			0.66	
Satd. Flow (perm)		1131			1594			2951			2241	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	178	45	46	26	66	140	46	2047	45	29	1310	62
RTOR Reduction (vph)	0	11	0	0	6	0	0	2	0	0	5	0
Lane Group Flow (vph)	0	258	0	0	226	0	0	2136	0	0	1396	0
Heavy Vehicles (%)	1%	0%	0%	20%	0%	2%	0%	4%	0%	0%	6%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4			8			6			2		
Actuated Green, G (s)		17.2			17.2			40.8			40.8	
Effective Green, g (s)		17.2			17.2			40.8			40.8	
Actuated g/C Ratio		0.25			0.25			0.58			0.58	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Vehicle Extension (s)		2.0			2.0			4.0			4.0	
Lane Grp Cap (vph)		277			391			1720			1306	
v/s Ratio Prot												
v/s Ratio Perm		c0.23			0.14			c0.72			0.62	
v/c Ratio		0.93			0.58			1.24			1.07	
Uniform Delay, d1		25.8			23.2			14.6			14.6	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		36.0			1.3			113.9			45.7	
Delay (s)		61.9			24.5			128.5			60.3	
Level of Service		E			C			F			E	
Approach Delay (s)		61.9			24.5			128.5			60.3	
Approach LOS		E			C			F			E	

Intersection Summary			
HCM 2000 Control Delay	94.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	126.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	166	42	43	24	61	130	43	1904	42	27	1218	58
Future Volume (veh/h)	166	42	43	24	61	130	43	1904	42	27	1218	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1900	1604	1900	1870	1900	1841	1900	1900	1811	1900
Adj Flow Rate, veh/h	178	45	46	26	66	140	46	2047	45	29	1310	62
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	0	0	20	0	2	0	4	0	0	6	0
Cap, veh/h	276	60	52	83	140	253	72	1745	39	54	1419	81
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.59	0.59	0.59	0.59	0.59	0.59
Sat Flow, veh/h	795	252	216	110	586	1059	30	2961	67	0	2408	137
Grp Volume(v), veh/h	269	0	0	232	0	0	1014	0	1124	667	0	734
Grp Sat Flow(s),veh/h/ln	1263	0	0	1754	0	0	1394	0	1663	921	0	1623
Q Serve(g_s), s	6.3	0.0	0.0	0.0	0.0	0.0	17.5	0.0	41.3	0.0	0.0	23.7
Cycle Q Clear(g_c), s	14.6	0.0	0.0	8.3	0.0	0.0	41.3	0.0	41.3	41.3	0.0	23.7
Prop In Lane	0.66		0.17	0.11		0.60	0.05		0.04	0.04		0.08
Lane Grp Cap(c), veh/h	388	0	0	477	0	0	876	0	980	597	0	957
V/C Ratio(X)	0.69	0.00	0.00	0.49	0.00	0.00	1.16	0.00	1.15	1.12	0.00	0.77
Avail Cap(c_a), veh/h	412	0	0	506	0	0	876	0	980	597	0	957
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.09	0.00	0.09	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.9	0.0	0.0	23.4	0.0	0.0	14.9	0.0	14.4	21.0	0.0	10.8
Incr Delay (d2), s/veh	3.7	0.0	0.0	0.3	0.0	0.0	72.6	0.0	67.3	73.5	0.0	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	0.0	0.0	3.2	0.0	0.0	25.1	0.0	28.9	19.2	0.0	6.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.6	0.0	0.0	23.7	0.0	0.0	87.4	0.0	81.6	94.4	0.0	16.7
LnGrp LOS	C	A	A	C	A	A	F	A	F	F	A	B
Approach Vol, veh/h		269			232			2138			1401	
Approach Delay, s/veh		29.6			23.7			84.4			53.7	
Approach LOS		C			C			F			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	47.3	22.7	47.3	22.7
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	40.0	18.0	40.0	18.0
Max Q Clear Time (g_c+I1), s	43.3	16.6	43.3	10.3
Green Ext Time (p_c), s	0.0	0.2	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	66.6
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.

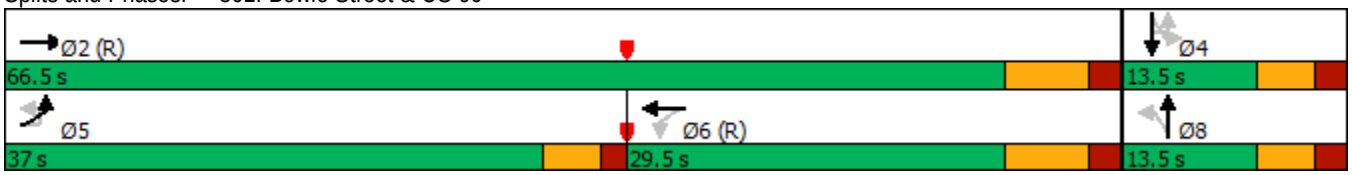
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	6	151	2303	42	8	2028	72	18	5	8	2	56
Future Volume (vph)	6	151	2303	42	8	2028	72	18	5	8	2	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		200		0	200		0	0		0		0
Storage Lanes		1		0	1		0	0		0		0
Taper Length (ft)		25			25			25				25
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00
Frt			0.997			0.995			0.965			
Flt Protected		0.950			0.950				0.972			
Satd. Flow (prot)	0	1732	5023	0	1805	4969	0	0	1476	0	0	0
Flt Permitted		0.125			0.178				0.487			
Satd. Flow (perm)	0	228	5023	0	338	4969	0	0	740	0	0	0
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			9			6			9			
Link Speed (mph)			55			50			30			
Link Distance (ft)			1682			1949			1310			
Travel Time (s)			20.9			26.6			29.8			
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	33%	3%	3%	0%	0%	4%	0%	25%	0%	25%	0%	0%
Adj. Flow (vph)	7	170	2588	47	9	2279	81	20	6	9	2	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	177	2635	0	9	2360	0	0	35	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left
Median Width(ft)			12			12			0			
Link Offset(ft)			0			0			0			
Crosswalk Width(ft)			16			16			16			
Two way Left Turn Lane			Yes			Yes						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	9	15
Number of Detectors	1	1	2		1	2		1	2		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Left
Leading Detector (ft)	20	20	100		20	100		20	100		20	20
Trailing Detector (ft)	0	0	0		0	0		0	0		0	0
Detector 1 Position(ft)	0	0	0		0	0		0	0		0	0
Detector 1 Size(ft)	20	20	6		20	6		20	6		20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94			94			
Detector 2 Size(ft)			6			6			6			
Detector 2 Type			Cl+Ex			Cl+Ex			Cl+Ex			
Detector 2 Channel												
Detector 2 Extend (s)			0.0			0.0			0.0			
Turn Type	custom	Prot	NA		Perm	NA		Perm	NA		Perm	Perm
Protected Phases		5	2			6			8			

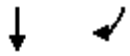
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	13	187
Future Volume (vph)	13	187
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.902	
Flt Protected	0.989	
Satd. Flow (prot)	1671	0
Flt Permitted	0.913	
Satd. Flow (perm)	1542	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	131	
Link Speed (mph)	30	
Link Distance (ft)	2374	
Travel Time (s)	54.0	
Peak Hour Factor	0.89	0.89
Heavy Vehicles (%)	0%	2%
Adj. Flow (vph)	15	210
Shared Lane Traffic (%)		
Lane Group Flow (vph)	290	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	4	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Permitted Phases	5				6			8			4	4
Detector Phase	5	5	2		6	6		8	8		4	4
Switch Phase												
Minimum Initial (s)	8.0	8.0	10.0		10.0	10.0		8.0	8.0		8.0	8.0
Minimum Split (s)	13.0	13.0	17.0		22.5	22.5		13.5	13.5		13.5	13.5
Total Split (s)	37.0	37.0	66.5		29.5	29.5		13.5	13.5		13.5	13.5
Total Split (%)	46.3%	46.3%	83.1%		36.9%	36.9%		16.9%	16.9%		16.9%	16.9%
Maximum Green (s)	32.0	32.0	59.5		22.5	22.5		8.0	8.0		8.0	8.0
Yellow Time (s)	3.5	3.5	5.0		5.0	5.0		3.5	3.5		3.5	3.5
All-Red Time (s)	1.5	1.5	2.0		2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0			0.0			
Total Lost Time (s)		5.0	7.0		7.0	7.0			5.5			
Lead/Lag	Lead	Lead			Lag	Lag						
Lead-Lag Optimize?	Yes	Yes			Yes	Yes						
Vehicle Extension (s)	5.0	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Recall Mode	None	None	C-Max		C-Max	C-Max		None	None		None	None
Act Effct Green (s)		32.0	59.5		22.5	22.5			8.0			
Actuated g/C Ratio		0.40	0.74		0.28	0.28			0.10			
v/c Ratio		1.95	0.70		0.09	1.68			0.43			
Control Delay		484.4	6.8		24.4	335.7			44.4			
Queue Delay		0.0	0.0		0.0	0.0			0.0			
Total Delay		484.4	6.8		24.4	335.7			44.4			
LOS		F	A		C	F			D			
Approach Delay			36.9			334.5			44.4			
Approach LOS			D			F			D			

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.95			
Intersection Signal Delay: 168.1		Intersection LOS: F	
Intersection Capacity Utilization 85.7%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 301: Bowie Street & US 90





Lane Group	SBT	SBR
Permitted Phases		
Detector Phase	4	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	13.5	
Total Split (s)	13.5	
Total Split (%)	16.9%	
Maximum Green (s)	8.0	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	5.0	
Recall Mode	None	
Act Effct Green (s)	8.0	
Actuated g/C Ratio	0.10	
v/c Ratio	1.07	
Control Delay	95.6	
Queue Delay	0.0	
Total Delay	95.6	
LOS	F	
Approach Delay	95.6	
Approach LOS	F	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	177	2635	9	2360	35	290
v/c Ratio	1.95	0.70	0.09	1.68	0.43	1.07
Control Delay	484.4	6.8	24.4	335.7	44.4	95.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	484.4	6.8	24.4	335.7	44.4	95.6
Queue Length 50th (ft)	~139	203	3	~650	12	~98
Queue Length 95th (ft)	#217	242	15	#736	#46	#244
Internal Link Dist (ft)		1602		1869	1230	2294
Turn Bay Length (ft)	200		200			
Base Capacity (vph)	91	3738	95	1401	82	272
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	1.95	0.70	0.09	1.68	0.43	1.07

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	6	151	2303	42	8	2028	72	18	5	8	2	56
Future Volume (vph)	6	151	2303	42	8	2028	72	18	5	8	2	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	7.0		7.0	7.0			5.5			
Lane Util. Factor		1.00	0.91		1.00	0.91			1.00			
Frt		1.00	1.00		1.00	0.99			0.97			
Flt Protected		0.95	1.00		0.95	1.00			0.97			
Satd. Flow (prot)		1732	5025		1805	4968			1477			
Flt Permitted		0.12	1.00		0.18	1.00			0.49			
Satd. Flow (perm)		228	5025		338	4968			740			
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	7	170	2588	47	9	2279	81	20	6	9	2	63
RTOR Reduction (vph)	0	0	2	0	0	4	0	0	8	0	0	0
Lane Group Flow (vph)	0	177	2633	0	9	2356	0	0	27	0	0	0
Heavy Vehicles (%)	33%	3%	3%	0%	0%	4%	0%	25%	0%	25%	0%	0%
Turn Type	custom	Prot	NA		Perm	NA		Perm	NA		Perm	Perm
Protected Phases		5	2			6			8			
Permitted Phases	5				6			8			4	4
Actuated Green, G (s)		32.0	59.5		22.5	22.5			8.0			
Effective Green, g (s)		32.0	59.5		22.5	22.5			8.0			
Actuated g/C Ratio		0.40	0.74		0.28	0.28			0.10			
Clearance Time (s)		5.0	7.0		7.0	7.0			5.5			
Vehicle Extension (s)		5.0	5.0		5.0	5.0			5.0			
Lane Grp Cap (vph)		91	3737		95	1397			74			
v/s Ratio Prot			0.52			c0.47						
v/s Ratio Perm		c0.78			0.03				0.04			
v/c Ratio		1.95	0.70		0.09	1.69			0.36			
Uniform Delay, d1		24.0	5.5		21.2	28.8			33.6			
Progression Factor		1.00	1.00		1.00	1.00			1.00			
Incremental Delay, d2		462.7	1.1		2.0	311.9			6.3			
Delay (s)		486.7	6.7		23.2	340.7			39.9			
Level of Service		F	A		C	F			D			
Approach Delay (s)			36.9			339.5			39.9			
Approach LOS			D			F			D			

Intersection Summary			
HCM 2000 Control Delay	172.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.74		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	85.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	13	187
Future Volume (vph)	13	187
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.5	
Lane Util. Factor	1.00	
Frt	0.90	
Flt Protected	0.99	
Satd. Flow (prot)	1671	
Flt Permitted	0.91	
Satd. Flow (perm)	1542	
Peak-hour factor, PHF	0.89	0.89
Adj. Flow (vph)	15	210
RTOR Reduction (vph)	118	0
Lane Group Flow (vph)	172	0
Heavy Vehicles (%)	0%	2%
Turn Type	NA	
Protected Phases	4	
Permitted Phases		
Actuated Green, G (s)	8.0	
Effective Green, g (s)	8.0	
Actuated g/C Ratio	0.10	
Clearance Time (s)	5.5	
Vehicle Extension (s)	5.0	
Lane Grp Cap (vph)	154	
v/s Ratio Prot		
v/s Ratio Perm	c0.11	
v/c Ratio	1.12	
Uniform Delay, d1	36.0	
Progression Factor	1.00	
Incremental Delay, d2	107.5	
Delay (s)	143.5	
Level of Service	F	
Approach Delay (s)	143.5	
Approach LOS	F	

Intersection Summary

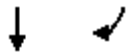
Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (veh/h)	6	151	2303	42	8	2028	72	18	5	8	2	56
Future Volume (veh/h)	6	151	2303	42	8	2028	72	18	5	8	2	56
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0		0
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00	1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
Work Zone On Approach			No			No			No			
Adj Sat Flow, veh/h/ln		1856	1856	1900	1900	1841	1900	1530	1900	1530		1900
Adj Flow Rate, veh/h		170	2588	47	9	2279	81	20	6	9		63
Peak Hour Factor		0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89		0.89
Percent Heavy Veh, %		3	3	0	0	4	0	25	0	25		0
Cap, veh/h		226	3810	69	146	2758	98	135	44	38		87
Arrive On Green		0.13	0.74	0.74	0.55	0.55	0.55	0.10	0.10	0.10		0.10
Sat Flow, veh/h		1767	5123	93	116	4983	176	647	439	376		317
Grp Volume(v), veh/h		170	1703	932	9	1529	831	35	0	0		288
Grp Sat Flow(s),veh/h/ln		1767	1689	1839	116	1675	1809	1461	0	0		1611
Q Serve(g_s), s		7.4	20.8	21.1	3.5	30.0	30.3	0.0	0.0	0.0		6.6
Cycle Q Clear(g_c), s		7.4	20.8	21.1	9.4	30.0	30.3	1.4	0.0	0.0		8.0
Prop In Lane		1.00		0.05	1.00		0.10	0.57		0.26		0.22
Lane Grp Cap(c), veh/h		226	2512	1368	146	1855	1001	217	0	0		216
V/C Ratio(X)		0.75	0.68	0.68	0.06	0.82	0.83	0.16	0.00	0.00		1.33
Avail Cap(c_a), veh/h		707	2512	1368	146	1855	1001	217	0	0		216
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
Upstream Filter(I)		1.00	1.00	1.00	0.13	0.13	0.13	1.00	0.00	0.00		1.00
Uniform Delay (d), s/veh		33.7	5.3	5.3	11.7	14.7	14.7	33.0	0.0	0.0		37.0
Incr Delay (d2), s/veh		10.3	1.5	2.8	0.1	0.6	1.1	0.7	0.0	0.0		178.2
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
%ile BackOfQ(50%),veh/ln		3.5	3.4	4.2	0.1	8.8	9.8	0.7	0.0	0.0		14.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		44.0	6.8	8.1	11.8	15.3	15.9	33.8	0.0	0.0		215.2
LnGrp LOS		D	A	A	B	B	B	C	A	A		F
Approach Vol, veh/h			2805			2369			35			
Approach Delay, s/veh			9.5			15.5			33.8			
Approach LOS			A			B			C			

Timer - Assigned Phs	2		4	5	6		8					
Phs Duration (G+Y+Rc), s	66.5		13.5	15.2	51.3		13.5					
Change Period (Y+Rc), s	7.0		5.5	5.0	7.0		5.5					
Max Green Setting (Gmax), s	59.5		8.0	32.0	22.5		8.0					
Max Q Clear Time (g_c+I1), s	23.1		10.0	9.4	32.3		3.4					
Green Ext Time (p_c), s	34.4		0.0	1.0	0.0		0.1					

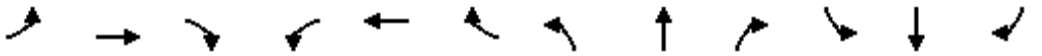
Intersection Summary	
HCM 6th Ctrl Delay	23.0
HCM 6th LOS	C

Notes

User approved ignoring U-Turning movement.



Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	13	187
Future Volume (veh/h)	13	187
Initial Q (Qb), veh	0	0
Ped-Bike Adj(A_pbT)		1.00
Parking Bus, Adj	1.00	1.00
Work Zone On Approach	No	
Adj Sat Flow, veh/h/ln	1900	1870
Adj Flow Rate, veh/h	15	210
Peak Hour Factor	0.89	0.89
Percent Heavy Veh, %	0	2
Cap, veh/h	12	117
Arrive On Green	0.10	0.10
Sat Flow, veh/h	119	1175
Grp Volume(v), veh/h	0	0
Grp Sat Flow(s),veh/h/ln	0	0
Q Serve(g_s), s	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0
Prop In Lane		0.73
Lane Grp Cap(c), veh/h	0	0
V/C Ratio(X)	0.00	0.00
Avail Cap(c_a), veh/h	0	0
HCM Platoon Ratio	1.00	1.00
Upstream Filter(I)	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0
Unsig. Movement Delay, s/veh		
LnGrp Delay(d),s/veh	0.0	0.0
LnGrp LOS	A	A
Approach Vol, veh/h	288	
Approach Delay, s/veh	215.2	
Approach LOS	F	
Timer - Assigned Phs		

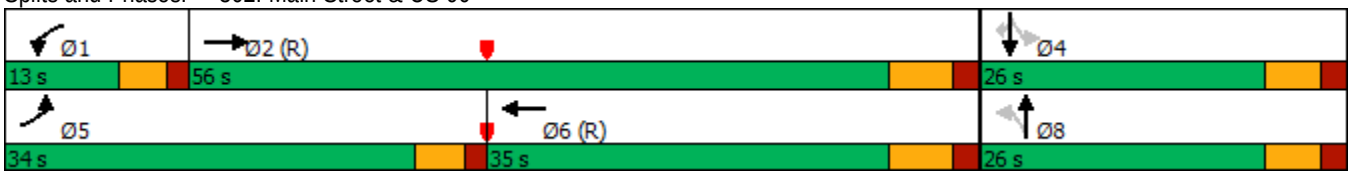


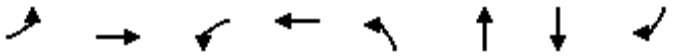
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	523	1756	18	19	1396	68	23	39	53	196	35	523
Future Volume (vph)	523	1756	18	19	1396	68	23	39	53	196	35	523
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	200		0	100		0	0		0
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.993			0.913				0.850
Flt Protected	0.950			0.950			0.950				0.959	
Satd. Flow (prot)	1805	4973	0	1626	4948	0	1641	1735	0	0	1822	1599
Flt Permitted	0.950			0.950			0.418				0.690	
Satd. Flow (perm)	1805	4973	0	1626	4948	0	722	1735	0	0	1311	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			8			58				499
Link Speed (mph)		55			50			55			30	
Link Distance (ft)		1949			4264			1352			297	
Travel Time (s)		24.2			58.1			16.8			6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	13%	11%	4%	6%	10%	0%	0%	0%	0%	1%
Adj. Flow (vph)	568	1909	20	21	1517	74	25	42	58	213	38	568
Shared Lane Traffic (%)												
Lane Group Flow (vph)	568	1929	0	21	1591	0	25	100	0	0	251	568
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8			4		4
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	8.0	10.0		8.0	10.0		8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	13.0	16.5		13.0	16.5		14.0	14.0		14.0	14.0	14.0
Total Split (s)	34.0	56.0		13.0	35.0		26.0	26.0		26.0	26.0	26.0
Total Split (%)	35.8%	58.9%		13.7%	36.8%		27.4%	27.4%		27.4%	27.4%	27.4%
Maximum Green (s)	29.0	49.5		8.0	28.5		20.0	20.0		20.0	20.0	20.0
Yellow Time (s)	3.5	4.5		3.5	4.5		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.5	2.0		1.5	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)	5.0	6.5		5.0	6.5		6.0	6.0			6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.5	3.5		3.5	3.5		4.5	4.5		4.5	4.5	4.5
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
Act Effct Green (s)	29.0	57.3		8.0	28.5		20.0	20.0			20.0	20.0
Actuated g/C Ratio	0.31	0.60		0.08	0.30		0.21	0.21			0.21	0.21
v/c Ratio	1.03	0.64		0.15	1.07		0.16	0.24			0.91	0.78
Control Delay	80.6	14.6		43.3	76.8		34.0	16.8			73.8	14.1
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Delay	80.6	14.6		43.3	76.8		34.0	16.8			73.8	14.1
LOS	F	B		D	E		C	B			E	B
Approach Delay		29.6			76.3			20.3			32.4	
Approach LOS		C			E			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 95			
Actuated Cycle Length: 95			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.07			
Intersection Signal Delay: 44.7		Intersection LOS: D	
Intersection Capacity Utilization 91.4%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 302: Main Street & US 90



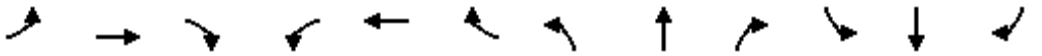


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	568	1929	21	1591	25	100	251	568
v/c Ratio	1.03	0.64	0.15	1.07	0.16	0.24	0.91	0.78
Control Delay	80.6	14.6	43.3	76.8	34.0	16.8	73.8	14.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	80.6	14.6	43.3	76.8	34.0	16.8	73.8	14.1
Queue Length 50th (ft)	~370	212	12	~391	12	21	149	35
Queue Length 95th (ft)	#572	376	35	#488	36	63	#293	164
Internal Link Dist (ft)		1869		4184		1272	217	
Turn Bay Length (ft)	150		200		100			
Base Capacity (vph)	551	3000	136	1490	152	411	276	730
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	1.03	0.64	0.15	1.07	0.16	0.24	0.91	0.78

Intersection Summary

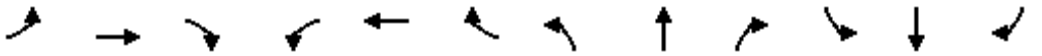
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	523	1756	18	19	1396	68	23	39	53	196	35	523
Future Volume (vph)	523	1756	18	19	1396	68	23	39	53	196	35	523
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.5		5.0	6.5		6.0	6.0			6.0	6.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00			1.00	1.00
Frt	1.00	1.00		1.00	0.99		1.00	0.91			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.96	1.00
Satd. Flow (prot)	1805	4975		1626	4948		1641	1735			1823	1599
Flt Permitted	0.95	1.00		0.95	1.00		0.42	1.00			0.69	1.00
Satd. Flow (perm)	1805	4975		1626	4948		722	1735			1311	1599
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	568	1909	20	21	1517	74	25	42	58	213	38	568
RTOR Reduction (vph)	0	1	0	0	6	0	0	46	0	0	0	394
Lane Group Flow (vph)	568	1928	0	21	1585	0	25	54	0	0	251	174
Heavy Vehicles (%)	0%	4%	13%	11%	4%	6%	10%	0%	0%	0%	0%	1%
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		4
Actuated Green, G (s)	29.0	54.3		3.2	28.5		20.0	20.0			20.0	20.0
Effective Green, g (s)	29.0	54.3		3.2	28.5		20.0	20.0			20.0	20.0
Actuated g/C Ratio	0.31	0.57		0.03	0.30		0.21	0.21			0.21	0.21
Clearance Time (s)	5.0	6.5		5.0	6.5		6.0	6.0			6.0	6.0
Vehicle Extension (s)	3.5	3.5		3.5	3.5		4.5	4.5			4.5	4.5
Lane Grp Cap (vph)	551	2843		54	1484		152	365			276	336
v/s Ratio Prot	c0.31	0.39		0.01	c0.32			0.03				
v/s Ratio Perm							0.03				c0.19	0.11
v/c Ratio	1.03	0.68		0.39	1.07		0.16	0.15			0.91	0.52
Uniform Delay, d1	33.0	14.2		44.9	33.2		30.7	30.6			36.6	33.2
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	46.5	1.3		5.4	44.0		0.9	0.3			32.2	2.2
Delay (s)	79.5	15.6		50.4	77.3		31.6	30.9			68.8	35.5
Level of Service	E	B		D	E		C	C			E	D
Approach Delay (s)		30.1			76.9			31.0			45.7	
Approach LOS		C			E			C			D	

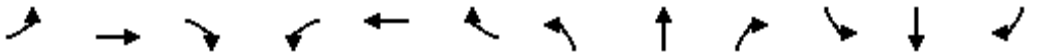
Intersection Summary			
HCM 2000 Control Delay	47.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	95.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	91.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	523	1756	18	19	1396	68	23	39	53	196	35	523
Future Volume (veh/h)	523	1756	18	19	1396	68	23	39	53	196	35	523
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1841	1707	1737	1841	1811	1752	1900	1900	1900	1900	1885
Adj Flow Rate, veh/h	568	1909	20	21	1517	74	25	42	58	213	38	568
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	4	13	11	4	6	10	0	0	0	0	1
Cap, veh/h	552	2920	31	59	1473	72	76	152	210	259	34	336
Arrive On Green	0.31	0.57	0.57	0.04	0.30	0.30	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1810	5127	54	1654	4908	239	763	723	998	900	161	1598
Grp Volume(v), veh/h	568	1247	682	21	1035	556	25	0	100	251	0	568
Grp Sat Flow(s),veh/h/ln	1810	1675	1831	1654	1675	1798	763	0	1720	1060	0	1598
Q Serve(g_s), s	29.0	24.3	24.3	1.2	28.5	28.5	0.0	0.0	4.6	15.4	0.0	20.0
Cycle Q Clear(g_c), s	29.0	24.3	24.3	1.2	28.5	28.5	20.0	0.0	4.6	20.0	0.0	20.0
Prop In Lane	1.00		0.03	1.00		0.13	1.00		0.58	0.85		1.00
Lane Grp Cap(c), veh/h	552	1908	1043	59	1005	539	76	0	362	293	0	336
V/C Ratio(X)	1.03	0.65	0.65	0.35	1.03	1.03	0.33	0.00	0.28	0.86	0.00	1.69
Avail Cap(c_a), veh/h	552	1908	1043	139	1005	539	76	0	362	293	0	336
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.64	0.64	0.64	0.53	0.53	0.53	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.0	14.0	14.0	44.7	33.3	33.3	47.5	0.0	31.4	40.7	0.0	37.5
Incr Delay (d2), s/veh	38.1	1.1	2.1	2.3	28.8	36.3	4.3	0.0	0.7	22.2	0.0	322.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.2	7.6	8.6	0.5	14.6	16.7	0.6	0.0	1.9	7.7	0.0	37.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.1	15.2	16.1	47.0	62.1	69.5	51.8	0.0	32.1	62.9	0.0	360.1
LnGrp LOS	F	B	B	D	F	F	D	A	C	E	A	F
Approach Vol, veh/h		2497			1612			125			819	
Approach Delay, s/veh		28.1			64.5			36.1			269.0	
Approach LOS		C			E			D			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.4	60.6		26.0	34.0	35.0		26.0				
Change Period (Y+Rc), s	5.0	6.5		6.0	5.0	6.5		6.0				
Max Green Setting (Gmax), s	8.0	49.5		20.0	29.0	28.5		20.0				
Max Q Clear Time (g_c+I1), s	3.2	26.3		22.0	31.0	30.5		22.0				
Green Ext Time (p_c), s	0.0	15.4		0.0	0.0	0.0		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		79.0	
HCM 6th LOS		E	

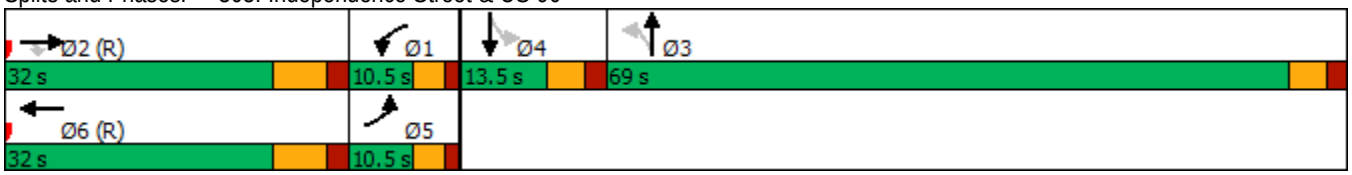


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	1636	333	106	1284	56	283	85	232	14	109	32
Future Volume (vph)	56	1636	333	106	1284	56	283	85	232	14	109	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	130		0	100		0	0		0
Storage Lanes	1		1	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.994			0.890			0.972	
Flt Protected	0.950			0.950			0.950				0.995	
Satd. Flow (prot)	1805	3471	1599	1805	4920	0	1752	1642	0	0	1787	0
Flt Permitted	0.950			0.950			0.648				0.273	
Satd. Flow (perm)	1805	3471	1599	1805	4920	0	1195	1642	0	0	490	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			153		5			161			8	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		4264			1976			555			937	
Travel Time (s)		64.6			29.9			12.6			21.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	4%	1%	0%	5%	0%	3%	3%	3%	0%	2%	7%
Adj. Flow (vph)	62	1818	370	118	1427	62	314	94	258	16	121	36
Shared Lane Traffic (%)												
Lane Group Flow (vph)	62	1818	370	118	1489	0	314	352	0	0	173	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			3			4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			2				3			4		
Detector Phase	5	2	2	1	6		3	3		4	4	
Switch Phase												
Minimum Initial (s)	6.0	10.0	10.0	6.0	10.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	10.5	17.0	17.0	10.5	17.0		13.5	13.5		13.5	13.5	
Total Split (s)	10.5	32.0	32.0	10.5	32.0		69.0	69.0		13.5	13.5	
Total Split (%)	8.4%	25.6%	25.6%	8.4%	25.6%		55.2%	55.2%		10.8%	10.8%	
Maximum Green (s)	6.0	25.0	25.0	6.0	25.0		63.5	63.5		8.0	8.0	
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.5	2.0	2.0	1.5	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	4.5	7.0	7.0	4.5	7.0		5.5	5.5			5.5	
Lead/Lag	Lag	Lead	Lead	Lag	Lead		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.5	5.0	5.0	3.5	5.0		3.5	3.5		3.5	3.5	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Act Effct Green (s)	6.0	46.4	46.4	6.0	48.5		42.1	42.1			8.0	
Actuated g/C Ratio	0.05	0.37	0.37	0.05	0.39		0.34	0.34			0.06	
v/c Ratio	0.72	1.41	0.54	1.37	0.78		0.78	0.53			4.55	
Control Delay	99.9	222.0	23.2	268.3	39.2		49.6	18.8			1669.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Delay	99.9	222.0	23.2	268.3	39.2		49.6	18.8			1669.8	
LOS	F	F	C	F	D		D	B			F	
Approach Delay		185.9			56.0			33.3			1669.8	
Approach LOS		F			E			C			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 125			
Actuated Cycle Length: 125			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 4.55			
Intersection Signal Delay: 174.5		Intersection LOS: F	
Intersection Capacity Utilization 97.0%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 303: Independence Street & US 90

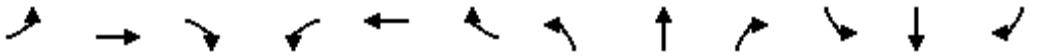


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	62	1818	370	118	1489	314	352	173
v/c Ratio	0.72	1.41	0.54	1.37	0.78	0.78	0.53	4.55
Control Delay	99.9	222.0	23.2	268.3	39.2	49.6	18.8	1669.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	99.9	222.0	23.2	268.3	39.2	49.6	18.8	1669.8
Queue Length 50th (ft)	50	~1042	135	~126	394	227	121	~255
Queue Length 95th (ft)	#127	#1358	281	#252	#631	283	175	#404
Internal Link Dist (ft)		4184			1896		475	857
Turn Bay Length (ft)	200			130		100		
Base Capacity (vph)	86	1287	689	86	1910	607	913	38
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	0.72	1.41	0.54	1.37	0.78	0.52	0.39	4.55

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

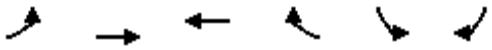
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



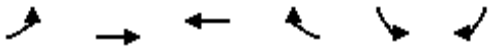
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	1636	333	106	1284	56	283	85	232	14	109	32
Future Volume (vph)	56	1636	333	106	1284	56	283	85	232	14	109	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	7.0	7.0	4.5	7.0		5.5	5.5			5.5	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91		1.00	1.00			1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.89			0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1805	3471	1599	1805	4919		1752	1642			1787	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.65	1.00			0.27	
Satd. Flow (perm)	1805	3471	1599	1805	4919		1195	1642			490	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	62	1818	370	118	1427	62	314	94	258	16	121	36
RTOR Reduction (vph)	0	0	97	0	3	0	0	107	0	0	7	0
Lane Group Flow (vph)	62	1818	273	118	1486	0	314	245	0	0	166	0
Heavy Vehicles (%)	0%	4%	1%	0%	5%	0%	3%	3%	3%	0%	2%	7%
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			3			4	
Permitted Phases			2				3			4		
Actuated Green, G (s)	4.8	45.5	45.5	6.9	47.6		42.1	42.1			8.0	
Effective Green, g (s)	4.8	45.5	45.5	6.9	47.6		42.1	42.1			8.0	
Actuated g/C Ratio	0.04	0.36	0.36	0.06	0.38		0.34	0.34			0.06	
Clearance Time (s)	4.5	7.0	7.0	4.5	7.0		5.5	5.5			5.5	
Vehicle Extension (s)	3.5	5.0	5.0	3.5	5.0		3.5	3.5			3.5	
Lane Grp Cap (vph)	69	1263	582	99	1873		402	553			31	
v/s Ratio Prot	0.03	c0.52		c0.07	0.30			0.15				
v/s Ratio Perm			0.17				c0.26				c0.34	
v/c Ratio	0.90	1.44	0.47	1.19	0.79		0.78	0.44			5.34	
Uniform Delay, d1	59.9	39.8	30.5	59.0	34.3		37.3	32.3			58.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	74.2	202.3	2.7	151.0	3.6		9.8	0.7			2021.6	
Delay (s)	134.1	242.1	33.2	210.0	37.9		47.1	33.0			2080.1	
Level of Service	F	F	C	F	D		D	C			F	
Approach Delay (s)		204.7			50.5			39.6			2080.1	
Approach LOS		F			D			D			F	

Intersection Summary			
HCM 2000 Control Delay	197.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.45		
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	97.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology expects strict NEMA phasing.



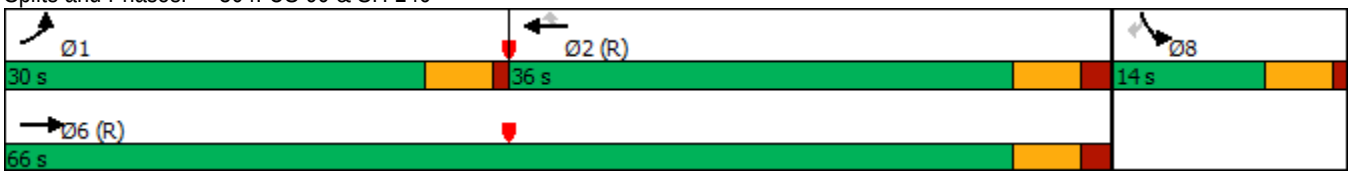
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	684	648	806	203	180	433
Future Volume (vph)	684	648	806	203	180	433
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			300	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1752	1827	1792	1524	1752	1568
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1752	1827	1792	1524	1752	1568
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				216		461
Link Speed (mph)		50	50		55	
Link Distance (ft)		470	2799		7877	
Travel Time (s)		6.4	38.2		97.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	3%	4%	6%	6%	3%	3%
Adj. Flow (vph)	728	689	857	216	191	461
Shared Lane Traffic (%)						
Lane Group Flow (vph)	728	689	857	216	191	461
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	1	6	2		8	

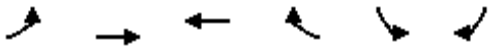


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases				2		8
Detector Phase	1	6	2	2	8	8
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	5.0
Minimum Split (s)	15.0	16.0	16.0	16.0	10.0	10.0
Total Split (s)	30.0	66.0	36.0	36.0	14.0	14.0
Total Split (%)	37.5%	82.5%	45.0%	45.0%	17.5%	17.5%
Maximum Green (s)	25.0	60.0	30.0	30.0	9.0	9.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	6.0	5.0	5.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	C-Max	C-Max	C-Max	None	None
Act Effct Green (s)	25.0	60.0	30.0	30.0	9.0	9.0
Actuated g/C Ratio	0.31	0.75	0.38	0.38	0.11	0.11
v/c Ratio	1.33	0.50	1.28	0.31	0.97	0.79
Control Delay	188.1	5.5	161.0	3.9	95.7	14.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	188.1	5.5	161.0	3.9	95.7	14.9
LOS	F	A	F	A	F	B
Approach Delay		99.3	129.4		38.6	
Approach LOS		F	F		D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.33			
Intersection Signal Delay: 97.0		Intersection LOS: F	
Intersection Capacity Utilization 103.6%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 304: US 90 & SH 146



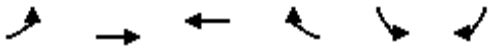


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	728	689	857	216	191	461
v/c Ratio	1.33	0.50	1.28	0.31	0.97	0.79
Control Delay	188.1	5.5	161.0	3.9	95.7	14.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	188.1	5.5	161.0	3.9	95.7	14.9
Queue Length 50th (ft)	~480	108	~550	0	97	0
Queue Length 95th (ft)	#686	166	#767	41	#223	#128
Internal Link Dist (ft)		390	2719		7797	
Turn Bay Length (ft)	250			300		
Base Capacity (vph)	547	1370	672	706	197	585
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	1.33	0.50	1.28	0.31	0.97	0.79

Intersection Summary

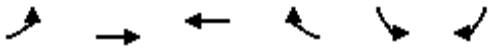
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	684	648	806	203	180	433
Future Volume (vph)	684	648	806	203	180	433
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0	6.0	6.0	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1752	1827	1792	1524	1752	1568
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1752	1827	1792	1524	1752	1568
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	728	689	857	216	191	461
RTOR Reduction (vph)	0	0	0	135	0	409
Lane Group Flow (vph)	728	689	857	81	191	52
Heavy Vehicles (%)	3%	4%	6%	6%	3%	3%
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	1	6	2		8	
Permitted Phases				2		8
Actuated Green, G (s)	25.0	60.0	30.0	30.0	9.0	9.0
Effective Green, g (s)	25.0	60.0	30.0	30.0	9.0	9.0
Actuated g/C Ratio	0.31	0.75	0.38	0.38	0.11	0.11
Clearance Time (s)	5.0	6.0	6.0	6.0	5.0	5.0
Vehicle Extension (s)	3.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	547	1370	672	571	197	176
v/s Ratio Prot	c0.42	0.38	c0.48		c0.11	
v/s Ratio Perm				0.05		0.03
v/c Ratio	1.33	0.50	1.28	0.14	0.97	0.29
Uniform Delay, d1	27.5	4.0	25.0	16.5	35.4	32.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	161.1	1.3	135.2	0.5	54.4	0.3
Delay (s)	188.6	5.3	160.2	17.0	89.7	32.9
Level of Service	F	A	F	B	F	C
Approach Delay (s)		99.5	131.4		49.6	
Approach LOS		F	F		D	

Intersection Summary			
HCM 2000 Control Delay	100.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.25		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	103.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



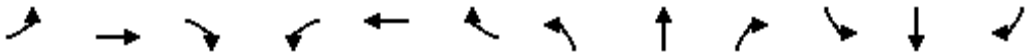
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	684	648	806	203	180	433
Future Volume (veh/h)	684	648	806	203	180	433
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1856	1841	1811	1811	1856	1856
Adj Flow Rate, veh/h	728	689	857	0	191	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	4	6	6	3	3
Cap, veh/h	552	1381	679		199	
Arrive On Green	0.31	0.75	0.38	0.00	0.11	0.00
Sat Flow, veh/h	1767	1841	1811	1535	1767	1572
Grp Volume(v), veh/h	728	689	857	0	191	0
Grp Sat Flow(s),veh/h/ln	1767	1841	1811	1535	1767	1572
Q Serve(g_s), s	25.0	12.0	30.0	0.0	8.6	0.0
Cycle Q Clear(g_c), s	25.0	12.0	30.0	0.0	8.6	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	552	1381	679		199	
V/C Ratio(X)	1.32	0.50	1.26		0.96	
Avail Cap(c_a), veh/h	552	1381	679		199	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.76	0.00
Uniform Delay (d), s/veh	27.5	4.0	25.0	0.0	35.3	0.0
Incr Delay (d2), s/veh	155.6	1.3	129.5	0.0	44.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	33.1	2.4	35.4	0.0	5.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	183.1	5.3	154.5	0.0	79.8	0.0
LnGrp LOS	F	A	F		E	
Approach Vol, veh/h		1417	857	A	191	A
Approach Delay, s/veh		96.7	154.5		79.8	
Approach LOS		F	F		E	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	30.0	36.0				66.0	14.0
Change Period (Y+Rc), s	5.0	6.0				6.0	5.0
Max Green Setting (Gmax), s	25.0	30.0				60.0	9.0
Max Q Clear Time (g_c+I1), s	27.0	32.0				14.0	10.6
Green Ext Time (p_c), s	0.0	0.0				2.6	0.0

Intersection Summary	
HCM 6th Ctrl Delay	115.4
HCM 6th LOS	F

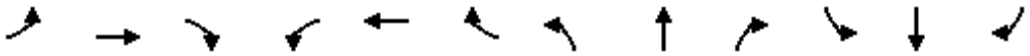
Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	47	24	6	0	0	5	97	32	26	105	31
Future Volume (vph)	2	47	24	6	0	0	5	97	32	26	105	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.956						0.968			0.974	
Flt Protected		0.999			0.950			0.998			0.992	
Satd. Flow (prot)	0	1815	0	0	1805	0	0	1836	0	0	1836	0
Flt Permitted		0.999			0.950			0.998			0.992	
Satd. Flow (perm)	0	1815	0	0	1805	0	0	1836	0	0	1836	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		803			358			401			590	
Travel Time (s)		18.3			8.1			9.1			13.4	
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	71	36	9	0	0	8	147	48	39	159	47
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	110	0	0	9	0	0	203	0	0	245	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			50			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 29.7%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	2	47	24	6	0	0	5	97	32	26	105	31
Future Volume (vph)	2	47	24	6	0	0	5	97	32	26	105	31
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Hourly flow rate (vph)	3	71	36	9	0	0	8	147	48	39	159	47

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	110	9	203	245
Volume Left (vph)	3	9	8	39
Volume Right (vph)	36	0	48	47
Hadj (s)	-0.19	0.20	-0.13	-0.08
Departure Headway (s)	4.7	5.3	4.3	4.3
Degree Utilization, x	0.14	0.01	0.24	0.30
Capacity (veh/h)	697	611	798	796
Control Delay (s)	8.5	8.3	8.7	9.1
Approach Delay (s)	8.5	8.3	8.7	9.1
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.9			
Level of Service	A			
Intersection Capacity Utilization	29.7%	ICU Level of Service	A	
Analysis Period (min)	15			

Intersection	
Intersection Delay, s/veh	8.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	47	24	6	0	0	5	97	32	26	105	31
Future Vol, veh/h	2	47	24	6	0	0	5	97	32	26	105	31
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	71	36	9	0	0	8	147	48	39	159	47
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.5	8.3	8.7	9.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	4%	3%	100%	16%
Vol Thru, %	72%	64%	0%	65%
Vol Right, %	24%	33%	0%	19%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	134	73	6	162
LT Vol	5	2	6	26
Through Vol	97	47	0	105
RT Vol	32	24	0	31
Lane Flow Rate	203	111	9	245
Geometry Grp	1	1	1	1
Degree of Util (X)	0.243	0.144	0.013	0.295
Departure Headway (Hd)	4.313	4.694	5.229	4.321
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	832	763	683	832
Service Time	2.336	2.726	3.271	2.343
HCM Lane V/C Ratio	0.244	0.145	0.013	0.294
HCM Control Delay	8.7	8.5	8.3	9.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	1	0.5	0	1.2

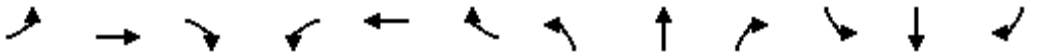
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	199	24	129	121	24	122
Future Volume (vph)	199	24	129	121	24	122
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.985		0.935			
Flt Protected	0.957					0.992
Satd. Flow (prot)	1758	0	1749	0	0	1854
Flt Permitted	0.957					0.992
Satd. Flow (perm)	1758	0	1749	0	0	1854
Link Speed (mph)	30		30			30
Link Distance (ft)	1292		2374			1487
Travel Time (s)	29.4		54.0			33.8
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	9%	3%	0%	0%	2%
Adj. Flow (vph)	221	27	143	134	27	136
Shared Lane Traffic (%)						
Lane Group Flow (vph)	248	0	277	0	0	163
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Free		Yield			Yield

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 44.4%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	199	24	129	121	24	122
Future Volume (Veh/h)	199	24	129	121	24	122
Sign Control	Free		Yield			Yield
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	221	27	143	134	27	136
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	0		469	0	661	456
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0		469	0	661	456
tC, single (s)	4.1		6.5	6.2	7.1	6.5
tC, 2 stage (s)						
tF (s)	2.2		4.0	3.3	3.5	4.0
p0 queue free %	86		66	88	88	69
cM capacity (veh/h)	1630		424	1091	221	433

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	248	277	163
Volume Left	221	0	27
Volume Right	27	134	0
cSH	1630	602	374
Volume to Capacity	0.14	0.46	0.44
Queue Length 95th (ft)	12	60	54
Control Delay (s)	6.8	16.0	21.9
Lane LOS	A	C	C
Approach Delay (s)	6.8	16.0	21.9
Approach LOS		C	C

Intersection Summary			
Average Delay	14.1		
Intersection Capacity Utilization	44.4%	ICU Level of Service	A
Analysis Period (min)	15		

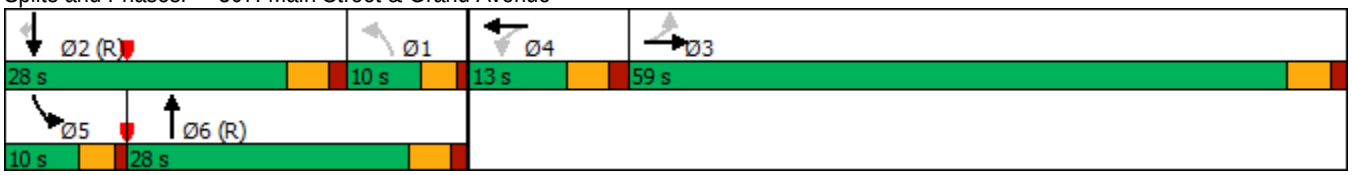


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	235	50	71	16	66	77	19	851	11	24	783	170
Future Volume (vph)	235	50	71	16	66	77	19	851	11	24	783	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	100		0	100		0	200		125
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.912			0.919			0.998				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	1733	0	1805	1722	0	1626	1860	0	1805	1881	1615
Flt Permitted	0.654			0.500						0.950		
Satd. Flow (perm)	1230	1733	0	950	1722	0	1712	1860	0	1805	1881	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		81			41			1				119
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		345			825			1581			1585	
Travel Time (s)		7.8			18.8			35.9			36.0	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	1%	0%	0%	0%	3%	0%	11%	2%	0%	0%	1%	0%
Adj. Flow (vph)	267	57	81	18	75	88	22	967	13	27	890	193
Shared Lane Traffic (%)												
Lane Group Flow (vph)	267	138	0	18	163	0	22	980	0	27	890	193
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		custom	NA		Prot	NA	Perm
Protected Phases		3			4			6		5	2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	3			4			1					2
Detector Phase	3	3		4	4		1	6		5	2	2
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		6.0	10.0		6.0	10.0	10.0
Minimum Split (s)	13.0	13.0		13.0	13.0		10.0	15.0		10.0	15.0	15.0
Total Split (s)	59.0	59.0		13.0	13.0		10.0	28.0		10.0	28.0	28.0
Total Split (%)	53.6%	53.6%		11.8%	11.8%		9.1%	25.5%		9.1%	25.5%	25.5%
Maximum Green (s)	54.0	54.0		8.0	8.0		6.0	23.0		6.0	23.0	23.0
Yellow Time (s)	3.5	3.5		3.5	3.5		3.0	3.5		3.0	3.5	3.5
All-Red Time (s)	1.5	1.5		1.5	1.5		1.0	1.5		1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		4.0	5.0		4.0	5.0	5.0
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		2.0	2.0		3.5	3.5		2.0	3.5	3.5
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	30.8	30.8		8.0	8.0		6.0	49.5		6.7	52.2	52.2
Actuated g/C Ratio	0.28	0.28		0.07	0.07		0.05	0.45		0.06	0.47	0.47
v/c Ratio	0.78	0.25		0.26	1.00		0.24	1.17		0.25	1.00	0.23
Control Delay	50.6	12.8		58.1	109.9		56.3	119.9		54.5	61.2	10.3
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	50.6	12.8		58.1	109.9		56.3	119.9		54.5	61.2	10.3
LOS	D	B		E	F		E	F		D	E	B
Approach Delay		37.7			104.7			118.5			52.2	
Approach LOS		D			F			F			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.17			
Intersection Signal Delay: 78.2		Intersection LOS: E	
Intersection Capacity Utilization 79.2%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 307: Main Street & Grand Avenue

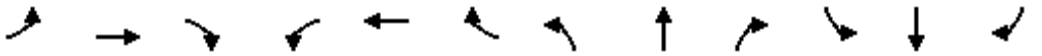


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	267	138	18	163	22	980	27	890	193
v/c Ratio	0.78	0.25	0.26	1.00	0.24	1.17	0.25	1.00	0.23
Control Delay	50.6	12.8	58.1	109.9	56.3	119.9	54.5	61.2	10.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.6	12.8	58.1	109.9	56.3	119.9	54.5	61.2	10.3
Queue Length 50th (ft)	174	30	12	88	15	~871	19	559	26
Queue Length 95th (ft)	225	64	36	#220	41	#1270	46	#1086	92
Internal Link Dist (ft)		265		745		1501		1505	
Turn Bay Length (ft)	150		100		100		200		125
Base Capacity (vph)	603	891	69	163	93	837	109	891	828
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.15	0.26	1.00	0.24	1.17	0.25	1.00	0.23

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

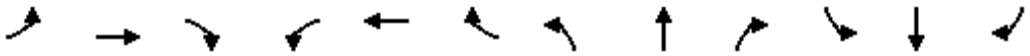
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	235	50	71	16	66	77	19	851	11	24	783	170
Future Volume (vph)	235	50	71	16	66	77	19	851	11	24	783	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0		4.0	5.0		4.0	5.0	5.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.91		1.00	0.92		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1787	1733		1805	1722		1626	1860		1805	1881	1615
Flt Permitted	0.65	1.00		0.50	1.00		1.00	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1230	1733		950	1722		1712	1860		1805	1881	1615
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	267	57	81	18	75	88	22	967	12	27	890	193
RTOR Reduction (vph)	0	58	0	0	38	0	0	1	0	0	0	65
Lane Group Flow (vph)	267	80	0	18	125	0	22	979	0	27	890	128
Heavy Vehicles (%)	1%	0%	0%	0%	3%	0%	11%	2%	0%	0%	1%	0%
Turn Type	Perm	NA		Perm	NA		custom	NA		Prot	NA	Perm
Protected Phases		3			4			6		5	2	
Permitted Phases	3			4			1					2
Actuated Green, G (s)	30.8	30.8		8.0	8.0		2.4	47.9		4.3	49.8	49.8
Effective Green, g (s)	30.8	30.8		8.0	8.0		2.4	47.9		4.3	49.8	49.8
Actuated g/C Ratio	0.28	0.28		0.07	0.07		0.02	0.44		0.04	0.45	0.45
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	5.0		4.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		2.0	2.0		3.5	3.5		2.0	3.5	3.5
Lane Grp Cap (vph)	344	485		69	125		37	809		70	851	731
v/s Ratio Prot		0.05			c0.07			c0.53		0.01	c0.47	
v/s Ratio Perm	c0.22			0.02			0.01					0.08
v/c Ratio	0.78	0.16		0.26	1.00		0.59	1.21		0.39	1.05	0.17
Uniform Delay, d1	36.4	29.9		48.2	51.0		53.3	31.1		51.6	30.1	17.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	10.5	0.2		0.7	79.7		24.3	106.2		1.3	43.5	0.5
Delay (s)	46.9	30.0		48.9	130.7		77.6	137.3		52.8	73.6	18.4
Level of Service	D	C		D	F		E	F		D	E	B
Approach Delay (s)		41.2			122.6			136.0			63.5	
Approach LOS		D			F			F			E	

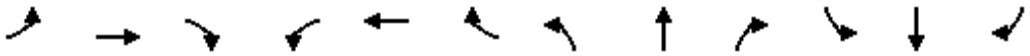
Intersection Summary			
HCM 2000 Control Delay	91.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	79.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology does not support custom phasing.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	0	0	48	2	2	0	146	8	5	84	0
Future Volume (vph)	2	0	0	48	2	2	0	146	8	5	84	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.932			0.993				
Flt Protected		0.950		0.950							0.997	
Satd. Flow (prot)	0	1805	0	1805	0	0	0	1835	0	0	1894	0
Flt Permitted		0.950		0.950							0.997	
Satd. Flow (perm)	0	1805	0	1805	0	0	0	1835	0	0	1894	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		433			707			1487			1399	
Travel Time (s)		9.8			16.1			33.8			31.8	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%
Adj. Flow (vph)	2	0	0	59	2	2	0	180	10	6	104	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2	0	59	4	0	0	190	0	0	110	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization Err%		ICU Level of Service H	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	0	0	48	2	2	0	146	8	5	84	0
Future Volume (Veh/h)	2	0	0	48	2	2	0	146	8	5	84	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Hourly flow rate (vph)	2	0	0	59	2	2	0	180	10	6	104	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	304	306	104	301	301	185	104			190		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	304	306	104	301	301	185	104			190		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	91	100	100	100			100		
cM capacity (veh/h)	647	608	956	653	612	862	1500			1396		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	2	61	190	110
Volume Left	2	59	0	6
Volume Right	0	2	10	0
cSH	647	658	1700	1396
Volume to Capacity	0.00	0.09	0.11	0.00
Queue Length 95th (ft)	0	8	0	0
Control Delay (s)	10.6	11.0	0.0	0.4
Lane LOS	B	B		A
Approach Delay (s)	10.6	Err	0.0	0.4
Approach LOS	B	F		

Intersection Summary				
Average Delay	Err			
Intersection Capacity Utilization	Err%	ICU Level of Service	H	
Analysis Period (min)	15			

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	0	48	2	2	0	146	8	5	84	0
Future Vol, veh/h	2	0	0	48	2	2	0	146	8	5	84	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0	0	3	0	0	0	0
Mvmt Flow	2	0	0	59	2	2	0	180	10	6	104	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	303	306	104	301	301	185	-	0	0	190	0	0
Stage 1	116	116	-	185	185	-	-	-	-	-	-	-
Stage 2	187	190	-	116	116	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	-	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	653	611	956	655	615	862	0	-	-	1396	-	0
Stage 1	894	803	-	821	751	-	0	-	-	-	-	0
Stage 2	819	747	-	894	803	-	0	-	-	-	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	646	608	956	652	612	862	-	-	-	1396	-	-
Mov Cap-2 Maneuver	646	608	-	652	612	-	-	-	-	-	-	-
Stage 1	894	799	-	821	751	-	-	-	-	-	-	-
Stage 2	814	747	-	890	799	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.6	11	0	0.4
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	646	658	1396	-
HCM Lane V/C Ratio	-	-	0.004	0.094	0.004	-
HCM Control Delay (s)	-	-	10.6	11	7.6	0
HCM Lane LOS	-	-	B	B	A	A
HCM 95th %tile Q(veh)	-	-	0	0.3	0	-

Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	13	11	2	55	0	0	125
Future Volume (vph)	13	11	2	55	0	0	125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.937					0.865	
Flt Protected					0.950		
Satd. Flow (prot)	1780	0	0	0	1805	1580	0
Flt Permitted					0.950		
Satd. Flow (perm)	1780	0	0	0	1805	1580	0
Link Speed (mph)	30				30	30	
Link Distance (ft)	720				80	1399	
Travel Time (s)	16.4				1.8	31.8	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	4%
Adj. Flow (vph)	15	13	2	64	0	0	145
Shared Lane Traffic (%)							
Lane Group Flow (vph)	28	0	0	0	66	145	0
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	R NA	Left	Left	Left	Right
Median Width(ft)	0				0	12	
Link Offset(ft)	0				0	0	
Crosswalk Width(ft)	16				16	16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	15		15	9
Sign Control	Stop				Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 24.1%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection Sign configuration not allowed in HCM analysis.

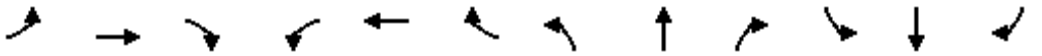
Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Vol, veh/h	13	11	2	55	0	0	125
Future Vol, veh/h	13	11	2	55	0	0	125
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	-	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	-	0	0	-
Grade, %	0	-	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0	4
Mvmt Flow	15	13	2	64	0	0	145

Major/Minor	Minor2		Major2		
Conflicting Flow All	132	0	-	0	0
Stage 1	132	-	-	-	-
Stage 2	0	-	-	-	-
Critical Hdwy	6.5	6.2	-	4.1	-
Critical Hdwy Stg 1	5.5	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	4	3.3	-	2.2	-
Pot Cap-1 Maneuver	762	-	-	-	-
Stage 1	791	-	-	-	-
Stage 2	-	-	-	-	-
Platoon blocked, %					-
Mov Cap-1 Maneuver	0	-	-	-	-
Mov Cap-2 Maneuver	0	-	-	-	-
Stage 1	0	-	-	-	-
Stage 2	0	-	-	-	-

Approach	EB	WB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	EBLn1	WBL	WBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-

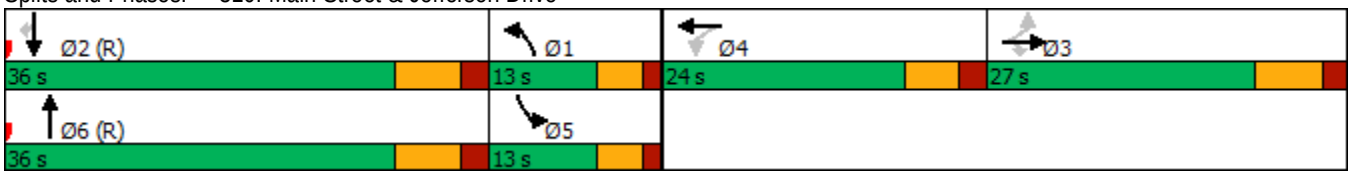


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	339	158	51	169	113	58	42	1382	166	27	1031	224
Future Volume (vph)	339	158	51	169	113	58	42	1382	166	27	1031	224
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	200		0	200		250
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.977			0.984				0.850
Flt Protected		0.967			0.976		0.950			0.950		
Satd. Flow (prot)	0	1826	1615	0	1782	0	1805	1849	0	1805	1881	1553
Flt Permitted		0.584			0.129		0.950			0.950		
Satd. Flow (perm)	0	1103	1615	0	236	0	1805	1849	0	1805	1881	1553
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			164		9			6				164
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1006			727			3897			1103	
Travel Time (s)		17.1			12.4			66.4			18.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	2%	0%	0%	5%	0%	0%	1%	2%	0%	1%	4%
Adj. Flow (vph)	381	178	57	190	127	65	47	1553	187	30	1158	252
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	559	57	0	382	0	47	1740	0	30	1158	252
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		3			4		1	6		5	2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	3		3	4								2
Detector Phase	3	3	3	4	4		1	6		5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	8.0	8.0		8.0	10.0		8.0	10.0	10.0
Minimum Split (s)	25.0	25.0	25.0	24.0	24.0		13.0	25.0		13.0	25.0	25.0
Total Split (s)	27.0	27.0	27.0	24.0	24.0		13.0	36.0		13.0	36.0	36.0
Total Split (%)	27.0%	27.0%	27.0%	24.0%	24.0%		13.0%	36.0%		13.0%	36.0%	36.0%
Maximum Green (s)	20.0	20.0	20.0	18.0	18.0		8.0	29.0		8.0	29.0	29.0
Yellow Time (s)	5.0	5.0	5.0	4.0	4.0		3.5	5.0		3.5	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		1.5	2.0		1.5	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		7.0	7.0		6.0		5.0	7.0		5.0	7.0	7.0
Lead/Lag	Lag	Lag	Lag	Lead	Lead		Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5		3.0	3.5		3.0	3.5	3.5
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)		20.0	20.0		23.2		8.0	29.0		8.0	29.0	29.0
Actuated g/C Ratio		0.20	0.20		0.23		0.08	0.29		0.08	0.29	0.29
v/c Ratio		2.54	0.13		6.26		0.33	3.22		0.21	2.12	0.45
Control Delay		727.2	0.6		2411.5		50.0	1021.0		46.8	535.1	13.2
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Delay		727.2	0.6		2411.5		50.0	1021.0		46.8	535.1	13.2
LOS		F	A		F		D	F		D	F	B
Approach Delay		659.9			2411.5			995.5			433.6	
Approach LOS		F			F			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 6.26			
Intersection Signal Delay: 883.1		Intersection LOS: F	
Intersection Capacity Utilization 145.4%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 310: Main Street & Jefferson Drive

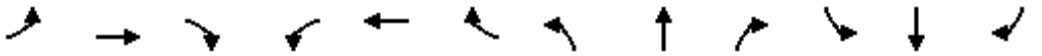


Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	559	57	382	47	1740	30	1158	252
v/c Ratio	2.54	0.13	6.26	0.33	3.22	0.21	2.12	0.45
Control Delay	727.2	0.6	2411.5	50.0	1021.0	46.8	535.1	13.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	727.2	0.6	2411.5	50.0	1021.0	46.8	535.1	13.2
Queue Length 50th (ft)	~599	0	~457	29	~1991	18	~1181	42
Queue Length 95th (ft)	#793	0	#634	65	#2229	47	#1410	109
Internal Link Dist (ft)	926		647		3817		1023	
Turn Bay Length (ft)				200		200		250
Base Capacity (vph)	220	454	61	144	540	144	545	566
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	2.54	0.13	6.26	0.33	3.22	0.21	2.12	0.45

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

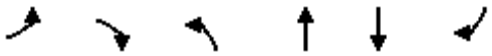
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	339	158	51	169	113	58	42	1382	166	27	1031	224
Future Volume (vph)	339	158	51	169	113	58	42	1382	166	27	1031	224
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0	7.0		6.0		5.0	7.0		5.0	7.0	7.0
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85		0.98		1.00	0.98		1.00	1.00	0.85
Flt Protected		0.97	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1826	1615		1782		1805	1849		1805	1881	1553
Flt Permitted		0.58	1.00		0.13		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1103	1615		236		1805	1849		1805	1881	1553
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	381	178	57	190	127	65	47	1553	187	30	1158	252
RTOR Reduction (vph)	0	0	46	0	7	0	0	4	0	0	0	120
Lane Group Flow (vph)	0	559	11	0	375	0	47	1736	0	30	1158	132
Heavy Vehicles (%)	0%	2%	0%	0%	5%	0%	0%	1%	2%	0%	1%	4%
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		3			4		1	6		5	2	
Permitted Phases	3		3	4								2
Actuated Green, G (s)		20.0	20.0		23.2		4.8	27.0		4.8	27.0	27.0
Effective Green, g (s)		20.0	20.0		23.2		4.8	27.0		4.8	27.0	27.0
Actuated g/C Ratio		0.20	0.20		0.23		0.05	0.27		0.05	0.27	0.27
Clearance Time (s)		7.0	7.0		6.0		5.0	7.0		5.0	7.0	7.0
Vehicle Extension (s)		3.5	3.5		3.5		3.0	3.5		3.0	3.5	3.5
Lane Grp Cap (vph)		220	323		54		86	499		86	507	419
v/s Ratio Prot							c0.03	c0.94		0.02	0.62	
v/s Ratio Perm		c0.51	0.01		c1.59							0.09
v/c Ratio		2.54	0.04		6.95		0.55	3.48		0.35	2.28	0.32
Uniform Delay, d1		40.0	32.2		38.4		46.5	36.5		46.1	36.5	29.1
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		706.6	0.1		2714.1		6.9	1120.2		2.4	584.1	2.0
Delay (s)		746.6	32.3		2752.5		53.5	1156.7		48.5	620.6	31.1
Level of Service		F	C		F		D	F		D	F	C
Approach Delay (s)		680.5			2752.5			1127.7			505.5	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	997.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	4.08		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	145.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology expects strict NEMA phasing.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	154	109	106	1687	1272	113
Future Volume (vph)	154	109	106	1687	1272	113
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	200			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.944				0.989	
Flt Protected	0.972		0.950			
Satd. Flow (prot)	1743	0	1805	1881	1845	0
Flt Permitted	0.972		0.082			
Satd. Flow (perm)	1743	0	156	1881	1845	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	39				8	
Link Speed (mph)	30			40	40	
Link Distance (ft)	1219			1103	1788	
Travel Time (s)	27.7			18.8	30.5	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	0%	1%	2%	0%
Adj. Flow (vph)	173	122	119	1896	1429	127
Shared Lane Traffic (%)						
Lane Group Flow (vph)	295	0	119	1896	1556	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1		1	2	2	
Detector Template	Left		Left	Thru	Thru	
Leading Detector (ft)	20		20	100	100	
Trailing Detector (ft)	0		0	0	0	
Detector 1 Position(ft)	0		0	0	0	
Detector 1 Size(ft)	20		20	6	6	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot		pm+pt	NA	NA	
Protected Phases	4		5	2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases			2			
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	8.0		6.0	10.0	10.0	
Minimum Split (s)	24.0		10.5	25.0	25.0	
Total Split (s)	24.0		10.5	59.0	48.5	
Total Split (%)	28.9%		12.7%	71.1%	58.4%	
Maximum Green (s)	18.0		6.0	52.0	41.5	
Yellow Time (s)	4.0		3.0	5.0	5.0	
All-Red Time (s)	2.0		1.5	2.0	2.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	6.0		4.5	7.0	7.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.5		3.0	4.0	4.0	
Recall Mode	None		None	C-Max	C-Max	
Act Effct Green (s)	16.2		56.3	53.8	45.2	
Actuated g/C Ratio	0.20		0.68	0.65	0.54	
v/c Ratio	0.79		0.52	1.56	1.54	
Control Delay	43.7		16.7	274.5	270.8	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	43.7		16.7	274.5	270.8	
LOS	D		B	F	F	
Approach Delay	43.7			259.2	270.8	
Approach LOS	D			F	F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 83			
Actuated Cycle Length: 83			
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: 1.56			
Intersection Signal Delay: 247.5		Intersection LOS: F	
Intersection Capacity Utilization 114.8%		ICU Level of Service H	
Analysis Period (min) 15			

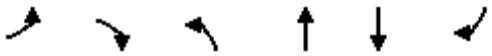
Splits and Phases: 311: Main Street & Cook Road

Lane Group	EBL	NBL	NBT	SBT
Lane Group Flow (vph)	295	119	1896	1556
v/c Ratio	0.79	0.52	1.56	1.54
Control Delay	43.7	16.7	274.5	270.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	43.7	16.7	274.5	270.8
Queue Length 50th (ft)	124	20	~1435	~1215
Queue Length 95th (ft)	#229	58	#1668	#1450
Internal Link Dist (ft)	1139		1023	1708
Turn Bay Length (ft)		200		
Base Capacity (vph)	408	227	1218	1008
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.72	0.52	1.56	1.54

Intersection Summary

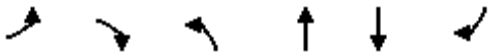
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	154	109	106	1687	1272	113
Future Volume (vph)	154	109	106	1687	1272	113
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		4.5	7.0	7.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frt	0.94		1.00	1.00	0.99	
Flt Protected	0.97		0.95	1.00	1.00	
Satd. Flow (prot)	1743		1805	1881	1845	
Flt Permitted	0.97		0.08	1.00	1.00	
Satd. Flow (perm)	1743		155	1881	1845	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	173	122	119	1896	1429	127
RTOR Reduction (vph)	31	0	0	0	4	0
Lane Group Flow (vph)	264	0	119	1896	1552	0
Heavy Vehicles (%)	0%	0%	0%	1%	2%	0%
Turn Type	Prot		pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases			2			
Actuated Green, G (s)	16.2		53.8	53.8	44.4	
Effective Green, g (s)	16.2		53.8	53.8	44.4	
Actuated g/C Ratio	0.20		0.65	0.65	0.53	
Clearance Time (s)	6.0		4.5	7.0	7.0	
Vehicle Extension (s)	3.5		3.0	4.0	4.0	
Lane Grp Cap (vph)	340		197	1219	986	
v/s Ratio Prot	c0.15		0.04	c1.01	0.84	
v/s Ratio Perm			0.35			
v/c Ratio	0.78		0.60	1.56	1.57	
Uniform Delay, d1	31.7		18.5	14.6	19.3	
Progression Factor	1.00		1.00	1.00	1.00	
Incremental Delay, d2	10.9		5.1	254.0	263.4	
Delay (s)	42.5		23.6	268.6	282.7	
Level of Service	D		C	F	F	
Approach Delay (s)	42.5			254.1	282.7	
Approach LOS	D			F	F	

Intersection Summary			
HCM 2000 Control Delay	249.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.47		
Actuated Cycle Length (s)	83.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	114.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	154	109	106	1687	1272	113
Future Volume (veh/h)	154	109	106	1687	1272	113
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1885	1870	1900
Adj Flow Rate, veh/h	173	122	119	1896	1429	127
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	1	2	0
Cap, veh/h	196	138	209	1224	893	79
Arrive On Green	0.19	0.19	0.07	0.65	0.53	0.53
Sat Flow, veh/h	1006	710	1810	1885	1693	150
Grp Volume(v), veh/h	296	0	119	1896	0	1556
Grp Sat Flow(s),veh/h/ln	1722	0	1810	1885	0	1843
Q Serve(g_s), s	13.9	0.0	2.2	53.9	0.0	43.8
Cycle Q Clear(g_c), s	13.9	0.0	2.2	53.9	0.0	43.8
Prop In Lane	0.58	0.41	1.00			0.08
Lane Grp Cap(c), veh/h	335	0	209	1224	0	972
V/C Ratio(X)	0.88	0.00	0.57	1.55	0.00	1.60
Avail Cap(c_a), veh/h	373	0	218	1224	0	972
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.09	0.09	0.00	1.00
Uniform Delay (d), s/veh	32.5	0.0	19.1	14.6	0.0	19.6
Incr Delay (d2), s/veh	20.5	0.0	0.3	247.6	0.0	275.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	0.0	1.1	100.8	0.0	89.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	53.1	0.0	19.4	262.2	0.0	295.0
LnGrp LOS	D	A	B	F	A	F
Approach Vol, veh/h	296			2015	1556	
Approach Delay, s/veh	53.1			247.9	295.0	
Approach LOS	D			F	F	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		60.9		22.1	10.1	50.8
Change Period (Y+Rc), s		7.0		6.0	4.5	7.0
Max Green Setting (Gmax), s		52.0		18.0	6.0	41.5
Max Q Clear Time (g_c+I1), s		55.9		15.9	4.2	45.8
Green Ext Time (p_c), s		0.0		0.3	0.0	0.0

Intersection Summary		
HCM 6th Ctrl Delay	251.9	
HCM 6th LOS	F	

Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	187	682	817	224	290	669
Future Volume (vph)	187	682	817	224	290	669
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	135	
Storage Lanes	1	1		1	2	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1787	1553	1900	1615	1641	3574
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1787	1553	1900	1615	1641	3574
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		550		220		
Link Speed (mph)	55		40			40
Link Distance (ft)	7877		885			960
Travel Time (s)	97.6		15.1			16.4
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	1%	4%	0%	0%	10%	1%
Adj. Flow (vph)	210	766	918	252	326	752
Shared Lane Traffic (%)						
Lane Group Flow (vph)	210	766	918	252	326	752
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Turn Type	Perm	Perm	NA	Perm	Split	NA
Protected Phases			2		6	6
Permitted Phases	8	8		2		
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%
Maximum Green (s)	18.0	18.0	18.0	18.0	18.0	18.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	18.0	18.0	18.0	18.0	18.0	18.0
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.27	0.27

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
v/c Ratio	0.44	0.94	1.81	0.43	0.75	0.79
Control Delay	24.1	29.0	396.5	7.1	35.4	30.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.1	29.0	396.5	7.1	35.4	30.4
LOS	C	C	F	A	D	C
Approach Delay	27.9		312.6			31.9
Approach LOS	C		F			C

Intersection Summary			
Area Type:	Other		
Cycle Length: 67.5			
Actuated Cycle Length: 67.5			
Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 1.81			
Intersection Signal Delay: 132.6		Intersection LOS: F	
Intersection Capacity Utilization 92.7%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 312: Main Street & SH 146

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	210	766	918	252	326	752
v/c Ratio	0.44	0.94	1.81	0.43	0.75	0.79
Control Delay	24.1	29.0	396.5	7.1	35.4	30.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.1	29.0	396.5	7.1	35.4	30.4
Queue Length 50th (ft)	72	84	~587	10	123	151
Queue Length 95th (ft)	128	#317	#784	59	#233	#212
Internal Link Dist (ft)	7797		805			880
Turn Bay Length (ft)					135	
Base Capacity (vph)	476	817	506	592	437	953
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	0.44	0.94	1.81	0.43	0.75	0.79

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

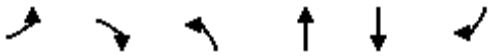
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	187	682	817	224	290	669
Future Volume (vph)	187	682	817	224	290	669
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1787	1553	1900	1615	1641	3574
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1787	1553	1900	1615	1641	3574
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	210	766	918	252	326	752
RTOR Reduction (vph)	0	403	0	161	0	0
Lane Group Flow (vph)	210	363	918	91	326	752
Heavy Vehicles (%)	1%	4%	0%	0%	10%	1%
Turn Type	Perm	Perm	NA	Perm	Split	NA
Protected Phases			2		6	6
Permitted Phases	8	8		2		
Actuated Green, G (s)	18.0	18.0	18.0	18.0	18.0	18.0
Effective Green, g (s)	18.0	18.0	18.0	18.0	18.0	18.0
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.27	0.27
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Grp Cap (vph)	476	414	506	430	437	953
v/s Ratio Prot			c0.48		0.20	c0.21
v/s Ratio Perm	0.12	c0.23		0.06		
v/c Ratio	0.44	0.88	1.81	0.21	0.75	0.79
Uniform Delay, d1	20.6	23.7	24.8	19.2	22.7	23.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.0	22.0	374.2	1.1	11.0	6.6
Delay (s)	23.5	45.7	398.9	20.3	33.7	29.6
Level of Service	C	D	F	C	C	C
Approach Delay (s)	40.9		317.4			30.8
Approach LOS	D		F			C

Intersection Summary			
HCM 2000 Control Delay	137.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	67.5	Sum of lost time (s)	13.5
Intersection Capacity Utilization	92.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

HCM 6th Edition methodology does not support Non-NEMA phasing.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	372	0	14	228	328	177
Future Volume (vph)	372	0	14	228	328	177
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.953	
Flt Protected	0.950			0.997		
Satd. Flow (prot)	1770	0	0	1581	1683	0
Flt Permitted	0.950			0.997		
Satd. Flow (perm)	1770	0	0	1581	1683	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	686			526	1142	
Travel Time (s)	15.6			12.0	26.0	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	0%	0%	21%	9%	5%
Adj. Flow (vph)	396	0	15	243	349	188
Shared Lane Traffic (%)						
Lane Group Flow (vph)	396	0	0	258	537	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Free			Stop	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 55.3%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection Sign configuration not allowed in HCM analysis.

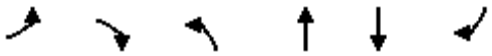
Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	372	0	14	228	328	177
Future Vol, veh/h	372	0	14	228	328	177
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	0	0	21	9	5
Mvmt Flow	396	0	15	243	349	188

Major/Minor	Minor2		Major2	
Conflicting Flow All	443	443	-	0
Stage 1	443	443	-	-
Stage 2	0	0	-	-
Critical Hdwy	6.4	6.71	-	-
Critical Hdwy Stg 1	5.4	5.71	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	3.5	4.189	-	-
Pot Cap-1 Maneuver	576	482	-	-
Stage 1	651	545	-	-
Stage 2	-	-	-	-
Platoon blocked, %			-	-
Mov Cap-1 Maneuver	576	0	-	-
Mov Cap-2 Maneuver	576	0	-	-
Stage 1	651	0	-	-
Stage 2	-	0	-	-

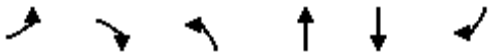
Approach	NB	SB
HCM Control Delay, s	16.2	0
HCM LOS	C	

Minor Lane/Major Mvmt	NBLn1	SBT	SBR
Capacity (veh/h)	576	-	-
HCM Lane V/C Ratio	0.447	-	-
HCM Control Delay (s)	16.2	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	2.3	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	3	468	212	243	352	3
Future Volume (vph)	3	468	212	243	352	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.866				0.999	
Flt Protected				0.977		
Satd. Flow (prot)	1645	0	0	1671	1743	0
Flt Permitted				0.977		
Satd. Flow (perm)	1645	0	0	1671	1743	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	516			1385	526	
Travel Time (s)	11.7			31.5	12.0	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	2%	19%	9%	0%
Adj. Flow (vph)	3	478	216	248	359	3
Shared Lane Traffic (%)						
Lane Group Flow (vph)	481	0	0	464	362	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 82.4%		ICU Level of Service E	
Analysis Period (min) 15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	3	468	212	243	352	3
Future Volume (Veh/h)	3	468	212	243	352	3
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	3	478	216	248	359	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1040	360	362			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1040	360	362			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	31	82			
cM capacity (veh/h)	211	689	1197			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	481	464	362
Volume Left	3	216	0
Volume Right	478	0	3
cSH	679	1197	1700
Volume to Capacity	0.71	0.18	0.21
Queue Length 95th (ft)	147	16	0
Control Delay (s)	22.1	5.0	0.0
Lane LOS	C	A	
Approach Delay (s)	22.1	5.0	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	9.9		
Intersection Capacity Utilization	82.4%	ICU Level of Service	E
Analysis Period (min)	15		

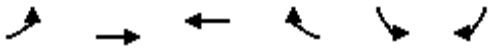
Intersection	
Int Delay, s/veh	9.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	468	212	243	352	3
Future Vol, veh/h	3	468	212	243	352	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	0	0	2	19	9	0
Mvmt Flow	3	478	216	248	359	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1041	361	362	0	-	0
Stage 1	361	-	-	-	-	-
Stage 2	680	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.12	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.218	-	-	-
Pot Cap-1 Maneuver	257	688	1197	-	-	-
Stage 1	710	-	-	-	-	-
Stage 2	507	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	203	688	1197	-	-	-
Mov Cap-2 Maneuver	203	-	-	-	-	-
Stage 1	562	-	-	-	-	-
Stage 2	507	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	22.2	4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1197	-	678	-	-
HCM Lane V/C Ratio	0.181	-	0.709	-	-
HCM Control Delay (s)	8.7	0	22.2	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.7	-	5.9	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	380	462	211	0	0	188
Future Volume (vph)	380	462	211	0	0	188
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.865	
Flt Protected		0.978				
Satd. Flow (prot)	0	1832	1845	0	1580	0
Flt Permitted		0.978				
Satd. Flow (perm)	0	1832	1845	0	1580	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		4107	516		686	
Travel Time (s)		93.3	11.7		15.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	1%	3%	0%	0%	4%
Adj. Flow (vph)	432	525	240	0	0	214
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	957	240	0	214	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Stop		Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 78.1%		ICU Level of Service D	
Analysis Period (min) 15			

Intersection Sign configuration not allowed in HCM analysis.

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	380	462	211	0	0	188
Future Vol, veh/h	380	462	211	0	0	188
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	1	3	0	0	4
Mvmt Flow	432	525	240	0	0	214

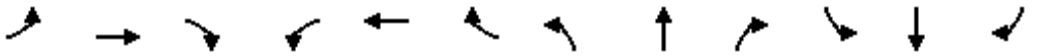
Major/Minor	Major1		Minor2	
Conflicting Flow All	0	0	1389	0
Stage 1	-	-	0	-
Stage 2	-	-	1389	-
Critical Hdwy	4.12	-	6.53	6.2
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	5.53	-
Follow-up Hdwy	2.218	-	4.027	3.3
Pot Cap-1 Maneuver	-	-	~ 142	-
Stage 1	-	-	-	-
Stage 2	-	-	~ 209	-
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	0	-
Mov Cap-2 Maneuver	-	-	0	-
Stage 1	-	-	0	-
Stage 2	-	-	0	-

Approach	EB	WB
HCM Control Delay, s		
HCM LOS		-

Minor Lane/Major Mvmt	EBL	EBTWBLn1	
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Improved Network 2021 AM



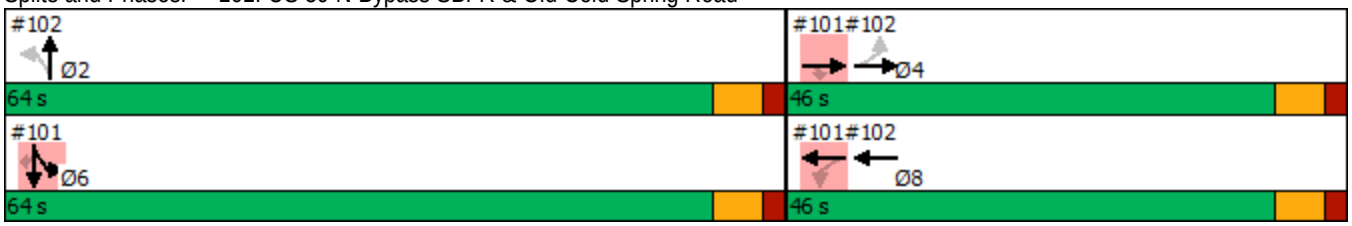
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	266	251	111	288	0	0	0	0	66	28	38
Future Volume (vph)	0	266	251	111	288	0	0	0	0	66	28	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected					0.986						0.966	
Satd. Flow (prot)	0	1712	1369	0	1662	0	0	0	0	0	1757	1122
Flt Permitted					0.822						0.966	
Satd. Flow (perm)	0	1712	1369	0	1386	0	0	0	0	0	1757	1122
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			282									43
Link Speed (mph)		40			40			30			45	
Link Distance (ft)		930			353			1253			1599	
Travel Time (s)		15.9			6.0			28.5			24.2	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	11%	18%	12%	13%	0%	0%	0%	0%	3%	8%	44%
Adj. Flow (vph)	0	299	282	125	324	0	0	0	0	74	31	43
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	299	282	0	449	0	0	0	0	0	105	43
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Perm	Perm	NA					Split	NA	Perm
Protected Phases		4			8					6	6	
Permitted Phases			4	8								6
Detector Phase		4	4	8	8					6	6	6
Switch Phase												

Lane Group	Ø2
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	2
Permitted Phases	
Detector Phase	
Switch Phase	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)		5.0	5.0	5.0	5.0					5.0	5.0	5.0
Minimum Split (s)		24.0	24.0	24.0	24.0					24.0	24.0	24.0
Total Split (s)		46.0	46.0	46.0	46.0					64.0	64.0	64.0
Total Split (%)		41.8%	41.8%	41.8%	41.8%					58.2%	58.2%	58.2%
Maximum Green (s)		40.0	40.0	40.0	40.0					58.0	58.0	58.0
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					2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0						0.0	0.0
Total Lost Time (s)		6.0	6.0		6.0						6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Recall Mode		None	None	None	None					Min	Min	Min
Act Effct Green (s)		40.1	40.1		40.1						10.3	10.3
Actuated g/C Ratio		0.64	0.64		0.64						0.17	0.17
v/c Ratio		0.27	0.29		0.51						0.36	0.19
Control Delay		6.0	1.6		9.4						26.6	10.2
Queue Delay		0.0	0.0		0.4						0.0	0.0
Total Delay		6.0	1.6		9.8						26.6	10.2
LOS		A	A		A						C	B
Approach Delay		3.9			9.8						21.8	
Approach LOS		A			A						C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 62.4			
Natural Cycle: 110			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay: 8.4		Intersection LOS: A	
Intersection Capacity Utilization 57.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 101: US 59 N Bypass SBFR & Old Cold Spring Road

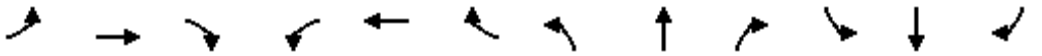


Lane Group	Ø2
Minimum Initial (s)	5.0
Minimum Split (s)	64.0
Total Split (s)	64.0
Total Split (%)	58%
Maximum Green (s)	58.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	Min
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Lane Group	EBT	EBR	WBT	SBT	SBR
Lane Group Flow (vph)	299	282	449	105	43
v/c Ratio	0.27	0.29	0.51	0.36	0.19
Control Delay	6.0	1.6	9.4	26.6	10.2
Queue Delay	0.0	0.0	0.4	0.0	0.0
Total Delay	6.0	1.6	9.8	26.6	10.2
Queue Length 50th (ft)	41	0	79	36	0
Queue Length 95th (ft)	85	23	221	74	22
Internal Link Dist (ft)	850		273	1519	
Turn Bay Length (ft)					
Base Capacity (vph)	1099	979	889	1635	1047
Starvation Cap Reductn	0	0	119	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.27	0.29	0.58	0.06	0.04

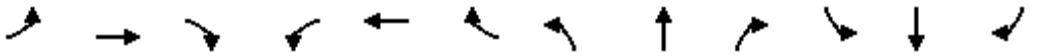
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	266	251	111	288	0	0	0	0	66	28	38
Future Volume (vph)	0	266	251	111	288	0	0	0	0	66	28	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0		6.0						6.0	6.0
Lane Util. Factor		1.00	1.00		1.00						1.00	1.00
Frt		1.00	0.85		1.00						1.00	0.85
Flt Protected		1.00	1.00		0.99						0.97	1.00
Satd. Flow (prot)		1712	1369		1662						1757	1122
Flt Permitted		1.00	1.00		0.82						0.97	1.00
Satd. Flow (perm)		1712	1369		1386						1757	1122
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	299	282	125	324	0	0	0	0	74	31	43
RTOR Reduction (vph)	0	0	101	0	0	0	0	0	0	0	0	36
Lane Group Flow (vph)	0	299	181	0	449	0	0	0	0	0	105	7
Heavy Vehicles (%)	0%	11%	18%	12%	13%	0%	0%	0%	0%	3%	8%	44%
Turn Type		NA	Perm	Perm	NA					Split	NA	Perm
Protected Phases		4			8					6	6	
Permitted Phases			4	8								6
Actuated Green, G (s)		40.0	40.0		40.0						10.3	10.3
Effective Green, g (s)		40.0	40.0		40.0						10.3	10.3
Actuated g/C Ratio		0.64	0.64		0.64						0.17	0.17
Clearance Time (s)		6.0	6.0		6.0						6.0	6.0
Vehicle Extension (s)		3.0	3.0		3.0						3.0	3.0
Lane Grp Cap (vph)		1099	878		889						290	185
v/s Ratio Prot		0.17									c0.06	
v/s Ratio Perm			0.13		c0.32							0.01
v/c Ratio		0.27	0.21		0.51						0.36	0.04
Uniform Delay, d1		4.8	4.6		5.9						23.1	21.8
Progression Factor		1.00	1.00		1.08						1.00	1.00
Incremental Delay, d2		0.1	0.1		0.4						0.8	0.1
Delay (s)		5.0	4.7		6.8						23.9	21.9
Level of Service		A	A		A						C	C
Approach Delay (s)		4.8			6.8			0.0			23.3	
Approach LOS		A			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	7.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	62.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	57.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology does not support clustered intersections.



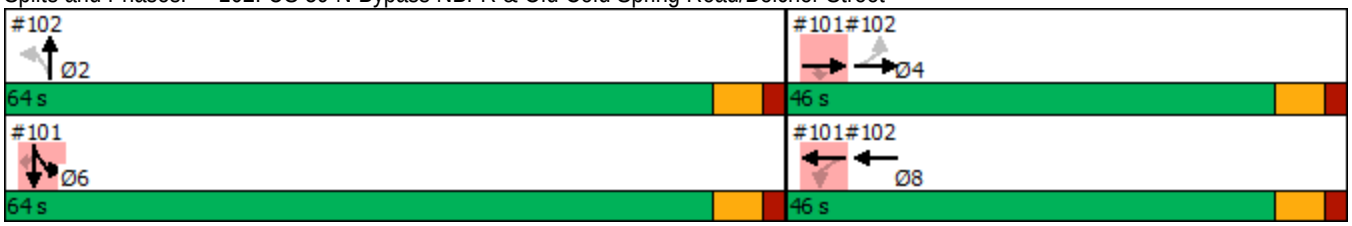
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	264	0	0	231	24	179	11	94	0	0	0
Future Volume (vph)	66	264	0	0	231	24	179	11	94	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Frt					0.987			0.950				
Flt Protected		0.990						0.969				
Satd. Flow (prot)	0	1725	0	0	1850	0	0	2786	0	0	0	0
Flt Permitted		0.883						0.969				
Satd. Flow (perm)	0	1539	0	0	1850	0	0	2786	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					5			108				
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		353			1397			1065			1401	
Travel Time (s)		6.0			23.8			16.1			21.2	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	33%	3%	0%	0%	1%	5%	28%	0%	5%	0%	0%	0%
Adj. Flow (vph)	76	303	0	0	266	28	206	13	108	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	379	0	0	294	0	0	327	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2		1	2				
Detector Template	Left	Thru			Thru		Left	Thru				
Leading Detector (ft)	20	100			100		20	100				
Trailing Detector (ft)	0	0			0		0	0				
Detector 1 Position(ft)	0	0			0		0	0				
Detector 1 Size(ft)	20	6			6		20	6				
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0			0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0			0.0		0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4						2					
Detector Phase	4	4			8		2	2				
Switch Phase												

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	6
Permitted Phases	
Detector Phase	
Switch Phase	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	5.0	5.0			5.0		5.0	5.0				
Minimum Split (s)	24.0	24.0			24.0		64.0	64.0				
Total Split (s)	46.0	46.0			46.0		64.0	64.0				
Total Split (%)	41.8%	41.8%			41.8%		58.2%	58.2%				
Maximum Green (s)	40.0	40.0			40.0		58.0	58.0				
Yellow Time (s)	4.0	4.0			4.0		4.0	4.0				
All-Red Time (s)	2.0	2.0			2.0		2.0	2.0				
Lost Time Adjust (s)		0.0			0.0			0.0				
Total Lost Time (s)		6.0			6.0			6.0				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0				
Recall Mode	None	None			None		Min	Min				
Act Effct Green (s)		40.1			40.1			10.3				
Actuated g/C Ratio		0.64			0.64			0.17				
v/c Ratio		0.38			0.25			0.59				
Control Delay		5.1			5.7			20.5				
Queue Delay		0.2			0.0			0.0				
Total Delay		5.3			5.7			20.5				
LOS		A			A			C				
Approach Delay		5.3			5.7			20.5				
Approach LOS		A			A			C				

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 62.4			
Natural Cycle: 110			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay: 10.4		Intersection LOS: B	
Intersection Capacity Utilization 56.1%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 102: US 59 N Bypass NBFR & Old Cold Spring Road/Belcher Street

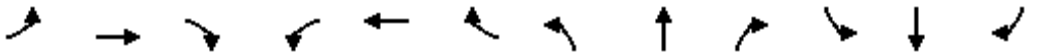


Lane Group	Ø6
Minimum Initial (s)	5.0
Minimum Split (s)	24.0
Total Split (s)	64.0
Total Split (%)	58%
Maximum Green (s)	58.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	Min
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Lane Group	EBT	WBT	NBT
Lane Group Flow (vph)	379	294	327
v/c Ratio	0.38	0.25	0.59
Control Delay	5.1	5.7	20.5
Queue Delay	0.2	0.0	0.0
Total Delay	5.3	5.7	20.5
Queue Length 50th (ft)	45	39	40
Queue Length 95th (ft)	67	77	71
Internal Link Dist (ft)	273	1317	985
Turn Bay Length (ft)			
Base Capacity (vph)	988	1189	2601
Starvation Cap Reductn	156	0	0
Spillback Cap Reductn	0	15	11
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.46	0.25	0.13

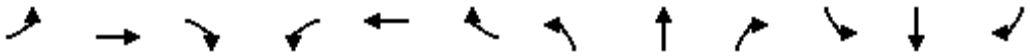
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	264	0	0	231	24	179	11	94	0	0	0
Future Volume (vph)	66	264	0	0	231	24	179	11	94	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0			6.0				
Lane Util. Factor		1.00			1.00			0.95				
Frt		1.00			0.99			0.95				
Flt Protected		0.99			1.00			0.97				
Satd. Flow (prot)		1726			1850			2788				
Flt Permitted		0.88			1.00			0.97				
Satd. Flow (perm)		1538			1850			2788				
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	76	303	0	0	266	28	206	13	108	0	0	0
RTOR Reduction (vph)	0	0	0	0	2	0	0	90	0	0	0	0
Lane Group Flow (vph)	0	379	0	0	292	0	0	237	0	0	0	0
Heavy Vehicles (%)	33%	3%	0%	0%	1%	5%	28%	0%	5%	0%	0%	0%
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		40.0			40.0			10.3				
Effective Green, g (s)		40.0			40.0			10.3				
Actuated g/C Ratio		0.64			0.64			0.17				
Clearance Time (s)		6.0			6.0			6.0				
Vehicle Extension (s)		3.0			3.0			3.0				
Lane Grp Cap (vph)		987			1187			460				
v/s Ratio Prot					0.16							
v/s Ratio Perm		c0.25						0.08				
v/c Ratio		0.38			0.25			0.51				
Uniform Delay, d1		5.3			4.7			23.7				
Progression Factor		0.67			1.00			1.00				
Incremental Delay, d2		0.2			0.1			1.0				
Delay (s)		3.8			4.8			24.7				
Level of Service		A			A			C				
Approach Delay (s)		3.8			4.8			24.7			0.0	
Approach LOS		A			A			C			A	

Intersection Summary			
HCM 2000 Control Delay	10.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	62.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	56.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology does not support clustered intersections.

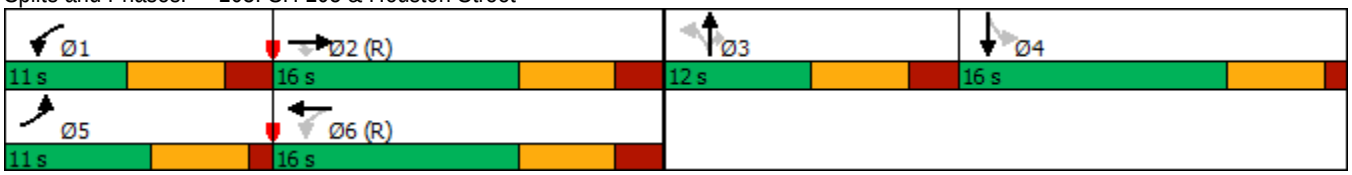


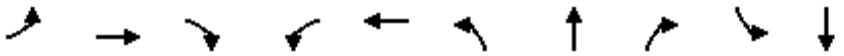
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	182	252	279	273	3	309	13	265	6	18	33
Future Volume (vph)	20	182	252	279	273	3	309	13	265	6	18	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	500		500	560		0	0		300	175		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt			0.850		0.998				0.850		0.904	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	1727	1442	1626	1807	0	1719	1900	1455	1805	3136	0
Flt Permitted	0.950			0.426			0.667			0.748		
Satd. Flow (perm)	1719	1727	1442	729	1807	0	1207	1900	1455	1421	3136	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			278		1				288		36	
Link Speed (mph)		55			60			60			30	
Link Distance (ft)		1108			4415			2711			551	
Travel Time (s)		13.7			50.2			30.8			12.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	10%	12%	11%	5%	0%	5%	0%	11%	0%	6%	3%
Adj. Flow (vph)	22	198	274	303	297	3	336	14	288	7	20	36
Shared Lane Traffic (%)												
Lane Group Flow (vph)	22	198	274	303	300	0	336	14	288	7	56	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			4			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			3			4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			2	6			3		3	4		
Detector Phase	5	2	2	1	6		3	3	3	4	4	
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		5.0	5.0	5.0	10.0	10.0	
Minimum Split (s)	11.0	16.0	16.0	11.0	16.0		11.0	11.0	11.0	16.0	16.0	
Total Split (s)	11.0	16.0	16.0	11.0	16.0		12.0	12.0	12.0	16.0	16.0	
Total Split (%)	20.0%	29.1%	29.1%	20.0%	29.1%		21.8%	21.8%	21.8%	29.1%	29.1%	
Maximum Green (s)	6.0	10.0	10.0	5.0	10.0		6.0	6.0	6.0	11.0	11.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	5.0	5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lead	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	4.0	4.0	3.0	4.0		3.0	3.0	3.0	4.0	4.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	
Act Effct Green (s)	6.2	14.3	14.3	26.8	25.6		6.0	6.0	6.0	10.0	10.0	
Actuated g/C Ratio	0.11	0.26	0.26	0.49	0.47		0.11	0.11	0.11	0.18	0.18	
v/c Ratio	0.11	0.44	0.47	0.63	0.36		2.56	0.07	0.69	0.03	0.09	
Control Delay	23.1	24.1	6.3	22.8	18.3		744.0	22.9	14.6	19.0	10.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	23.1	24.1	6.3	22.8	18.3		744.0	22.9	14.6	19.0	10.9	
LOS	C	C	A	C	B		F	C	B	B	B	
Approach Delay		14.2			20.6			398.9			11.8	
Approach LOS		B			C			F			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 55			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 2.56			
Intersection Signal Delay: 152.8		Intersection LOS: F	
Intersection Capacity Utilization 63.8%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 103: SH 105 & Houston Street



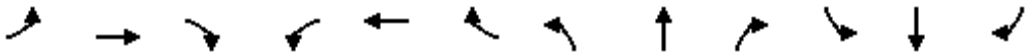


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	22	198	274	303	300	336	14	288	7	56
v/c Ratio	0.11	0.44	0.47	0.63	0.36	2.56	0.07	0.69	0.03	0.09
Control Delay	23.1	24.1	6.3	22.8	18.3	744.0	22.9	14.6	19.0	10.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.1	24.1	6.3	22.8	18.3	744.0	22.9	14.6	19.0	10.9
Queue Length 50th (ft)	7	61	0	70	67	~192	4	0	2	2
Queue Length 95th (ft)	23	#135	51	#179	#226	#323	18	#84	11	15
Internal Link Dist (ft)		1028			4335		2631			471
Turn Bay Length (ft)	500		500	560				300	175	
Base Capacity (vph)	198	450	581	480	841	131	207	415	284	656
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	0.11	0.44	0.47	0.63	0.36	2.56	0.07	0.69	0.02	0.09

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

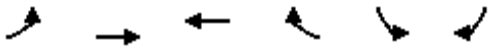
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



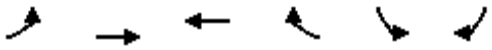
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	182	252	279	273	3	309	13	265	6	18	33
Future Volume (vph)	20	182	252	279	273	3	309	13	265	6	18	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.90	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1719	1727	1442	1626	1808		1719	1900	1455	1805	3134	
Flt Permitted	0.95	1.00	1.00	0.43	1.00		0.67	1.00	1.00	0.75	1.00	
Satd. Flow (perm)	1719	1727	1442	729	1808		1206	1900	1455	1422	3134	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	198	274	303	297	3	336	14	288	7	20	36
RTOR Reduction (vph)	0	0	213	0	1	0	0	0	257	0	32	0
Lane Group Flow (vph)	22	198	61	303	299	0	336	14	31	7	24	0
Heavy Vehicles (%)	5%	10%	12%	11%	5%	0%	5%	0%	11%	0%	6%	3%
Turn Type	Prot	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			3			4	
Permitted Phases			2	6			3		3	4		
Actuated Green, G (s)	1.4	12.3	12.3	26.0	19.6		6.0	6.0	6.0	6.0	6.0	
Effective Green, g (s)	1.4	12.3	12.3	26.0	19.6		6.0	6.0	6.0	6.0	6.0	
Actuated g/C Ratio	0.03	0.22	0.22	0.47	0.36		0.11	0.11	0.11	0.11	0.11	
Clearance Time (s)	5.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	5.0	5.0	
Vehicle Extension (s)	3.0	4.0	4.0	3.0	4.0		3.0	3.0	3.0	4.0	4.0	
Lane Grp Cap (vph)	43	386	322	470	644		131	207	158	155	341	
v/s Ratio Prot	0.01	0.11		c0.09	0.17			0.01			c0.01	
v/s Ratio Perm			0.04	c0.21			c0.28		0.02	0.00		
v/c Ratio	0.51	0.51	0.19	0.64	0.46		2.56	0.07	0.20	0.05	0.07	
Uniform Delay, d1	26.5	18.7	17.3	9.9	13.7		24.5	22.0	22.3	21.9	22.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	9.9	4.8	1.3	3.0	2.4		726.0	0.1	0.6	0.2	0.1	
Delay (s)	36.4	23.5	18.6	12.9	16.1		750.5	22.1	22.9	22.1	22.1	
Level of Service	D	C	B	B	B		F	C	C	C	C	
Approach Delay (s)		21.4			14.5			406.1			22.1	
Approach LOS		C			B			F			C	

Intersection Summary			
HCM 2000 Control Delay	155.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	23.0
Intersection Capacity Utilization	63.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology expects strict NEMA phasing.



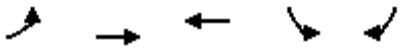
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	74	755	1041	129	172	160
Future Volume (vph)	74	755	1041	129	172	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.983			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1736	3282	3358	0	1719	1599
Flt Permitted	0.105				0.950	
Satd. Flow (perm)	192	3282	3358	0	1719	1599
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			32			58
Link Speed (mph)		65	65		30	
Link Distance (ft)		2030	1363		297	
Travel Time (s)		21.3	14.3		6.8	
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Heavy Vehicles (%)	4%	10%	6%	3%	5%	1%
Adj. Flow (vph)	97	993	1370	170	226	211
Shared Lane Traffic (%)						
Lane Group Flow (vph)	97	993	1540	0	226	211
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2		1	1
Detector Template	Left	Thru	Thru		Left	Right
Leading Detector (ft)	20	100	100		20	20
Trailing Detector (ft)	0	0	0		0	0
Detector 1 Position(ft)	0	0	0		0	0
Detector 1 Size(ft)	20	6	6		20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	4					6
Detector Phase	4	4	8		6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	5.0
Minimum Split (s)	24.0	24.0	24.0		24.0	24.0
Total Split (s)	56.0	56.0	56.0		24.0	24.0
Total Split (%)	70.0%	70.0%	70.0%		30.0%	30.0%
Maximum Green (s)	50.0	50.0	50.0		18.0	18.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	None		Min	Min
Walk Time (s)	7.0	7.0	7.0		7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)	0	0	0		0	0
Act Effct Green (s)	40.9	40.9	40.9		13.9	13.9
Actuated g/C Ratio	0.61	0.61	0.61		0.21	0.21
v/c Ratio	0.84	0.50	0.75		0.64	0.56
Control Delay	68.2	8.5	12.2		36.1	26.0
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	68.2	8.5	12.2		36.1	26.0
LOS	E	A	B		D	C
Approach Delay		13.8	12.2		31.2	
Approach LOS		B	B		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 67.6			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 15.5		Intersection LOS: B	
Intersection Capacity Utilization 61.6%		ICU Level of Service B	
Analysis Period (min) 15			

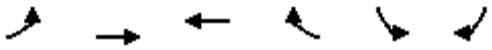
Splits and Phases: 201: US 90 & Waco Street



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	97	993	1540	226	211
v/c Ratio	0.84	0.50	0.75	0.64	0.56
Control Delay	68.2	8.5	12.2	36.1	26.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	68.2	8.5	12.2	36.1	26.0
Queue Length 50th (ft)	29	110	214	101	66
Queue Length 95th (ft)	#102	130	231	140	103
Internal Link Dist (ft)		1950	1283	217	
Turn Bay Length (ft)	200				
Base Capacity (vph)	143	2454	2519	488	496
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.68	0.40	0.61	0.46	0.43

Intersection Summary

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



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	74	755	1041	129	172	160
Future Volume (vph)	74	755	1041	129	172	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		6.0	6.0
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.98		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1736	3282	3360		1719	1599
Flt Permitted	0.10	1.00	1.00		0.95	1.00
Satd. Flow (perm)	191	3282	3360		1719	1599
Peak-hour factor, PHF	0.76	0.76	0.76	0.76	0.76	0.76
Adj. Flow (vph)	97	993	1370	170	226	211
RTOR Reduction (vph)	0	0	12	0	0	46
Lane Group Flow (vph)	97	993	1528	0	226	165
Heavy Vehicles (%)	4%	10%	6%	3%	5%	1%
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)	40.9	40.9	40.9		13.9	13.9
Effective Green, g (s)	40.9	40.9	40.9		13.9	13.9
Actuated g/C Ratio	0.61	0.61	0.61		0.21	0.21
Clearance Time (s)	6.0	6.0	6.0		6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	116	2009	2057		357	332
v/s Ratio Prot		0.30	0.45		c0.13	
v/s Ratio Perm	c0.51					0.10
v/c Ratio	0.84	0.49	0.74		0.63	0.50
Uniform Delay, d1	10.3	7.2	9.2		24.1	23.4
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	38.0	0.2	1.5		3.6	1.2
Delay (s)	48.3	7.4	10.7		27.8	24.5
Level of Service	D	A	B		C	C
Approach Delay (s)		11.0	10.7		26.2	
Approach LOS		B	B		C	

Intersection Summary			
HCM 2000 Control Delay	13.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	66.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	61.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology supports speed limit in the range of 25 to 55 mph.

Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	812	102	1	107	658	73	115
Future Volume (vph)	812	102	1	107	658	73	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		125		0	225
Storage Lanes		0		1		1	1
Taper Length (ft)				25		25	
Lane Util. Factor	0.95	0.95	0.95	1.00	0.95	1.00	1.00
Frt	0.983						0.850
Flt Protected				0.950		0.950	
Satd. Flow (prot)	3316	0	0	1736	3374	1583	1482
Flt Permitted				0.221		0.950	
Satd. Flow (perm)	3316	0	0	404	3374	1583	1482
Right Turn on Red		Yes					Yes
Satd. Flow (RTOR)	39						132
Link Speed (mph)	45				45	30	
Link Distance (ft)	1974				176	2080	
Travel Time (s)	29.9				2.7	47.3	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	7%	7%	0%	4%	7%	14%	9%
Adj. Flow (vph)	933	117	1	123	756	84	132
Shared Lane Traffic (%)							
Lane Group Flow (vph)	1050	0	0	124	756	84	132
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	R NA	Left	Left	Left	Right
Median Width(ft)	12				12	12	
Link Offset(ft)	0				0	0	
Crosswalk Width(ft)	16				16	16	
Two way Left Turn Lane	Yes				Yes		
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	15		15	9
Number of Detectors	2		1	1	2	1	1
Detector Template	Thru		Left	Left	Thru	Left	Right
Leading Detector (ft)	100		20	20	100	20	20
Trailing Detector (ft)	0		0	0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0	0
Detector 1 Size(ft)	6		20	20	6	20	20
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94				94		
Detector 2 Size(ft)	6				6		
Detector 2 Type	Cl+Ex				Cl+Ex		
Detector 2 Channel							
Detector 2 Extend (s)	0.0				0.0		
Turn Type	NA		custom	pm+pt	NA	Prot	Perm
Protected Phases	2			1	6	8	

Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Permitted Phases			1	6			8
Detector Phase	2		1	1	6	8	8
Switch Phase							
Minimum Initial (s)	10.0		5.0	5.0	10.0	5.0	5.0
Minimum Split (s)	15.0		10.0	10.0	15.0	10.0	10.0
Total Split (s)	55.0		10.0	10.0	65.0	10.0	10.0
Total Split (%)	73.3%		13.3%	13.3%	86.7%	13.3%	13.3%
Maximum Green (s)	50.0		5.0	5.0	60.0	5.0	5.0
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
Lost Time Adjust (s)	0.0			0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0			5.0	5.0	5.0	5.0
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?	Yes		Yes	Yes			
Vehicle Extension (s)	2.0		2.0	2.0	2.0	2.0	2.0
Recall Mode	C-Max		None	None	Max	None	None
Act Effct Green (s)	52.0			60.0	60.0	5.0	5.0
Actuated g/C Ratio	0.69			0.80	0.80	0.07	0.07
v/c Ratio	0.45			0.30	0.28	0.80	0.59
Control Delay	6.1			3.5	2.2	84.5	19.2
Queue Delay	0.0			0.0	0.0	0.0	0.0
Total Delay	6.1			3.5	2.2	84.5	19.2
LOS	A			A	A	F	B
Approach Delay	6.1				2.4	44.6	
Approach LOS	A				A	D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 8.5		Intersection LOS: A	
Intersection Capacity Utilization 51.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 202: Waco Street & FM 1960

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	1050	124	756	84	132
v/c Ratio	0.45	0.30	0.28	0.80	0.59
Control Delay	6.1	3.5	2.2	84.5	19.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	6.1	3.5	2.2	84.5	19.2
Queue Length 50th (ft)	101	8	32	39	0
Queue Length 95th (ft)	131	16	42	#110	#52
Internal Link Dist (ft)	1894		96	2000	
Turn Bay Length (ft)		125			225
Base Capacity (vph)	2310	412	2699	105	222
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.45	0.30	0.28	0.80	0.59

Intersection Summary

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

Movement	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	812	102	1	107	658	73	115
Future Volume (vph)	812	102	1	107	658	73	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0			5.0	5.0	5.0	5.0
Lane Util. Factor	0.95			1.00	0.95	1.00	1.00
Frt	0.98			1.00	1.00	1.00	0.85
Flt Protected	1.00			0.95	1.00	0.95	1.00
Satd. Flow (prot)	3317			1736	3374	1583	1482
Flt Permitted	1.00			0.22	1.00	0.95	1.00
Satd. Flow (perm)	3317			404	3374	1583	1482
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	933	117	1	123	756	84	132
RTOR Reduction (vph)	12	0	0	0	0	0	123
Lane Group Flow (vph)	1038	0	0	124	756	84	9
Heavy Vehicles (%)	7%	7%	0%	4%	7%	14%	9%
Turn Type	NA		custom	pm+pt	NA	Prot	Perm
Protected Phases	2			1	6	8	
Permitted Phases			1	6			8
Actuated Green, G (s)	51.0			60.0	60.0	5.0	5.0
Effective Green, g (s)	51.0			60.0	60.0	5.0	5.0
Actuated g/C Ratio	0.68			0.80	0.80	0.07	0.07
Clearance Time (s)	5.0			5.0	5.0	5.0	5.0
Vehicle Extension (s)	2.0			2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	2255			394	2699	105	98
v/s Ratio Prot	c0.31			0.02	c0.22	c0.05	
v/s Ratio Perm				0.24			0.01
v/c Ratio	0.46			0.31	0.28	0.80	0.09
Uniform Delay, d1	5.6			2.6	1.9	34.5	32.9
Progression Factor	1.00			1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7			0.2	0.3	32.3	0.1
Delay (s)	6.3			2.8	2.2	66.8	33.0
Level of Service	A			A	A	E	C
Approach Delay (s)	6.3				2.3	46.2	
Approach LOS	A				A	D	

Intersection Summary			
HCM 2000 Control Delay	8.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	51.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (veh/h)	812	102	1	107	658	73	115
Future Volume (veh/h)	812	102	1	107	658	73	115
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach	No				No	No	
Adj Sat Flow, veh/h/ln	1796	1796		1841	1796	1693	1767
Adj Flow Rate, veh/h	933	117		123	756	84	132
Peak Hour Factor	0.87	0.87		0.87	0.87	0.87	0.87
Percent Heavy Veh, %	7	7		4	7	14	9
Cap, veh/h	2034	255		488	2730	107	100
Arrive On Green	0.67	0.67		0.07	0.80	0.07	0.07
Sat Flow, veh/h	3141	383		1753	3503	1612	1497
Grp Volume(v), veh/h	522	528		123	756	84	132
Grp Sat Flow(s),veh/h/ln	1706	1727		1753	1706	1612	1497
Q Serve(g_s), s	11.0	11.0		1.4	4.3	3.8	5.0
Cycle Q Clear(g_c), s	11.0	11.0		1.4	4.3	3.8	5.0
Prop In Lane		0.22		1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1138	1152		488	2730	107	100
V/C Ratio(X)	0.46	0.46		0.25	0.28	0.78	1.32
Avail Cap(c_a), veh/h	1138	1152		488	2730	107	100
HCM Platoon Ratio	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.0	6.0		3.8	1.9	34.5	35.0
Incr Delay (d2), s/veh	1.3	1.3		0.1	0.3	27.9	199.1
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	3.0		0.2	0.4	2.3	7.3
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	7.3	7.3		3.9	2.2	62.4	234.1
LnGrp LOS	A	A		A	A	E	F
Approach Vol, veh/h	1050				879	216	
Approach Delay, s/veh	7.3				2.4	167.3	
Approach LOS	A				A	F	

Timer - Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	10.0	55.0				65.0		10.0
Change Period (Y+Rc), s	5.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	5.0	50.0				60.0		5.0
Max Q Clear Time (g_c+I1), s	3.4	13.0				6.3		7.0
Green Ext Time (p_c), s	0.0	4.2				3.3		0.0

Intersection Summary	
HCM 6th Ctrl Delay	21.4
HCM 6th LOS	C

Notes

User approved ignoring U-Turning movement.

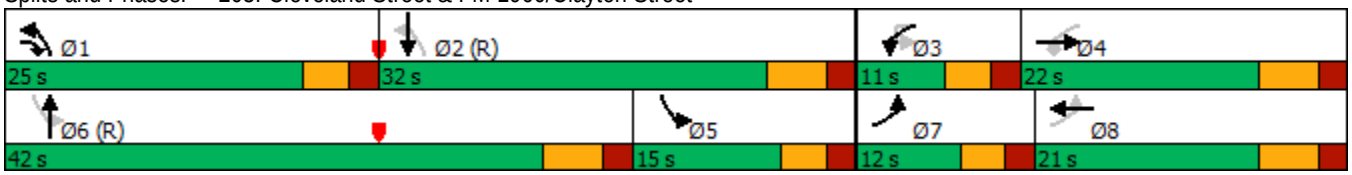
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	167	154	612	1	55	242	52	387	343	60	33	729
Future Volume (vph)	167	154	612	1	55	242	52	387	343	60	33	729
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	600		600		0		0	225		0	100	
Storage Lanes	1		1		1		0	1		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95
Frt		0.900	0.850			0.973			0.978			0.980
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1626	2936	1374	0	1404	1814	0	1612	3106	0	1805	3329
Flt Permitted	0.250				0.284			0.160			0.479	
Satd. Flow (perm)	428	2936	1374	0	420	1814	0	271	3106	0	910	3329
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		333	170			10			26			19
Link Speed (mph)		35				35			55			45
Link Distance (ft)		1871				1513			495			3038
Travel Time (s)		36.4				29.5			6.1			46.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	11%	4%	7%	0%	29%	1%	6%	12%	11%	29%	0%	6%
Adj. Flow (vph)	182	167	665	1	60	263	57	421	373	65	36	792
Shared Lane Traffic (%)			50%									
Lane Group Flow (vph)	182	500	332	0	61	320	0	421	438	0	36	914
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	2	1	1	1	2		1	2		1	2
Detector Template	Left	Thru	Right	Left	Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	100	20	20	20	100		20	100		20	100
Trailing Detector (ft)	0	0	0	0	0	0		0	0		0	0
Detector 1 Position(ft)	0	0	0	0	0	0		0	0		0	0
Detector 1 Size(ft)	20	6	20	20	20	6		20	6		20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94				94			94			94
Detector 2 Size(ft)		6				6			6			6
Detector 2 Type		Cl+Ex				Cl+Ex			Cl+Ex			Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0				0.0			0.0			0.0
Turn Type	D.P+P	NA	pm+ov	custom	D.P+P	NA		D.P+P	NA		D.P+P	NA
Protected Phases	7	4	1		3	8		1	6		5	2

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	112
Future Volume (vph)	112
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.95
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.92
Heavy Vehicles (%)	8%
Adj. Flow (vph)	122
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Permitted Phases	8		4	3	4			2			6	
Detector Phase	7	4	1	3	3	8		1	6		5	2
Switch Phase												
Minimum Initial (s)	6.0	10.0	10.0	6.0	6.0	10.0		10.0	10.0		10.0	10.0
Minimum Split (s)	11.0	16.0	15.0	11.0	11.0	16.0		15.0	16.0		15.0	16.0
Total Split (s)	12.0	22.0	25.0	11.0	11.0	21.0		25.0	42.0		15.0	32.0
Total Split (%)	13.3%	24.4%	27.8%	12.2%	12.2%	23.3%		27.8%	46.7%		16.7%	35.6%
Maximum Green (s)	7.0	16.0	20.0	6.0	6.0	15.0		20.0	36.0		10.0	26.0
Yellow Time (s)	3.0	4.0	3.0	3.0	3.0	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		2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	6.0	5.0		5.0	6.0		5.0	6.0		5.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lead	Lag		Lead	Lead		Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes
Vehicle Extension (s)	3.0	4.0	4.0	3.0	3.0	5.0		4.0	4.0		4.0	4.0
Recall Mode	None	None	None	None	None	None		None	C-Max		None	C-Max
Act Effct Green (s)	23.0	18.2	44.2		24.0	15.0		47.0	42.0		49.0	26.0
Actuated g/C Ratio	0.26	0.20	0.49		0.27	0.17		0.52	0.47		0.54	0.29
v/c Ratio	0.90	0.58	0.44		0.34	1.03		0.96	0.30		0.06	0.94
Control Delay	71.5	14.3	9.5		28.3	97.6		58.6	16.1		8.9	48.8
Queue Delay	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay	71.5	14.3	9.5		28.3	97.6		58.6	16.1		8.9	48.8
LOS	E	B	A		C	F		E	B		A	D
Approach Delay		23.0				86.5			36.9			47.3
Approach LOS		C				F			D			D

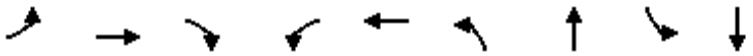
Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:NBSB, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.03			
Intersection Signal Delay: 41.5		Intersection LOS: D	
Intersection Capacity Utilization 88.6%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 203: Cleveland Street & FM 1960/Clayton Street



Lane Group	SBR
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	182	500	332	61	320	421	438	36	914
v/c Ratio	0.90	0.58	0.44	0.34	1.03	0.96	0.30	0.06	0.94
Control Delay	71.5	14.3	9.5	28.3	97.6	58.6	16.1	8.9	48.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.5	14.3	9.5	28.3	97.6	58.6	16.1	8.9	48.8
Queue Length 50th (ft)	80	46	59	25	~192	185	83	8	261
Queue Length 95th (ft)	#178	100	134	55	#357	#373	121	21	#386
Internal Link Dist (ft)		1791			1433		415		2958
Turn Bay Length (ft)	600		600			225		100	
Base Capacity (vph)	202	859	761	177	310	439	1463	594	975
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	0.58	0.44	0.34	1.03	0.96	0.30	0.06	0.94

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	167	154	612	1	55	242	52	387	343	60	33	729
Future Volume (vph)	167	154	612	1	55	242	52	387	343	60	33	729
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0	5.0		5.0	6.0		5.0	6.0		5.0	6.0
Lane Util. Factor	1.00	0.91	0.91		1.00	1.00		1.00	0.95		1.00	0.95
Frt	1.00	0.90	0.85		1.00	0.97		1.00	0.98		1.00	0.98
Flt Protected	0.95	1.00	1.00		0.95	1.00		0.95	1.00		0.95	1.00
Satd. Flow (prot)	1626	2936	1374		1404	1815		1612	3105		1805	3329
Flt Permitted	0.25	1.00	1.00		0.28	1.00		0.16	1.00		0.48	1.00
Satd. Flow (perm)	428	2936	1374		420	1815		271	3105		910	3329
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	182	167	665	1	60	263	57	421	373	65	36	792
RTOR Reduction (vph)	0	266	98	0	0	8	0	0	15	0	0	14
Lane Group Flow (vph)	182	234	234	0	61	312	0	421	423	0	36	900
Heavy Vehicles (%)	11%	4%	7%	0%	29%	1%	6%	12%	11%	29%	0%	6%
Turn Type	D.P+P	NA	pm+ov	custom	D.P+P	NA		D.P+P	NA		D.P+P	NA
Protected Phases	7	4	1		3	8		1	6		5	2
Permitted Phases	8		4	3	4			2			6	
Actuated Green, G (s)	23.0	18.2	38.2		23.0	16.0		45.0	39.0		45.0	25.0
Effective Green, g (s)	23.0	18.2	38.2		23.0	16.0		45.0	39.0		45.0	25.0
Actuated g/C Ratio	0.26	0.20	0.42		0.26	0.18		0.50	0.43		0.50	0.28
Clearance Time (s)	5.0	6.0	5.0		5.0	6.0		5.0	6.0		5.0	6.0
Vehicle Extension (s)	3.0	4.0	4.0		3.0	5.0		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)	202	593	583		159	322		433	1345		514	924
v/s Ratio Prot	c0.07	0.08	0.09		0.02	c0.17		c0.22	0.14		0.00	c0.27
v/s Ratio Perm	0.16		0.08		0.08			0.27			0.03	
v/c Ratio	0.90	0.40	0.40		0.38	0.97		0.97	0.31		0.07	0.97
Uniform Delay, d1	30.3	31.1	18.0		26.4	36.7		24.2	16.7		12.5	32.2
Progression Factor	1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2	37.1	0.6	0.6		1.5	41.7		36.0	0.6		0.1	24.0
Delay (s)	67.4	31.7	18.6		27.9	78.5		60.2	17.3		12.6	56.2
Level of Service	E	C	B		C	E		E	B		B	E
Approach Delay (s)		33.8				70.4			38.3			54.5
Approach LOS		C				E			D			D

Intersection Summary			
HCM 2000 Control Delay	45.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	88.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	112
Future Volume (vph)	112
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	122
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	8%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	167	154	612	1	55	242	52	387	343	60	33	729
Future Volume (veh/h)	167	154	612	1	55	242	52	387	343	60	33	729
Initial Q (Qb), veh	0	0	0		0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00		1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No				No			No			No
Adj Sat Flow, veh/h/ln	1737	1841	1796		1470	1885	1811	1722	1737	1470	1900	1811
Adj Flow Rate, veh/h	182	167	665		60	263	57	421	373	65	36	792
Peak Hour Factor	0.92	0.92	0.92		0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	11	4	7		29	1	6	12	11	29	0	6
Cap, veh/h	209	355	1227		211	250	54	452	1125	194	558	899
Arrive On Green	0.08	0.19	0.19		0.05	0.17	0.17	0.21	0.40	0.40	0.10	0.30
Sat Flow, veh/h	1654	1841	3045		1400	1501	325	1640	2814	486	1810	2988
Grp Volume(v), veh/h	182	167	665		60	0	320	421	217	221	36	456
Grp Sat Flow(s),veh/h/ln	1654	1841	1522		1400	0	1827	1640	1650	1650	1810	1721
Q Serve(g_s), s	7.0	7.2	15.0		3.0	0.0	15.0	16.6	8.2	8.3	0.0	22.7
Cycle Q Clear(g_c), s	7.0	7.2	15.0		3.0	0.0	15.0	16.6	8.2	8.3	0.0	22.7
Prop In Lane	1.00		1.00		1.00		0.18	1.00		0.29	1.00	
Lane Grp Cap(c), veh/h	209	355	1227		211	0	304	452	660	660	558	517
V/C Ratio(X)	0.87	0.47	0.54		0.28	0.00	1.05	0.93	0.33	0.33	0.06	0.88
Avail Cap(c_a), veh/h	209	355	1227		231	0	304	472	660	660	578	517
HCM Platoon Ratio	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00		0.86	0.00	0.86	1.00	1.00	1.00	0.76	0.76
Uniform Delay (d), s/veh	31.9	32.3	20.5		27.2	0.0	37.5	21.1	18.7	18.7	16.4	29.9
Incr Delay (d2), s/veh	30.7	1.4	0.6		0.6	0.0	61.9	25.2	1.3	1.4	0.1	15.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	3.3	5.1		1.0	0.0	11.7	8.5	3.0	3.0	0.4	10.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.6	33.6	21.2		27.8	0.0	99.4	46.3	20.0	20.1	16.5	45.2
LnGrp LOS	E	C	C		C	A	F	D	B	C	B	D
Approach Vol, veh/h		1014				380			859			950
Approach Delay, s/veh		30.7				88.1			32.9			44.1
Approach LOS		C				F			C			D

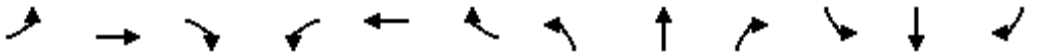
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.9	33.1	9.7	23.3	15.0	42.0	12.0	21.0
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	6.0	* 6	5.0	6.0
Max Green Setting (Gmax), s	20.0	26.0	6.0	16.0	10.0	* 36	7.0	15.0
Max Q Clear Time (g_c+I1), s	18.6	24.7	5.0	17.0	2.0	10.3	9.0	17.0
Green Ext Time (p_c), s	0.3	0.8	0.0	0.0	0.0	3.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	42.1
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	112
Future Volume (veh/h)	112
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1781
Adj Flow Rate, veh/h	122
Peak Hour Factor	0.92
Percent Heavy Veh, %	8
Cap, veh/h	138
Arrive On Green	0.30
Sat Flow, veh/h	460
Grp Volume(v), veh/h	458
Grp Sat Flow(s),veh/h/ln	1728
Q Serve(g_s), s	22.7
Cycle Q Clear(g_c), s	22.7
Prop In Lane	0.27
Lane Grp Cap(c), veh/h	520
V/C Ratio(X)	0.88
Avail Cap(c_a), veh/h	520
HCM Platoon Ratio	1.00
Upstream Filter(I)	0.76
Uniform Delay (d), s/veh	29.9
Incr Delay (d2), s/veh	15.2
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	10.9
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	45.1
LnGrp LOS	D
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

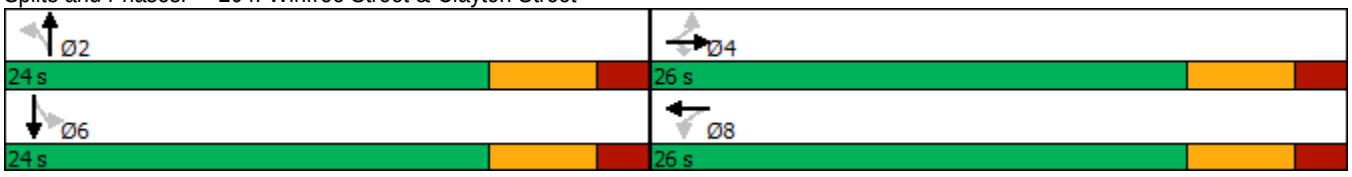


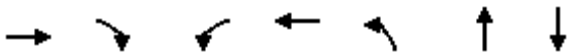
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	108	36	272	320	13	117	181	52	4	233	40
Future Volume (vph)	16	108	36	272	320	13	117	181	52	4	233	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.994			0.966			0.981	
Flt Protected		0.994		0.950			0.950				0.999	
Satd. Flow (prot)	0	1670	1553	1787	1863	0	1770	1795	0	0	1836	0
Flt Permitted		0.922		0.666			0.612				0.992	
Satd. Flow (perm)	0	1549	1553	1253	1863	0	1140	1795	0	0	1823	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			65		5			32			19	
Link Speed (mph)		45			30			30			30	
Link Distance (ft)		1513			1036			419			1496	
Travel Time (s)		22.9			23.5			9.5			34.0	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	0%	15%	4%	1%	1%	11%	2%	2%	3%	0%	1%	4%
Adj. Flow (vph)	18	124	41	313	368	15	134	208	60	5	268	46
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	142	41	313	383	0	134	268	0	0	319	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		2	2		6	6	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	26.0	26.0	26.0	26.0	26.0		24.0	24.0		24.0	24.0	
Total Split (%)	52.0%	52.0%	52.0%	52.0%	52.0%		48.0%	48.0%		48.0%	48.0%	
Maximum Green (s)	20.0	20.0	20.0	20.0	20.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)		6.0	6.0	6.0	6.0		6.0	6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		Min	Min		Min	Min	
Act Effct Green (s)		15.0	15.0	15.0	15.0		11.9	11.9			11.9	
Actuated g/C Ratio		0.38	0.38	0.38	0.38		0.30	0.30			0.30	
v/c Ratio		0.24	0.07	0.66	0.54		0.39	0.48			0.57	
Control Delay		10.2	2.2	18.6	13.1		15.7	13.7			16.0	
Queue Delay		0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Delay		10.2	2.2	18.6	13.1		15.7	13.7			16.0	
LOS		B	A	B	B		B	B			B	
Approach Delay		8.4			15.6			14.3			16.0	
Approach LOS		A			B			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 39.5			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 14.5		Intersection LOS: B	
Intersection Capacity Utilization 64.3%		ICU Level of Service C	
Analysis Period (min) 15			

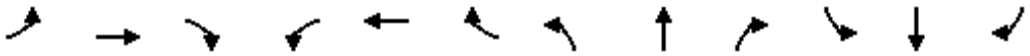
Splits and Phases: 204: Winfree Street & Clayton Street





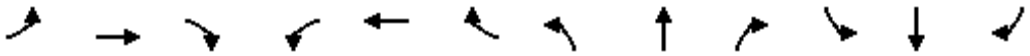
Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	142	41	313	383	134	268	319
v/c Ratio	0.24	0.07	0.66	0.54	0.39	0.48	0.57
Control Delay	10.2	2.2	18.6	13.1	15.7	13.7	16.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.2	2.2	18.6	13.1	15.7	13.7	16.0
Queue Length 50th (ft)	20	0	52	60	24	42	56
Queue Length 95th (ft)	54	8	133	136	60	93	117
Internal Link Dist (ft)	1433			956		339	1416
Turn Bay Length (ft)							
Base Capacity (vph)	825	858	668	995	546	877	884
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.05	0.47	0.38	0.25	0.31	0.36

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	108	36	272	320	13	117	181	52	4	233	40
Future Volume (vph)	16	108	36	272	320	13	117	181	52	4	233	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0	6.0	6.0		6.0	6.0			6.0	
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Frt		1.00	0.85	1.00	0.99		1.00	0.97			0.98	
Flt Protected		0.99	1.00	0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)		1669	1553	1787	1863		1770	1796			1836	
Flt Permitted		0.92	1.00	0.67	1.00		0.61	1.00			0.99	
Satd. Flow (perm)		1549	1553	1254	1863		1140	1796			1822	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	18	124	41	313	368	15	134	208	60	5	268	46
RTOR Reduction (vph)	0	0	25	0	3	0	0	22	0	0	13	0
Lane Group Flow (vph)	0	142	16	313	380	0	134	246	0	0	306	0
Heavy Vehicles (%)	0%	15%	4%	1%	1%	11%	2%	2%	3%	0%	1%	4%
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		14.9	14.9	14.9	14.9		11.9	11.9			11.9	
Effective Green, g (s)		14.9	14.9	14.9	14.9		11.9	11.9			11.9	
Actuated g/C Ratio		0.38	0.38	0.38	0.38		0.31	0.31			0.31	
Clearance Time (s)		6.0	6.0	6.0	6.0		6.0	6.0			6.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		594	596	481	715		349	550			558	
v/s Ratio Prot					0.20			0.14				
v/s Ratio Perm		0.09	0.01	c0.25			0.12				c0.17	
v/c Ratio		0.24	0.03	0.65	0.53		0.38	0.45			0.55	
Uniform Delay, d1		8.1	7.4	9.8	9.2		10.6	10.8			11.2	
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2		0.2	0.0	3.1	0.8		0.7	0.6			1.1	
Delay (s)		8.3	7.5	13.0	10.0		11.3	11.4			12.3	
Level of Service		A	A	B	B		B	B			B	
Approach Delay (s)		8.1			11.3			11.3			12.3	
Approach LOS		A			B			B			B	

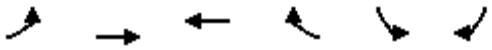
Intersection Summary			
HCM 2000 Control Delay	11.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	38.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	64.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	108	36	272	320	13	117	181	52	4	233	40
Future Volume (veh/h)	16	108	36	272	320	13	117	181	52	4	233	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1678	1841	1885	1885	1737	1870	1870	1856	1900	1885	1841
Adj Flow Rate, veh/h	18	124	41	313	368	15	134	208	60	5	268	46
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	15	4	1	1	11	2	2	3	0	1	4
Cap, veh/h	147	618	628	634	724	30	503	353	102	107	394	67
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	76	1535	1560	1230	1799	73	1066	1395	403	10	1557	264
Grp Volume(v), veh/h	142	0	41	313	0	383	134	0	268	319	0	0
Grp Sat Flow(s),veh/h/ln	1611	0	1560	1230	0	1872	1066	0	1798	1831	0	0
Q Serve(g_s), s	0.0	0.0	0.6	7.8	0.0	5.4	0.0	0.0	4.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.9	0.0	0.6	9.7	0.0	5.4	3.2	0.0	4.6	5.5	0.0	0.0
Prop In Lane	0.13		1.00	1.00		0.04	1.00		0.22	0.02		0.14
Lane Grp Cap(c), veh/h	765	0	628	634	0	753	503	0	455	569	0	0
V/C Ratio(X)	0.19	0.00	0.07	0.49	0.00	0.51	0.27	0.00	0.59	0.56	0.00	0.00
Avail Cap(c_a), veh/h	1024	0	895	844	0	1074	783	0	928	1047	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.8	0.0	6.4	10.0	0.0	7.8	10.9	0.0	11.4	11.8	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.6	0.0	0.5	0.3	0.0	1.2	0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.1	1.5	0.0	1.5	0.7	0.0	1.5	1.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.9	0.0	6.4	10.6	0.0	8.4	11.2	0.0	12.6	12.6	0.0	0.0
LnGrp LOS	A	A	A	B	A	A	B	A	B	B	A	A
Approach Vol, veh/h		183			696			402			319	
Approach Delay, s/veh		6.8			9.3			12.1			12.6	
Approach LOS		A			A			B			B	

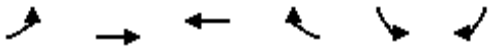
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		14.8		20.0		14.8		20.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		18.0		20.0		18.0		20.0				
Max Q Clear Time (g_c+I1), s		6.6		3.9		7.5		11.7				
Green Ext Time (p_c), s		1.7		0.7		1.4		2.3				

Intersection Summary												
HCM 6th Ctrl Delay			10.4									
HCM 6th LOS			B									



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	1	177	600	7	0	1
Future Volume (vph)	1	177	600	7	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.999		0.865	
Flt Protected						
Satd. Flow (prot)	0	1776	1880	0	1644	0
Flt Permitted						
Satd. Flow (perm)	0	1776	1880	0	1644	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		1036	1081		1292	
Travel Time (s)		15.7	16.4		29.4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	7%	1%	0%	0%	0%
Adj. Flow (vph)	1	188	638	7	0	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	189	645	0	1	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 42.0%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	1	177	600	7	0	1
Future Volume (Veh/h)	1	177	600	7	0	1
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	1	188	638	7	0	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1036				
pX, platoon unblocked						
vC, conflicting volume	645				832	642
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	645				832	642
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	950				342	478

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	189	645	1
Volume Left	1	0	0
Volume Right	0	7	1
cSH	950	1700	478
Volume to Capacity	0.00	0.38	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.1	0.0	12.5
Lane LOS	A		B
Approach Delay (s)	0.1	0.0	12.5
Approach LOS			B

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	42.0%	ICU Level of Service	A
Analysis Period (min)	15		

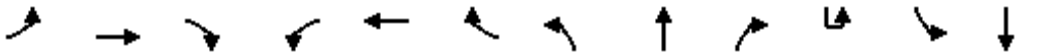
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	177	600	7	0	1
Future Vol, veh/h	1	177	600	7	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	7	1	0	0	0
Mvmt Flow	1	188	638	7	0	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	645	0	-	0	832	642
Stage 1	-	-	-	-	642	-
Stage 2	-	-	-	-	190	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	950	-	-	-	342	478
Stage 1	-	-	-	-	528	-
Stage 2	-	-	-	-	847	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	950	-	-	-	342	478
Mov Cap-2 Maneuver	-	-	-	-	342	-
Stage 1	-	-	-	-	527	-
Stage 2	-	-	-	-	847	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	950	-	-	-	478
HCM Lane V/C Ratio	0.001	-	-	-	0.002
HCM Control Delay (s)	8.8	0	-	-	12.5
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	89	9	39	19	24	33	9	654	16	1	14	982
Future Volume (vph)	89	9	39	19	24	33	9	654	16	1	14	982
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.961			0.941			0.996				0.993
Flt Protected		0.969			0.988			0.999				0.999
Satd. Flow (prot)	0	1769	0	0	1645	0	0	3335	0	0	0	3330
Flt Permitted		0.789			0.894			0.934				0.939
Satd. Flow (perm)	0	1441	0	0	1488	0	0	3118	0	0	0	3130
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)		28			40			6				11
Link Speed (mph)		30			30			45				55
Link Distance (ft)		594			763			3038				1923
Travel Time (s)		13.5			17.3			46.0				23.8
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	0%	0%	0%	0%	18%	4%	0%	8%	0%	0%	0%	8%
Adj. Flow (vph)	109	11	48	23	29	40	11	798	20	1	17	1198
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	168	0	0	92	0	0	829	0	0	0	1272
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Number of Detectors	1	2		1	2		1	2		1	1	2
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Left	Thru
Leading Detector (ft)	20	100		20	100		20	100		20	20	100
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	Perm	NA
Protected Phases		4			8			6				2
Permitted Phases	4			8			6			2	2	
Detector Phase	4	4		8	8		6	6		2	2	2
Switch Phase												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	46
Future Volume (vph)	46
Ideal Flow (vphpl)	1900
Lane Util. Factor	0.95
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.82
Heavy Vehicles (%)	0%
Adj. Flow (vph)	56
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	

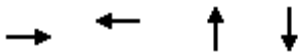
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Minimum Initial (s)	5.0	5.0		5.0	5.0		10.0	10.0		10.0	10.0	10.0
Minimum Split (s)	11.0	11.0		24.0	24.0		16.0	16.0		16.0	16.0	16.0
Total Split (s)	24.0	24.0		24.0	24.0		46.0	46.0		46.0	46.0	46.0
Total Split (%)	34.3%	34.3%		34.3%	34.3%		65.7%	65.7%		65.7%	65.7%	65.7%
Maximum Green (s)	18.0	18.0		18.0	18.0		40.0	40.0		40.0	40.0	40.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)		0.0			0.0			0.0				0.0
Total Lost Time (s)		6.0			6.0			6.0				6.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		4.0	4.0		4.0	4.0	4.0
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	C-Max
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				13.0	13.0							
Pedestrian Calls (#/hr)				0	0							
Act Effct Green (s)		11.6			11.6			46.4				46.4
Actuated g/C Ratio		0.17			0.17			0.66				0.66
v/c Ratio		0.64			0.33			0.40				0.61
Control Delay		33.0			18.1			6.8				9.1
Queue Delay		0.0			0.0			0.0				0.0
Total Delay		33.0			18.1			6.8				9.1
LOS		C			B			A				A
Approach Delay		33.0			18.1			6.8				9.1
Approach LOS		C			B			A				A

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 10.4		Intersection LOS: B	
Intersection Capacity Utilization 63.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 206: Cleveland Street & Linney Street

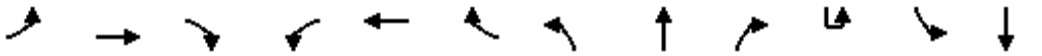
Lane Group	SBR
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	168	92	829	1272
v/c Ratio	0.64	0.33	0.40	0.61
Control Delay	33.0	18.1	6.8	9.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	33.0	18.1	6.8	9.1
Queue Length 50th (ft)	56	20	72	136
Queue Length 95th (ft)	91	45	118	213
Internal Link Dist (ft)	514	683	2958	1843
Turn Bay Length (ft)				
Base Capacity (vph)	391	412	2068	2078
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.43	0.22	0.40	0.61

Intersection Summary

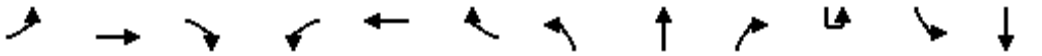


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	89	9	39	19	24	33	9	654	16	1	14	982
Future Volume (vph)	89	9	39	19	24	33	9	654	16	1	14	982
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0			6.0				6.0
Lane Util. Factor		1.00			1.00			0.95				0.95
Frt		0.96			0.94			1.00				0.99
Flt Protected		0.97			0.99			1.00				1.00
Satd. Flow (prot)		1769			1644			3338				3333
Flt Permitted		0.79			0.89			0.93				0.94
Satd. Flow (perm)		1442			1489			3118				3130
Peak-hour factor, PHF	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	109	11	48	23	29	40	11	798	20	1	17	1198
RTOR Reduction (vph)	0	23	0	0	33	0	0	2	0	0	0	4
Lane Group Flow (vph)	0	145	0	0	59	0	0	827	0	0	0	1268
Heavy Vehicles (%)	0%	0%	0%	0%	18%	4%	0%	8%	0%	0%	0%	8%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	Perm	NA
Protected Phases		4			8			6				2
Permitted Phases	4			8			6			2	2	
Actuated Green, G (s)		11.6			11.6			46.4				46.4
Effective Green, g (s)		11.6			11.6			46.4				46.4
Actuated g/C Ratio		0.17			0.17			0.66				0.66
Clearance Time (s)		6.0			6.0			6.0				6.0
Vehicle Extension (s)		2.0			2.0			4.0				4.0
Lane Grp Cap (vph)		238			246			2066				2074
v/s Ratio Prot												
v/s Ratio Perm		c0.10			0.04			0.27				c0.41
v/c Ratio		0.61			0.24			0.40				0.61
Uniform Delay, d1		27.1			25.4			5.4				6.7
Progression Factor		1.00			1.00			1.00				1.00
Incremental Delay, d2		3.0			0.2			0.6				1.4
Delay (s)		30.1			25.5			6.0				8.0
Level of Service		C			C			A				A
Approach Delay (s)		30.1			25.5			6.0				8.0
Approach LOS		C			C			A				A

Intersection Summary			
HCM 2000 Control Delay	9.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	46
Future Volume (vph)	46
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.82
Adj. Flow (vph)	56
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Heavy Vehicles (%)	0%
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	89	9	39	19	24	33	9	654	16	1	14	982
Future Volume (veh/h)	89	9	39	19	24	33	9	654	16	1	14	982
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00		1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach		No			No			No				No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1633	1841	1900	1781	1900		1900	1781
Adj Flow Rate, veh/h	109	11	48	23	29	40	11	798	20		17	1198
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82		0.82	0.82
Percent Heavy Veh, %	0	0	0	0	18	4	0	8	0		0	8
Cap, veh/h	216	19	60	95	81	86	61	2272	56		64	2222
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.70	0.70	0.70		0.70	0.70
Sat Flow, veh/h	1009	144	461	237	621	660	12	3255	81		16	3183
Grp Volume(v), veh/h	168	0	0	92	0	0	432	0	397		666	0
Grp Sat Flow(s),veh/h/ln	1614	0	0	1519	0	0	1742	0	1607		1753	0
Q Serve(g_s), s	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.9		0.0	0.0
Cycle Q Clear(g_c), s	6.8	0.0	0.0	3.9	0.0	0.0	6.8	0.0	6.9		12.6	0.0
Prop In Lane	0.65		0.29	0.25		0.43	0.03		0.05		0.03	
Lane Grp Cap(c), veh/h	295	0	0	262	0	0	1269	0	1122		1276	0
V/C Ratio(X)	0.57	0.00	0.00	0.35	0.00	0.00	0.34	0.00	0.35		0.52	0.00
Avail Cap(c_a), veh/h	479	0	0	438	0	0	1269	0	1122		1276	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.88	0.00	0.88		1.00	0.00
Uniform Delay (d), s/veh	29.2	0.0	0.0	28.2	0.0	0.0	4.2	0.0	4.2		5.1	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.3	0.0	0.0	0.6	0.0	0.8		1.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	0.0	1.4	0.0	0.0	1.5	0.0	1.5		2.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.9	0.0	0.0	28.5	0.0	0.0	4.9	0.0	5.0		6.6	0.0
LnGrp LOS	C	A	A	C	A	A	A	A	A		A	A
Approach Vol, veh/h		168			92			829				1271
Approach Delay, s/veh		29.9			28.5			4.9				6.8
Approach LOS		C			C			A				A

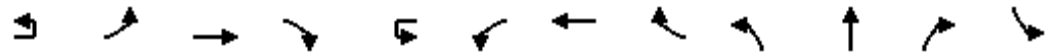
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		54.9		15.1		54.9		15.1				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		40.0		18.0		40.0		18.0				
Max Q Clear Time (g_c+I1), s		14.9		8.8		8.9		5.9				
Green Ext Time (p_c), s		12.0		0.4		8.0		0.2				

Intersection Summary												
HCM 6th Ctrl Delay			8.6									
HCM 6th LOS			A									

Notes

User approved ignoring U-Turning movement.

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	46
Future Volume (veh/h)	46
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1900
Adj Flow Rate, veh/h	56
Peak Hour Factor	0.82
Percent Heavy Veh, %	0
Cap, veh/h	103
Arrive On Green	0.70
Sat Flow, veh/h	148
Grp Volume(v), veh/h	605
Grp Sat Flow(s),veh/h/ln	1595
Q Serve(g_s), s	12.9
Cycle Q Clear(g_c), s	12.9
Prop In Lane	0.09
Lane Grp Cap(c), veh/h	1113
V/C Ratio(X)	0.54
Avail Cap(c_a), veh/h	1113
HCM Platoon Ratio	1.00
Upstream Filter(I)	1.00
Uniform Delay (d), s/veh	5.1
Incr Delay (d2), s/veh	1.9
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	2.4
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	7.0
LnGrp LOS	A
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	



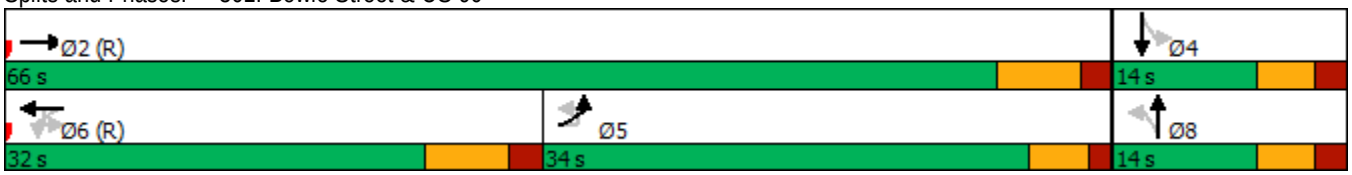
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	86	1045	21	1	5	955	39	12	3	0	34
Future Volume (vph)	1	86	1045	21	1	5	955	39	12	3	0	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		200		0		200		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.997				0.994					
Flt Protected		0.950				0.950				0.961		
Satd. Flow (prot)	0	1753	4752	0	0	1547	4647	0	0	1669	0	0
Flt Permitted		0.259				0.239				0.626		
Satd. Flow (perm)	0	478	4752	0	0	389	4647	0	0	1087	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			10				8					
Link Speed (mph)			55				50			30		
Link Distance (ft)			1682				1949			1310		
Travel Time (s)			20.9				26.6			29.8		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	3%	9%	0%	100%	0%	11%	10%	0%	50%	0%	0%
Adj. Flow (vph)	1	91	1112	22	1	5	1016	41	13	3	0	36
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	92	1134	0	0	6	1057	0	0	16	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane			Yes				Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	2		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	20	100		20	20	100		20	100		20
Trailing Detector (ft)	0	0	0		0	0	0		0	0		0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0		0
Detector 1 Size(ft)	20	20	6		20	20	6		20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	Prot	NA		Perm	Perm	NA		Perm	NA		Perm
Protected Phases		5	2				6			8		

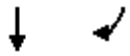
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	93
Future Volume (vph)	0	93
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.901	
Flt Protected	0.987	
Satd. Flow (prot)	1690	0
Flt Permitted	0.904	
Satd. Flow (perm)	1548	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	150	
Link Speed (mph)	30	
Link Distance (ft)	2374	
Travel Time (s)	54.0	
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	99
Shared Lane Traffic (%)		
Lane Group Flow (vph)	135	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	4	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Permitted Phases	5				6	6			8			4
Detector Phase	5	5	2		6	6	6		8	8		4
Switch Phase												
Minimum Initial (s)	8.0	8.0	10.0		10.0	10.0	10.0		8.0	8.0		8.0
Minimum Split (s)	13.0	13.0	17.0		22.5	22.5	22.5		13.5	13.5		13.5
Total Split (s)	34.0	34.0	66.0		32.0	32.0	32.0		14.0	14.0		14.0
Total Split (%)	42.5%	42.5%	82.5%		40.0%	40.0%	40.0%		17.5%	17.5%		17.5%
Maximum Green (s)	29.0	29.0	59.0		25.0	25.0	25.0		8.5	8.5		8.5
Yellow Time (s)	3.5	3.5	5.0		5.0	5.0	5.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	2.0		2.0	2.0	2.0		2.0	2.0		2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	7.0			7.0	7.0			5.5		
Lead/Lag	Lag	Lag			Lead	Lead	Lead					
Lead-Lag Optimize?	Yes	Yes			Yes	Yes	Yes					
Vehicle Extension (s)	5.0	5.0	5.0		5.0	5.0	5.0		5.0	5.0		5.0
Recall Mode	None	None	C-Max		C-Max	C-Max	C-Max		None	None		None
Act Effct Green (s)		25.0	59.2			32.0	32.0			8.3		
Actuated g/C Ratio		0.31	0.74			0.40	0.40			0.10		
v/c Ratio		0.62	0.32			0.04	0.57			0.14		
Control Delay		40.4	3.8			20.5	22.9			35.7		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay		40.4	3.8			20.5	22.9			35.7		
LOS		D	A			C	C			D		
Approach Delay			6.6				22.9			35.7		
Approach LOS			A				C			D		

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay: 14.1		Intersection LOS: B	
Intersection Capacity Utilization 52.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 301: Bowie Street & US 90





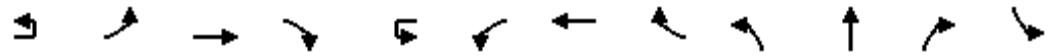
Lane Group	SBT	SBR
Permitted Phases		
Detector Phase	4	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	13.5	
Total Split (s)	14.0	
Total Split (%)	17.5%	
Maximum Green (s)	8.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	5.0	
Recall Mode	None	
Act Effct Green (s)	8.3	
Actuated g/C Ratio	0.10	
v/c Ratio	0.46	
Control Delay	10.6	
Queue Delay	0.0	
Total Delay	10.6	
LOS	B	
Approach Delay	10.6	
Approach LOS	B	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	92	1134	6	1057	16	135
v/c Ratio	0.62	0.32	0.04	0.57	0.14	0.46
Control Delay	40.4	3.8	20.5	22.9	35.7	10.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.4	3.8	20.5	22.9	35.7	10.6
Queue Length 50th (ft)	36	56	2	169	7	0
Queue Length 95th (ft)	#93	71	11	217	26	42
Internal Link Dist (ft)		1602		1869	1230	2294
Turn Bay Length (ft)	200		200			
Base Capacity (vph)	173	3519	155	1863	115	298
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	0.53	0.32	0.04	0.57	0.14	0.45

Intersection Summary

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

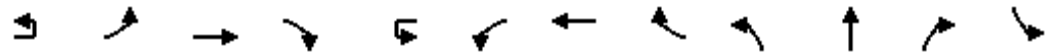


Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	1	86	1045	21	1	5	955	39	12	3	0	34
Future Volume (vph)	1	86	1045	21	1	5	955	39	12	3	0	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	7.0			7.0	7.0			5.5		
Lane Util. Factor		1.00	0.91			1.00	0.91			1.00		
Frt		1.00	1.00			1.00	0.99			1.00		
Flt Protected		0.95	1.00			0.95	1.00			0.96		
Satd. Flow (prot)		1753	4752			1547	4647			1669		
Flt Permitted		0.26	1.00			0.24	1.00			0.63		
Satd. Flow (perm)		477	4752			388	4647			1087		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	1	91	1112	22	1	5	1016	41	13	3	0	36
RTOR Reduction (vph)	0	0	3	0	0	0	5	0	0	0	0	0
Lane Group Flow (vph)	0	92	1131	0	0	6	1052	0	0	16	0	0
Heavy Vehicles (%)	0%	3%	9%	0%	100%	0%	11%	10%	0%	50%	0%	0%
Turn Type	custom	Prot	NA		Perm	Perm	NA		Perm	NA		Perm
Protected Phases		5	2				6			8		
Permitted Phases	5				6	6			8			4
Actuated Green, G (s)		23.2	59.2			31.0	31.0			8.3		
Effective Green, g (s)		23.2	59.2			31.0	31.0			8.3		
Actuated g/C Ratio		0.29	0.74			0.39	0.39			0.10		
Clearance Time (s)		5.0	7.0			7.0	7.0			5.5		
Vehicle Extension (s)		5.0	5.0			5.0	5.0			5.0		
Lane Grp Cap (vph)		138	3516			150	1800			112		
v/s Ratio Prot			0.24				c0.23					
v/s Ratio Perm		c0.19				0.02				c0.01		
v/c Ratio		0.67	0.32			0.04	0.58			0.14		
Uniform Delay, d1		25.0	3.5			15.2	19.4			32.6		
Progression Factor		1.00	1.00			1.00	1.00			1.00		
Incremental Delay, d2		15.0	0.2			0.5	1.4			1.2		
Delay (s)		40.0	3.8			15.7	20.8			33.8		
Level of Service		D	A			B	C			C		
Approach Delay (s)			6.5				20.8			33.8		
Approach LOS			A				C			C		

Intersection Summary			
HCM 2000 Control Delay	14.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	52.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	93
Future Volume (vph)	0	93
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.5	
Lane Util. Factor	1.00	
Frt	0.90	
Flt Protected	0.99	
Satd. Flow (prot)	1689	
Flt Permitted	0.90	
Satd. Flow (perm)	1547	
Peak-hour factor, PHF	0.94	0.94
Adj. Flow (vph)	0	99
RTOR Reduction (vph)	121	0
Lane Group Flow (vph)	14	0
Heavy Vehicles (%)	0%	0%
Turn Type	NA	
Protected Phases	4	
Permitted Phases		
Actuated Green, G (s)	8.3	
Effective Green, g (s)	8.3	
Actuated g/C Ratio	0.10	
Clearance Time (s)	5.5	
Vehicle Extension (s)	5.0	
Lane Grp Cap (vph)	160	
v/s Ratio Prot		
v/s Ratio Perm	0.01	
v/c Ratio	0.09	
Uniform Delay, d1	32.4	
Progression Factor	1.00	
Incremental Delay, d2	0.5	
Delay (s)	32.9	
Level of Service	C	
Approach Delay (s)	32.9	
Approach LOS	C	

Intersection Summary



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (veh/h)	1	86	1045	21	1	5	955	39	12	3	0	34
Future Volume (veh/h)	1	86	1045	21	1	5	955	39	12	3	0	34
Initial Q (Qb), veh		0	0	0		0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00	1.00		1.00	1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No				No			No		
Adj Sat Flow, veh/h/ln		1856	1767	1900		1900	1737	1752	1900	1159	1900	1900
Adj Flow Rate, veh/h		91	1112	22		5	1016	41	13	3	0	36
Peak Hour Factor		0.94	0.94	0.94		0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %		3	9	0		0	11	10	0	50	0	0
Cap, veh/h		600	3601	71		209	1461	59	147	22	0	90
Arrive On Green		0.34	0.74	0.74		0.31	0.31	0.31	0.10	0.10	0.00	0.10
Sat Flow, veh/h		1767	4868	96		504	4676	189	624	208	0	319
Grp Volume(v), veh/h		91	734	400		5	687	370	16	0	0	135
Grp Sat Flow(s),veh/h/ln		1767	1608	1749		504	1581	1703	833	0	0	1587
Q Serve(g_s), s		2.9	6.2	6.2		0.6	15.3	15.3	0.0	0.0	0.0	4.7
Cycle Q Clear(g_c), s		2.9	6.2	6.2		6.8	15.3	15.3	1.2	0.0	0.0	6.6
Prop In Lane		1.00		0.06		1.00		0.11	0.81		0.00	0.27
Lane Grp Cap(c), veh/h		600	2378	1294		209	988	532	168	0	0	222
V/C Ratio(X)		0.15	0.31	0.31		0.02	0.69	0.70	0.10	0.00	0.00	0.61
Avail Cap(c_a), veh/h		641	2378	1294		209	988	532	170	0	0	226
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00		0.91	0.91	0.91	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh		18.4	3.5	3.5		23.6	24.2	24.2	32.6	0.0	0.0	35.0
Incr Delay (d2), s/veh		0.2	0.3	0.6		0.2	3.7	6.7	0.5	0.0	0.0	6.9
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.1	1.0	1.1		0.1	5.5	6.4	0.3	0.0	0.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		18.6	3.9	4.1		23.8	27.8	30.9	33.1	0.0	0.0	41.9
LnGrp LOS		B	A	A		C	C	C	C	A	A	D
Approach Vol, veh/h			1225				1062			16		
Approach Delay, s/veh			5.0				28.9			33.1		
Approach LOS			A				C			C		

Timer - Assigned Phs	2		4	5	6		8					
Phs Duration (G+Y+Rc), s	66.2		13.8	34.2	32.0		13.8					
Change Period (Y+Rc), s	7.0		5.5	7.0	* 7		5.5					
Max Green Setting (Gmax), s	59.0		8.5	29.0	* 25		8.5					
Max Q Clear Time (g_c+I1), s	8.2		8.6	4.9	17.3		3.2					
Green Ext Time (p_c), s	18.1		0.0	0.5	5.3		0.0					

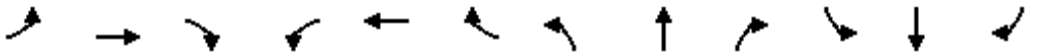
Intersection Summary	
HCM 6th Ctrl Delay	17.6
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	0	93
Future Volume (veh/h)	0	93
Initial Q (Qb), veh	0	0
Ped-Bike Adj(A_pbT)		1.00
Parking Bus, Adj	1.00	1.00
Work Zone On Approach	No	
Adj Sat Flow, veh/h/ln	1900	1900
Adj Flow Rate, veh/h	0	99
Peak Hour Factor	0.94	0.94
Percent Heavy Veh, %	0	0
Cap, veh/h	11	121
Arrive On Green	0.00	0.10
Sat Flow, veh/h	104	1164
Grp Volume(v), veh/h	0	0
Grp Sat Flow(s),veh/h/ln	0	0
Q Serve(g_s), s	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0
Prop In Lane		0.73
Lane Grp Cap(c), veh/h	0	0
V/C Ratio(X)	0.00	0.00
Avail Cap(c_a), veh/h	0	0
HCM Platoon Ratio	1.00	1.00
Upstream Filter(I)	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0
Unsig. Movement Delay, s/veh		
LnGrp Delay(d),s/veh	0.0	0.0
LnGrp LOS	A	A
Approach Vol, veh/h	135	
Approach Delay, s/veh	41.9	
Approach LOS	D	
Timer - Assigned Phs		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	680	9	23	706	68	9	19	27	93	14	255
Future Volume (vph)	210	680	9	23	706	68	9	19	27	93	14	255
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	200		0	100		0	0		0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.987			0.912				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	4628	0	1049	4548	0	1583	1327	0	1805	1900	1568
Flt Permitted	0.233			0.349			0.747			0.469		
Satd. Flow (perm)	438	4628	0	386	4548	0	1245	1327	0	891	1900	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			22			30				234
Link Speed (mph)		55			50			55			30	
Link Distance (ft)		1949			4264			1352			297	
Travel Time (s)		24.2			58.1			16.8			6.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	12%	0%	72%	13%	8%	14%	0%	52%	0%	0%	3%
Adj. Flow (vph)	233	756	10	26	784	76	10	21	30	103	16	283
Shared Lane Traffic (%)												
Lane Group Flow (vph)	233	766	0	26	860	0	10	51	0	103	16	283
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5

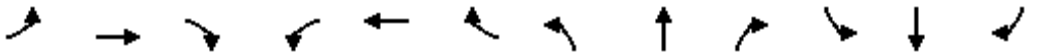
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			8			4		4
Detector Phase	5	2		1	6		3	8		7	4	5
Switch Phase												
Minimum Initial (s)	8.0	10.0		8.0	10.0		5.0	8.0		5.0	8.0	8.0
Minimum Split (s)	13.0	16.5		13.0	16.5		9.5	14.0		9.5	14.0	13.0
Total Split (s)	18.0	30.0		13.0	25.0		9.5	17.0		9.5	17.0	18.0
Total Split (%)	25.9%	43.2%		18.7%	36.0%		13.7%	24.5%		13.7%	24.5%	25.9%
Maximum Green (s)	13.0	23.5		8.0	18.5		5.0	11.0		5.0	11.0	13.0
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.0		3.5	4.0	3.5
All-Red Time (s)	1.5	2.0		1.5	2.0		1.0	2.0		1.0	2.0	1.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.5		5.0	6.5		4.5	6.0		4.5	6.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.5	3.5		3.5	3.5		3.0	4.5		3.0	4.5	3.5
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
Act Effct Green (s)	46.7	41.3		39.3	29.8		11.8	8.9		14.4	12.7	26.3
Actuated g/C Ratio	0.67	0.59		0.57	0.43		0.17	0.13		0.21	0.18	0.38
v/c Ratio	0.47	0.28		0.09	0.44		0.04	0.26		0.39	0.05	0.38
Control Delay	9.8	11.5		8.2	17.5		17.7	18.7		24.5	22.6	4.4
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	9.8	11.5		8.2	17.5		17.7	18.7		24.5	22.6	4.4
LOS	A	B		A	B		B	B		C	C	A
Approach Delay		11.1			17.2			18.5			10.3	
Approach LOS		B			B			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 69.5			
Actuated Cycle Length: 69.5			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.47			
Intersection Signal Delay: 13.5		Intersection LOS: B	
Intersection Capacity Utilization 53.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 302: Main Street & US 90

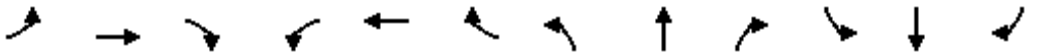
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	233	766	26	860	10	51	103	16	283
v/c Ratio	0.47	0.28	0.09	0.44	0.04	0.26	0.39	0.05	0.38
Control Delay	9.8	11.5	8.2	17.5	17.7	18.7	24.5	22.6	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.8	11.5	8.2	17.5	17.7	18.7	24.5	22.6	4.4
Queue Length 50th (ft)	42	55	4	102	3	8	34	5	10
Queue Length 95th (ft)	84	126	15	159	12	36	65	21	53
Internal Link Dist (ft)		1869		4184		1272		217	
Turn Bay Length (ft)	150		200		100				
Base Capacity (vph)	546	2752	294	1963	236	235	264	379	788
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	0.43	0.28	0.09	0.44	0.04	0.22	0.39	0.04	0.36

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	680	9	23	706	68	9	19	27	93	14	255
Future Volume (vph)	210	680	9	23	706	68	9	19	27	93	14	255
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.5		5.0	6.5		4.5	6.0		4.5	6.0	5.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00		1.00	0.99		1.00	0.91		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1787	4629		1049	4547		1583	1327		1805	1900	1568
Flt Permitted	0.23	1.00		0.35	1.00		0.75	1.00		0.47	1.00	1.00
Satd. Flow (perm)	439	4629		386	4547		1245	1327		892	1900	1568
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	233	756	10	26	784	76	10	21	30	103	16	283
RTOR Reduction (vph)	0	2	0	0	14	0	0	27	0	0	0	162
Lane Group Flow (vph)	233	764	0	26	846	0	10	24	0	103	16	121
Heavy Vehicles (%)	1%	12%	0%	72%	13%	8%	14%	0%	52%	0%	0%	3%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	40.4	32.2		28.2	25.0		8.2	7.2		16.0	11.1	21.5
Effective Green, g (s)	40.4	32.2		28.2	25.0		8.2	7.2		16.0	11.1	21.5
Actuated g/C Ratio	0.58	0.46		0.41	0.36		0.12	0.10		0.23	0.16	0.31
Clearance Time (s)	5.0	6.5		5.0	6.5		4.5	6.0		4.5	6.0	5.0
Vehicle Extension (s)	3.5	3.5		3.5	3.5		3.0	4.5		3.0	4.5	3.5
Lane Grp Cap (vph)	456	2144		187	1635		151	137		269	303	485
v/s Ratio Prot	c0.08	0.17		0.01	0.19		0.00	0.02		c0.03	0.01	0.04
v/s Ratio Perm	c0.22			0.05			0.01			c0.06		0.04
v/c Ratio	0.51	0.36		0.14	0.52		0.07	0.18		0.38	0.05	0.25
Uniform Delay, d1	7.7	12.0		12.6	17.5		27.2	28.4		22.0	24.7	18.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.1	0.5		0.4	1.2		0.2	1.1		0.9	0.1	0.3
Delay (s)	8.9	12.5		13.0	18.7		27.4	29.5		22.9	24.9	18.3
Level of Service	A	B		B	B		C	C		C	C	B
Approach Delay (s)		11.6			18.5			29.2			19.7	
Approach LOS		B			B			C			B	

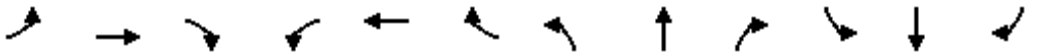
Intersection Summary			
HCM 2000 Control Delay	16.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	69.5	Sum of lost time (s)	22.0
Intersection Capacity Utilization	53.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	680	9	23	706	68	9	19	27	93	14	255
Future Volume (veh/h)	210	680	9	23	706	68	9	19	27	93	14	255
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1722	1900	833	1707	1781	1693	1900	1129	1900	1900	1856
Adj Flow Rate, veh/h	233	756	10	26	784	76	10	21	30	103	16	283
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	12	0	72	13	8	14	0	52	0	0	3
Cap, veh/h	472	2198	29	251	1694	163	235	81	115	343	319	442
Arrive On Green	0.11	0.46	0.46	0.05	0.39	0.39	0.01	0.11	0.11	0.07	0.17	0.17
Sat Flow, veh/h	1795	4782	63	793	4323	417	1612	707	1011	1810	1900	1572
Grp Volume(v), veh/h	233	495	271	26	562	298	10	0	51	103	16	283
Grp Sat Flow(s),veh/h/ln	1795	1567	1711	793	1554	1632	1612	0	1718	1810	1900	1572
Q Serve(g_s), s	4.9	7.1	7.1	1.3	9.4	9.5	0.4	0.0	1.9	3.4	0.5	11.0
Cycle Q Clear(g_c), s	4.9	7.1	7.1	1.3	9.4	9.5	0.4	0.0	1.9	3.4	0.5	11.0
Prop In Lane	1.00		0.04	1.00		0.26	1.00		0.59	1.00		1.00
Lane Grp Cap(c), veh/h	472	1441	786	251	1218	640	235	0	196	343	319	442
V/C Ratio(X)	0.49	0.34	0.34	0.10	0.46	0.47	0.04	0.00	0.26	0.30	0.05	0.64
Avail Cap(c_a), veh/h	602	1441	786	305	1218	640	330	0	270	352	319	442
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.96	0.86	0.86	0.86	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.3	12.1	12.1	11.5	15.8	15.8	26.9	0.0	28.3	23.9	24.4	22.1
Incr Delay (d2), s/veh	0.9	0.6	1.1	0.2	1.1	2.1	0.1	0.0	1.2	0.5	0.1	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	2.0	2.3	0.2	2.9	3.3	0.1	0.0	0.8	1.4	0.2	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.2	12.8	13.3	11.7	16.9	17.9	26.9	0.0	29.5	24.4	24.5	25.9
LnGrp LOS	B	B	B	B	B	B	C	A	C	C	C	C
Approach Vol, veh/h		999			886			61			402	
Approach Delay, s/veh		12.5			17.1			29.1			25.5	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.2	38.7	5.4	17.8	12.9	33.9	9.2	14.0
Change Period (Y+Rc), s	5.0	6.5	4.5	6.0	5.0	6.5	4.5	6.0
Max Green Setting (Gmax), s	8.0	23.5	5.0	11.0	13.0	18.5	5.0	11.0
Max Q Clear Time (g_c+I1), s	3.3	9.1	2.4	13.0	6.9	11.5	5.4	3.9
Green Ext Time (p_c), s	0.0	4.3	0.0	0.0	0.4	3.2	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	16.9
HCM 6th LOS	B

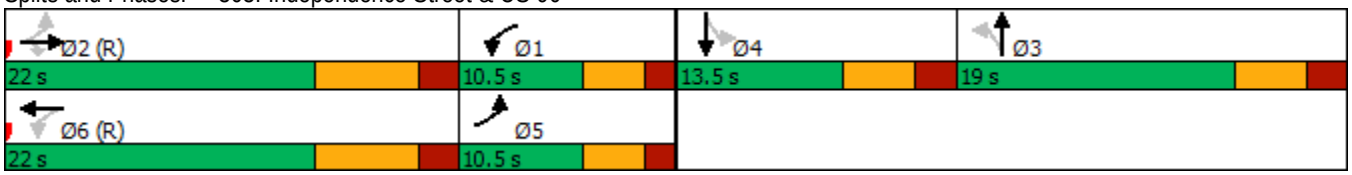


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	562	113	29	605	16	194	70	38	9	27	22
Future Volume (vph)	11	562	113	29	605	16	194	70	38	9	27	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	130		0	100		0	0		0
Storage Lanes	1		1	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.996			0.947			0.950	
Flt Protected	0.950			0.950			0.950				0.992	
Satd. Flow (prot)	1805	3252	1292	1671	4508	0	1583	1776	0	0	1711	0
Flt Permitted	0.385			0.353			0.717				0.287	
Satd. Flow (perm)	732	3252	1292	621	4508	0	1195	1776	0	0	495	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			210		5			38			23	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		4264			1976			555			937	
Travel Time (s)		64.6			29.9			12.6			21.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	11%	25%	8%	15%	0%	14%	2%	0%	29%	0%	0%
Adj. Flow (vph)	12	598	120	31	644	17	206	74	40	10	29	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	12	598	120	31	661	0	206	114	0	0	62	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			3			4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			3			4		
Detector Phase	5	2	2	1	6		3	3		4	4	
Switch Phase												
Minimum Initial (s)	6.0	10.0	10.0	6.0	10.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	10.5	17.0	17.0	10.5	17.0		13.5	13.5		13.5	13.5	
Total Split (s)	10.5	22.0	22.0	10.5	22.0		19.0	19.0		13.5	13.5	
Total Split (%)	16.2%	33.8%	33.8%	16.2%	33.8%		29.2%	29.2%		20.8%	20.8%	
Maximum Green (s)	6.0	15.0	15.0	6.0	15.0		13.5	13.5		8.0	8.0	
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.5	2.0	2.0	1.5	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	4.5	7.0	7.0	4.5	7.0		5.5	5.5			5.5	
Lead/Lag	Lag	Lead	Lead	Lag	Lead		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.5	5.0	5.0	3.5	5.0		3.5	3.5		3.5	3.5	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Act Effct Green (s)	29.9	21.4	21.4	30.8	23.5		14.4	14.4			9.9	
Actuated g/C Ratio	0.46	0.33	0.33	0.47	0.36		0.22	0.22			0.15	
v/c Ratio	0.03	0.56	0.21	0.08	0.40		0.78	0.27			0.66	
Control Delay	11.3	23.9	1.3	12.0	18.5		47.4	16.7			56.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Delay	11.3	23.9	1.3	12.0	18.5		47.4	16.7			56.5	
LOS	B	C	A	B	B		D	B			E	
Approach Delay		20.0			18.2			36.5			56.5	
Approach LOS		B			B			D			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 23.5		Intersection LOS: C	
Intersection Capacity Utilization 51.9%		ICU Level of Service A	
Analysis Period (min) 15			

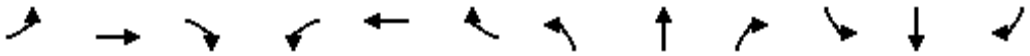
Splits and Phases: 303: Independence Street & US 90



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	12	598	120	31	661	206	114	62
v/c Ratio	0.03	0.56	0.21	0.08	0.40	0.78	0.27	0.66
Control Delay	11.3	23.9	1.3	12.0	18.5	47.4	16.7	56.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.3	23.9	1.3	12.0	18.5	47.4	16.7	56.5
Queue Length 50th (ft)	3	117	0	7	86	71	23	13
Queue Length 95th (ft)	11	#192	6	20	121	#187	65	#79
Internal Link Dist (ft)		4184			1896		475	857
Turn Bay Length (ft)	200			130		100		
Base Capacity (vph)	435	1071	566	391	1634	272	434	94
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	0.03	0.56	0.21	0.08	0.40	0.76	0.26	0.66

Intersection Summary

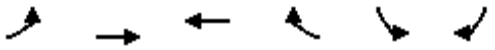
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



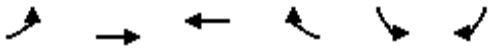
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	562	113	29	605	16	194	70	38	9	27	22
Future Volume (vph)	11	562	113	29	605	16	194	70	38	9	27	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	7.0	7.0	4.5	7.0		5.5	5.5			5.5	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91		1.00	1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.95			0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1805	3252	1292	1671	4508		1583	1777			1710	
Flt Permitted	0.39	1.00	1.00	0.35	1.00		0.72	1.00			0.29	
Satd. Flow (perm)	732	3252	1292	620	4508		1194	1777			494	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	12	598	120	31	644	17	206	74	40	10	29	23
RTOR Reduction (vph)	0	0	89	0	4	0	0	30	0	0	20	0
Lane Group Flow (vph)	12	598	31	31	657	0	206	84	0	0	42	0
Heavy Vehicles (%)	0%	11%	25%	8%	15%	0%	14%	2%	0%	29%	0%	0%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			3			4	
Permitted Phases	2		2	6			3			4		
Actuated Green, G (s)	17.9	16.7	16.7	22.1	18.8		14.4	14.4			8.1	
Effective Green, g (s)	17.9	16.7	16.7	22.1	18.8		14.4	14.4			8.1	
Actuated g/C Ratio	0.28	0.26	0.26	0.34	0.29		0.22	0.22			0.12	
Clearance Time (s)	4.5	7.0	7.0	4.5	7.0		5.5	5.5			5.5	
Vehicle Extension (s)	3.5	5.0	5.0	3.5	5.0		3.5	3.5			3.5	
Lane Grp Cap (vph)	221	835	331	264	1303		264	393			61	
v/s Ratio Prot	0.00	c0.18		c0.01	0.15			0.05				
v/s Ratio Perm	0.01		0.02	0.03			c0.17				c0.08	
v/c Ratio	0.05	0.72	0.09	0.12	0.50		0.78	0.21			0.69	
Uniform Delay, d1	17.5	22.0	18.4	17.1	19.2		23.8	20.7			27.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	5.2	0.6	0.2	1.4		14.2	0.3			28.4	
Delay (s)	17.6	27.2	18.9	17.3	20.6		38.0	21.0			55.6	
Level of Service	B	C	B	B	C		D	C			E	
Approach Delay (s)		25.7			20.5			32.0			55.6	
Approach LOS		C			C			C			E	

Intersection Summary			
HCM 2000 Control Delay	25.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	51.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology expects strict NEMA phasing.



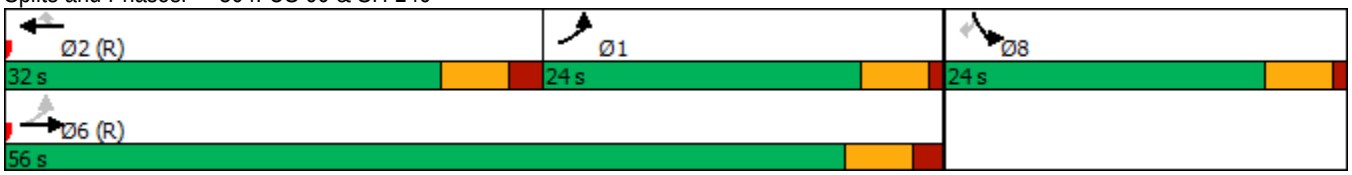
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	203	303	316	93	72	275
Future Volume (vph)	203	303	316	93	72	275
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			300	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1543	1712	1743	1568	1641	1324
Flt Permitted	0.493				0.950	
Satd. Flow (perm)	801	1712	1743	1568	1641	1324
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				102		302
Link Speed (mph)		50	50		55	
Link Distance (ft)		470	2799		7877	
Travel Time (s)		6.4	38.2		97.6	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	17%	11%	9%	3%	10%	22%
Adj. Flow (vph)	223	333	347	102	79	302
Shared Lane Traffic (%)						
Lane Group Flow (vph)	223	333	347	102	79	302
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	1	6	2		8	

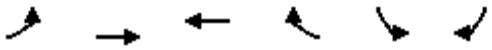


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	6			2		8
Detector Phase	1	6	2	2	8	8
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	5.0
Minimum Split (s)	15.0	16.0	16.0	16.0	10.0	10.0
Total Split (s)	24.0	56.0	32.0	32.0	24.0	24.0
Total Split (%)	30.0%	70.0%	40.0%	40.0%	30.0%	30.0%
Maximum Green (s)	19.0	50.0	26.0	26.0	19.0	19.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	6.0	5.0	5.0
Lead/Lag	Lag		Lead	Lead		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	C-Max	C-Max	C-Max	None	None
Act Effct Green (s)	60.9	59.9	35.9	35.9	9.1	9.1
Actuated g/C Ratio	0.76	0.75	0.45	0.45	0.11	0.11
v/c Ratio	0.28	0.26	0.44	0.13	0.42	0.72
Control Delay	5.2	4.3	18.6	4.2	38.5	14.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.2	4.3	18.6	4.2	38.5	14.7
LOS	A	A	B	A	D	B
Approach Delay		4.7	15.3		19.6	
Approach LOS		A	B		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 12.2		Intersection LOS: B	
Intersection Capacity Utilization 45.4%		ICU Level of Service A	
Analysis Period (min) 15			

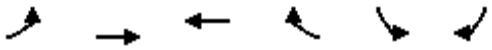
Splits and Phases: 304: US 90 & SH 146





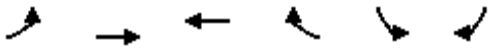
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	223	333	347	102	79	302
v/c Ratio	0.28	0.26	0.44	0.13	0.42	0.72
Control Delay	5.2	4.3	18.6	4.2	38.5	14.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.2	4.3	18.6	4.2	38.5	14.7
Queue Length 50th (ft)	22	38	112	0	38	0
Queue Length 95th (ft)	62	97	217	30	71	68
Internal Link Dist (ft)		390	2719		7797	
Turn Bay Length (ft)	250			300		
Base Capacity (vph)	785	1282	782	759	389	544
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	0.28	0.26	0.44	0.13	0.20	0.56

Intersection Summary



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	203	303	316	93	72	275
Future Volume (vph)	203	303	316	93	72	275
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0	6.0	6.0	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1543	1712	1743	1568	1641	1324
Flt Permitted	0.49	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	801	1712	1743	1568	1641	1324
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	223	333	347	102	79	302
RTOR Reduction (vph)	0	0	0	56	0	268
Lane Group Flow (vph)	223	333	347	46	79	34
Heavy Vehicles (%)	17%	11%	9%	3%	10%	22%
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	1	6	2		8	
Permitted Phases	6			2		8
Actuated Green, G (s)	60.9	59.9	35.9	35.9	9.1	9.1
Effective Green, g (s)	60.9	59.9	35.9	35.9	9.1	9.1
Actuated g/C Ratio	0.76	0.75	0.45	0.45	0.11	0.11
Clearance Time (s)	5.0	6.0	6.0	6.0	5.0	5.0
Vehicle Extension (s)	3.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	785	1281	782	703	186	150
v/s Ratio Prot	c0.07	0.19	c0.20		c0.05	
v/s Ratio Perm	0.15			0.03		0.03
v/c Ratio	0.28	0.26	0.44	0.07	0.42	0.23
Uniform Delay, d1	4.6	3.1	15.2	12.5	33.0	32.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.5	1.8	0.2	0.6	0.3
Delay (s)	4.8	3.6	17.0	12.7	33.6	32.5
Level of Service	A	A	B	B	C	C
Approach Delay (s)		4.1	16.0		32.8	
Approach LOS		A	B		C	

Intersection Summary			
HCM 2000 Control Delay	15.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	45.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	203	303	316	93	72	275
Future Volume (veh/h)	203	303	316	93	72	275
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1648	1737	1767	1856	1752	1574
Adj Flow Rate, veh/h	223	333	347	0	79	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	17	11	9	3	10	22
Cap, veh/h	845	1394	574		100	
Arrive On Green	0.40	0.80	0.32	0.00	0.06	0.00
Sat Flow, veh/h	1570	1737	1767	1572	1668	1334
Grp Volume(v), veh/h	223	333	347	0	79	0
Grp Sat Flow(s),veh/h/ln	1570	1737	1767	1572	1668	1334
Q Serve(g_s), s	0.0	3.7	13.2	0.0	3.7	0.0
Cycle Q Clear(g_c), s	0.0	3.7	13.2	0.0	3.7	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	845	1394	574		100	
V/C Ratio(X)	0.26	0.24	0.60		0.79	
Avail Cap(c_a), veh/h	845	1394	574		396	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.74	0.00
Uniform Delay (d), s/veh	11.3	1.9	22.7	0.0	37.1	0.0
Incr Delay (d2), s/veh	0.2	0.4	4.7	0.0	3.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.4	5.6	0.0	1.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.5	2.3	27.3	0.0	41.0	0.0
LnGrp LOS	B	A	C		D	
Approach Vol, veh/h		556	347	A	79	A
Approach Delay, s/veh		6.0	27.3		41.0	
Approach LOS		A	C		D	

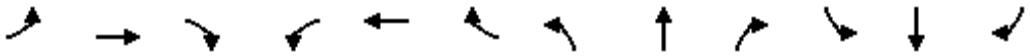
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	38.2	32.0			70.2	9.8
Change Period (Y+Rc), s	6.0	* 6			6.0	5.0
Max Green Setting (Gmax), s	19.0	* 26			50.0	19.0
Max Q Clear Time (g_c+I1), s	2.0	15.2			5.7	5.7
Green Ext Time (p_c), s	0.5	0.8			1.1	0.1

Intersection Summary	
HCM 6th Ctrl Delay	16.4
HCM 6th LOS	B

Notes

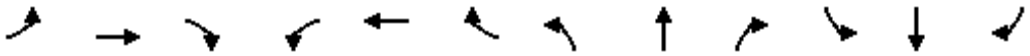
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	15	4	0	0	0	1	104	23	1	32	5
Future Volume (vph)	8	15	4	0	0	0	1	104	23	1	32	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.979						0.976			0.982	
Flt Protected		0.986									0.999	
Satd. Flow (prot)	0	1834	0	0	1900	0	0	1854	0	0	1864	0
Flt Permitted		0.986									0.999	
Satd. Flow (perm)	0	1834	0	0	1900	0	0	1854	0	0	1864	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		803			358			401			590	
Travel Time (s)		18.3			8.1			9.1			13.4	
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	11	21	6	0	0	0	1	146	32	1	45	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	38	0	0	0	0	0	179	0	0	53	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			50			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 17.3%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	8	15	4	0	0	0	1	104	23	1	32	5
Future Volume (vph)	8	15	4	0	0	0	1	104	23	1	32	5
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Hourly flow rate (vph)	11	21	6	0	0	0	1	146	32	1	45	7

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	38	0	179	53
Volume Left (vph)	11	0	1	1
Volume Right (vph)	6	0	32	7
Hadj (s)	-0.04	0.00	-0.11	-0.08
Departure Headway (s)	4.3	4.4	3.9	4.1
Degree Utilization, x	0.05	0.00	0.20	0.06
Capacity (veh/h)	784	778	896	864
Control Delay (s)	7.6	7.4	7.9	7.3
Approach Delay (s)	7.6	0.0	7.9	7.3
Approach LOS	A	A	A	A

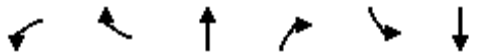
Intersection Summary				
Delay	7.7			
Level of Service	A			
Intersection Capacity Utilization	17.3%	ICU Level of Service	A	
Analysis Period (min)	15			

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	15	4	0	0	0	1	104	23	1	32	5
Future Vol, veh/h	8	15	4	0	0	0	1	104	23	1	32	5
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	11	21	6	0	0	0	1	146	32	1	45	7
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.6	0	7.9	7.3
HCM LOS	A	-	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	30%	0%	3%
Vol Thru, %	81%	56%	100%	84%
Vol Right, %	18%	15%	0%	13%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	128	27	0	38
LT Vol	1	8	0	1
Through Vol	104	15	0	32
RT Vol	23	4	0	5
Lane Flow Rate	180	38	0	54
Geometry Grp	1	1	1	1
Degree of Util (X)	0.195	0.045	0	0.06
Departure Headway (Hd)	3.901	4.271	4.435	4.029
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	918	826	0	883
Service Time	1.933	2.36	2.435	2.081
HCM Lane V/C Ratio	0.196	0.046	0	0.061
HCM Control Delay	7.9	7.6	7.4	7.3
HCM Lane LOS	A	A	N	A
HCM 95th-tile Q	0.7	0.1	0	0.2



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	86	65	99	88	85	74
Future Volume (vph)	86	65	99	88	85	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.937			
Flt Protected	0.950					0.974
Satd. Flow (prot)	1787	1170	1696	0	0	1580
Flt Permitted	0.950					0.974
Satd. Flow (perm)	1787	1170	1696	0	0	1580
Link Speed (mph)	30		30			30
Link Distance (ft)	1292		2374			1487
Travel Time (s)	29.4		54.0			33.8
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles (%)	1%	38%	4%	6%	32%	0%
Adj. Flow (vph)	130	98	150	133	129	112
Shared Lane Traffic (%)						
Lane Group Flow (vph)	130	98	283	0	0	241
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Stop			Stop

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.0%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	86	65	99	88	85	74
Future Volume (vph)	86	65	99	88	85	74
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66
Hourly flow rate (vph)	130	98	150	133	129	112

Direction, Lane #	WB 1	WB 2	NB 1	SB 1
Volume Total (vph)	130	98	283	241
Volume Left (vph)	130	0	0	129
Volume Right (vph)	0	98	133	0
Hadj (s)	0.52	-0.05	-0.20	0.40
Departure Headway (s)	6.3	5.7	4.7	5.3
Degree Utilization, x	0.23	0.16	0.37	0.36
Capacity (veh/h)	533	585	733	646
Control Delay (s)	10.0	8.6	10.4	11.2
Approach Delay (s)	9.4		10.4	11.2
Approach LOS	A		B	B

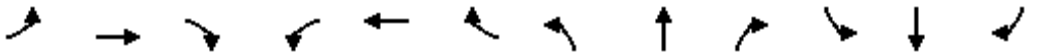
Intersection Summary			
Delay	10.4		
Level of Service	B		
Intersection Capacity Utilization	34.0%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	10.8
Intersection LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	86	65	99	88	85	74
Future Vol, veh/h	86	65	99	88	85	74
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles, %	1	38	4	6	32	0
Mvmt Flow	130	98	150	133	129	112
Number of Lanes	1	1	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	2	0
HCM Control Delay	10.3	10.4	11.8
HCM LOS	B	B	B

Lane	NBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	0%	100%	0%	53%
Vol Thru, %	53%	0%	0%	47%
Vol Right, %	47%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	187	86	65	159
LT Vol	0	86	0	85
Through Vol	99	0	0	74
RT Vol	88	0	65	0
Lane Flow Rate	283	130	98	241
Geometry Grp	2	7	7	2
Degree of Util (X)	0.367	0.227	0.156	0.37
Departure Headway (Hd)	4.662	6.28	5.703	5.524
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	765	567	622	646
Service Time	2.727	4.076	3.499	3.598
HCM Lane V/C Ratio	0.37	0.229	0.158	0.373
HCM Control Delay	10.4	10.9	9.6	11.8
HCM Lane LOS	B	B	A	B
HCM 95th-tile Q	1.7	0.9	0.5	1.7

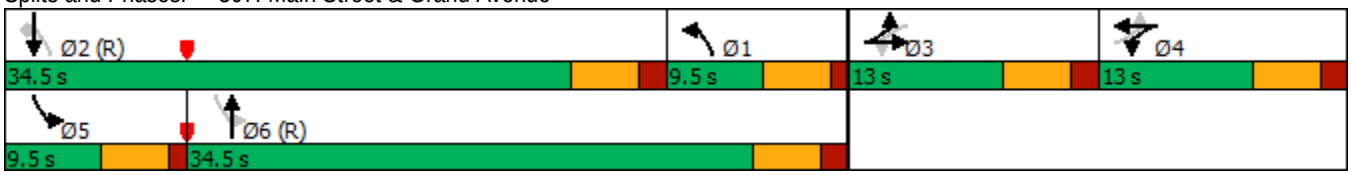


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	128	79	53	4	88	40	36	334	4	19	477	156
Future Volume (vph)	128	79	53	4	88	40	36	334	4	19	477	156
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	100		0	100		0	200		125
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.940			0.953			0.998				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1530	1765	0	1805	1782	0	1805	1888	0	1687	1863	1615
Flt Permitted	0.500			0.500			0.162			0.363		
Satd. Flow (perm)	805	1765	0	950	1782	0	308	1888	0	645	1863	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		39			26			1				187
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		345			825			1581			1585	
Travel Time (s)		7.8			18.8			35.9			36.0	
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles (%)	18%	2%	0%	0%	1%	3%	0%	0%	33%	7%	2%	0%
Adj. Flow (vph)	180	111	75	6	124	56	51	470	6	27	672	220
Shared Lane Traffic (%)												
Lane Group Flow (vph)	180	186	0	6	180	0	51	476	0	27	672	220
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA		D.P+P	NA		D.P+P	NA		D.P+P	NA	Perm
Protected Phases	3	3		4	4		1	6		5	2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			3			2			6		2
Detector Phase	3	3		4	4		1	6		5	2	2
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		5.0	10.0		5.0	10.0	10.0
Minimum Split (s)	13.0	13.0		13.0	13.0		9.5	15.0		9.5	15.0	15.0
Total Split (s)	13.0	13.0		13.0	13.0		9.5	34.5		9.5	34.5	34.5
Total Split (%)	18.6%	18.6%		18.6%	18.6%		13.6%	49.3%		13.6%	49.3%	49.3%
Maximum Green (s)	8.0	8.0		8.0	8.0		5.0	29.5		5.0	29.5	29.5
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)	1.5	1.5		1.5	1.5		1.0	1.5		1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		4.5	5.0		4.5	5.0	5.0
Lead/Lag	Lead	Lead		Lag	Lag		Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		2.0	2.0		3.0	3.5		3.0	3.5	3.5
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	16.0	8.0		16.0	8.0		36.8	35.2		37.7	33.3	33.3
Actuated g/C Ratio	0.23	0.11		0.23	0.11		0.53	0.50		0.54	0.48	0.48
v/c Ratio	0.68	0.79		0.02	0.80		0.19	0.50		0.06	0.76	0.25
Control Delay	35.2	49.3		17.8	53.2		11.1	15.1		7.3	24.1	4.1
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	35.2	49.3		17.8	53.2		11.1	15.1		7.3	24.1	4.1
LOS	D	D		B	D		B	B		A	C	A
Approach Delay		42.4			52.1			14.7			18.8	
Approach LOS		D			D			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:NBSB, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 25.2		Intersection LOS: C	
Intersection Capacity Utilization 56.6%		ICU Level of Service B	
Analysis Period (min) 15			

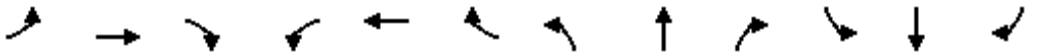
Splits and Phases: 307: Main Street & Grand Avenue



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	180	186	6	180	51	476	27	672	220
v/c Ratio	0.68	0.79	0.02	0.80	0.19	0.50	0.06	0.76	0.25
Control Delay	35.2	49.3	17.8	53.2	11.1	15.1	7.3	24.1	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.2	49.3	17.8	53.2	11.1	15.1	7.3	24.1	4.1
Queue Length 50th (ft)	61	62	2	66	9	110	5	252	8
Queue Length 95th (ft)	85	#101	8	#105	17	172	11	265	24
Internal Link Dist (ft)		265		745		1501		1505	
Turn Bay Length (ft)	150		100		100		200		125
Base Capacity (vph)	266	236	314	226	268	950	421	886	866
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	0.68	0.79	0.02	0.80	0.19	0.50	0.06	0.76	0.25

Intersection Summary

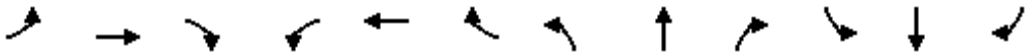
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	128	79	53	4	88	40	36	334	4	19	477	156
Future Volume (vph)	128	79	53	4	88	40	36	334	4	19	477	156
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0		4.5	5.0		4.5	5.0	5.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.94		1.00	0.95		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1530	1764		1805	1782		1805	1889		1687	1863	1615
Flt Permitted	0.50	1.00		0.50	1.00		0.16	1.00		0.36	1.00	1.00
Satd. Flow (perm)	805	1764		950	1782		308	1889		644	1863	1615
Peak-hour factor, PHF	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Adj. Flow (vph)	180	111	75	6	124	56	51	470	6	27	672	220
RTOR Reduction (vph)	0	35	0	0	23	0	0	1	0	0	0	105
Lane Group Flow (vph)	180	151	0	6	157	0	51	475	0	27	672	115
Heavy Vehicles (%)	18%	2%	0%	0%	1%	3%	0%	0%	33%	7%	2%	0%
Turn Type	D.P+P	NA		D.P+P	NA		D.P+P	NA		D.P+P	NA	Perm
Protected Phases	3	3		4	4		1	6		5	2	
Permitted Phases	4			3			2			6		2
Actuated Green, G (s)	16.0	8.0		16.0	8.0		34.5	32.5		34.5	30.6	30.6
Effective Green, g (s)	16.0	8.0		16.0	8.0		34.5	32.5		34.5	30.6	30.6
Actuated g/C Ratio	0.23	0.11		0.23	0.11		0.49	0.46		0.49	0.44	0.44
Clearance Time (s)	5.0	5.0		5.0	5.0		4.5	5.0		4.5	5.0	5.0
Vehicle Extension (s)	3.0	3.0		2.0	2.0		3.0	3.5		3.0	3.5	3.5
Lane Grp Cap (vph)	266	201		314	203		235	877		347	814	705
v/s Ratio Prot	0.08	c0.09		0.00	c0.09		0.01	c0.25		0.00	c0.36	
v/s Ratio Perm	0.08			0.00			0.09			0.04		0.07
v/c Ratio	0.68	0.75		0.02	0.77		0.22	0.54		0.08	0.83	0.16
Uniform Delay, d1	23.6	30.0		22.6	30.1		22.3	13.4		9.7	17.3	11.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	6.7	14.7		0.0	15.3		0.5	2.4		0.1	9.4	0.5
Delay (s)	30.3	44.8		22.6	45.4		22.7	15.8		9.8	26.7	12.4
Level of Service	C	D		C	D		C	B		A	C	B
Approach Delay (s)		37.7			44.6			16.5			22.8	
Approach LOS		D			D			B			C	

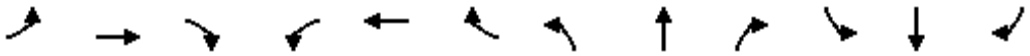
Intersection Summary			
HCM 2000 Control Delay	25.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	56.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology expects strict NEMA phasing.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	84	0	90	0	44	71	148	50	0
Future Volume (vph)	0	0	0	84	0	90	0	44	71	148	50	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.865			0.917				
Flt Protected				0.950							0.964	
Satd. Flow (prot)	0	1900	0	1805	0	0	0	1723	0	0	1818	0
Flt Permitted				0.950							0.964	
Satd. Flow (perm)	0	1900	0	1805	0	0	0	1723	0	0	1818	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		433			707			1487			1399	
Travel Time (s)		9.8			16.1			33.8			31.8	
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	3%	0%
Adj. Flow (vph)	0	0	0	153	0	164	0	80	129	269	91	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	153	164	0	0	209	0	0	360	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization Err%		ICU Level of Service H	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	84	0	90	0	44	71	148	50	0
Future Volume (Veh/h)	0	0	0	84	0	90	0	44	71	148	50	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Hourly flow rate (vph)	0	0	0	153	0	164	0	80	129	269	91	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	938	838	91	774	774	144	91			209		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	938	838	91	774	774	144	91			209		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	43	100	82	100			80		
cM capacity (veh/h)	172	245	972	270	267	908	1517			1374		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	0	317	209	360
Volume Left	0	153	0	269
Volume Right	0	164	129	0
cSH	1700	425	1700	1374
Volume to Capacity	0.00	0.75	0.12	0.20
Queue Length 95th (ft)	0	152	0	18
Control Delay (s)	0.0	34.6	0.0	6.6
Lane LOS	A	D		A
Approach Delay (s)	0.0	34.6	0.0	6.6
Approach LOS	A	D		

Intersection Summary				
Average Delay	15.0			
Intersection Capacity Utilization	Err%	ICU Level of Service	H	
Analysis Period (min)	15			

Intersection	
Int Delay, s/veh	15.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	84	0	90	0	44	71	148	50	0
Future Vol, veh/h	0	0	0	84	0	90	0	44	71	148	50	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	55	55	55	55	55	55	55	55	55	55	55	55
Heavy Vehicles, %	0	0	0	0	0	0	0	3	0	0	3	0
Mvmt Flow	0	0	0	153	0	164	0	80	129	269	91	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	856	838	91	774	-	145	-	0	0	209	0	0
Stage 1	629	629	-	145	-	-	-	-	-	-	-	-
Stage 2	227	209	-	629	-	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	-	6.2	-	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	-	3.3	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	280	305	972	318	0	908	0	-	-	1374	-	0
Stage 1	474	478	-	863	0	-	0	-	-	-	-	0
Stage 2	780	733	-	474	0	-	0	-	-	-	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	193	242	972	267	-	908	-	-	-	1374	-	-
Mov Cap-2 Maneuver	193	242	-	267	-	-	-	-	-	-	-	-
Stage 1	474	380	-	863	-	-	-	-	-	-	-	-
Stage 2	639	733	-	376	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	35.2	0	6.2
HCM LOS	A	E		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	421	1374	-
HCM Lane V/C Ratio	-	-	-	0.751	0.196	-
HCM Control Delay (s)	-	-	0	35.2	8.3	0
HCM Lane LOS	-	-	A	E	A	A
HCM 95th %tile Q(veh)	-	-	-	6.2	0.7	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	5	14	99	0	0	66
Future Volume (vph)	5	14	99	0	0	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.902				0.865	
Flt Protected				0.950		
Satd. Flow (prot)	1714	0	0	1787	1611	0
Flt Permitted				0.950		
Satd. Flow (perm)	1714	0	0	1787	1611	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	720			80	1399	
Travel Time (s)	16.4			1.8	31.8	
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles (%)	0%	0%	1%	0%	0%	2%
Adj. Flow (vph)	8	21	150	0	0	100
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	0	0	150	100	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Stop			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 22.9%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	5	14	99	0	0	66
Future Volume (vph)	5	14	99	0	0	66
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66
Hourly flow rate (vph)	8	21	150	0	0	100

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	29	150	100
Volume Left (vph)	0	150	0
Volume Right (vph)	21	0	100
Hadj (s)	-0.43	0.22	-0.57
Departure Headway (s)	3.8	4.3	3.7
Degree Utilization, x	0.03	0.18	0.10
Capacity (veh/h)	906	808	915
Control Delay (s)	6.9	8.3	7.2
Approach Delay (s)	6.9	8.3	7.2
Approach LOS	A	A	A

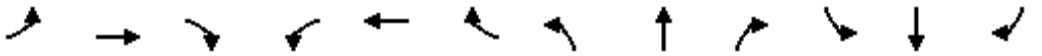
Intersection Summary			
Delay	7.8		
Level of Service	A		
Intersection Capacity Utilization	22.9%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	5	14	99	0	0	66
Future Vol, veh/h	5	14	99	0	0	66
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles, %	0	0	1	0	0	2
Mvmt Flow	8	21	150	0	0	100
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	6.9	8.3	7.1
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	0%	0%	100%
Vol Thru, %	0%	26%	0%
Vol Right, %	100%	74%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	66	19	99
LT Vol	0	0	99
Through Vol	0	5	0
RT Vol	66	14	0
Lane Flow Rate	100	29	150
Geometry Grp	1	1	1
Degree of Util (X)	0.1	0.03	0.18
Departure Headway (Hd)	3.607	3.748	4.316
Convergence, Y/N	Yes	Yes	Yes
Cap	973	945	831
Service Time	1.704	1.811	2.341
HCM Lane V/C Ratio	0.103	0.031	0.181
HCM Control Delay	7.1	6.9	8.3
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.3	0.1	0.7

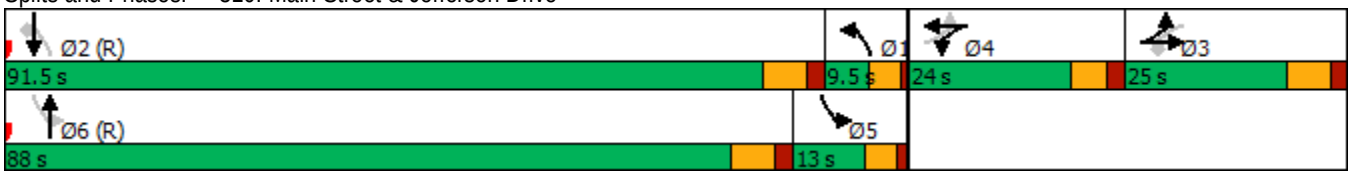


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	215	108	39	88	148	17	73	561	114	0	879	301
Future Volume (vph)	215	108	39	88	148	17	73	561	114	0	879	301
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	300		0	200		300	200		250
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850		0.984			0.975				0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1805	1900	1615	1770	1845	0	1703	3491	0	1900	1863	1615
Flt Permitted	0.255			0.546			0.047					
Satd. Flow (perm)	484	1900	1615	1017	1845	0	84	3491	0	1900	1863	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			109		3			25				207
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1006			727			3897			1103	
Travel Time (s)		17.1			12.4			66.4			18.8	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	0%	0%	0%	2%	0%	13%	6%	1%	0%	0%	2%	0%
Adj. Flow (vph)	262	132	48	107	180	21	89	684	139	0	1072	367
Shared Lane Traffic (%)												
Lane Group Flow (vph)	262	132	48	107	201	0	89	823	0	0	1072	367
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA	Perm	D.P+P	NA		D.P+P	NA		D.P+P	NA	Perm
Protected Phases	3	3		4	4		1	6		5	2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		3	3			2			6		2
Detector Phase	3	3	3	4	4		1	6		5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	8.0	8.0		5.0	10.0		8.0	10.0	10.0
Minimum Split (s)	25.0	25.0	25.0	24.0	24.0		9.5	25.0		13.0	25.0	25.0
Total Split (s)	25.0	25.0	25.0	24.0	24.0		9.5	88.0		13.0	91.5	91.5
Total Split (%)	16.7%	16.7%	16.7%	16.0%	16.0%		6.3%	58.7%		8.7%	61.0%	61.0%
Maximum Green (s)	18.0	18.0	18.0	18.0	18.0		5.0	81.0		8.0	84.5	84.5
Yellow Time (s)	5.0	5.0	5.0	4.0	4.0		3.5	5.0		3.5	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		1.0	2.0		1.5	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	6.0	6.0		4.5	7.0		5.0	7.0	7.0
Lead/Lag	Lag	Lag	Lag	Lead	Lead		Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5		3.0	3.5		3.0	3.5	3.5
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	35.0	18.2	18.2	37.0	17.8		92.0	94.0			84.5	84.5
Actuated g/C Ratio	0.23	0.12	0.12	0.25	0.12		0.61	0.63			0.56	0.56
v/c Ratio	0.96	0.57	0.16	0.31	0.91		0.85	0.37			1.02	0.37
Control Delay	104.6	72.9	1.2	43.6	104.3		98.5	13.8			65.9	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0			11.9	0.0
Total Delay	104.6	72.9	1.2	43.6	104.3		98.5	13.8			77.8	8.3
LOS	F	E	A	D	F		F	B			E	A
Approach Delay		83.9			83.2			22.0			60.1	
Approach LOS		F			F			C			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:NBSB, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay: 54.6		Intersection LOS: D	
Intersection Capacity Utilization 91.6%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 310: Main Street & Jefferson Drive

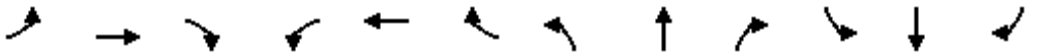


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	262	132	48	107	201	89	823	1072	367
v/c Ratio	0.96	0.57	0.16	0.31	0.91	0.85	0.37	1.02	0.37
Control Delay	104.6	72.9	1.2	43.6	104.3	98.5	13.8	65.9	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.9	0.0
Total Delay	104.6	72.9	1.2	43.6	104.3	98.5	13.8	77.8	8.3
Queue Length 50th (ft)	217	124	0	80	194	37	190	~1110	74
Queue Length 95th (ft)	#336	179	0	120	#294	#117	203	#1159	112
Internal Link Dist (ft)		926			647		3817	1023	
Turn Bay Length (ft)	300			300		200			250
Base Capacity (vph)	273	231	291	342	224	105	2197	1049	1000
Starvation Cap Reductn	0	0	0	0	0	0	0	34	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	0.96	0.57	0.16	0.31	0.90	0.85	0.37	1.06	0.37

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

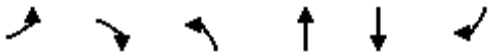
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



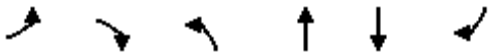
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	215	108	39	88	148	17	73	561	114	0	879	301
Future Volume (vph)	215	108	39	88	148	17	73	561	114	0	879	301
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0	6.0	6.0		4.5	7.0			7.0	7.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95			1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.97			1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)	1805	1900	1615	1770	1845		1703	3490			1863	1615
Flt Permitted	0.25	1.00	1.00	0.55	1.00		0.05	1.00			1.00	1.00
Satd. Flow (perm)	484	1900	1615	1017	1845		85	3490			1863	1615
Peak-hour factor, PHF	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	262	132	48	107	180	21	89	684	139	0	1072	367
RTOR Reduction (vph)	0	0	42	0	3	0	0	9	0	0	0	90
Lane Group Flow (vph)	262	132	6	107	198	0	89	814	0	0	1072	277
Heavy Vehicles (%)	0%	0%	0%	2%	0%	13%	6%	1%	0%	0%	2%	0%
Turn Type	D.P+P	NA	Perm	D.P+P	NA		D.P+P	NA		D.P+P	NA	Perm
Protected Phases	3	3		4	4		1	6		5	2	
Permitted Phases	4		3	3			2			6		2
Actuated Green, G (s)	36.0	18.2	18.2	36.0	17.8		89.5	94.0			84.5	84.5
Effective Green, g (s)	36.0	18.2	18.2	36.0	17.8		89.5	94.0			84.5	84.5
Actuated g/C Ratio	0.24	0.12	0.12	0.24	0.12		0.60	0.63			0.56	0.56
Clearance Time (s)	7.0	7.0	7.0	6.0	6.0		4.5	7.0			7.0	7.0
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5		3.0	3.5			3.5	3.5
Lane Grp Cap (vph)	276	230	195	333	218		104	2187			1049	909
v/s Ratio Prot	c0.11	0.07		0.04	0.11		c0.03	0.23			c0.58	
v/s Ratio Perm	c0.11		0.00	0.04			0.48					0.17
v/c Ratio	0.95	0.57	0.03	0.32	0.91		0.86	0.37			1.02	0.30
Uniform Delay, d1	60.3	62.2	58.1	46.2	65.3		68.9	13.6			32.8	17.3
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	40.4	3.7	0.1	0.7	37.3		45.8	0.5			33.5	0.9
Delay (s)	100.7	65.9	58.2	46.8	102.6		114.7	14.1			66.2	18.1
Level of Service	F	E	E	D	F		F	B			E	B
Approach Delay (s)		85.7			83.2			23.9			53.9	
Approach LOS		F			F			C			D	

Intersection Summary			
HCM 2000 Control Delay	52.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	91.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology expects strict NEMA phasing.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	17	82	54	701	1161	32
Future Volume (vph)	17	82	54	701	1161	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	200			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt		0.850			0.996	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1805	1568	1805	3574	1871	0
Flt Permitted	0.950		0.042			
Satd. Flow (perm)	1805	1568	80	3574	1871	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		92			2	
Link Speed (mph)	30			40	40	
Link Distance (ft)	1219			1103	1788	
Travel Time (s)	27.7			18.8	30.5	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	3%	0%	1%	1%	7%
Adj. Flow (vph)	19	92	61	788	1304	36
Shared Lane Traffic (%)						
Lane Group Flow (vph)	19	92	61	788	1340	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	
Detector Template	Left	Right	Left	Thru	Thru	
Leading Detector (ft)	20	20	20	100	100	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	20	20	20	6	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0	6.0	10.0	10.0	
Minimum Split (s)	24.0	24.0	10.5	25.0	25.0	
Total Split (s)	24.0	24.0	10.8	116.0	105.2	
Total Split (%)	17.1%	17.1%	7.7%	82.9%	75.1%	
Maximum Green (s)	18.0	18.0	6.3	109.0	98.2	
Yellow Time (s)	4.0	4.0	3.0	5.0	5.0	
All-Red Time (s)	2.0	2.0	1.5	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	4.5	7.0	7.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.5	3.5	3.0	4.0	4.0	
Recall Mode	None	None	None	C-Max	C-Max	
Act Effct Green (s)	8.8	8.8	120.7	118.2	108.9	
Actuated g/C Ratio	0.06	0.06	0.86	0.84	0.78	
v/c Ratio	0.17	0.50	0.40	0.26	0.92	
Control Delay	64.9	21.1	15.9	2.5	33.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	64.9	21.1	15.9	2.5	33.0	
LOS	E	C	B	A	C	
Approach Delay	28.6			3.4	33.0	
Approach LOS	C			A	C	

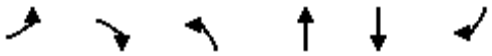
Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 21.9		Intersection LOS: C	
Intersection Capacity Utilization 80.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 311: Main Street & Cook Road

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	19	92	61	788	1340
v/c Ratio	0.17	0.50	0.40	0.26	0.92
Control Delay	64.9	21.1	15.9	2.5	33.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	64.9	21.1	15.9	2.5	33.0
Queue Length 50th (ft)	17	0	6	55	1170
Queue Length 95th (ft)	43	54	39	83	#1438
Internal Link Dist (ft)	1139			1023	1708
Turn Bay Length (ft)			200		
Base Capacity (vph)	232	281	156	3016	1455
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.08	0.33	0.39	0.26	0.92

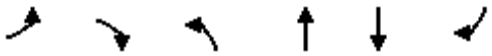
Intersection Summary

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



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	17	82	54	701	1161	32
Future Volume (vph)	17	82	54	701	1161	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.5	7.0	7.0	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	
Frt	1.00	0.85	1.00	1.00	1.00	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1805	1568	1805	3574	1871	
Flt Permitted	0.95	1.00	0.04	1.00	1.00	
Satd. Flow (perm)	1805	1568	80	3574	1871	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	19	92	61	788	1304	36
RTOR Reduction (vph)	0	86	0	0	0	0
Lane Group Flow (vph)	19	6	61	788	1340	0
Heavy Vehicles (%)	0%	3%	0%	1%	1%	7%
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Actuated Green, G (s)	8.8	8.8	118.2	118.2	108.0	
Effective Green, g (s)	8.8	8.8	118.2	118.2	108.0	
Actuated g/C Ratio	0.06	0.06	0.84	0.84	0.77	
Clearance Time (s)	6.0	6.0	4.5	7.0	7.0	
Vehicle Extension (s)	3.5	3.5	3.0	4.0	4.0	
Lane Grp Cap (vph)	113	98	137	3017	1443	
v/s Ratio Prot	c0.01		c0.02	0.22	c0.72	
v/s Ratio Perm		0.00	0.35			
v/c Ratio	0.17	0.06	0.45	0.26	0.93	
Uniform Delay, d1	62.1	61.7	36.2	2.2	12.9	
Progression Factor	1.00	1.00	1.00	1.00	1.62	
Incremental Delay, d2	0.8	0.3	2.3	0.2	11.6	
Delay (s)	63.0	62.0	38.5	2.4	32.5	
Level of Service	E	E	D	A	C	
Approach Delay (s)	62.2			5.0	32.5	
Approach LOS	E			A	C	

Intersection Summary			
HCM 2000 Control Delay	23.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	80.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	17	82	54	701	1161	32
Future Volume (veh/h)	17	82	54	701	1161	32
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1856	1900	1885	1885	1796
Adj Flow Rate, veh/h	19	92	61	788	1304	36
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	3	0	1	1	7
Cap, veh/h	131	114	194	2990	1394	38
Arrive On Green	0.07	0.07	0.04	0.83	0.76	0.76
Sat Flow, veh/h	1810	1572	1810	3676	1826	50
Grp Volume(v), veh/h	19	92	61	788	0	1340
Grp Sat Flow(s),veh/h/ln	1810	1572	1810	1791	0	1876
Q Serve(g_s), s	1.4	8.1	0.9	6.5	0.0	82.7
Cycle Q Clear(g_c), s	1.4	8.1	0.9	6.5	0.0	82.7
Prop In Lane	1.00	1.00	1.00			0.03
Lane Grp Cap(c), veh/h	131	114	194	2990	0	1433
V/C Ratio(X)	0.15	0.81	0.32	0.26	0.00	0.94
Avail Cap(c_a), veh/h	233	202	205	2990	0	1433
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.85	0.85	0.00	1.00
Uniform Delay (d), s/veh	60.9	64.0	32.4	2.4	0.0	13.7
Incr Delay (d2), s/veh	0.6	14.9	0.8	0.2	0.0	12.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	7.4	1.5	1.6	0.0	32.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	61.5	78.8	33.2	2.6	0.0	26.3
LnGrp LOS	E	E	C	A	A	C
Approach Vol, veh/h	111			849	1340	
Approach Delay, s/veh	75.9			4.8	26.3	
Approach LOS	E			A	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		123.9		16.1	9.9	113.9
Change Period (Y+Rc), s		7.0		6.0	4.5	7.0
Max Green Setting (Gmax), s		109.0		18.0	6.3	98.2
Max Q Clear Time (g_c+I1), s		8.5		10.1	2.9	84.7
Green Ext Time (p_c), s		9.4		0.2	0.0	11.2

Intersection Summary		
HCM 6th Ctrl Delay		20.8
HCM 6th LOS		C

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	114	217	325	91	324	743
Future Volume (vph)	114	217	325	91	324	743
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	135	
Storage Lanes	1	1		1	2	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1719	1302	1863	1583	1388	3539
Flt Permitted	0.950				0.248	
Satd. Flow (perm)	1719	1302	1863	1583	362	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		247		103		
Link Speed (mph)	55		40			40
Link Distance (ft)	7877		885			960
Travel Time (s)	97.6		15.1			16.4
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	5%	24%	2%	2%	30%	2%
Adj. Flow (vph)	130	247	369	103	368	844
Shared Lane Traffic (%)						
Lane Group Flow (vph)	130	247	369	103	368	844
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Turn Type	Perm	Perm	NA	Perm	pm+pt	NA
Protected Phases			2		1	6
Permitted Phases	8	8		2	6	
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	23.0	23.0	24.0	24.0	23.0	47.0
Total Split (%)	32.9%	32.9%	34.3%	34.3%	32.9%	67.1%
Maximum Green (s)	18.5	18.5	19.5	19.5	18.5	42.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	18.5	18.5	19.5	19.5	42.5	42.5
Actuated g/C Ratio	0.26	0.26	0.28	0.28	0.61	0.61

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
v/c Ratio	0.29	0.47	0.71	0.20	0.75	0.39
Control Delay	22.6	6.5	37.3	9.2	21.4	7.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.6	6.5	37.3	9.2	21.4	7.8
LOS	C	A	D	A	C	A
Approach Delay	12.1		31.2			11.9
Approach LOS	B		C			B

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 16.3		Intersection LOS: B	
Intersection Capacity Utilization 52.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 312: Main Street & SH 146

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	130	247	369	103	368	844
v/c Ratio	0.29	0.47	0.71	0.20	0.75	0.39
Control Delay	22.6	6.5	37.3	9.2	21.4	7.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.6	6.5	37.3	9.2	21.4	7.8
Queue Length 50th (ft)	45	0	187	0	76	87
Queue Length 95th (ft)	85	47	253	44	#195	116
Internal Link Dist (ft)	7797		805			880
Turn Bay Length (ft)					135	
Base Capacity (vph)	454	525	518	515	490	2148
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	0.29	0.47	0.71	0.20	0.75	0.39

Intersection Summary

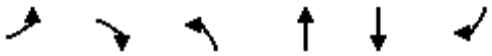
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	114	217	325	91	324	743
Future Volume (vph)	114	217	325	91	324	743
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1719	1302	1863	1583	1388	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.25	1.00
Satd. Flow (perm)	1719	1302	1863	1583	362	3539
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	130	247	369	103	368	844
RTOR Reduction (vph)	0	182	0	74	0	0
Lane Group Flow (vph)	130	65	369	29	368	844
Heavy Vehicles (%)	5%	24%	2%	2%	30%	2%
Turn Type	Perm	Perm	NA	Perm	pm+pt	NA
Protected Phases			2		1	6
Permitted Phases	8	8		2	6	
Actuated Green, G (s)	18.5	18.5	19.5	19.5	42.5	42.5
Effective Green, g (s)	18.5	18.5	19.5	19.5	42.5	42.5
Actuated g/C Ratio	0.26	0.26	0.28	0.28	0.61	0.61
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Grp Cap (vph)	454	344	518	440	490	2148
v/s Ratio Prot			0.20		c0.20	0.24
v/s Ratio Perm	c0.08	0.05		0.02	c0.26	
v/c Ratio	0.29	0.19	0.71	0.07	0.75	0.39
Uniform Delay, d1	20.5	19.9	22.7	18.6	9.8	7.1
Progression Factor	1.00	1.00	1.27	2.45	1.00	1.00
Incremental Delay, d2	1.6	1.2	7.9	0.3	10.2	0.5
Delay (s)	22.1	21.2	36.8	45.7	20.0	7.6
Level of Service	C	C	D	D	B	A
Approach Delay (s)	21.5		38.8			11.4
Approach LOS	C		D			B

Intersection Summary			
HCM 2000 Control Delay	19.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	52.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM 6th Edition methodology does not support Non-NEMA phasing.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	66	0	22	232	166	242
Future Volume (vph)	66	0	22	232	166	242
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.920	
Flt Protected	0.950			0.996		
Satd. Flow (prot)	1570	0	0	1713	1651	0
Flt Permitted	0.950			0.996		
Satd. Flow (perm)	1570	0	0	1713	1651	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	686			526	1142	
Travel Time (s)	15.6			12.0	26.0	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	15%	100%	5%	11%	13%	1%
Adj. Flow (vph)	69	0	23	242	173	252
Shared Lane Traffic (%)						
Lane Group Flow (vph)	69	0	0	265	425	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Free			Stop	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 40.8%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection Sign configuration not allowed in HCM analysis.

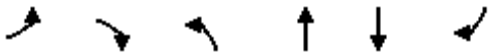
Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	66	0	22	232	166	242
Future Vol, veh/h	66	0	22	232	166	242
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	15	100	5	11	13	1
Mvmt Flow	69	0	23	242	173	252

Major/Minor	Minor2		Major2	
Conflicting Flow All	299	299	-	0
Stage 1	299	299	-	-
Stage 2	0	0	-	-
Critical Hdwy	6.45	6.61	-	-
Critical Hdwy Stg 1	5.45	5.61	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	3.545	4.099	-	-
Pot Cap-1 Maneuver	686	598	-	-
Stage 1	746	650	-	-
Stage 2	-	-	-	-
Platoon blocked, %			-	-
Mov Cap-1 Maneuver	686	0	-	-
Mov Cap-2 Maneuver	686	0	-	-
Stage 1	746	0	-	-
Stage 2	-	0	-	-

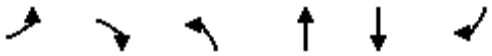
Approach	NB	SB
HCM Control Delay, s	13.5	0
HCM LOS	B	

Minor Lane/Major Mvmt	NBLn1	SBT	SBR
Capacity (veh/h)	686	-	-
HCM Lane V/C Ratio	0.386	-	-
HCM Control Delay (s)	13.5	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	1.8	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	67	362	201	196	1
Future Volume (vph)	0	67	362	201	196	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865				0.999	
Flt Protected				0.969		
Satd. Flow (prot)	1644	0	0	1779	1610	0
Flt Permitted				0.969		
Satd. Flow (perm)	1644	0	0	1779	1610	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	516			1385	526	
Travel Time (s)	11.7			31.5	12.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	1%	8%	18%	0%
Adj. Flow (vph)	0	73	393	218	213	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	73	0	0	611	214	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 55.1%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	67	362	201	196	1
Future Volume (Veh/h)	0	67	362	201	196	1
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	73	393	218	213	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1218	214	214			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1218	214	214			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	91	71			
cM capacity (veh/h)	143	832	1362			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	73	611	214
Volume Left	0	393	0
Volume Right	73	0	1
cSH	832	1362	1700
Volume to Capacity	0.09	0.29	0.13
Queue Length 95th (ft)	7	30	0
Control Delay (s)	9.7	6.6	0.0
Lane LOS	A	A	
Approach Delay (s)	9.7	6.6	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	5.3		
Intersection Capacity Utilization	55.1%	ICU Level of Service	B
Analysis Period (min)	15		

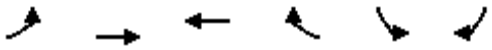
Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	67	362	201	196	1
Future Vol, veh/h	0	67	362	201	196	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	1	8	18	0
Mvmt Flow	0	73	393	218	213	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1218	214	214	0	-	0
Stage 1	214	-	-	-	-	-
Stage 2	1004	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.11	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.209	-	-	-
Pot Cap-1 Maneuver	201	831	1362	-	-	-
Stage 1	826	-	-	-	-	-
Stage 2	357	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	135	831	1362	-	-	-
Mov Cap-2 Maneuver	135	-	-	-	-	-
Stage 1	555	-	-	-	-	-
Stage 2	357	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	5.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1362	-	831	-	-
HCM Lane V/C Ratio	0.289	-	0.088	-	-
HCM Control Delay (s)	8.7	0	9.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	1.2	-	0.3	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	70	65	357	0	0	245
Future Volume (vph)	70	65	357	0	0	245
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.865	
Flt Protected		0.975				
Satd. Flow (prot)	0	1659	1881	0	1627	0
Flt Permitted		0.975				
Satd. Flow (perm)	0	1659	1881	0	1627	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		4107	516		686	
Travel Time (s)		93.3	11.7		15.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	17%	6%	1%	0%	0%	1%
Adj. Flow (vph)	74	69	380	0	0	261
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	143	380	0	261	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Stop		Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 51.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection Sign configuration not allowed in HCM analysis.

Intersection	
Int Delay, s/veh	0

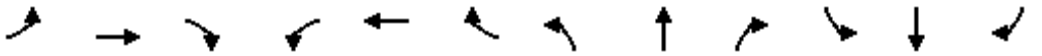
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	70	65	357	0	0	245
Future Vol, veh/h	70	65	357	0	0	245
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	17	6	1	0	0	1
Mvmt Flow	74	69	380	0	0	261

Major/Minor	Major1		Minor2	
Conflicting Flow All	0	0	217	0
Stage 1	-	-	0	-
Stage 2	-	-	217	-
Critical Hdwy	4.27	-	6.51	6.2
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	5.51	-
Follow-up Hdwy	2.353	-	4.009	3.3
Pot Cap-1 Maneuver	-	-	683	-
Stage 1	-	-	-	-
Stage 2	-	-	725	-
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	0	-
Mov Cap-2 Maneuver	-	-	0	-
Stage 1	-	-	0	-
Stage 2	-	-	0	-

Approach	EB	WB
HCM Control Delay, s		
HCM LOS		-

Minor Lane/Major Mvmt	EBL	EBTWBLn1	
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-

Improved Network 2021 PM



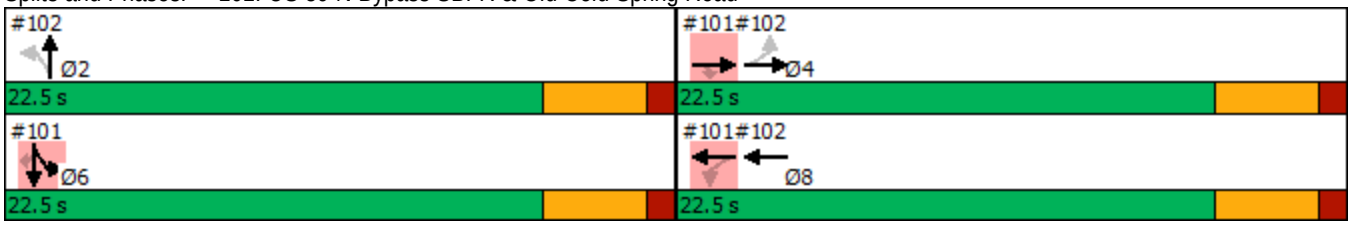
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	205	204	59	475	0	0	0	0	50	22	73
Future Volume (vph)	0	205	204	59	475	0	0	0	0	50	22	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected					0.995						0.967	
Satd. Flow (prot)	0	1743	1495	0	1782	0	0	0	0	0	1809	1170
Flt Permitted					0.945						0.967	
Satd. Flow (perm)	0	1743	1495	0	1692	0	0	0	0	0	1809	1170
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			219									78
Link Speed (mph)		40			40			30			45	
Link Distance (ft)		930			353			1253			1599	
Travel Time (s)		15.9			6.0			28.5			24.2	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	9%	8%	7%	6%	0%	0%	0%	0%	0%	5%	38%
Adj. Flow (vph)	0	220	219	63	511	0	0	0	0	54	24	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	220	219	0	574	0	0	0	0	0	78	78
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Perm	Perm	NA					Split	NA	Perm
Protected Phases		4			8					6	6	
Permitted Phases			4	8								6
Detector Phase		4	4	8	8					6	6	6
Switch Phase												

Lane Group	Ø2
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	2
Permitted Phases	
Detector Phase	
Switch Phase	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)		5.0	5.0	5.0	5.0					5.0	5.0	5.0
Minimum Split (s)		22.5	22.5	22.5	22.5					22.5	22.5	22.5
Total Split (s)		22.5	22.5	22.5	22.5					22.5	22.5	22.5
Total Split (%)		50.0%	50.0%	50.0%	50.0%					50.0%	50.0%	50.0%
Maximum Green (s)		18.0	18.0	18.0	18.0					18.0	18.0	18.0
Yellow Time (s)		3.5	3.5	3.5	3.5					3.5	3.5	3.5
All-Red Time (s)		1.0	1.0	1.0	1.0					1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0						0.0	0.0
Total Lost Time (s)		4.5	4.5		4.5						4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Recall Mode		None	None	None	None					Min	Min	Min
Walk Time (s)		7.0	7.0	7.0	7.0					7.0	7.0	7.0
Flash Dont Walk (s)		11.0	11.0	11.0	11.0					11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0	0	0					0	0	0
Act Effct Green (s)		16.2	16.2		16.2						9.0	9.0
Actuated g/C Ratio		0.47	0.47		0.47						0.26	0.26
v/c Ratio		0.27	0.27		0.72						0.16	0.21
Control Delay		7.0	2.3		14.4						11.1	5.0
Queue Delay		0.0	0.0		0.0						0.0	0.0
Total Delay		7.0	2.3		14.4						11.1	5.0
LOS		A	A		B						B	A
Approach Delay		4.7			14.4						8.0	
Approach LOS		A			B						A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 34.4			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 9.9		Intersection LOS: A	
Intersection Capacity Utilization 56.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 101: US 59 N Bypass SBFR & Old Cold Spring Road



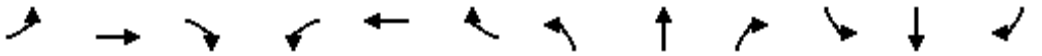
Lane Group	Ø2
Minimum Initial (s)	5.0
Minimum Split (s)	22.5
Total Split (s)	22.5
Total Split (%)	50%
Maximum Green (s)	18.0
Yellow Time (s)	3.5
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	Min
Walk Time (s)	7.0
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Lane Group	EBT	EBR	WBT	SBT	SBR
Lane Group Flow (vph)	220	219	574	78	78
v/c Ratio	0.27	0.27	0.72	0.16	0.21
Control Delay	7.0	2.3	14.4	11.1	5.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	7.0	2.3	14.4	11.1	5.0
Queue Length 50th (ft)	21	0	78	12	0
Queue Length 95th (ft)	59	24	#246	32	19
Internal Link Dist (ft)	850		273	1519	
Turn Bay Length (ft)					
Base Capacity (vph)	929	899	902	965	660
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.24	0.24	0.64	0.08	0.12

Intersection Summary

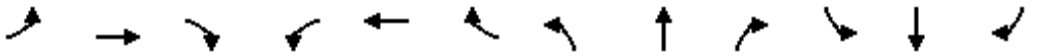
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	205	204	59	475	0	0	0	0	50	22	73
Future Volume (vph)	0	205	204	59	475	0	0	0	0	50	22	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5		4.5						4.5	4.5
Lane Util. Factor		1.00	1.00		1.00						1.00	1.00
Frt		1.00	0.85		1.00						1.00	0.85
Flt Protected		1.00	1.00		0.99						0.97	1.00
Satd. Flow (prot)		1743	1495		1781						1809	1170
Flt Permitted		1.00	1.00		0.94						0.97	1.00
Satd. Flow (perm)		1743	1495		1692						1809	1170
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	220	219	63	511	0	0	0	0	54	24	78
RTOR Reduction (vph)	0	0	115	0	0	0	0	0	0	0	0	57
Lane Group Flow (vph)	0	220	104	0	574	0	0	0	0	0	78	21
Heavy Vehicles (%)	0%	9%	8%	7%	6%	0%	0%	0%	0%	0%	5%	38%
Turn Type		NA	Perm	Perm	NA					Split	NA	Perm
Protected Phases		4			8					6	6	
Permitted Phases			4	8								6
Actuated Green, G (s)		16.2	16.2		16.2						9.0	9.0
Effective Green, g (s)		16.2	16.2		16.2						9.0	9.0
Actuated g/C Ratio		0.47	0.47		0.47						0.26	0.26
Clearance Time (s)		4.5	4.5		4.5						4.5	4.5
Vehicle Extension (s)		3.0	3.0		3.0						3.0	3.0
Lane Grp Cap (vph)		825	708		801						476	307
v/s Ratio Prot		0.13									c0.04	
v/s Ratio Perm			0.07		c0.34							0.02
v/c Ratio		0.27	0.15		0.72						0.16	0.07
Uniform Delay, d1		5.4	5.1		7.2						9.7	9.5
Progression Factor		1.00	1.00		0.88						1.00	1.00
Incremental Delay, d2		0.2	0.1		3.0						0.2	0.1
Delay (s)		5.6	5.2		9.3						9.9	9.5
Level of Service		A	A		A						A	A
Approach Delay (s)		5.4			9.3			0.0			9.7	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	34.2	Sum of lost time (s)	9.0
Intersection Capacity Utilization	56.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology does not support clustered intersections.



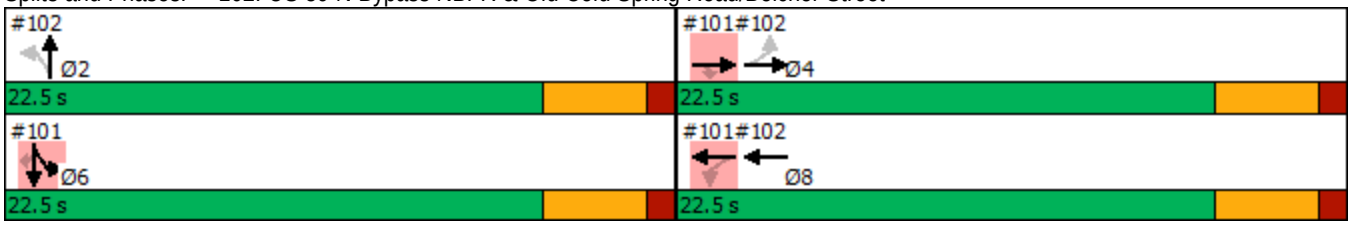
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	193	0	0	262	28	276	27	80	0	0	0
Future Volume (vph)	61	193	0	0	262	28	276	27	80	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Frt					0.987			0.969				
Flt Protected		0.988						0.965				
Satd. Flow (prot)	0	1729	0	0	1803	0	0	3137	0	0	0	0
Flt Permitted		0.869						0.965				
Satd. Flow (perm)	0	1521	0	0	1803	0	0	3137	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					14			83				
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		353			1397			1065			1401	
Travel Time (s)		6.0			23.8			16.1			21.2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	26%	3%	0%	0%	4%	4%	9%	7%	3%	0%	0%	0%
Adj. Flow (vph)	64	201	0	0	273	29	288	28	83	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	265	0	0	302	0	0	399	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2		1	2				
Detector Template	Left	Thru			Thru		Left	Thru				
Leading Detector (ft)	20	100			100		20	100				
Trailing Detector (ft)	0	0			0		0	0				
Detector 1 Position(ft)	0	0			0		0	0				
Detector 1 Size(ft)	20	6			6		20	6				
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0			0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0			0.0		0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4						2					
Detector Phase	4	4			8		2	2				
Switch Phase												

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	6
Permitted Phases	
Detector Phase	
Switch Phase	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	5.0	5.0			5.0		5.0	5.0				
Minimum Split (s)	22.5	22.5			22.5		22.5	22.5				
Total Split (s)	22.5	22.5			22.5		22.5	22.5				
Total Split (%)	50.0%	50.0%			50.0%		50.0%	50.0%				
Maximum Green (s)	18.0	18.0			18.0		18.0	18.0				
Yellow Time (s)	3.5	3.5			3.5		3.5	3.5				
All-Red Time (s)	1.0	1.0			1.0		1.0	1.0				
Lost Time Adjust (s)		0.0			0.0			0.0				
Total Lost Time (s)		4.5			4.5			4.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0				
Recall Mode	None	None			None		Min	Min				
Walk Time (s)	7.0	7.0			7.0		7.0	7.0				
Flash Dont Walk (s)	11.0	11.0			11.0		11.0	11.0				
Pedestrian Calls (#/hr)	0	0			0		0	0				
Act Effct Green (s)		16.2			16.2			9.0				
Actuated g/C Ratio		0.47			0.47			0.26				
v/c Ratio		0.37			0.35			0.45				
Control Delay		5.5			7.3			10.4				
Queue Delay		0.0			0.0			0.0				
Total Delay		5.5			7.3			10.4				
LOS		A			A			B				
Approach Delay		5.5			7.3			10.4				
Approach LOS		A			A			B				

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 34.4			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 8.1		Intersection LOS: A	
Intersection Capacity Utilization 55.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 102: US 59 N Bypass NBFR & Old Cold Spring Road/Belcher Street

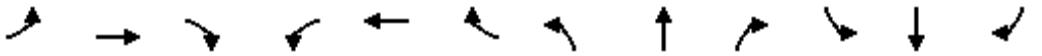


Lane Group	Ø6
Minimum Initial (s)	5.0
Minimum Split (s)	22.5
Total Split (s)	22.5
Total Split (%)	50%
Maximum Green (s)	18.0
Yellow Time (s)	3.5
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	Min
Walk Time (s)	7.0
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Lane Group	EBT	WBT	NBT
Lane Group Flow (vph)	265	302	399
v/c Ratio	0.37	0.35	0.45
Control Delay	5.5	7.3	10.4
Queue Delay	0.0	0.0	0.0
Total Delay	5.5	7.3	10.4
Queue Length 50th (ft)	20	28	27
Queue Length 95th (ft)	39	77	52
Internal Link Dist (ft)	273	1317	985
Turn Bay Length (ft)			
Base Capacity (vph)	811	968	1711
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.33	0.31	0.23

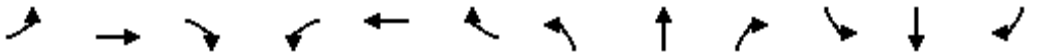
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	193	0	0	262	28	276	27	80	0	0	0
Future Volume (vph)	61	193	0	0	262	28	276	27	80	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5			4.5				
Lane Util. Factor		1.00			1.00			0.95				
Frt		1.00			0.99			0.97				
Flt Protected		0.99			1.00			0.97				
Satd. Flow (prot)		1729			1803			3137				
Flt Permitted		0.87			1.00			0.97				
Satd. Flow (perm)		1521			1803			3137				
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	64	201	0	0	273	29	288	28	83	0	0	0
RTOR Reduction (vph)	0	0	0	0	7	0	0	61	0	0	0	0
Lane Group Flow (vph)	0	265	0	0	295	0	0	338	0	0	0	0
Heavy Vehicles (%)	26%	3%	0%	0%	4%	4%	9%	7%	3%	0%	0%	0%
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		16.2			16.2			9.0				
Effective Green, g (s)		16.2			16.2			9.0				
Actuated g/C Ratio		0.47			0.47			0.26				
Clearance Time (s)		4.5			4.5			4.5				
Vehicle Extension (s)		3.0			3.0			3.0				
Lane Grp Cap (vph)		720			854			825				
v/s Ratio Prot					0.16							
v/s Ratio Perm		c0.17						0.11				
v/c Ratio		0.37			0.35			0.41				
Uniform Delay, d1		5.7			5.7			10.4				
Progression Factor		0.60			1.00			1.00				
Incremental Delay, d2		0.3			0.2			0.3				
Delay (s)		3.8			5.9			10.7				
Level of Service		A			A			B				
Approach Delay (s)		3.8			5.9			10.7			0.0	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM 2000 Control Delay	7.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	34.2	Sum of lost time (s)	9.0
Intersection Capacity Utilization	55.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology does not support clustered intersections.

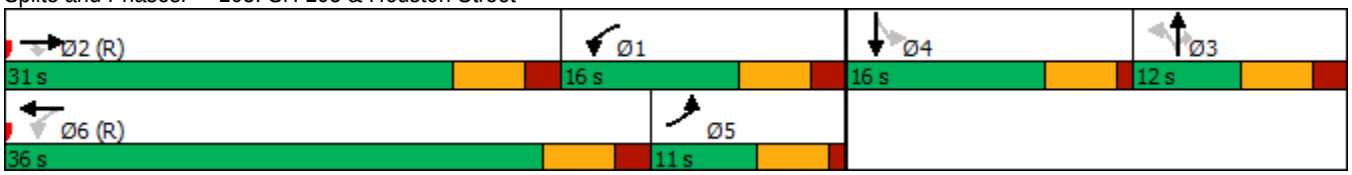


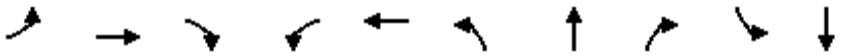
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	488	166	393	396	8	90	8	271	16	34	18
Future Volume (vph)	34	488	166	393	396	8	90	8	271	16	34	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	500		500	560		0	0		300	175		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt			0.850		0.997				0.850		0.949	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1845	1599	1703	1789	0	1787	1900	1538	1805	3295	0
Flt Permitted	0.950			0.279			0.721			0.645		
Satd. Flow (perm)	1805	1845	1599	500	1789	0	1356	1900	1538	1226	3295	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			204		2				277		18	
Link Speed (mph)		55			60			60			30	
Link Distance (ft)		1108			4415			2711			551	
Travel Time (s)		13.7			50.2			30.8			12.5	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	1%	6%	6%	0%	1%	0%	5%	0%	6%	0%
Adj. Flow (vph)	35	498	169	401	404	8	92	8	277	16	35	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	35	498	169	401	412	0	92	8	277	16	53	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			4			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			3			4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			2	6			3		3	4		
Detector Phase	5	2	2	1	6		3	3	3	4	4	
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		5.0	5.0	5.0	10.0	10.0	
Minimum Split (s)	11.0	16.0	16.0	11.0	16.0		11.0	11.0	11.0	16.0	16.0	
Total Split (s)	11.0	31.0	31.0	16.0	36.0		12.0	12.0	12.0	16.0	16.0	
Total Split (%)	14.7%	41.3%	41.3%	21.3%	48.0%		16.0%	16.0%	16.0%	21.3%	21.3%	
Maximum Green (s)	6.0	25.0	25.0	10.0	30.0		6.0	6.0	6.0	11.0	11.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	5.0	5.0	
Lead/Lag	Lag	Lead	Lead	Lag	Lead		Lag	Lag	Lag	Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	4.0	4.0	3.0	4.0		3.0	3.0	3.0	4.0	4.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	
Act Effct Green (s)	5.9	30.1	30.1	45.7	41.7		7.7	7.7	7.7	10.2	10.2	
Actuated g/C Ratio	0.08	0.40	0.40	0.61	0.56		0.10	0.10	0.10	0.14	0.14	
v/c Ratio	0.25	0.67	0.22	0.86	0.41		0.67	0.04	0.68	0.10	0.11	
Control Delay	37.0	26.5	2.6	40.7	14.4		59.8	32.1	15.0	29.8	21.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	37.0	26.5	2.6	40.7	14.4		59.8	32.1	15.0	29.8	21.5	
LOS	D	C	A	D	B		E	C	B	C	C	
Approach Delay		21.3			27.4			26.3			23.4	
Approach LOS		C			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 24.8		Intersection LOS: C	
Intersection Capacity Utilization 74.1%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 103: SH 105 & Houston Street

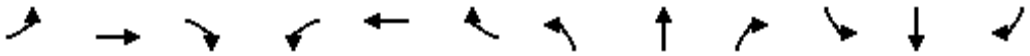




Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	35	498	169	401	412	92	8	277	16	53
v/c Ratio	0.25	0.67	0.22	0.86	0.41	0.67	0.04	0.68	0.10	0.11
Control Delay	37.0	26.5	2.6	40.7	14.4	59.8	32.1	15.0	29.8	21.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.0	26.5	2.6	40.7	14.4	59.8	32.1	15.0	29.8	21.5
Queue Length 50th (ft)	16	208	0	102	104	43	4	0	7	7
Queue Length 95th (ft)	42	#365	26	#247	231	#125	16	#96	24	22
Internal Link Dist (ft)		1028			4335		2631			471
Turn Bay Length (ft)	500		500	560				300	175	
Base Capacity (vph)	144	741	764	465	996	138	194	405	179	498
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	0.24	0.67	0.22	0.86	0.41	0.67	0.04	0.68	0.09	0.11

Intersection Summary

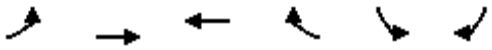
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



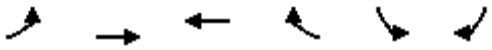
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	488	166	393	396	8	90	8	271	16	34	18
Future Volume (vph)	34	488	166	393	396	8	90	8	271	16	34	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	1845	1599	1703	1789		1787	1900	1538	1805	3296	
Flt Permitted	0.95	1.00	1.00	0.28	1.00		0.72	1.00	1.00	0.65	1.00	
Satd. Flow (perm)	1805	1845	1599	499	1789		1356	1900	1538	1226	3296	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	35	498	169	401	404	8	92	8	277	16	35	18
RTOR Reduction (vph)	0	0	112	0	1	0	0	0	249	0	17	0
Lane Group Flow (vph)	35	498	57	401	411	0	92	8	28	16	36	0
Heavy Vehicles (%)	0%	3%	1%	6%	6%	0%	1%	0%	5%	0%	6%	0%
Turn Type	Prot	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			3			4	
Permitted Phases			2	6			3		3	4		
Actuated Green, G (s)	2.4	25.1	25.1	44.1	36.7		7.7	7.7	7.7	6.2	6.2	
Effective Green, g (s)	2.4	25.1	25.1	44.1	36.7		7.7	7.7	7.7	6.2	6.2	
Actuated g/C Ratio	0.03	0.33	0.33	0.59	0.49		0.10	0.10	0.10	0.08	0.08	
Clearance Time (s)	5.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	5.0	5.0	
Vehicle Extension (s)	3.0	4.0	4.0	3.0	4.0		3.0	3.0	3.0	4.0	4.0	
Lane Grp Cap (vph)	57	617	535	502	875		139	195	157	101	272	
v/s Ratio Prot	0.02	0.27		c0.14	0.23			0.00			0.01	
v/s Ratio Perm			0.04	c0.33			c0.07		0.02	c0.01		
v/c Ratio	0.61	0.81	0.11	0.80	0.47		0.66	0.04	0.18	0.16	0.13	
Uniform Delay, d1	35.8	22.7	17.2	19.4	12.7		32.4	30.3	30.8	32.0	31.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	18.0	10.9	0.4	8.7	1.8		11.2	0.1	0.6	1.0	0.3	
Delay (s)	53.9	33.6	17.6	28.1	14.5		43.6	30.4	31.3	33.0	32.2	
Level of Service	D	C	B	C	B		D	C	C	C	C	
Approach Delay (s)		30.8			21.2			34.3			32.4	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	27.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	23.0
Intersection Capacity Utilization	74.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology expects strict NEMA phasing.



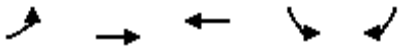
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	218	985	839	304	51	82
Future Volume (vph)	218	985	839	304	51	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.960			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1787	3406	3271	0	1656	1495
Flt Permitted	0.211				0.950	
Satd. Flow (perm)	397	3406	3271	0	1656	1495
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			133			87
Link Speed (mph)		65	65		30	
Link Distance (ft)		2030	1363		297	
Travel Time (s)		21.3	14.3		6.8	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	1%	6%	7%	3%	9%	8%
Adj. Flow (vph)	232	1048	893	323	54	87
Shared Lane Traffic (%)						
Lane Group Flow (vph)	232	1048	1216	0	54	87
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2		1	1
Detector Template	Left	Thru	Thru		Left	Right
Leading Detector (ft)	20	100	100		20	20
Trailing Detector (ft)	0	0	0		0	0
Detector 1 Position(ft)	0	0	0		0	0
Detector 1 Size(ft)	20	6	6		20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	4					6
Detector Phase	4	4	8		6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	5.0
Minimum Split (s)	22.5	22.5	22.5		22.5	22.5
Total Split (s)	67.0	67.0	67.0		23.0	23.0
Total Split (%)	74.4%	74.4%	74.4%		25.6%	25.6%
Maximum Green (s)	62.5	62.5	62.5		18.5	18.5
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	None		Min	Min
Walk Time (s)	7.0	7.0	7.0		7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)	0	0	0		0	0
Act Effct Green (s)	55.9	55.9	55.9		8.0	8.0
Actuated g/C Ratio	0.76	0.76	0.76		0.11	0.11
v/c Ratio	0.77	0.40	0.48		0.30	0.36
Control Delay	26.1	3.5	3.5		37.2	12.8
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	26.1	3.5	3.5		37.2	12.8
LOS	C	A	A		D	B
Approach Delay		7.6	3.5		22.1	
Approach LOS		A	A		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 73.2			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 6.5		Intersection LOS: A	
Intersection Capacity Utilization 60.4%		ICU Level of Service B	
Analysis Period (min) 15			

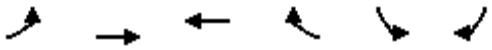
Splits and Phases: 201: US 90 & Waco Street



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	232	1048	1216	54	87
v/c Ratio	0.77	0.40	0.48	0.30	0.36
Control Delay	26.1	3.5	3.5	37.2	12.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	26.1	3.5	3.5	37.2	12.8
Queue Length 50th (ft)	42	60	64	25	0
Queue Length 95th (ft)	#226	102	113	59	40
Internal Link Dist (ft)		1950	1283	217	
Turn Bay Length (ft)	200				
Base Capacity (vph)	332	2848	2757	432	455
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.70	0.37	0.44	0.13	0.19

Intersection Summary

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



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	218	985	839	304	51	82
Future Volume (vph)	218	985	839	304	51	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5		4.5	4.5
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.96		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1787	3406	3272		1656	1495
Flt Permitted	0.21	1.00	1.00		0.95	1.00
Satd. Flow (perm)	397	3406	3272		1656	1495
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	232	1048	893	323	54	87
RTOR Reduction (vph)	0	0	31	0	0	77
Lane Group Flow (vph)	232	1048	1185	0	54	10
Heavy Vehicles (%)	1%	6%	7%	3%	9%	8%
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)	55.9	55.9	55.9		8.0	8.0
Effective Green, g (s)	55.9	55.9	55.9		8.0	8.0
Actuated g/C Ratio	0.77	0.77	0.77		0.11	0.11
Clearance Time (s)	4.5	4.5	4.5		4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	304	2611	2508		181	164
v/s Ratio Prot		0.31	0.36		c0.03	
v/s Ratio Perm	c0.59					0.01
v/c Ratio	0.76	0.40	0.47		0.30	0.06
Uniform Delay, d1	4.8	2.9	3.1		29.9	29.1
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	10.8	0.1	0.1		0.9	0.1
Delay (s)	15.6	3.0	3.2		30.8	29.2
Level of Service	B	A	A		C	C
Approach Delay (s)		5.3	3.2		29.8	
Approach LOS		A	A		C	

Intersection Summary			
HCM 2000 Control Delay	5.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	72.9	Sum of lost time (s)	9.0
Intersection Capacity Utilization	60.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology supports speed limit in the range of 25 to 55 mph.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	904	46	99	822	293	438
Future Volume (vph)	904	46	99	822	293	438
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	125		0	225
Storage Lanes		0	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Frt	0.993					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3501	0	1770	3539	1787	1599
Flt Permitted			0.209		0.950	
Satd. Flow (perm)	3501	0	389	3539	1787	1599
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	10					124
Link Speed (mph)	45			45	30	
Link Distance (ft)	1974			176	2080	
Travel Time (s)	29.9			2.7	47.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	10%	2%	2%	1%	1%
Adj. Flow (vph)	952	48	104	865	308	461
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1000	0	104	865	308	461
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane	Yes			Yes		
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	1
Detector Template	Thru		Left	Thru	Left	Right
Leading Detector (ft)	100		20	100	20	20
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	6		20	6	20	20
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		pm+pt	NA	Prot	pm+ov
Protected Phases	2		1	6	8	1

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Permitted Phases			6			8
Detector Phase	2		1	6	8	1
Switch Phase						
Minimum Initial (s)	10.0		5.0	10.0	5.0	5.0
Minimum Split (s)	15.0		10.0	15.0	10.0	10.0
Total Split (s)	57.0		10.0	67.0	23.0	10.0
Total Split (%)	63.3%		11.1%	74.4%	25.6%	11.1%
Maximum Green (s)	52.0		5.0	62.0	18.0	5.0
Yellow Time (s)	4.0		4.0	4.0	4.0	4.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0		5.0	5.0	5.0	5.0
Lead/Lag	Lag		Lead			Lead
Lead-Lag Optimize?	Yes		Yes			Yes
Vehicle Extension (s)	2.0		2.0	2.0	2.0	2.0
Recall Mode	C-Max		None	Max	None	None
Act Effct Green (s)	52.5		62.7	62.7	17.3	27.5
Actuated g/C Ratio	0.58		0.70	0.70	0.19	0.31
v/c Ratio	0.49		0.30	0.35	0.90	0.80
Control Delay	11.9		6.8	6.1	65.5	33.0
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	11.9		6.8	6.1	65.5	33.0
LOS	B		A	A	E	C
Approach Delay	11.9			6.1	46.0	
Approach LOS	B			A	D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 19.4		Intersection LOS: B	
Intersection Capacity Utilization 61.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 202: Waco Street & FM 1960

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	1000	104	865	308	461
v/c Ratio	0.49	0.30	0.35	0.90	0.80
Control Delay	11.9	6.8	6.1	65.5	33.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	11.9	6.8	6.1	65.5	33.0
Queue Length 50th (ft)	161	17	92	171	177
Queue Length 95th (ft)	210	32	121	#315	#335
Internal Link Dist (ft)	1894		96	2000	
Turn Bay Length (ft)		125			225
Base Capacity (vph)	2047	350	2465	357	574
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.49	0.30	0.35	0.86	0.80

Intersection Summary

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

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	904	46	99	822	293	438
Future Volume (vph)	904	46	99	822	293	438
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0		5.0	5.0	5.0	5.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3501		1770	3539	1787	1599
Flt Permitted	1.00		0.21	1.00	0.95	1.00
Satd. Flow (perm)	3501		390	3539	1787	1599
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	952	48	104	865	308	461
RTOR Reduction (vph)	4	0	0	0	0	93
Lane Group Flow (vph)	996	0	104	865	308	368
Heavy Vehicles (%)	2%	10%	2%	2%	1%	1%
Turn Type	NA		pm+pt	NA	Prot	pm+ov
Protected Phases	2		1	6	8	1
Permitted Phases			6			8
Actuated Green, G (s)	52.5		62.7	62.7	17.3	22.5
Effective Green, g (s)	52.5		62.7	62.7	17.3	22.5
Actuated g/C Ratio	0.58		0.70	0.70	0.19	0.25
Clearance Time (s)	5.0		5.0	5.0	5.0	5.0
Vehicle Extension (s)	2.0		2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	2042		351	2465	343	488
v/s Ratio Prot	c0.28		0.02	0.24	c0.17	c0.04
v/s Ratio Perm			0.19			0.19
v/c Ratio	0.49		0.30	0.35	0.90	0.75
Uniform Delay, d1	10.9		6.1	5.5	35.5	31.2
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8		0.2	0.4	24.2	5.8
Delay (s)	11.8		6.2	5.9	59.7	37.0
Level of Service	B		A	A	E	D
Approach Delay (s)	11.8			5.9	46.1	
Approach LOS	B			A	D	

Intersection Summary			
HCM 2000 Control Delay	19.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	61.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

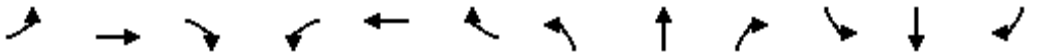
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	904	46	99	822	293	438
Future Volume (veh/h)	904	46	99	822	293	438
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1752	1870	1870	1885	1885
Adj Flow Rate, veh/h	952	48	104	865	308	461
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	10	2	2	1	1
Cap, veh/h	1989	100	414	2448	359	408
Arrive On Green	0.58	0.58	0.06	0.69	0.20	0.20
Sat Flow, veh/h	3536	174	1781	3647	1795	1598
Grp Volume(v), veh/h	491	509	104	865	308	461
Grp Sat Flow(s),veh/h/ln	1777	1839	1781	1777	1795	1598
Q Serve(g_s), s	14.5	14.5	1.9	9.0	14.9	18.0
Cycle Q Clear(g_c), s	14.5	14.5	1.9	9.0	14.9	18.0
Prop In Lane		0.09	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1027	1063	414	2448	359	408
V/C Ratio(X)	0.48	0.48	0.25	0.35	0.86	1.13
Avail Cap(c_a), veh/h	1027	1063	414	2448	359	408
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.1	11.1	7.5	5.8	34.8	33.5
Incr Delay (d2), s/veh	1.6	1.5	0.1	0.4	17.5	84.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	5.4	0.6	2.5	8.1	18.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.7	12.6	7.6	6.2	52.3	118.1
LnGrp LOS	B	B	A	A	D	F
Approach Vol, veh/h	1000			969	769	
Approach Delay, s/veh	12.7			6.3	91.7	
Approach LOS	B			A	F	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	10.0	57.0				67.0	23.0
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	5.0	52.0				62.0	18.0
Max Q Clear Time (g_c+I1), s	3.9	16.5				11.0	20.0
Green Ext Time (p_c), s	0.0	3.9				3.9	0.0

Intersection Summary	
HCM 6th Ctrl Delay	32.6
HCM 6th LOS	C

Notes

User approved ignoring U-Turning movement.

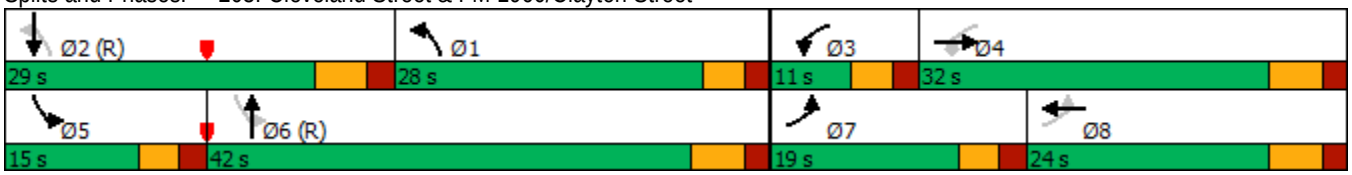


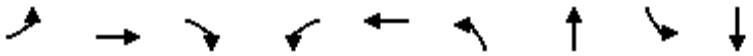
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	322	365	538	65	299	40	488	939	71	55	588	135
Future Volume (vph)	322	365	538	65	299	40	488	939	71	55	588	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	600		600	0		0	225		0	100		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.939	0.850		0.982			0.989			0.972	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	3208	1427	1517	1825	0	1736	3495	0	1805	3283	0
Flt Permitted	0.211			0.239			0.190			0.115		
Satd. Flow (perm)	389	3208	1427	382	1825	0	347	3495	0	218	3283	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		143	294		6			9			26	
Link Speed (mph)		35			35			55			45	
Link Distance (ft)		1871			1513			495			3038	
Travel Time (s)		36.4			29.5			6.1			46.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	3%	0%	3%	19%	2%	4%	4%	2%	4%	0%	8%	2%
Adj. Flow (vph)	332	376	555	67	308	41	503	968	73	57	606	139
Shared Lane Traffic (%)			47%									
Lane Group Flow (vph)	332	637	294	67	349	0	503	1041	0	57	745	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA	Perm	D.P+P	NA		D.P+P	NA		D.P+P	NA	
Protected Phases	7	4		3	8		1	6		5	2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	8		4	4			2			6		
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0	10.0	6.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	16.0	16.0	11.0	16.0		15.0	16.0		15.0	16.0	
Total Split (s)	19.0	32.0	32.0	11.0	24.0		28.0	42.0		15.0	29.0	
Total Split (%)	19.0%	32.0%	32.0%	11.0%	24.0%		28.0%	42.0%		15.0%	29.0%	
Maximum Green (s)	14.0	26.0	26.0	6.0	18.0		23.0	36.0		10.0	23.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	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	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	6.0	6.0	5.0	6.0		5.0	6.0		5.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	4.0	4.0	3.0	5.0		4.0	4.0		4.0	4.0	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	33.0	28.2	28.2	34.0	18.0		47.0	39.0		48.0	23.0	
Actuated g/C Ratio	0.33	0.28	0.28	0.34	0.18		0.47	0.39		0.48	0.23	
v/c Ratio	1.04	0.63	0.48	0.34	1.05		1.04	0.76		0.22	0.96	
Control Delay	89.4	28.0	6.5	25.3	102.9		87.1	31.7		14.2	61.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	89.4	28.0	6.5	25.3	102.9		87.1	31.7		14.2	61.8	
LOS	F	C	A	C	F		F	C		B	E	
Approach Delay		39.1			90.4			49.8			58.4	
Approach LOS		D			F			D			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:NBSB, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.05			
Intersection Signal Delay: 52.4		Intersection LOS: D	
Intersection Capacity Utilization 101.9%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 203: Cleveland Street & FM 1960/Clayton Street



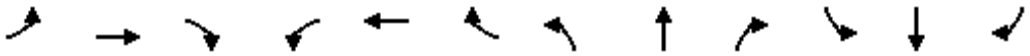


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	332	637	294	67	349	503	1041	57	745
v/c Ratio	1.04	0.63	0.48	0.34	1.05	1.04	0.76	0.22	0.96
Control Delay	89.4	28.0	6.5	25.3	102.9	87.1	31.7	14.2	61.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	89.4	28.0	6.5	25.3	102.9	87.1	31.7	14.2	61.8
Queue Length 50th (ft)	~178	156	0	27	~240	~292	311	17	241
Queue Length 95th (ft)	#355	221	71	57	#419	#495	395	37	#363
Internal Link Dist (ft)		1791			1433		415		2958
Turn Bay Length (ft)	600		600			225		100	
Base Capacity (vph)	319	1007	613	198	333	482	1368	263	775
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	1.04	0.63	0.48	0.34	1.05	1.04	0.76	0.22	0.96

Intersection Summary

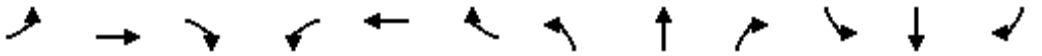
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	322	365	538	65	299	40	488	939	71	55	588	135
Future Volume (vph)	322	365	538	65	299	40	488	939	71	55	588	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0	6.0	5.0	6.0		5.0	6.0		5.0	6.0	
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.94	0.85	1.00	0.98		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1752	3206	1427	1517	1826		1736	3497		1805	3283	
Flt Permitted	0.21	1.00	1.00	0.24	1.00		0.19	1.00		0.11	1.00	
Satd. Flow (perm)	388	3206	1427	381	1826		348	3497		218	3283	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	332	376	555	67	308	41	503	968	73	57	606	139
RTOR Reduction (vph)	0	103	211	0	5	0	0	6	0	0	21	0
Lane Group Flow (vph)	332	534	83	67	344	0	503	1035	0	57	724	0
Heavy Vehicles (%)	3%	0%	3%	19%	2%	4%	4%	2%	4%	0%	8%	2%
Turn Type	D.P+P	NA	Perm	D.P+P	NA		D.P+P	NA		D.P+P	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	8		4	4			2			6		
Actuated Green, G (s)	33.0	28.2	28.2	33.0	19.0		45.0	37.0		45.0	21.0	
Effective Green, g (s)	33.0	28.2	28.2	33.0	19.0		45.0	37.0		45.0	21.0	
Actuated g/C Ratio	0.33	0.28	0.28	0.33	0.19		0.45	0.37		0.45	0.21	
Clearance Time (s)	5.0	6.0	6.0	5.0	6.0		5.0	6.0		5.0	6.0	
Vehicle Extension (s)	3.0	4.0	4.0	3.0	5.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	319	904	402	180	346		489	1293		225	689	
v/s Ratio Prot	c0.15	0.17		0.02	0.19		c0.25	0.30		0.02	c0.22	
v/s Ratio Perm	c0.20		0.06	0.10			0.22			0.09		
v/c Ratio	1.04	0.59	0.21	0.37	0.99		1.03	0.80		0.25	1.05	
Uniform Delay, d1	29.4	30.9	27.4	24.2	40.4		34.3	28.2		18.2	39.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	61.4	1.2	0.3	1.3	46.8		48.2	5.3		0.8	48.6	
Delay (s)	90.8	32.1	27.7	25.5	87.3		82.5	33.5		19.0	88.1	
Level of Service	F	C	C	C	F		F	C		B	F	
Approach Delay (s)		46.5			77.3			49.5			83.2	
Approach LOS		D			E			D			F	

Intersection Summary			
HCM 2000 Control Delay	58.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	101.9%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



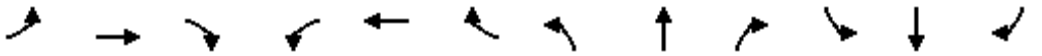
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	322	365	538	65	299	40	488	939	71	55	588	135
Future Volume (veh/h)	322	365	538	65	299	40	488	939	71	55	588	135
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1900	1856	1618	1870	1841	1841	1870	1841	1900	1781	1870
Adj Flow Rate, veh/h	332	376	555	67	308	41	503	968	73	57	606	139
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	0	3	19	2	4	4	2	4	0	8	2
Cap, veh/h	319	512	847	196	291	39	702	1728	130	391	629	144
Arrive On Green	0.14	0.27	0.27	0.05	0.18	0.18	0.36	0.52	0.52	0.08	0.23	0.23
Sat Flow, veh/h	1767	1900	3145	1541	1616	215	1753	3349	253	1810	2735	626
Grp Volume(v), veh/h	332	376	555	67	0	349	503	514	527	57	374	371
Grp Sat Flow(s),veh/h/ln	1767	1900	1572	1541	0	1832	1753	1777	1825	1810	1692	1669
Q Serve(g_s), s	14.0	18.0	15.7	3.1	0.0	18.0	19.6	19.7	19.7	1.3	21.9	22.0
Cycle Q Clear(g_c), s	14.0	18.0	15.7	3.1	0.0	18.0	19.6	19.7	19.7	1.3	21.9	22.0
Prop In Lane	1.00		1.00	1.00		0.12	1.00		0.14	1.00		0.38
Lane Grp Cap(c), veh/h	319	512	847	196	0	330	702	917	941	391	389	384
V/C Ratio(X)	1.04	0.73	0.66	0.34	0.00	1.06	0.72	0.56	0.56	0.15	0.96	0.97
Avail Cap(c_a), veh/h	319	512	847	211	0	330	702	917	941	429	389	384
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.98	0.00	0.98	1.00	1.00	1.00	0.91	0.91	0.91
Uniform Delay (d), s/veh	30.6	33.3	32.4	26.0	0.0	41.0	25.6	16.5	16.5	10.6	38.1	38.1
Incr Delay (d2), s/veh	61.0	5.9	2.1	1.0	0.0	65.4	3.8	2.5	2.4	0.2	35.0	36.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.6	8.9	6.0	1.2	0.0	13.9	9.7	7.4	7.6	0.5	12.3	12.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	91.6	39.2	34.5	27.0	0.0	106.4	29.4	19.0	18.9	10.8	73.1	74.1
LnGrp LOS	F	D	C	C	A	F	C	B	B	B	E	E
Approach Vol, veh/h		1263			416			1544			802	
Approach Delay, s/veh		50.9			93.6			22.3			69.1	
Approach LOS		D			F			C			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	41.5	29.0	10.1	32.9	12.9	57.6	19.0	24.0
Change Period (Y+Rc), s	6.0	* 6	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	23.0	* 23	6.0	26.0	10.0	36.0	14.0	18.0
Max Q Clear Time (g_c+I1), s	21.6	24.0	5.1	20.0	3.3	21.7	16.0	20.0
Green Ext Time (p_c), s	0.4	0.0	0.0	3.1	0.1	6.8	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	48.0
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

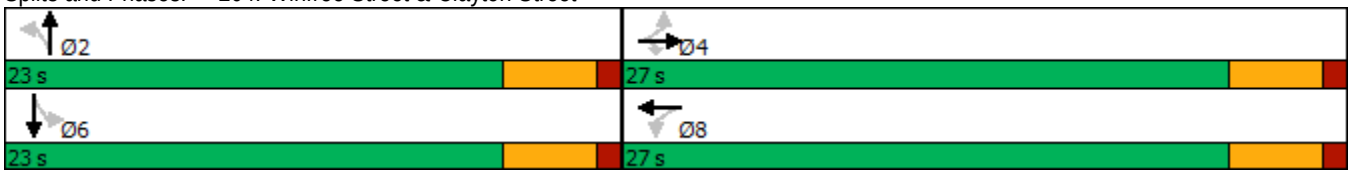


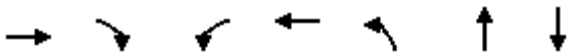
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	567	58	175	193	3	85	220	391	21	182	41
Future Volume (vph)	32	567	58	175	193	3	85	220	391	21	182	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.998			0.904			0.977	
Flt Protected		0.997		0.950			0.950				0.996	
Satd. Flow (prot)	0	1867	1615	1770	1842	0	1770	1718	0	0	1823	0
Flt Permitted		0.978		0.257			0.618				0.672	
Satd. Flow (perm)	0	1831	1615	479	1842	0	1151	1718	0	0	1230	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			59		2			202			23	
Link Speed (mph)		45			30			30			30	
Link Distance (ft)		1513			1036			419			1496	
Travel Time (s)		22.9			23.5			9.5			34.0	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	10%	1%	0%	2%	3%	0%	2%	0%	0%	0%	1%	4%
Adj. Flow (vph)	33	579	59	179	197	3	87	224	399	21	186	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	612	59	179	200	0	87	623	0	0	249	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		2	2		6	6	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	27.0	27.0	27.0	27.0	27.0		23.0	23.0		23.0	23.0	
Total Split (%)	54.0%	54.0%	54.0%	54.0%	54.0%		46.0%	46.0%		46.0%	46.0%	
Maximum Green (s)	22.5	22.5	22.5	22.5	22.5		18.5	18.5		18.5	18.5	
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)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)		4.5	4.5	4.5	4.5		4.5	4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0		0	0	
Act Effct Green (s)		20.8	20.8	20.8	20.8		16.1	16.1			16.1	
Actuated g/C Ratio		0.45	0.45	0.45	0.45		0.35	0.35			0.35	
v/c Ratio		0.74	0.08	0.83	0.24		0.22	0.85			0.56	
Control Delay		18.4	3.1	49.2	9.2		12.6	23.6			17.0	
Queue Delay		0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Delay		18.4	3.1	49.2	9.2		12.6	23.6			17.0	
LOS		B	A	D	A		B	C			B	
Approach Delay		17.0			28.1			22.3			17.0	
Approach LOS		B			C			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 46.2			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 21.0		Intersection LOS: C	
Intersection Capacity Utilization 88.8%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 204: Winfree Street & Clayton Street

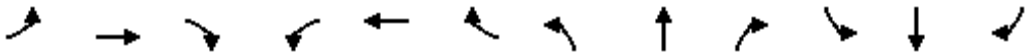




Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	612	59	179	200	87	623	249
v/c Ratio	0.74	0.08	0.83	0.24	0.22	0.85	0.56
Control Delay	18.4	3.1	49.2	9.2	12.6	23.6	17.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.4	3.1	49.2	9.2	12.6	23.6	17.0
Queue Length 50th (ft)	138	0	43	33	17	104	49
Queue Length 95th (ft)	#287	14	#142	66	42	#274	106
Internal Link Dist (ft)	1433			956		339	1416
Turn Bay Length (ft)							
Base Capacity (vph)	915	837	239	922	473	825	519
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	0.67	0.07	0.75	0.22	0.18	0.76	0.48

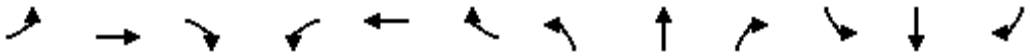
Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	567	58	175	193	3	85	220	391	21	182	41
Future Volume (vph)	32	567	58	175	193	3	85	220	391	21	182	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5	4.5	4.5		4.5	4.5			4.5	
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Frt		1.00	0.85	1.00	1.00		1.00	0.90			0.98	
Flt Protected		1.00	1.00	0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)		1867	1615	1770	1841		1770	1717			1823	
Flt Permitted		0.98	1.00	0.26	1.00		0.62	1.00			0.67	
Satd. Flow (perm)		1831	1615	480	1841		1150	1717			1230	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	33	579	59	179	197	3	87	224	399	21	186	42
RTOR Reduction (vph)	0	0	32	0	1	0	0	131	0	0	15	0
Lane Group Flow (vph)	0	612	27	179	199	0	87	492	0	0	234	0
Heavy Vehicles (%)	10%	1%	0%	2%	3%	0%	2%	0%	0%	0%	1%	4%
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		20.8	20.8	20.8	20.8		16.1	16.1			16.1	
Effective Green, g (s)		20.8	20.8	20.8	20.8		16.1	16.1			16.1	
Actuated g/C Ratio		0.45	0.45	0.45	0.45		0.35	0.35			0.35	
Clearance Time (s)		4.5	4.5	4.5	4.5		4.5	4.5			4.5	
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		829	731	217	834		403	602			431	
v/s Ratio Prot					0.11			c0.29				
v/s Ratio Perm		0.33	0.02	c0.37			0.08				0.19	
v/c Ratio		0.74	0.04	0.82	0.24		0.22	0.82			0.54	
Uniform Delay, d1		10.3	7.0	11.0	7.7		10.5	13.6			12.0	
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2		3.5	0.0	21.8	0.1		0.3	8.4			1.4	
Delay (s)		13.8	7.0	32.8	7.8		10.7	22.0			13.4	
Level of Service		B	A	C	A		B	C			B	
Approach Delay (s)		13.2			19.6			20.6			13.4	
Approach LOS		B			B			C			B	

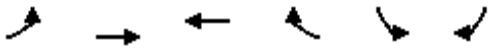
Intersection Summary			
HCM 2000 Control Delay	17.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	45.9	Sum of lost time (s)	9.0
Intersection Capacity Utilization	88.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	567	58	175	193	3	85	220	391	21	182	41
Future Volume (veh/h)	32	567	58	175	193	3	85	220	391	21	182	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1885	1900	1870	1856	1900	1870	1900	1900	1900	1885	1841
Adj Flow Rate, veh/h	33	579	59	179	197	3	87	224	399	21	186	42
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	10	1	0	2	3	0	2	0	0	0	1	4
Cap, veh/h	97	814	725	290	820	12	304	227	404	79	326	66
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.37	0.37	0.37	0.37	0.37	0.37
Sat Flow, veh/h	48	1810	1610	790	1823	28	1153	613	1091	3	882	179
Grp Volume(v), veh/h	612	0	59	179	0	200	87	0	623	249	0	0
Grp Sat Flow(s),veh/h/ln	1857	0	1610	790	0	1851	1153	0	1704	1064	0	0
Q Serve(g_s), s	1.7	0.0	1.0	9.2	0.0	3.3	0.0	0.0	18.2	0.3	0.0	0.0
Cycle Q Clear(g_c), s	13.3	0.0	1.0	22.5	0.0	3.3	7.9	0.0	18.2	18.5	0.0	0.0
Prop In Lane	0.05		1.00	1.00		0.01	1.00		0.64	0.08		0.17
Lane Grp Cap(c), veh/h	912	0	725	290	0	833	304	0	630	472	0	0
V/C Ratio(X)	0.67	0.00	0.08	0.62	0.00	0.24	0.29	0.00	0.99	0.53	0.00	0.00
Avail Cap(c_a), veh/h	912	0	725	290	0	833	304	0	630	472	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	11.2	0.0	7.9	21.3	0.0	8.5	12.4	0.0	15.6	12.1	0.0	0.0
Incr Delay (d2), s/veh	1.9	0.0	0.0	4.0	0.0	0.1	0.5	0.0	32.8	1.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.0	0.3	2.3	0.0	1.1	0.7	0.0	11.5	1.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.1	0.0	7.9	25.2	0.0	8.6	12.9	0.0	48.4	13.2	0.0	0.0
LnGrp LOS	B	A	A	C	A	A	B	A	D	B	A	A
Approach Vol, veh/h		671			379			710			249	
Approach Delay, s/veh		12.7			16.5			44.1			13.2	
Approach LOS		B			B			D			B	

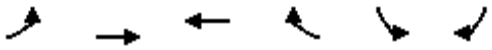
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		23.0		27.0		23.0		27.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.5		22.5		18.5		22.5				
Max Q Clear Time (g_c+I1), s		20.2		15.3		20.5		24.5				
Green Ext Time (p_c), s		0.0		2.3		0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			24.6									
HCM 6th LOS			C									



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	12	980	430	0	0	41
Future Volume (vph)	12	980	430	0	0	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.865	
Flt Protected		0.999				
Satd. Flow (prot)	0	1880	1881	0	1644	0
Flt Permitted		0.999				
Satd. Flow (perm)	0	1880	1881	0	1644	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		1036	1081		1292	
Travel Time (s)		15.7	16.4		29.4	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	1%	1%	0%	0%	0%
Adj. Flow (vph)	13	1101	483	0	0	46
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1114	483	0	46	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 71.2%		ICU Level of Service C	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	12	980	430	0	0	41
Future Volume (Veh/h)	12	980	430	0	0	41
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	13	1101	483	0	0	46
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1036				
pX, platoon unblocked					0.73	
vC, conflicting volume	483				1610	483
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	483				1651	483
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				100	92
cM capacity (veh/h)	1090				79	588

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	1114	483	46
Volume Left	13	0	0
Volume Right	0	0	46
cSH	1090	1700	588
Volume to Capacity	0.01	0.28	0.08
Queue Length 95th (ft)	1	0	6
Control Delay (s)	0.4	0.0	11.6
Lane LOS	A		B
Approach Delay (s)	0.4	0.0	11.6
Approach LOS			B

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	71.2%	ICU Level of Service	C
Analysis Period (min)	15		

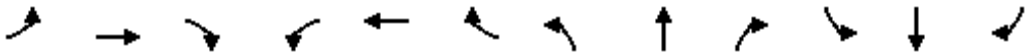
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	12	980	430	0	0	41
Future Vol, veh/h	12	980	430	0	0	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	1	1	0	0	0
Mvmt Flow	13	1101	483	0	0	46

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	483	0	-	0	1610	483
Stage 1	-	-	-	-	483	-
Stage 2	-	-	-	-	1127	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1090	-	-	-	116	588
Stage 1	-	-	-	-	625	-
Stage 2	-	-	-	-	312	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1090	-	-	-	112	588
Mov Cap-2 Maneuver	-	-	-	-	112	-
Stage 1	-	-	-	-	606	-
Stage 2	-	-	-	-	312	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	11.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1090	-	-	-	588
HCM Lane V/C Ratio	0.012	-	-	-	0.078
HCM Control Delay (s)	8.3	0	-	-	11.6
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.3

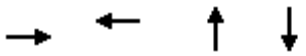


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	103	26	27	15	38	81	27	1184	26	17	757	36
Future Volume (vph)	103	26	27	15	38	81	27	1184	26	17	757	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.977			0.918			0.997			0.993	
Flt Protected		0.968			0.994			0.999			0.999	
Satd. Flow (prot)	0	1785	0	0	1676	0	0	3463	0	0	3391	0
Flt Permitted		0.734			0.956			0.922			0.912	
Satd. Flow (perm)	0	1354	0	0	1612	0	0	3196	0	0	3096	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			55			5			11	
Link Speed (mph)		30			30			45			55	
Link Distance (ft)		594			763			3038			1923	
Travel Time (s)		13.5			17.3			46.0			23.8	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	1%	0%	0%	20%	0%	2%	0%	4%	0%	0%	6%	0%
Adj. Flow (vph)	111	28	29	16	41	87	29	1273	28	18	814	39
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	168	0	0	144	0	0	1330	0	0	871	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4			8			6			2		
Detector Phase	4	4		8	8		6	6		2	2	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	5.0	5.0		5.0	5.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	11.0		24.0	24.0		16.0	16.0		16.0	16.0	
Total Split (s)	24.0	24.0		24.0	24.0		46.0	46.0		46.0	46.0	
Total Split (%)	34.3%	34.3%		34.3%	34.3%		65.7%	65.7%		65.7%	65.7%	
Maximum Green (s)	18.0	18.0		18.0	18.0		40.0	40.0		40.0	40.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		4.0	4.0		4.0	4.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)				5.0	5.0							
Flash Dont Walk (s)				13.0	13.0							
Pedestrian Calls (#/hr)				0	0							
Act Effct Green (s)		12.2			12.2			45.8			45.8	
Actuated g/C Ratio		0.17			0.17			0.65			0.65	
v/c Ratio		0.68			0.44			0.64			0.43	
Control Delay		38.1			19.7			9.8			7.3	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		38.1			19.7			9.8			7.3	
LOS		D			B			A			A	
Approach Delay		38.1			19.7			9.8			7.3	
Approach LOS		D			B			A			A	

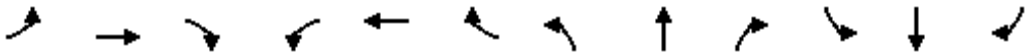
Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 11.4		Intersection LOS: B	
Intersection Capacity Utilization 78.3%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 206: Cleveland Street & Linney Street



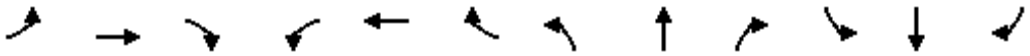
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	168	144	1330	871
v/c Ratio	0.68	0.44	0.64	0.43
Control Delay	38.1	19.7	9.8	7.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	38.1	19.7	9.8	7.3
Queue Length 50th (ft)	63	34	151	79
Queue Length 95th (ft)	111	74	274	147
Internal Link Dist (ft)	514	683	2958	1843
Turn Bay Length (ft)				
Base Capacity (vph)	358	455	2094	2031
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.47	0.32	0.64	0.43

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	103	26	27	15	38	81	27	1184	26	17	757	36
Future Volume (vph)	103	26	27	15	38	81	27	1184	26	17	757	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0			6.0			6.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frt		0.98			0.92			1.00			0.99	
Flt Protected		0.97			0.99			1.00			1.00	
Satd. Flow (prot)		1785			1678			3462			3392	
Flt Permitted		0.73			0.96			0.92			0.91	
Satd. Flow (perm)		1354			1612			3195			3097	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	111	28	29	16	41	87	29	1273	28	18	814	39
RTOR Reduction (vph)	0	12	0	0	45	0	0	2	0	0	4	0
Lane Group Flow (vph)	0	156	0	0	99	0	0	1328	0	0	867	0
Heavy Vehicles (%)	1%	0%	0%	20%	0%	2%	0%	4%	0%	0%	6%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4			8			6			2		
Actuated Green, G (s)		12.2			12.2			45.8			45.8	
Effective Green, g (s)		12.2			12.2			45.8			45.8	
Actuated g/C Ratio		0.17			0.17			0.65			0.65	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Vehicle Extension (s)		2.0			2.0			4.0			4.0	
Lane Grp Cap (vph)		235			280			2090			2026	
v/s Ratio Prot												
v/s Ratio Perm		c0.12			0.06			c0.42			0.28	
v/c Ratio		0.67			0.35			0.64			0.43	
Uniform Delay, d1		27.0			25.4			7.2			5.8	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		5.4			0.3			1.5			0.7	
Delay (s)		32.4			25.7			8.6			6.5	
Level of Service		C			C			A			A	
Approach Delay (s)		32.4			25.7			8.6			6.5	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	10.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	78.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	26	27	15	38	81	27	1184	26	17	757	36
Future Volume (veh/h)	103	26	27	15	38	81	27	1184	26	17	757	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1900	1604	1900	1870	1900	1841	1900	1900	1811	1900
Adj Flow Rate, veh/h	111	28	29	16	41	87	29	1273	28	18	814	39
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	0	0	20	0	2	0	4	0	0	6	0
Cap, veh/h	216	43	36	72	82	149	78	2291	50	70	2185	103
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.69	0.69	0.69	0.69	0.69	0.69
Sat Flow, veh/h	933	303	258	107	586	1058	35	3330	73	24	3175	150
Grp Volume(v), veh/h	168	0	0	144	0	0	689	0	641	450	0	421
Grp Sat Flow(s),veh/h/ln	1494	0	0	1751	0	0	1775	0	1662	1728	0	1621
Q Serve(g_s), s	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.7	0.0	0.0	7.7
Cycle Q Clear(g_c), s	7.5	0.0	0.0	5.4	0.0	0.0	13.0	0.0	13.7	7.2	0.0	7.7
Prop In Lane	0.66		0.17	0.11		0.60	0.04		0.04	0.04		0.09
Lane Grp Cap(c), veh/h	295	0	0	303	0	0	1275	0	1144	1243	0	1116
V/C Ratio(X)	0.57	0.00	0.00	0.48	0.00	0.00	0.54	0.00	0.56	0.36	0.00	0.38
Avail Cap(c_a), veh/h	460	0	0	496	0	0	1275	0	1144	1243	0	1116
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.45	0.00	0.45	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.0	0.0	0.0	28.2	0.0	0.0	5.4	0.0	5.5	4.5	0.0	4.6
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.4	0.0	0.0	0.7	0.0	0.9	0.8	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	0.0	2.2	0.0	0.0	3.0	0.0	2.9	1.5	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.6	0.0	0.0	28.7	0.0	0.0	6.2	0.0	6.4	5.3	0.0	5.6
LnGrp LOS	C	A	A	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		168			144			1330			871	
Approach Delay, s/veh		29.6			28.7			6.3			5.5	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		54.2		15.8		54.2		15.8				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		40.0		18.0		40.0		18.0				
Max Q Clear Time (g_c+I1), s		9.7		9.5		15.7		7.4				
Green Ext Time (p_c), s		8.1		0.4		13.2		0.3				

Intersection Summary												
HCM 6th Ctrl Delay			8.8									
HCM 6th LOS			A									

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.

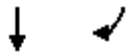
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	4	94	1432	26	5	1261	45	11	3	5	1	35
Future Volume (vph)	4	94	1432	26	5	1261	45	11	3	5	1	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		200		0	200		0	0		0		0
Storage Lanes		1		0	1		0	0		0		0
Taper Length (ft)		25			25			25				25
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00
Frt			0.997			0.995			0.961			
Flt Protected		0.950			0.950				0.972			
Satd. Flow (prot)	0	1734	5023	0	1805	4969	0	0	1462	0	0	0
Flt Permitted		0.455			0.179				0.716			
Satd. Flow (perm)	0	831	5023	0	340	4969	0	0	1077	0	0	0
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			9			10			6			
Link Speed (mph)			55			50			30			
Link Distance (ft)			1682			1949			1310			
Travel Time (s)			20.9			26.6			29.8			
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	33%	3%	3%	0%	0%	4%	0%	25%	0%	25%	0%	0%
Adj. Flow (vph)	4	106	1609	29	6	1417	51	12	3	6	1	39
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	110	1638	0	6	1468	0	0	21	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left
Median Width(ft)			12			12			0			
Link Offset(ft)			0			0			0			
Crosswalk Width(ft)			16			16			16			
Two way Left Turn Lane			Yes			Yes						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	9	15
Number of Detectors	1	1	2		1	2		1	2		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Left
Leading Detector (ft)	20	20	100		20	100		20	100		20	20
Trailing Detector (ft)	0	0	0		0	0		0	0		0	0
Detector 1 Position(ft)	0	0	0		0	0		0	0		0	0
Detector 1 Size(ft)	20	20	6		20	6		20	6		20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94			94			
Detector 2 Size(ft)			6			6			6			
Detector 2 Type			Cl+Ex			Cl+Ex			Cl+Ex			
Detector 2 Channel												
Detector 2 Extend (s)			0.0			0.0			0.0			
Turn Type	custom	Prot	NA		Perm	NA		Perm	NA		Perm	Perm
Protected Phases		5	2			6			8			

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	8	116
Future Volume (vph)	8	116
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.902	
Flt Protected	0.989	
Satd. Flow (prot)	1671	0
Flt Permitted	0.917	
Satd. Flow (perm)	1549	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	130	
Link Speed (mph)	30	
Link Distance (ft)	2374	
Travel Time (s)	54.0	
Peak Hour Factor	0.89	0.89
Heavy Vehicles (%)	0%	2%
Adj. Flow (vph)	9	130
Shared Lane Traffic (%)		
Lane Group Flow (vph)	179	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	4	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Permitted Phases	5				6			8			4	4
Detector Phase	5	5	2		6	6		8	8		4	4
Switch Phase												
Minimum Initial (s)	8.0	8.0	10.0		10.0	10.0		8.0	8.0		8.0	8.0
Minimum Split (s)	13.0	13.0	17.0		22.5	22.5		13.5	13.5		13.5	13.5
Total Split (s)	16.0	16.0	41.5		25.5	25.5		13.5	13.5		13.5	13.5
Total Split (%)	29.1%	29.1%	75.5%		46.4%	46.4%		24.5%	24.5%		24.5%	24.5%
Maximum Green (s)	11.0	11.0	34.5		18.5	18.5		8.0	8.0		8.0	8.0
Yellow Time (s)	3.5	3.5	5.0		5.0	5.0		3.5	3.5		3.5	3.5
All-Red Time (s)	1.5	1.5	2.0		2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0			0.0			
Total Lost Time (s)		5.0	7.0		7.0	7.0			5.5			
Lead/Lag	Lead	Lead			Lag	Lag						
Lead-Lag Optimize?	Yes	Yes			Yes	Yes						
Vehicle Extension (s)	5.0	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Recall Mode	None	None	C-Max		C-Max	C-Max		None	None		None	None
Act Effct Green (s)		11.0	38.6		25.8	25.8			8.0			
Actuated g/C Ratio		0.20	0.70		0.47	0.47			0.15			
v/c Ratio		0.66	0.46		0.04	0.63			0.13			
Control Delay		43.6	5.4		13.4	17.2			19.5			
Queue Delay		0.0	0.0		0.0	0.0			0.0			
Total Delay		43.6	5.4		13.4	17.2			19.5			
LOS		D	A		B	B			B			
Approach Delay			7.8			17.2			19.5			
Approach LOS			A			B			B			

Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 55			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 12.3		Intersection LOS: B	
Intersection Capacity Utilization 62.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 301: Bowie Street & US 90



Lane Group	SBT	SBR
Permitted Phases		
Detector Phase	4	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	13.5	
Total Split (s)	13.5	
Total Split (%)	24.5%	
Maximum Green (s)	8.0	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	5.0	
Recall Mode	None	
Act Effct Green (s)	8.0	
Actuated g/C Ratio	0.15	
v/c Ratio	0.53	
Control Delay	14.5	
Queue Delay	0.0	
Total Delay	14.5	
LOS	B	
Approach Delay	14.5	
Approach LOS	B	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	110	1638	6	1468	21	179
v/c Ratio	0.66	0.46	0.04	0.63	0.13	0.53
Control Delay	43.6	5.4	13.4	17.2	19.5	14.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.6	5.4	13.4	17.2	19.5	14.5
Queue Length 50th (ft)	34	89	1	160	4	14
Queue Length 95th (ft)	#99	116	8	#239	20	61
Internal Link Dist (ft)		1602		1869	1230	2294
Turn Bay Length (ft)	200		200			
Base Capacity (vph)	167	3528	159	2336	161	336
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	0.66	0.46	0.04	0.63	0.13	0.53

Intersection Summary

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

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	4	94	1432	26	5	1261	45	11	3	5	1	35
Future Volume (vph)	4	94	1432	26	5	1261	45	11	3	5	1	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	7.0		7.0	7.0			5.5			
Lane Util. Factor		1.00	0.91		1.00	0.91			1.00			
Frt		1.00	1.00		1.00	0.99			0.96			
Flt Protected		0.95	1.00		0.95	1.00			0.97			
Satd. Flow (prot)		1734	5025		1805	4968			1463			
Flt Permitted		0.45	1.00		0.18	1.00			0.72			
Satd. Flow (perm)		830	5025		341	4968			1077			
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	4	106	1609	29	6	1417	51	12	3	6	1	39
RTOR Reduction (vph)	0	0	3	0	0	6	0	0	5	0	0	0
Lane Group Flow (vph)	0	110	1635	0	6	1462	0	0	16	0	0	0
Heavy Vehicles (%)	33%	3%	3%	0%	0%	4%	0%	25%	0%	25%	0%	0%
Turn Type	custom	Prot	NA		Perm	NA		Perm	NA		Perm	Perm
Protected Phases		5	2			6			8			
Permitted Phases	5				6			8			4	4
Actuated Green, G (s)		8.8	36.1		22.3	22.3			6.4			
Effective Green, g (s)		8.8	36.1		22.3	22.3			6.4			
Actuated g/C Ratio		0.16	0.66		0.41	0.41			0.12			
Clearance Time (s)		5.0	7.0		7.0	7.0			5.5			
Vehicle Extension (s)		5.0	5.0		5.0	5.0			5.0			
Lane Grp Cap (vph)		132	3298		138	2014			125			
v/s Ratio Prot			0.33			c0.29						
v/s Ratio Perm		c0.13			0.02				0.01			
v/c Ratio		0.83	0.50		0.04	0.73			0.13			
Uniform Delay, d1		22.4	4.8		9.9	13.8			21.8			
Progression Factor		1.00	1.00		1.00	1.00			1.00			
Incremental Delay, d2		37.2	0.5		0.6	2.3			0.9			
Delay (s)		59.6	5.3		10.5	16.1			22.7			
Level of Service		E	A		B	B			C			
Approach Delay (s)			8.8			16.1			22.7			
Approach LOS			A			B			C			

Intersection Summary			
HCM 2000 Control Delay	12.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	8	116
Future Volume (vph)	8	116
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.5	
Lane Util. Factor	1.00	
Frt	0.90	
Flt Protected	0.99	
Satd. Flow (prot)	1671	
Flt Permitted	0.92	
Satd. Flow (perm)	1549	
Peak-hour factor, PHF	0.89	0.89
Adj. Flow (vph)	9	130
RTOR Reduction (vph)	115	0
Lane Group Flow (vph)	64	0
Heavy Vehicles (%)	0%	2%
Turn Type	NA	
Protected Phases	4	
Permitted Phases		
Actuated Green, G (s)	6.4	
Effective Green, g (s)	6.4	
Actuated g/C Ratio	0.12	
Clearance Time (s)	5.5	
Vehicle Extension (s)	5.0	
Lane Grp Cap (vph)	180	
v/s Ratio Prot		
v/s Ratio Perm	c0.04	
v/c Ratio	0.36	
Uniform Delay, d1	22.4	
Progression Factor	1.00	
Incremental Delay, d2	2.5	
Delay (s)	24.9	
Level of Service	C	
Approach Delay (s)	24.9	
Approach LOS	C	

Intersection Summary

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (veh/h)	4	94	1432	26	5	1261	45	11	3	5	1	35
Future Volume (veh/h)	4	94	1432	26	5	1261	45	11	3	5	1	35
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0		0
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00	1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
Work Zone On Approach			No			No			No			
Adj Sat Flow, veh/h/ln		1856	1856	1900	1900	1841	1900	1530	1900	1530		1900
Adj Flow Rate, veh/h		106	1609	29	6	1417	51	12	3	6		39
Peak Hour Factor		0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89		0.89
Percent Heavy Veh, %		3	3	0	0	4	0	25	0	25		0
Cap, veh/h		206	3250	59	264	2125	76	207	60	66		115
Arrive On Green		0.12	0.63	0.63	0.43	0.43	0.43	0.14	0.14	0.14		0.14
Sat Flow, veh/h		1767	5124	92	311	4979	179	754	433	475		251
Grp Volume(v), veh/h		106	1060	578	6	953	515	21	0	0		178
Grp Sat Flow(s),veh/h/ln		1767	1689	1839	311	1675	1808	1661	0	0		1606
Q Serve(g_s), s		3.1	9.2	9.2	0.6	12.5	12.5	0.0	0.0	0.0		3.8
Cycle Q Clear(g_c), s		3.1	9.2	9.2	0.6	12.5	12.5	0.6	0.0	0.0		5.9
Prop In Lane		1.00		0.05	1.00		0.10	0.57		0.29		0.22
Lane Grp Cap(c), veh/h		206	2142	1166	264	1429	772	333	0	0		302
V/C Ratio(X)		0.51	0.50	0.50	0.02	0.67	0.67	0.06	0.00	0.00		0.59
Avail Cap(c_a), veh/h		353	2142	1166	264	1429	772	343	0	0		313
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
Upstream Filter(I)		1.00	1.00	1.00	0.85	0.85	0.85	1.00	0.00	0.00		1.00
Uniform Delay (d), s/veh		22.8	5.4	5.4	9.2	12.6	12.6	20.7	0.0	0.0		22.9
Incr Delay (d2), s/veh		4.2	0.8	1.5	0.1	2.1	3.9	0.2	0.0	0.0		4.5
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
%ile BackOfQ(50%),veh/ln		1.3	1.5	1.8	0.0	3.7	4.4	0.2	0.0	0.0		2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		27.0	6.2	6.9	9.4	14.7	16.5	20.8	0.0	0.0		27.4
LnGrp LOS		C	A	A	A	B	B	C	A	A		C
Approach Vol, veh/h			1744			1474			21			
Approach Delay, s/veh			7.7			15.3			20.8			
Approach LOS			A			B			C			

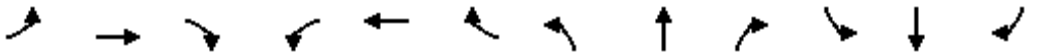
Timer - Assigned Phs	2		4	5	6		8					
Phs Duration (G+Y+Rc), s	41.9		13.1	11.4	30.5		13.1					
Change Period (Y+Rc), s	7.0		5.5	5.0	7.0		5.5					
Max Green Setting (Gmax), s	34.5		8.0	11.0	18.5		8.0					
Max Q Clear Time (g_c+I1), s	11.2		7.9	5.1	14.5		2.6					
Green Ext Time (p_c), s	17.6		0.0	0.2	3.5		0.0					

Intersection Summary												
HCM 6th Ctrl Delay		12.1										
HCM 6th LOS		B										

Notes

User approved ignoring U-Turning movement.

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	8	116
Future Volume (veh/h)	8	116
Initial Q (Qb), veh	0	0
Ped-Bike Adj(A_pbT)		1.00
Parking Bus, Adj	1.00	1.00
Work Zone On Approach	No	
Adj Sat Flow, veh/h/ln	1900	1870
Adj Flow Rate, veh/h	9	130
Peak Hour Factor	0.89	0.89
Percent Heavy Veh, %	0	2
Cap, veh/h	25	162
Arrive On Green	0.14	0.14
Sat Flow, veh/h	182	1173
Grp Volume(v), veh/h	0	0
Grp Sat Flow(s),veh/h/ln	0	0
Q Serve(g_s), s	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0
Prop In Lane		0.73
Lane Grp Cap(c), veh/h	0	0
V/C Ratio(X)	0.00	0.00
Avail Cap(c_a), veh/h	0	0
HCM Platoon Ratio	1.00	1.00
Upstream Filter(I)	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0
Unsig. Movement Delay, s/veh		
LnGrp Delay(d),s/veh	0.0	0.0
LnGrp LOS	A	A
Approach Vol, veh/h	178	
Approach Delay, s/veh	27.4	
Approach LOS	C	
Timer - Assigned Phs		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	325	1092	11	12	868	42	14	24	33	122	22	325
Future Volume (vph)	325	1092	11	12	868	42	14	24	33	122	22	325
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	200		0	100		0	0		0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.993			0.913				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	4973	0	1626	4948	0	1641	1735	0	1805	1900	1599
Flt Permitted	0.179			0.230			0.742			0.438		
Satd. Flow (perm)	340	4973	0	394	4948	0	1282	1735	0	832	1900	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			12			36				244
Link Speed (mph)		55			50			55			30	
Link Distance (ft)		1949			4264			1352			297	
Travel Time (s)		24.2			58.1			16.8			6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	13%	11%	4%	6%	10%	0%	0%	0%	0%	1%
Adj. Flow (vph)	353	1187	12	13	943	46	15	26	36	133	24	353
Shared Lane Traffic (%)												
Lane Group Flow (vph)	353	1199	0	13	989	0	15	62	0	133	24	353
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			8			4		4
Detector Phase	5	2		1	6		3	8		7	4	5
Switch Phase												
Minimum Initial (s)	8.0	10.0		8.0	10.0		5.0	8.0		5.0	8.0	8.0
Minimum Split (s)	13.0	16.5		13.0	16.5		9.5	14.0		9.5	14.0	13.0
Total Split (s)	14.0	23.4		13.0	22.4		9.5	14.0		9.6	14.1	14.0
Total Split (%)	23.3%	39.0%		21.7%	37.3%		15.8%	23.3%		16.0%	23.5%	23.3%
Maximum Green (s)	9.0	16.9		8.0	15.9		5.0	8.0		5.1	8.1	9.0
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.0		3.5	4.0	3.5
All-Red Time (s)	1.5	2.0		1.5	2.0		1.0	2.0		1.0	2.0	1.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.5		5.0	6.5		4.5	6.0		4.5	6.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.5	3.5		3.5	3.5		3.0	4.5		3.0	4.5	3.5
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
Act Effct Green (s)	37.2	35.2		31.8	22.3		10.8	8.0		13.7	11.9	24.3
Actuated g/C Ratio	0.62	0.59		0.53	0.37		0.18	0.13		0.23	0.20	0.40
v/c Ratio	0.81	0.41		0.03	0.54		0.06	0.24		0.46	0.06	0.45
Control Delay	29.3	11.9		7.5	18.3		14.9	15.7		22.5	19.9	5.6
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	29.3	11.9		7.5	18.3		14.9	15.7		22.5	19.9	5.6
LOS	C	B		A	B		B	B		C	B	A
Approach Delay		15.9			18.2			15.6			10.7	
Approach LOS		B			B			B			B	

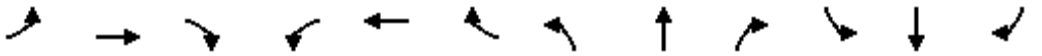
Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 15.8		Intersection LOS: B	
Intersection Capacity Utilization 63.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 302: Main Street & US 90

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	353	1199	13	989	15	62	133	24	353
v/c Ratio	0.81	0.41	0.03	0.54	0.06	0.24	0.46	0.06	0.45
Control Delay	29.3	11.9	7.5	18.3	14.9	15.7	22.5	19.9	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.3	11.9	7.5	18.3	14.9	15.7	22.5	19.9	5.6
Queue Length 50th (ft)	72	96	2	117	4	8	35	6	17
Queue Length 95th (ft)	#230	#221	9	160	15	38	71	26	78
Internal Link Dist (ft)		1869		4184		1272		217	
Turn Bay Length (ft)	150		200		100				
Base Capacity (vph)	442	2921	373	1843	261	262	289	376	798
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	0.80	0.41	0.03	0.54	0.06	0.24	0.46	0.06	0.44

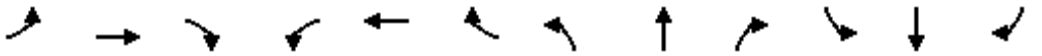
Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	325	1092	11	12	868	42	14	24	33	122	22	325
Future Volume (vph)	325	1092	11	12	868	42	14	24	33	122	22	325
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.5		5.0	6.5		4.5	6.0		4.5	6.0	5.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00		1.00	0.99		1.00	0.91		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1805	4976		1626	4948		1641	1735		1805	1900	1599
Flt Permitted	0.18	1.00		0.23	1.00		0.74	1.00		0.44	1.00	1.00
Satd. Flow (perm)	339	4976		393	4948		1281	1735		833	1900	1599
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	353	1187	12	13	943	46	15	26	36	133	24	353
RTOR Reduction (vph)	0	1	0	0	9	0	0	32	0	0	0	164
Lane Group Flow (vph)	353	1198	0	13	980	0	15	30	0	133	24	189
Heavy Vehicles (%)	0%	4%	13%	11%	4%	6%	10%	0%	0%	0%	0%	1%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	31.7	25.1		19.0	17.4		7.3	6.3		15.3	10.3	19.6
Effective Green, g (s)	31.7	25.1		19.0	17.4		7.3	6.3		15.3	10.3	19.6
Actuated g/C Ratio	0.53	0.42		0.32	0.29		0.12	0.10		0.26	0.17	0.33
Clearance Time (s)	5.0	6.5		5.0	6.5		4.5	6.0		4.5	6.0	5.0
Vehicle Extension (s)	3.5	3.5		3.5	3.5		3.0	4.5		3.0	4.5	3.5
Lane Grp Cap (vph)	406	2081		157	1434		161	182		293	326	522
v/s Ratio Prot	c0.13	0.24		0.00	0.20		0.00	0.02		c0.04	0.01	0.06
v/s Ratio Perm	c0.32			0.02			0.01			c0.08		0.06
v/c Ratio	0.87	0.58		0.08	0.68		0.09	0.16		0.45	0.07	0.36
Uniform Delay, d1	10.6	13.4		14.1	18.9		23.4	24.5		18.1	20.8	15.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	18.0	1.2		0.3	2.7		0.3	0.7		1.1	0.2	0.5
Delay (s)	28.6	14.5		14.4	21.5		23.6	25.2		19.2	21.0	15.9
Level of Service	C	B		B	C		C	C		B	C	B
Approach Delay (s)		17.7			21.4			24.9			17.0	
Approach LOS		B			C			C			B	

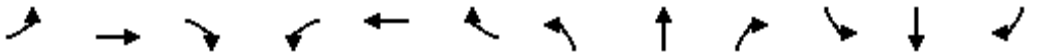
Intersection Summary			
HCM 2000 Control Delay	19.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	63.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	325	1092	11	12	868	42	14	24	33	122	22	325
Future Volume (veh/h)	325	1092	11	12	868	42	14	24	33	122	22	325
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1841	1707	1737	1841	1811	1752	1900	1900	1900	1900	1885
Adj Flow Rate, veh/h	353	1187	12	13	943	46	15	26	36	133	24	353
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	4	13	11	4	6	10	0	0	0	0	1
Cap, veh/h	445	2004	20	253	1309	64	276	96	133	408	377	556
Arrive On Green	0.15	0.39	0.39	0.03	0.27	0.27	0.02	0.13	0.13	0.08	0.20	0.20
Sat Flow, veh/h	1810	5130	52	1654	4909	239	1668	721	999	1810	1900	1598
Grp Volume(v), veh/h	353	775	424	13	643	346	15	0	62	133	24	353
Grp Sat Flow(s),veh/h/ln	1810	1675	1831	1654	1675	1798	1668	0	1720	1810	1900	1598
Q Serve(g_s), s	8.0	11.0	11.0	0.3	10.5	10.5	0.5	0.0	1.9	3.6	0.6	11.1
Cycle Q Clear(g_c), s	8.0	11.0	11.0	0.3	10.5	10.5	0.5	0.0	1.9	3.6	0.6	11.1
Prop In Lane	1.00		0.03	1.00		0.13	1.00		0.58	1.00		1.00
Lane Grp Cap(c), veh/h	445	1309	715	253	893	479	276	0	229	408	377	556
V/C Ratio(X)	0.79	0.59	0.59	0.05	0.72	0.72	0.05	0.00	0.27	0.33	0.06	0.63
Avail Cap(c_a), veh/h	445	1309	715	430	893	479	385	0	229	411	377	556
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	0.88	0.81	0.81	0.81	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.6	14.5	14.5	15.2	20.0	20.0	21.8	0.0	23.4	18.8	19.5	16.4
Incr Delay (d2), s/veh	8.7	1.7	3.2	0.1	4.1	7.4	0.1	0.0	1.1	0.5	0.1	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	3.4	4.0	0.1	3.9	4.6	0.2	0.0	0.7	1.4	0.3	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.3	16.2	17.7	15.3	24.0	27.4	21.9	0.0	24.5	19.3	19.7	19.3
LnGrp LOS	C	B	B	B	C	C	C	A	C	B	B	B
Approach Vol, veh/h		1552			1002			77			510	
Approach Delay, s/veh		18.0			25.1			24.0			19.3	
Approach LOS		B			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	29.9	5.6	17.9	14.0	22.5	9.5	14.0
Change Period (Y+Rc), s	5.0	6.5	4.5	6.0	5.0	6.5	4.5	6.0
Max Green Setting (Gmax), s	8.0	16.9	5.0	8.1	9.0	15.9	5.1	8.0
Max Q Clear Time (g_c+I1), s	2.3	13.0	2.5	13.1	10.0	12.5	5.6	3.9
Green Ext Time (p_c), s	0.0	2.6	0.0	0.0	0.0	2.0	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	20.6
HCM 6th LOS	C



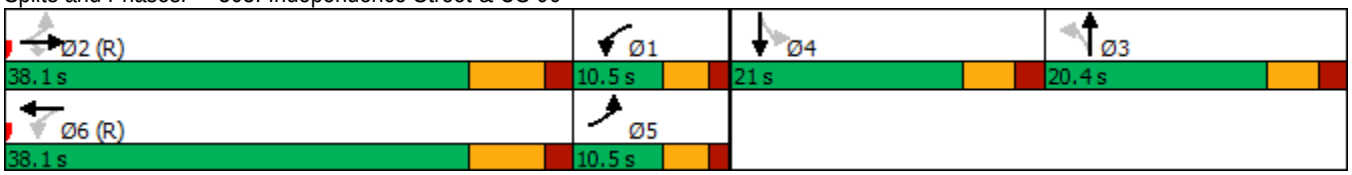
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	1017	207	66	798	35	176	53	144	9	68	20
Future Volume (vph)	35	1017	207	66	798	35	176	53	144	9	68	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	130		0	100		0	0		0
Storage Lanes	1		1	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.994			0.890			0.972	
Flt Protected	0.950			0.950			0.950				0.995	
Satd. Flow (prot)	1805	3471	1599	1805	4920	0	1752	1642	0	0	1787	0
Flt Permitted	0.238			0.120			0.687				0.343	
Satd. Flow (perm)	452	3471	1599	228	4920	0	1267	1642	0	0	616	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			230		8			130			12	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		4264			1976			555			937	
Travel Time (s)		64.6			29.9			12.6			21.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	4%	1%	0%	5%	0%	3%	3%	3%	0%	2%	7%
Adj. Flow (vph)	39	1130	230	73	887	39	196	59	160	10	76	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	39	1130	230	73	926	0	196	219	0	0	108	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			3			4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			3			4		
Detector Phase	5	2	2	1	6		3	3		4	4	
Switch Phase												
Minimum Initial (s)	6.0	10.0	10.0	6.0	10.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	10.5	17.0	17.0	10.5	17.0		13.5	13.5		13.5	13.5	
Total Split (s)	10.5	38.1	38.1	10.5	38.1		20.4	20.4		21.0	21.0	
Total Split (%)	11.7%	42.3%	42.3%	11.7%	42.3%		22.7%	22.7%		23.3%	23.3%	
Maximum Green (s)	6.0	31.1	31.1	6.0	31.1		14.9	14.9		15.5	15.5	
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.5	2.0	2.0	1.5	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	4.5	7.0	7.0	4.5	7.0		5.5	5.5			5.5	
Lead/Lag	Lag	Lead	Lead	Lag	Lead		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.5	5.0	5.0	3.5	5.0		3.5	3.5		3.5	3.5	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Act Effct Green (s)	41.5	33.0	33.0	42.4	35.1		15.1	15.1			15.5	
Actuated g/C Ratio	0.46	0.37	0.37	0.47	0.39		0.17	0.17			0.17	
v/c Ratio	0.13	0.89	0.31	0.34	0.48		0.92	0.57			0.93	
Control Delay	14.7	37.9	4.3	26.1	22.3		84.4	21.2			103.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Delay	14.7	37.9	4.3	26.1	22.3		84.4	21.2			103.9	
LOS	B	D	A	C	C		F	C			F	
Approach Delay		31.7			22.6			51.1			103.9	
Approach LOS		C			C			D			F	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.93
Intersection Signal Delay: 34.0 Intersection LOS: C
Intersection Capacity Utilization 63.7% ICU Level of Service B
Analysis Period (min) 15

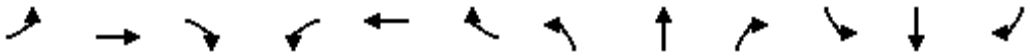
Splits and Phases: 303: Independence Street & US 90



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	39	1130	230	73	926	196	219	108
v/c Ratio	0.13	0.89	0.31	0.34	0.48	0.92	0.57	0.93
Control Delay	14.7	37.9	4.3	26.1	22.3	84.4	21.2	103.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.7	37.9	4.3	26.1	22.3	84.4	21.2	103.9
Queue Length 50th (ft)	11	324	0	21	152	111	45	55
Queue Length 95th (ft)	28	#460	47	44	193	#243	118	#158
Internal Link Dist (ft)		4184			1896		475	857
Turn Bay Length (ft)	200			130		100		
Base Capacity (vph)	298	1272	732	212	1923	212	384	116
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.89	0.31	0.34	0.48	0.92	0.57	0.93

Intersection Summary

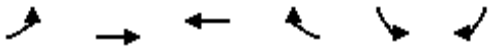
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



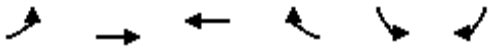
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	1017	207	66	798	35	176	53	144	9	68	20
Future Volume (vph)	35	1017	207	66	798	35	176	53	144	9	68	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	7.0	7.0	4.5	7.0		5.5	5.5			5.5	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91		1.00	1.00			1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.89			0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1805	3471	1599	1805	4919		1752	1643			1789	
Flt Permitted	0.24	1.00	1.00	0.12	1.00		0.69	1.00			0.34	
Satd. Flow (perm)	452	3471	1599	228	4919		1268	1643			617	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	39	1130	230	73	887	39	196	59	160	10	76	22
RTOR Reduction (vph)	0	0	150	0	5	0	0	108	0	0	10	0
Lane Group Flow (vph)	39	1130	80	73	921	0	196	111	0	0	98	0
Heavy Vehicles (%)	0%	4%	1%	0%	5%	0%	3%	3%	3%	0%	2%	7%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			3			4	
Permitted Phases	2		2	6			3			4		
Actuated Green, G (s)	34.8	31.2	31.2	39.0	33.3		15.1	15.1			15.5	
Effective Green, g (s)	34.8	31.2	31.2	39.0	33.3		15.1	15.1			15.5	
Actuated g/C Ratio	0.39	0.35	0.35	0.43	0.37		0.17	0.17			0.17	
Clearance Time (s)	4.5	7.0	7.0	4.5	7.0		5.5	5.5			5.5	
Vehicle Extension (s)	3.5	5.0	5.0	3.5	5.0		3.5	3.5			3.5	
Lane Grp Cap (vph)	228	1203	554	198	1820		212	275			106	
v/s Ratio Prot	0.01	c0.33		c0.02	0.19			0.07				
v/s Ratio Perm	0.06		0.05	0.14			c0.15				c0.16	
v/c Ratio	0.17	0.94	0.14	0.37	0.51		0.92	0.40			0.93	
Uniform Delay, d1	22.5	28.5	20.2	33.2	22.0		36.9	33.4			36.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.4	15.0	0.5	1.4	1.0		41.5	1.1			64.2	
Delay (s)	22.9	43.4	20.8	34.6	23.0		78.4	34.6			100.8	
Level of Service	C	D	C	C	C		E	C			F	
Approach Delay (s)		39.1			23.8			55.3			100.8	
Approach LOS		D			C			E			F	

Intersection Summary			
HCM 2000 Control Delay	38.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	63.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology expects strict NEMA phasing.



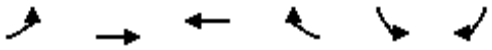
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	425	403	501	126	112	269
Future Volume (vph)	425	403	501	126	112	269
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			300	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1752	1827	1792	1524	1752	1568
Flt Permitted	0.266				0.950	
Satd. Flow (perm)	491	1827	1792	1524	1752	1568
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				134		286
Link Speed (mph)		50	50		55	
Link Distance (ft)		470	2799		7877	
Travel Time (s)		6.4	38.2		97.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	3%	4%	6%	6%	3%	3%
Adj. Flow (vph)	452	429	533	134	119	286
Shared Lane Traffic (%)						
Lane Group Flow (vph)	452	429	533	134	119	286
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	1	6	2		8	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	6			2		8
Detector Phase	1	6	2	2	8	8
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	5.0
Minimum Split (s)	15.0	16.0	16.0	16.0	10.0	10.0
Total Split (s)	16.0	47.0	31.0	31.0	13.0	13.0
Total Split (%)	26.7%	78.3%	51.7%	51.7%	21.7%	21.7%
Maximum Green (s)	11.0	41.0	25.0	25.0	8.0	8.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0	6.0	5.0	5.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	C-Max	C-Max	C-Max	None	None
Act Effct Green (s)	42.8	41.8	26.0	26.0	7.2	7.2
Actuated g/C Ratio	0.71	0.70	0.43	0.43	0.12	0.12
v/c Ratio	0.78	0.34	0.69	0.18	0.57	0.65
Control Delay	17.3	4.6	19.9	3.2	35.8	11.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.3	4.6	19.9	3.2	35.8	11.5
LOS	B	A	B	A	D	B
Approach Delay		11.1	16.6		18.7	
Approach LOS		B	B		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 14.5		Intersection LOS: B	
Intersection Capacity Utilization 69.5%		ICU Level of Service C	
Analysis Period (min) 15			

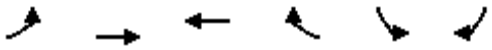
Splits and Phases: 304: US 90 & SH 146



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	452	429	533	134	119	286
v/c Ratio	0.78	0.34	0.69	0.18	0.57	0.65
Control Delay	17.3	4.6	19.9	3.2	35.8	11.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.3	4.6	19.9	3.2	35.8	11.5
Queue Length 50th (ft)	51	51	153	0	41	0
Queue Length 95th (ft)	#121	86	257	26	86	59
Internal Link Dist (ft)		390	2719		7797	
Turn Bay Length (ft)	250			300		
Base Capacity (vph)	581	1273	777	736	233	456
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	0.78	0.34	0.69	0.18	0.51	0.63

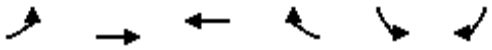
Intersection Summary

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



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	425	403	501	126	112	269
Future Volume (vph)	425	403	501	126	112	269
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0	6.0	6.0	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1752	1827	1792	1524	1752	1568
Flt Permitted	0.27	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	490	1827	1792	1524	1752	1568
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	452	429	533	134	119	286
RTOR Reduction (vph)	0	0	0	76	0	252
Lane Group Flow (vph)	452	429	533	58	119	34
Heavy Vehicles (%)	3%	4%	6%	6%	3%	3%
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	1	6	2		8	
Permitted Phases	6			2		8
Actuated Green, G (s)	41.8	41.8	26.0	26.0	7.2	7.2
Effective Green, g (s)	41.8	41.8	26.0	26.0	7.2	7.2
Actuated g/C Ratio	0.70	0.70	0.43	0.43	0.12	0.12
Clearance Time (s)	5.0	6.0	6.0	6.0	5.0	5.0
Vehicle Extension (s)	3.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	568	1272	776	660	210	188
v/s Ratio Prot	c0.14	0.23	0.30		c0.07	
v/s Ratio Perm	c0.41			0.04		0.02
v/c Ratio	0.80	0.34	0.69	0.09	0.57	0.18
Uniform Delay, d1	6.8	3.6	13.7	10.0	24.9	23.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.6	0.7	4.9	0.3	2.1	0.2
Delay (s)	14.4	4.3	18.6	10.3	27.0	23.9
Level of Service	B	A	B	B	C	C
Approach Delay (s)		9.5	17.0		24.8	
Approach LOS		A	B		C	

Intersection Summary			
HCM 2000 Control Delay	15.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



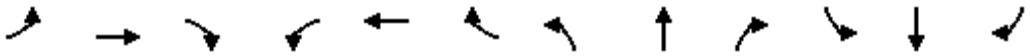
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	425	403	501	126	112	269
Future Volume (veh/h)	425	403	501	126	112	269
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1856	1841	1811	1811	1856	1856
Adj Flow Rate, veh/h	452	429	533	0	119	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	4	6	6	3	3
Cap, veh/h	643	1345	871		152	
Arrive On Green	0.17	0.73	0.48	0.00	0.09	0.00
Sat Flow, veh/h	1767	1841	1811	1535	1767	1572
Grp Volume(v), veh/h	452	429	533	0	119	0
Grp Sat Flow(s),veh/h/ln	1767	1841	1811	1535	1767	1572
Q Serve(g_s), s	6.6	4.9	13.0	0.0	4.0	0.0
Cycle Q Clear(g_c), s	6.6	4.9	13.0	0.0	4.0	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	643	1345	871		152	
V/C Ratio(X)	0.70	0.32	0.61		0.78	
Avail Cap(c_a), veh/h	672	1345	871		236	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.95	0.00
Uniform Delay (d), s/veh	8.0	2.8	11.5	0.0	26.9	0.0
Incr Delay (d2), s/veh	3.2	0.6	3.2	0.0	3.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.6	4.5	0.0	1.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.2	3.5	14.7	0.0	30.4	0.0
LnGrp LOS	B	A	B		C	
Approach Vol, veh/h		881	533	A	119	A
Approach Delay, s/veh		7.4	14.7		30.4	
Approach LOS		A	B		C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	15.0	34.8				49.8	10.2
Change Period (Y+Rc), s	5.0	6.0				6.0	5.0
Max Green Setting (Gmax), s	11.0	25.0				41.0	8.0
Max Q Clear Time (g_c+I1), s	8.6	15.0				6.9	6.0
Green Ext Time (p_c), s	0.4	1.4				1.4	0.0

Intersection Summary	
HCM 6th Ctrl Delay	11.7
HCM 6th LOS	B

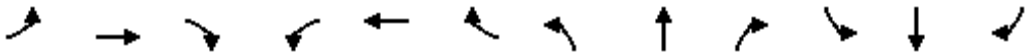
Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	29	15	4	0	0	3	60	20	16	65	19
Future Volume (vph)	1	29	15	4	0	0	3	60	20	16	65	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.955						0.968			0.974	
Flt Protected		0.999			0.950			0.998			0.992	
Satd. Flow (prot)	0	1813	0	0	1805	0	0	1836	0	0	1836	0
Flt Permitted		0.999			0.950			0.998			0.992	
Satd. Flow (perm)	0	1813	0	0	1805	0	0	1836	0	0	1836	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		803			358			401			590	
Travel Time (s)		18.3			8.1			9.1			13.4	
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	44	23	6	0	0	5	91	30	24	98	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	69	0	0	6	0	0	126	0	0	151	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			50			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 21.8%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	1	29	15	4	0	0	3	60	20	16	65	19
Future Volume (vph)	1	29	15	4	0	0	3	60	20	16	65	19
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Hourly flow rate (vph)	2	44	23	6	0	0	5	91	30	24	98	29

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	69	6	126	151
Volume Left (vph)	2	6	5	24
Volume Right (vph)	23	0	30	29
Hadj (s)	-0.19	0.20	-0.13	-0.08
Departure Headway (s)	4.3	4.8	4.1	4.1
Degree Utilization, x	0.08	0.01	0.14	0.17
Capacity (veh/h)	775	696	852	854
Control Delay (s)	7.7	7.8	7.8	8.0
Approach Delay (s)	7.7	7.8	7.8	8.0
Approach LOS	A	A	A	A

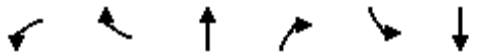
Intersection Summary			
Delay	7.8		
Level of Service	A		
Intersection Capacity Utilization	21.8%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	29	15	4	0	0	3	60	20	16	65	19
Future Vol, veh/h	1	29	15	4	0	0	3	60	20	16	65	19
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	44	23	6	0	0	5	91	30	24	98	29
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.7	7.8	7.7	8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	4%	2%	100%	16%
Vol Thru, %	72%	64%	0%	65%
Vol Right, %	24%	33%	0%	19%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	83	45	4	100
LT Vol	3	1	4	16
Through Vol	60	29	0	65
RT Vol	20	15	0	19
Lane Flow Rate	126	68	6	152
Geometry Grp	1	1	1	1
Degree of Util (X)	0.14	0.081	0.008	0.17
Departure Headway (Hd)	4.008	4.302	4.771	4.043
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	883	838	754	877
Service Time	2.084	2.302	2.773	2.114
HCM Lane V/C Ratio	0.143	0.081	0.008	0.173
HCM Control Delay	7.7	7.7	7.8	8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.5	0.3	0	0.6



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	124	15	80	75	15	76
Future Volume (vph)	124	15	80	75	15	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.935			
Flt Protected	0.950					0.992
Satd. Flow (prot)	1787	1482	1749	0	0	1854
Flt Permitted	0.950					0.992
Satd. Flow (perm)	1787	1482	1749	0	0	1854
Link Speed (mph)	30		30			30
Link Distance (ft)	1292		2374			1487
Travel Time (s)	29.4		54.0			33.8
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	9%	3%	0%	0%	2%
Adj. Flow (vph)	138	17	89	83	17	84
Shared Lane Traffic (%)						
Lane Group Flow (vph)	138	17	172	0	0	101
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Stop			Stop

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.4%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	124	15	80	75	15	76
Future Volume (vph)	124	15	80	75	15	76
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	138	17	89	83	17	84

Direction, Lane #	WB 1	WB 2	NB 1	SB 1
Volume Total (vph)	138	17	172	101
Volume Left (vph)	138	0	0	17
Volume Right (vph)	0	17	83	0
Hadj (s)	0.52	-0.55	-0.26	0.06
Departure Headway (s)	5.6	4.6	4.2	4.6
Degree Utilization, x	0.22	0.02	0.20	0.13
Capacity (veh/h)	606	744	822	744
Control Delay (s)	9.0	6.5	8.2	8.3
Approach Delay (s)	8.7		8.2	8.3
Approach LOS	A		A	A

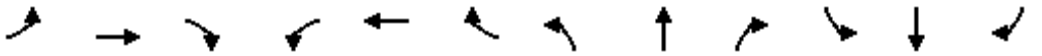
Intersection Summary			
Delay	8.4		
Level of Service	A		
Intersection Capacity Utilization	30.4%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	8.7
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	124	15	80	75	15	76
Future Vol, veh/h	124	15	80	75	15	76
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	1	9	3	0	0	2
Mvmt Flow	138	17	89	83	17	84
Number of Lanes	1	1	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	2	0
HCM Control Delay	9.6	8.3	8.2
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	0%	100%	0%	16%
Vol Thru, %	52%	0%	0%	84%
Vol Right, %	48%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	155	124	15	91
LT Vol	0	124	0	15
Through Vol	80	0	0	76
RT Vol	75	0	15	0
Lane Flow Rate	172	138	17	101
Geometry Grp	2	7	7	2
Degree of Util (X)	0.202	0.215	0.021	0.128
Departure Headway (Hd)	4.213	5.62	4.551	4.552
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	854	639	786	789
Service Time	2.23	3.35	2.28	2.573
HCM Lane V/C Ratio	0.201	0.216	0.022	0.128
HCM Control Delay	8.3	9.9	7.4	8.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.8	0.8	0.1	0.4

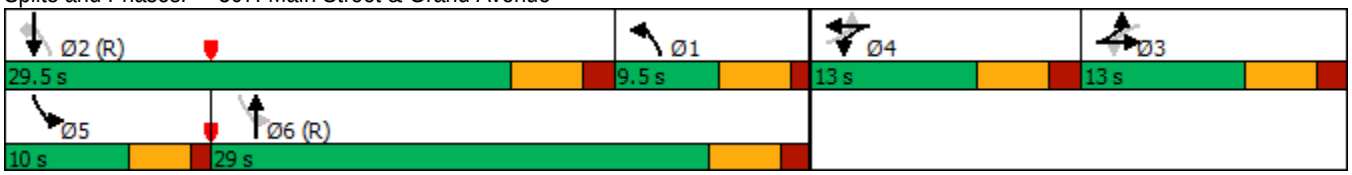


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	146	31	44	10	41	48	12	529	7	15	487	106
Future Volume (vph)	146	31	44	10	41	48	12	529	7	15	487	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	100		0	100		0	200		125
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.912			0.919			0.998				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	1733	0	1805	1722	0	1626	1859	0	1805	1881	1615
Flt Permitted	0.691			0.702			0.298			0.253		
Satd. Flow (perm)	1300	1733	0	1334	1722	0	510	1859	0	481	1881	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		50			55			1				201
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		345			825			1581			1585	
Travel Time (s)		7.8			18.8			35.9			36.0	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	1%	0%	0%	0%	3%	0%	11%	2%	0%	0%	1%	0%
Adj. Flow (vph)	166	35	50	11	47	55	14	601	8	17	553	120
Shared Lane Traffic (%)												
Lane Group Flow (vph)	166	85	0	11	102	0	14	609	0	17	553	120
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA		D.P+P	NA		D.P+P	NA		D.P+P	NA	Perm
Protected Phases	3	3		4	4		1	6		5	2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			3			2			6		2
Detector Phase	3	3		4	4		1	6		5	2	2
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		5.0	10.0		6.0	10.0	10.0
Minimum Split (s)	13.0	13.0		13.0	13.0		9.5	15.0		10.0	15.0	15.0
Total Split (s)	13.0	13.0		13.0	13.0		9.5	29.0		10.0	29.5	29.5
Total Split (%)	20.0%	20.0%		20.0%	20.0%		14.6%	44.6%		15.4%	45.4%	45.4%
Maximum Green (s)	8.0	8.0		8.0	8.0		5.0	24.0		6.0	24.5	24.5
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.0	3.5	3.5
All-Red Time (s)	1.5	1.5		1.5	1.5		1.0	1.5		1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		4.5	5.0		4.0	5.0	5.0
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		2.0	2.0		3.0	3.5		2.0	3.5	3.5
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	14.4	8.0		14.4	8.0		36.2	34.6		36.8	34.7	34.7
Actuated g/C Ratio	0.22	0.12		0.22	0.12		0.56	0.53		0.57	0.53	0.53
v/c Ratio	0.48	0.33		0.03	0.39		0.04	0.62		0.04	0.55	0.13
Control Delay	23.7	17.6		15.5	19.3		8.0	17.6		7.3	15.6	0.8
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	23.7	17.6		15.5	19.3		8.0	17.6		7.3	15.6	0.8
LOS	C	B		B	B		A	B		A	B	A
Approach Delay		21.7			18.9			17.4			12.8	
Approach LOS		C			B			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:NBSB, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay: 16.2		Intersection LOS: B	
Intersection Capacity Utilization 51.4%		ICU Level of Service A	
Analysis Period (min) 15			

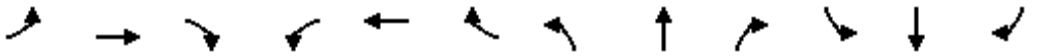
Splits and Phases: 307: Main Street & Grand Avenue



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	166	85	11	102	14	609	17	553	120
v/c Ratio	0.48	0.33	0.03	0.39	0.04	0.62	0.04	0.55	0.13
Control Delay	23.7	17.6	15.5	19.3	8.0	17.6	7.3	15.6	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.7	17.6	15.5	19.3	8.0	17.6	7.3	15.6	0.8
Queue Length 50th (ft)	48	13	3	17	2	157	3	136	0
Queue Length 95th (ft)	90	47	13	56	9	#392	10	#327	6
Internal Link Dist (ft)		265		745		1501		1505	
Turn Bay Length (ft)	150		100		100		200		125
Base Capacity (vph)	347	257	353	260	369	989	394	1003	955
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	0.48	0.33	0.03	0.39	0.04	0.62	0.04	0.55	0.13

Intersection Summary

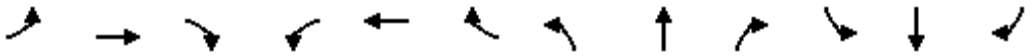
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	146	31	44	10	41	48	12	529	7	15	487	106
Future Volume (vph)	146	31	44	10	41	48	12	529	7	15	487	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0		4.5	5.0		4.0	5.0	5.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.91		1.00	0.92		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1787	1732		1805	1723		1626	1860		1805	1881	1615
Flt Permitted	0.69	1.00		0.70	1.00		0.30	1.00		0.25	1.00	1.00
Satd. Flow (perm)	1300	1732		1333	1723		510	1860		480	1881	1615
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	166	35	50	11	47	55	14	601	8	17	553	120
RTOR Reduction (vph)	0	44	0	0	50	0	0	1	0	0	0	64
Lane Group Flow (vph)	166	41	0	11	52	0	14	608	0	17	553	56
Heavy Vehicles (%)	1%	0%	0%	0%	3%	0%	11%	2%	0%	0%	1%	0%
Turn Type	D.P+P	NA		D.P+P	NA		D.P+P	NA		D.P+P	NA	Perm
Protected Phases	3	3		4	4		1	6		5	2	
Permitted Phases	4			3			2			6		2
Actuated Green, G (s)	14.4	8.0		14.4	6.4		31.1	30.4		31.6	30.1	30.1
Effective Green, g (s)	14.4	8.0		14.4	6.4		31.1	30.4		31.6	30.1	30.1
Actuated g/C Ratio	0.22	0.12		0.22	0.10		0.48	0.47		0.49	0.46	0.46
Clearance Time (s)	5.0	5.0		5.0	5.0		4.5	5.0		4.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		2.0	2.0		3.0	3.5		2.0	3.5	3.5
Lane Grp Cap (vph)	347	213		341	169		261	869		257	871	747
v/s Ratio Prot	c0.06	0.02		0.00	0.03		0.00	c0.33		0.00	c0.29	
v/s Ratio Perm	c0.05			0.00			0.02			0.03		0.03
v/c Ratio	0.48	0.19		0.03	0.31		0.05	0.70		0.07	0.63	0.07
Uniform Delay, d1	22.3	25.6		19.8	27.2		15.4	13.7		9.9	13.3	9.7
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.0	0.4		0.0	0.4		0.1	4.7		0.0	3.5	0.2
Delay (s)	23.3	26.0		19.8	27.6		15.5	18.4		10.0	16.8	9.9
Level of Service	C	C		B	C		B	B		A	B	A
Approach Delay (s)		24.2			26.9			18.3			15.4	
Approach LOS		C			C			B			B	

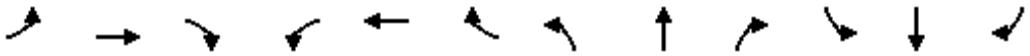
Intersection Summary			
HCM 2000 Control Delay	18.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	51.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology expects strict NEMA phasing.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	0	30	1	1	0	91	5	3	52	0
Future Volume (vph)	1	0	0	30	1	1	0	91	5	3	52	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.932			0.993				
Flt Protected		0.950		0.950							0.997	
Satd. Flow (prot)	0	1805	0	1805	0	0	0	1834	0	0	1894	0
Flt Permitted		0.950		0.950							0.997	
Satd. Flow (perm)	0	1805	0	1805	0	0	0	1834	0	0	1894	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		433			707			1487			1399	
Travel Time (s)		9.8			16.1			33.8			31.8	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%
Adj. Flow (vph)	1	0	0	37	1	1	0	112	6	4	64	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1	0	37	2	0	0	118	0	0	68	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization Err%		ICU Level of Service H	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	0	30	1	1	0	91	5	3	52	0
Future Volume (Veh/h)	1	0	0	30	1	1	0	91	5	3	52	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Hourly flow rate (vph)	1	0	0	37	1	1	0	112	6	4	64	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	188	190	64	187	187	115	64			118		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	188	190	64	187	187	115	64			118		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	95	100	100	100			100		
cM capacity (veh/h)	773	707	1006	776	709	943	1551			1483		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	1	38	118	68
Volume Left	1	37	0	4
Volume Right	0	1	6	0
cSH	773	780	1700	1483
Volume to Capacity	0.00	0.05	0.07	0.00
Queue Length 95th (ft)	0	4	0	0
Control Delay (s)	9.7	9.9	0.0	0.5
Lane LOS	A	A		A
Approach Delay (s)	9.7	Err	0.0	0.5
Approach LOS	A	F		

Intersection Summary				
Average Delay	Err			
Intersection Capacity Utilization	Err%	ICU Level of Service	H	
Analysis Period (min)	15			

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	0	30	1	1	0	91	5	3	52	0
Future Vol, veh/h	1	0	0	30	1	1	0	91	5	3	52	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0	0	3	0	0	0	0
Mvmt Flow	1	0	0	37	1	1	0	112	6	4	64	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	188	190	64	187	187	115	-	0	0	118	0	0
Stage 1	72	72	-	115	115	-	-	-	-	-	-	-
Stage 2	116	118	-	72	72	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	-	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	777	708	1006	778	711	943	0	-	-	1483	-	0
Stage 1	943	839	-	895	804	-	0	-	-	-	-	0
Stage 2	894	802	-	943	839	-	0	-	-	-	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	773	706	1006	776	709	943	-	-	-	1483	-	-
Mov Cap-2 Maneuver	773	706	-	776	709	-	-	-	-	-	-	-
Stage 1	943	836	-	895	804	-	-	-	-	-	-	-
Stage 2	891	802	-	940	836	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.7	9.9	0	0.4
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	773	780	1483	-
HCM Lane V/C Ratio	-	-	0.002	0.049	0.002	-
HCM Control Delay (s)	-	-	9.7	9.9	7.4	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0.2	0	-

Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	8	7	1	34	0	0	78
Future Volume (vph)	8	7	1	34	0	0	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.936					0.865	
Flt Protected					0.950		
Satd. Flow (prot)	1778	0	0	0	1805	1580	0
Flt Permitted					0.950		
Satd. Flow (perm)	1778	0	0	0	1805	1580	0
Link Speed (mph)	30				30	30	
Link Distance (ft)	720				80	1399	
Travel Time (s)	16.4				1.8	31.8	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	4%
Adj. Flow (vph)	9	8	1	40	0	0	91
Shared Lane Traffic (%)							
Lane Group Flow (vph)	17	0	0	0	41	91	0
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	R NA	Left	Left	Left	Right
Median Width(ft)	0				0	12	
Link Offset(ft)	0				0	0	
Crosswalk Width(ft)	16				16	16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	15		15	9
Sign Control	Stop				Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 20.0%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Sign Control	Stop				Stop	Stop	
Traffic Volume (vph)	8	7	1	34	0	0	78
Future Volume (vph)	8	7	1	34	0	0	78
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	9	8	0	40	0	0	91

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	17	40	91
Volume Left (vph)	0	40	0
Volume Right (vph)	8	0	91
Hadj (s)	-0.28	0.20	-0.53
Departure Headway (s)	3.8	4.3	3.5
Degree Utilization, x	0.02	0.05	0.09
Capacity (veh/h)	911	818	1003
Control Delay (s)	6.9	7.5	6.8
Approach Delay (s)	6.9	7.5	6.8
Approach LOS	A	A	A

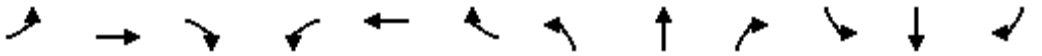
Intersection Summary			
Delay	7.0		
Level of Service	A		
Intersection Capacity Utilization	20.0%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	7
Intersection LOS	A

Movement	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Vol, veh/h	8	7	1	34	0	0	78
Future Vol, veh/h	8	7	1	34	0	0	78
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	0	0	0	0	0	0	4
Mvmt Flow	9	8	1	40	0	0	91
Number of Lanes	1	0	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	6.9	7.5	6.8
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	0%	0%	100%
Vol Thru, %	0%	53%	0%
Vol Right, %	100%	47%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	78	15	35
LT Vol	0	0	35
Through Vol	0	8	0
RT Vol	78	7	0
Lane Flow Rate	91	17	41
Geometry Grp	1	1	1
Degree of Util (X)	0.086	0.018	0.048
Departure Headway (Hd)	3.401	3.81	4.274
Convergence, Y/N	Yes	Yes	Yes
Cap	1051	940	840
Service Time	1.428	1.831	2.286
HCM Lane V/C Ratio	0.087	0.018	0.049
HCM Control Delay	6.8	6.9	7.5
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.3	0.1	0.2

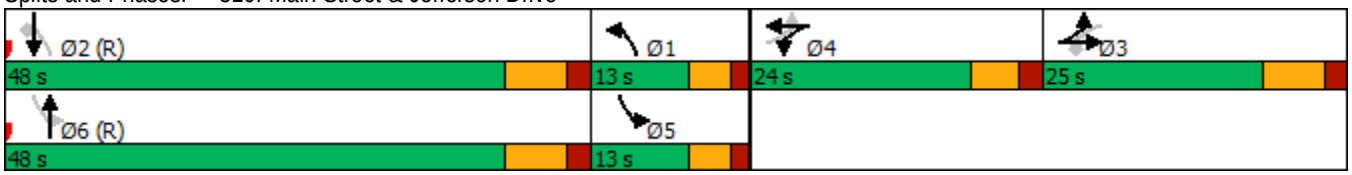


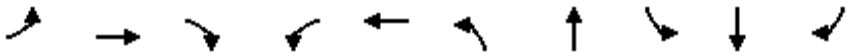
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	211	98	32	105	70	36	26	859	103	17	641	139
Future Volume (vph)	211	98	32	105	70	36	26	859	103	17	641	139
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	300		0	200		300	200		250
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850		0.950			0.984				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1863	1615	1805	1747	0	1805	3513	0	1805	1881	1553
Flt Permitted	0.629			0.686			0.171			0.181		
Satd. Flow (perm)	1195	1863	1615	1303	1747	0	325	3513	0	344	1881	1553
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			149		20			13				149
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1006			727			3897			1103	
Travel Time (s)		17.1			12.4			66.4			18.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	2%	0%	0%	5%	0%	0%	1%	2%	0%	1%	4%
Adj. Flow (vph)	237	110	36	118	79	40	29	965	116	19	720	156
Shared Lane Traffic (%)												
Lane Group Flow (vph)	237	110	36	118	119	0	29	1081	0	19	720	156
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA	Perm	D.P+P	NA		D.P+P	NA		D.P+P	NA	Perm
Protected Phases	3	3		4	4		1	6		5	2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		3	3			2			6		2
Detector Phase	3	3	3	4	4		1	6		5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	8.0	8.0		8.0	10.0		8.0	10.0	10.0
Minimum Split (s)	25.0	25.0	25.0	24.0	24.0		13.0	25.0		13.0	25.0	25.0
Total Split (s)	25.0	25.0	25.0	24.0	24.0		13.0	48.0		13.0	48.0	48.0
Total Split (%)	22.7%	22.7%	22.7%	21.8%	21.8%		11.8%	43.6%		11.8%	43.6%	43.6%
Maximum Green (s)	18.0	18.0	18.0	18.0	18.0		8.0	41.0		8.0	41.0	41.0
Yellow Time (s)	5.0	5.0	5.0	4.0	4.0		3.5	5.0		3.5	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		1.5	2.0		1.5	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	6.0	6.0		5.0	7.0		5.0	7.0	7.0
Lead/Lag	Lag	Lag	Lag	Lead	Lead		Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5		3.0	3.5		3.0	3.5	3.5
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	24.3	13.1	13.1	26.3	12.2		66.9	59.5		67.9	56.9	56.9
Actuated g/C Ratio	0.22	0.12	0.12	0.24	0.11		0.61	0.54		0.62	0.52	0.52
v/c Ratio	0.71	0.50	0.11	0.32	0.56		0.10	0.57		0.06	0.74	0.18
Control Delay	48.2	52.6	0.7	30.3	48.1		13.0	20.6		12.4	30.0	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	48.2	52.6	0.7	30.3	48.1		13.0	20.6		12.4	30.0	4.5
LOS	D	D	A	C	D		B	C		B	C	A
Approach Delay		45.0			39.2			20.4			25.2	
Approach LOS		D			D			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:NBSB, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay: 27.3		Intersection LOS: C	
Intersection Capacity Utilization 65.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 310: Main Street & Jefferson Drive

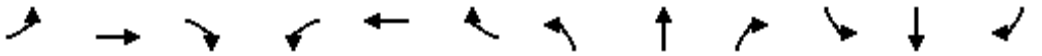




Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	237	110	36	118	119	29	1081	19	720	156
v/c Ratio	0.71	0.50	0.11	0.32	0.56	0.10	0.57	0.06	0.74	0.18
Control Delay	48.2	52.6	0.7	30.3	48.1	13.0	20.6	12.4	30.0	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.2	52.6	0.7	30.3	48.1	13.0	20.6	12.4	30.0	4.5
Queue Length 50th (ft)	140	74	0	64	67	7	216	5	416	3
Queue Length 95th (ft)	185	124	0	96	120	24	424	18	#740	43
Internal Link Dist (ft)		926			647		3817		1023	
Turn Bay Length (ft)	300			300		200		200		250
Base Capacity (vph)	417	304	388	447	302	305	1906	318	973	875
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	0.57	0.36	0.09	0.26	0.39	0.10	0.57	0.06	0.74	0.18

Intersection Summary

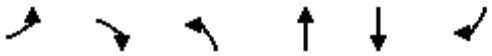
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	211	98	32	105	70	36	26	859	103	17	641	139
Future Volume (vph)	211	98	32	105	70	36	26	859	103	17	641	139
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0	6.0	6.0		5.0	7.0		5.0	7.0	7.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.95		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1805	1863	1615	1805	1746		1805	3513		1805	1881	1553
Flt Permitted	0.63	1.00	1.00	0.69	1.00		0.17	1.00		0.18	1.00	1.00
Satd. Flow (perm)	1195	1863	1615	1304	1746		324	3513		345	1881	1553
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	237	110	36	118	79	40	29	965	116	19	720	156
RTOR Reduction (vph)	0	0	32	0	18	0	0	6	0	0	0	76
Lane Group Flow (vph)	237	110	4	118	101	0	29	1075	0	19	720	80
Heavy Vehicles (%)	0%	2%	0%	0%	5%	0%	0%	1%	2%	0%	1%	4%
Turn Type	D.P+P	NA	Perm	D.P+P	NA		D.P+P	NA		D.P+P	NA	Perm
Protected Phases	3	3		4	4		1	6		5	2	
Permitted Phases	4		3	3			2			6		2
Actuated Green, G (s)	25.3	13.1	13.1	25.3	12.2		59.7	56.5		59.7	53.9	53.9
Effective Green, g (s)	25.3	13.1	13.1	25.3	12.2		59.7	56.5		59.7	53.9	53.9
Actuated g/C Ratio	0.23	0.12	0.12	0.23	0.11		0.54	0.51		0.54	0.49	0.49
Clearance Time (s)	7.0	7.0	7.0	6.0	6.0		5.0	7.0		5.0	7.0	7.0
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5		3.0	3.5		3.0	3.5	3.5
Lane Grp Cap (vph)	347	221	192	355	193		253	1804		229	921	760
v/s Ratio Prot	c0.08	0.06		0.04	0.06		c0.01	0.31		0.00	c0.38	
v/s Ratio Perm	c0.08		0.00	0.04			0.06			0.04		0.05
v/c Ratio	0.68	0.50	0.02	0.33	0.52		0.11	0.60		0.08	0.78	0.11
Uniform Delay, d1	38.6	45.4	42.8	34.9	46.2		30.8	18.7		21.9	23.2	15.1
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	5.7	2.1	0.1	0.7	2.9		0.2	1.5		0.2	6.6	0.3
Delay (s)	44.3	47.4	42.8	35.5	49.1		31.0	20.2		22.0	29.8	15.4
Level of Service	D	D	D	D	D		C	C		C	C	B
Approach Delay (s)		45.1			42.3			20.5			27.1	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	28.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	65.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology expects strict NEMA phasing.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	96	68	66	1049	791	70
Future Volume (vph)	96	68	66	1049	791	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	200			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt		0.850			0.989	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1805	1615	1805	3574	1845	0
Flt Permitted	0.950		0.133			
Satd. Flow (perm)	1805	1615	253	3574	1845	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		76			8	
Link Speed (mph)	30			40	40	
Link Distance (ft)	1219			1103	1788	
Travel Time (s)	27.7			18.8	30.5	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	0%	1%	2%	0%
Adj. Flow (vph)	108	76	74	1179	889	79
Shared Lane Traffic (%)						
Lane Group Flow (vph)	108	76	74	1179	968	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	
Detector Template	Left	Right	Left	Thru	Thru	
Leading Detector (ft)	20	20	20	100	100	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	20	20	20	6	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0	6.0	10.0	10.0	
Minimum Split (s)	24.0	24.0	10.5	25.0	25.0	
Total Split (s)	24.0	24.0	10.5	66.0	55.5	
Total Split (%)	26.7%	26.7%	11.7%	73.3%	61.7%	
Maximum Green (s)	18.0	18.0	6.0	59.0	48.5	
Yellow Time (s)	4.0	4.0	3.0	5.0	5.0	
All-Red Time (s)	2.0	2.0	1.5	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	4.5	7.0	7.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.5	3.5	3.0	4.0	4.0	
Recall Mode	None	None	None	C-Max	C-Max	
Act Effct Green (s)	11.3	11.3	71.0	69.9	60.9	
Actuated g/C Ratio	0.13	0.13	0.79	0.78	0.68	
v/c Ratio	0.48	0.28	0.24	0.43	0.77	
Control Delay	43.0	11.3	5.0	5.3	20.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	43.0	11.3	5.0	5.3	20.3	
LOS	D	B	A	A	C	
Approach Delay	29.9			5.3	20.3	
Approach LOS	C			A	C	

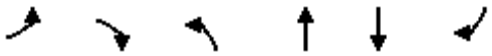
Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 13.2		Intersection LOS: B	
Intersection Capacity Utilization 72.1%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 311: Main Street & Cook Road

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	108	76	74	1179	968
v/c Ratio	0.48	0.28	0.24	0.43	0.77
Control Delay	43.0	11.3	5.0	5.3	20.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	43.0	11.3	5.0	5.3	20.3
Queue Length 50th (ft)	58	0	8	117	408
Queue Length 95th (ft)	103	37	22	179	#766
Internal Link Dist (ft)	1139			1023	1708
Turn Bay Length (ft)			200		
Base Capacity (vph)	361	383	313	2774	1250
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.30	0.20	0.24	0.43	0.77

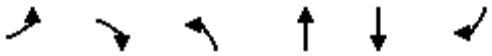
Intersection Summary

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



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	96	68	66	1049	791	70
Future Volume (vph)	96	68	66	1049	791	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.5	7.0	7.0	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	
Frt	1.00	0.85	1.00	1.00	0.99	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1805	1615	1805	3574	1845	
Flt Permitted	0.95	1.00	0.13	1.00	1.00	
Satd. Flow (perm)	1805	1615	252	3574	1845	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	108	76	74	1179	889	79
RTOR Reduction (vph)	0	68	0	0	3	0
Lane Group Flow (vph)	108	8	74	1179	965	0
Heavy Vehicles (%)	0%	0%	0%	1%	2%	0%
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Actuated Green, G (s)	9.7	9.7	67.3	67.3	57.4	
Effective Green, g (s)	9.7	9.7	67.3	67.3	57.4	
Actuated g/C Ratio	0.11	0.11	0.75	0.75	0.64	
Clearance Time (s)	6.0	6.0	4.5	7.0	7.0	
Vehicle Extension (s)	3.5	3.5	3.0	4.0	4.0	
Lane Grp Cap (vph)	194	174	281	2672	1176	
v/s Ratio Prot	c0.06		0.02	c0.33	c0.52	
v/s Ratio Perm		0.01	0.18			
v/c Ratio	0.56	0.05	0.26	0.44	0.82	
Uniform Delay, d1	38.1	36.0	11.0	4.3	12.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	3.8	0.1	0.5	0.5	6.5	
Delay (s)	41.9	36.1	11.5	4.8	18.9	
Level of Service	D	D	B	A	B	
Approach Delay (s)	39.5			5.2	18.9	
Approach LOS	D			A	B	

Intersection Summary			
HCM 2000 Control Delay	13.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	72.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	96	68	66	1049	791	70
Future Volume (veh/h)	96	68	66	1049	791	70
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1885	1870	1900
Adj Flow Rate, veh/h	108	76	74	1179	889	79
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	1	2	0
Cap, veh/h	159	142	351	2749	1120	99
Arrive On Green	0.09	0.09	0.06	0.77	0.66	0.66
Sat Flow, veh/h	1810	1610	1810	3676	1693	150
Grp Volume(v), veh/h	108	76	74	1179	0	968
Grp Sat Flow(s),veh/h/ln	1810	1610	1810	1791	0	1843
Q Serve(g_s), s	5.2	4.1	1.0	10.3	0.0	33.7
Cycle Q Clear(g_c), s	5.2	4.1	1.0	10.3	0.0	33.7
Prop In Lane	1.00	1.00	1.00			0.08
Lane Grp Cap(c), veh/h	159	142	351	2749	0	1219
V/C Ratio(X)	0.68	0.54	0.21	0.43	0.00	0.79
Avail Cap(c_a), veh/h	362	322	370	2749	0	1219
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.78	0.78	0.00	1.00
Uniform Delay (d), s/veh	39.8	39.3	11.3	3.6	0.0	10.9
Incr Delay (d2), s/veh	6.0	3.8	0.2	0.4	0.0	5.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	3.8	0.6	2.3	0.0	12.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	45.8	43.0	11.5	4.0	0.0	16.2
LnGrp LOS	D	D	B	A	A	B
Approach Vol, veh/h	184			1253	968	
Approach Delay, s/veh	44.6			4.4	16.2	
Approach LOS	D			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		76.1		13.9	9.6	66.5
Change Period (Y+Rc), s		7.0		6.0	4.5	7.0
Max Green Setting (Gmax), s		59.0		18.0	6.0	48.5
Max Q Clear Time (g_c+I1), s		12.3		7.2	3.0	35.7
Green Ext Time (p_c), s		16.1		0.5	0.0	7.5

Intersection Summary	
HCM 6th Ctrl Delay	12.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	116	424	508	139	180	416
Future Volume (vph)	116	424	508	139	180	416
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	135	
Storage Lanes	1	1		1	2	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1787	1553	1900	1615	1641	3574
Flt Permitted	0.950				0.133	
Satd. Flow (perm)	1787	1553	1900	1615	230	3574
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		476		156		
Link Speed (mph)	55		40			40
Link Distance (ft)	7877		885			960
Travel Time (s)	97.6		15.1			16.4
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	1%	4%	0%	0%	10%	1%
Adj. Flow (vph)	130	476	571	156	202	467
Shared Lane Traffic (%)						
Lane Group Flow (vph)	130	476	571	156	202	467
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Turn Type	Perm	Perm	NA	Perm	pm+pt	NA
Protected Phases			2		1	6
Permitted Phases	8	8		2	6	
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	22.5	22.5	30.0	30.0	22.5	52.5
Total Split (%)	30.0%	30.0%	40.0%	40.0%	30.0%	70.0%
Maximum Green (s)	18.0	18.0	25.5	25.5	18.0	48.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	18.0	18.0	25.5	25.5	48.0	48.0
Actuated g/C Ratio	0.24	0.24	0.34	0.34	0.64	0.64

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
v/c Ratio	0.30	0.65	0.88	0.24	0.42	0.20
Control Delay	25.7	7.3	41.4	4.4	10.7	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.7	7.3	41.4	4.4	10.7	5.9
LOS	C	A	D	A	B	A
Approach Delay	11.3		33.5			7.3
Approach LOS	B		C			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 18.0		Intersection LOS: B	
Intersection Capacity Utilization 60.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 312: Main Street & SH 146

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	130	476	571	156	202	467
v/c Ratio	0.30	0.65	0.88	0.24	0.42	0.20
Control Delay	25.7	7.3	41.4	4.4	10.7	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.7	7.3	41.4	4.4	10.7	5.9
Queue Length 50th (ft)	50	0	247	0	34	41
Queue Length 95th (ft)	94	69	#421	35	83	59
Internal Link Dist (ft)	7797		805			880
Turn Bay Length (ft)					135	
Base Capacity (vph)	428	734	646	652	485	2287
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	0.30	0.65	0.88	0.24	0.42	0.20

Intersection Summary

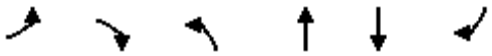
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	116	424	508	139	180	416
Future Volume (vph)	116	424	508	139	180	416
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1787	1553	1900	1615	1641	3574
Flt Permitted	0.95	1.00	1.00	1.00	0.13	1.00
Satd. Flow (perm)	1787	1553	1900	1615	230	3574
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	130	476	571	156	202	467
RTOR Reduction (vph)	0	362	0	103	0	0
Lane Group Flow (vph)	130	114	571	53	202	467
Heavy Vehicles (%)	1%	4%	0%	0%	10%	1%
Turn Type	Perm	Perm	NA	Perm	pm+pt	NA
Protected Phases			2		1	6
Permitted Phases	8	8		2	6	
Actuated Green, G (s)	18.0	18.0	25.5	25.5	48.0	48.0
Effective Green, g (s)	18.0	18.0	25.5	25.5	48.0	48.0
Actuated g/C Ratio	0.24	0.24	0.34	0.34	0.64	0.64
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Grp Cap (vph)	428	372	646	549	485	2287
v/s Ratio Prot			c0.30		c0.10	0.13
v/s Ratio Perm	0.07	c0.07		0.03	0.17	
v/c Ratio	0.30	0.31	0.88	0.10	0.42	0.20
Uniform Delay, d1	23.4	23.4	23.4	16.9	10.0	5.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.8	2.1	16.2	0.4	2.6	0.2
Delay (s)	25.2	25.5	39.5	17.2	12.6	5.8
Level of Service	C	C	D	B	B	A
Approach Delay (s)	25.4		34.8			7.8
Approach LOS	C		C			A

Intersection Summary			
HCM 2000 Control Delay	22.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	60.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

HCM 6th Edition methodology does not support Non-NEMA phasing.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	231	0	9	142	204	110
Future Volume (vph)	231	0	9	142	204	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.953	
Flt Protected	0.950			0.997		
Satd. Flow (prot)	1770	0	0	1583	1683	0
Flt Permitted	0.950			0.997		
Satd. Flow (perm)	1770	0	0	1583	1683	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	686			526	1142	
Travel Time (s)	15.6			12.0	26.0	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	0%	0%	21%	9%	5%
Adj. Flow (vph)	246	0	10	151	217	117
Shared Lane Traffic (%)						
Lane Group Flow (vph)	246	0	0	161	334	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Free			Stop	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.9%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection Sign configuration not allowed in HCM analysis.

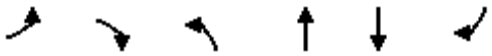
Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	231	0	9	142	204	110
Future Vol, veh/h	231	0	9	142	204	110
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	0	0	21	9	5
Mvmt Flow	246	0	10	151	217	117

Major/Minor	Minor2		Major2	
Conflicting Flow All	276	276	-	0
Stage 1	276	276	-	-
Stage 2	0	0	-	-
Critical Hdwy	6.4	6.71	-	-
Critical Hdwy Stg 1	5.4	5.71	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	3.5	4.189	-	-
Pot Cap-1 Maneuver	718	601	-	-
Stage 1	775	649	-	-
Stage 2	-	-	-	-
Platoon blocked, %			-	-
Mov Cap-1 Maneuver	718	0	-	-
Mov Cap-2 Maneuver	718	0	-	-
Stage 1	775	0	-	-
Stage 2	-	0	-	-

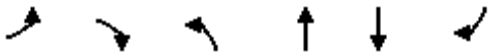
Approach	NB	SB
HCM Control Delay, s	11.5	0
HCM LOS	B	

Minor Lane/Major Mvmt	NBLn1	SBT	SBR
Capacity (veh/h)	718	-	-
HCM Lane V/C Ratio	0.224	-	-
HCM Control Delay (s)	11.5	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.9	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2	291	132	151	219	2
Future Volume (vph)	2	291	132	151	219	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.866				0.999	
Flt Protected				0.977		
Satd. Flow (prot)	1645	0	0	1671	1743	0
Flt Permitted				0.977		
Satd. Flow (perm)	1645	0	0	1671	1743	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	516			1385	526	
Travel Time (s)	11.7			31.5	12.0	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	2%	19%	9%	0%
Adj. Flow (vph)	2	297	135	154	223	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	299	0	0	289	225	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 55.0%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	291	132	151	219	2
Future Volume (Veh/h)	2	291	132	151	219	2
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	2	297	135	154	223	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	648	224	225			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	648	224	225			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	64	90			
cM capacity (veh/h)	394	820	1344			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	299	289	225
Volume Left	2	135	0
Volume Right	297	0	2
cSH	815	1344	1700
Volume to Capacity	0.37	0.10	0.13
Queue Length 95th (ft)	42	8	0
Control Delay (s)	12.0	4.2	0.0
Lane LOS	B	A	
Approach Delay (s)	12.0	4.2	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	5.9		
Intersection Capacity Utilization	55.0%	ICU Level of Service	B
Analysis Period (min)	15		

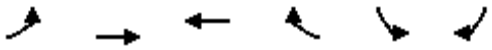
Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	291	132	151	219	2
Future Vol, veh/h	2	291	132	151	219	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	0	0	2	19	9	0
Mvmt Flow	2	297	135	154	223	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	648	224	225	0	-	0
Stage 1	224	-	-	-	-	-
Stage 2	424	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.12	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.218	-	-	-
Pot Cap-1 Maneuver	438	820	1344	-	-	-
Stage 1	818	-	-	-	-	-
Stage 2	664	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	390	820	1344	-	-	-
Mov Cap-2 Maneuver	390	-	-	-	-	-
Stage 1	728	-	-	-	-	-
Stage 2	664	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12	3.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1344	-	814	-	-
HCM Lane V/C Ratio	0.1	-	0.367	-	-
HCM Control Delay (s)	8	0	12	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.3	-	1.7	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	236	287	131	0	0	117
Future Volume (vph)	236	287	131	0	0	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.865	
Flt Protected		0.978				
Satd. Flow (prot)	0	1832	1845	0	1580	0
Flt Permitted		0.978				
Satd. Flow (perm)	0	1832	1845	0	1580	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		4107	516		686	
Travel Time (s)		93.3	11.7		15.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	1%	3%	0%	0%	4%
Adj. Flow (vph)	268	326	149	0	0	133
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	594	149	0	133	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Stop		Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 52.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection Sign configuration not allowed in HCM analysis.

Intersection	
Int Delay, s/veh	0

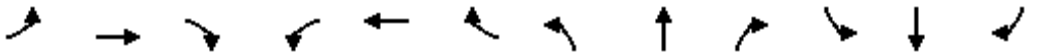
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	236	287	131	0	0	117
Future Vol, veh/h	236	287	131	0	0	117
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	1	3	0	0	4
Mvmt Flow	268	326	149	0	0	133

Major/Minor	Major1		Minor2	
Conflicting Flow All	0	0	862	0
Stage 1	-	-	0	-
Stage 2	-	-	862	-
Critical Hdwy	4.12	-	6.53	6.2
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	5.53	-
Follow-up Hdwy	2.218	-	4.027	3.3
Pot Cap-1 Maneuver	-	-	292	-
Stage 1	-	-	-	-
Stage 2	-	-	371	-
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	0	-
Mov Cap-2 Maneuver	-	-	0	-
Stage 1	-	-	0	-
Stage 2	-	-	0	-

Approach	EB	WB
HCM Control Delay, s		
HCM LOS		-

Minor Lane/Major Mvmt	EBL	EBTWBLn1	
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-

Improved Network 2045 AM



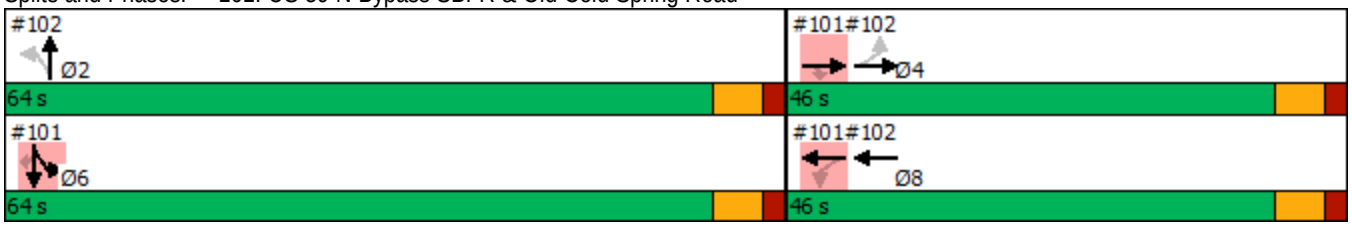
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	428	404	179	463	0	0	0	0	106	45	61
Future Volume (vph)	0	428	404	179	463	0	0	0	0	106	45	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected					0.986						0.966	
Satd. Flow (prot)	0	1712	1369	0	3158	0	0	0	0	0	1756	1122
Flt Permitted					0.674						0.966	
Satd. Flow (perm)	0	1712	1369	0	2159	0	0	0	0	0	1756	1122
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			454									69
Link Speed (mph)		40			40			30			45	
Link Distance (ft)		930			353			1253			1599	
Travel Time (s)		15.9			6.0			28.5			24.2	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	11%	18%	12%	13%	0%	0%	0%	0%	3%	8%	44%
Adj. Flow (vph)	0	481	454	201	520	0	0	0	0	119	51	69
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	481	454	0	721	0	0	0	0	0	170	69
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Perm	Perm	NA					Split	NA	Perm
Protected Phases		4			8					6	6	
Permitted Phases			4	8								6
Detector Phase		4	4	8	8					6	6	6
Switch Phase												

Lane Group	Ø2
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	2
Permitted Phases	
Detector Phase	
Switch Phase	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)		5.0	5.0	5.0	5.0					5.0	5.0	5.0
Minimum Split (s)		24.0	24.0	24.0	24.0					24.0	24.0	24.0
Total Split (s)		46.0	46.0	46.0	46.0					64.0	64.0	64.0
Total Split (%)		41.8%	41.8%	41.8%	41.8%					58.2%	58.2%	58.2%
Maximum Green (s)		40.0	40.0	40.0	40.0					58.0	58.0	58.0
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					2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0						0.0	0.0
Total Lost Time (s)		6.0	6.0		6.0						6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Recall Mode		None	None	None	None					Min	Min	Min
Act Effct Green (s)		40.1	40.1		40.1						15.7	15.7
Actuated g/C Ratio		0.59	0.59		0.59						0.23	0.23
v/c Ratio		0.48	0.46		0.57						0.42	0.22
Control Delay		10.7	2.6		11.0						25.2	7.6
Queue Delay		0.0	0.0		0.1						0.0	0.0
Total Delay		10.7	2.6		11.1						25.2	7.6
LOS		B	A		B						C	A
Approach Delay		6.7			11.1						20.1	
Approach LOS		A			B						C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 67.9			
Natural Cycle: 110			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 10.1		Intersection LOS: B	
Intersection Capacity Utilization 66.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 101: US 59 N Bypass SBFR & Old Cold Spring Road

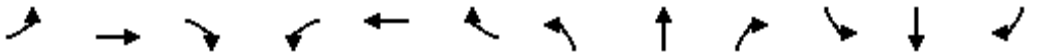


Lane Group	Ø2
Minimum Initial (s)	5.0
Minimum Split (s)	64.0
Total Split (s)	64.0
Total Split (%)	58%
Maximum Green (s)	58.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	Min
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Lane Group	EBT	EBR	WBT	SBT	SBR
Lane Group Flow (vph)	481	454	721	170	69
v/c Ratio	0.48	0.46	0.57	0.42	0.22
Control Delay	10.7	2.6	11.0	25.2	7.6
Queue Delay	0.0	0.0	0.1	0.0	0.0
Total Delay	10.7	2.6	11.1	25.2	7.6
Queue Length 50th (ft)	99	0	77	60	0
Queue Length 95th (ft)	201	37	148	109	27
Internal Link Dist (ft)	850		273	1519	
Turn Bay Length (ft)					
Base Capacity (vph)	1011	994	1275	1504	971
Starvation Cap Reductn	0	0	68	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.48	0.46	0.60	0.11	0.07

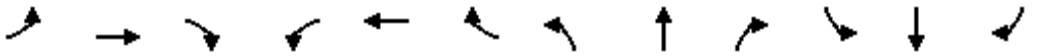
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	428	404	179	463	0	0	0	0	106	45	61
Future Volume (vph)	0	428	404	179	463	0	0	0	0	106	45	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0		6.0						6.0	6.0
Lane Util. Factor		1.00	1.00		0.95						1.00	1.00
Frt		1.00	0.85		1.00						1.00	0.85
Flt Protected		1.00	1.00		0.99						0.97	1.00
Satd. Flow (prot)		1712	1369		3159						1757	1122
Flt Permitted		1.00	1.00		0.67						0.97	1.00
Satd. Flow (perm)		1712	1369		2160						1757	1122
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	481	454	201	520	0	0	0	0	119	51	69
RTOR Reduction (vph)	0	0	185	0	0	0	0	0	0	0	0	53
Lane Group Flow (vph)	0	481	269	0	721	0	0	0	0	0	170	16
Heavy Vehicles (%)	0%	11%	18%	12%	13%	0%	0%	0%	0%	3%	8%	44%
Turn Type		NA	Perm	Perm	NA					Split	NA	Perm
Protected Phases		4			8					6	6	
Permitted Phases			4	8								6
Actuated Green, G (s)		40.1	40.1		40.1						15.7	15.7
Effective Green, g (s)		40.1	40.1		40.1						15.7	15.7
Actuated g/C Ratio		0.59	0.59		0.59						0.23	0.23
Clearance Time (s)		6.0	6.0		6.0						6.0	6.0
Vehicle Extension (s)		3.0	3.0		3.0						3.0	3.0
Lane Grp Cap (vph)		1012	809		1277						406	259
v/s Ratio Prot		0.28									c0.10	
v/s Ratio Perm			0.20		c0.33							0.01
v/c Ratio		0.48	0.33		0.56						0.42	0.06
Uniform Delay, d1		7.9	7.0		8.5						22.2	20.3
Progression Factor		1.00	1.00		0.96						1.00	1.00
Incremental Delay, d2		0.4	0.2		0.6						0.7	0.1
Delay (s)		8.2	7.3		8.7						22.9	20.4
Level of Service		A	A		A						C	C
Approach Delay (s)		7.8			8.7			0.0			22.2	
Approach LOS		A			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	9.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	67.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	66.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology does not support clustered intersections.



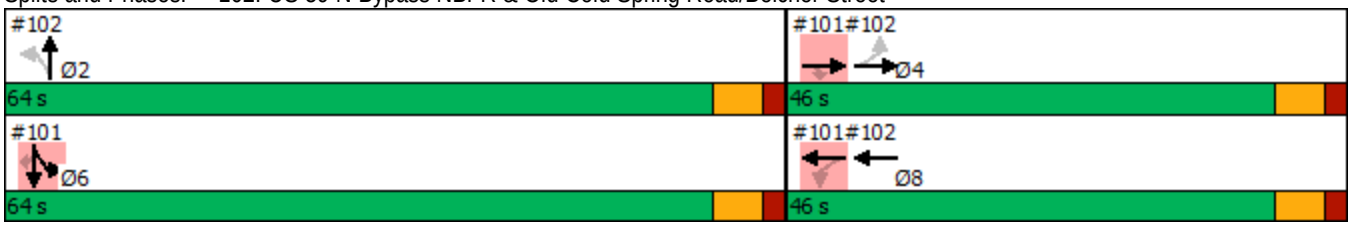
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	425	0	0	372	39	288	18	151	0	0	0
Future Volume (vph)	106	425	0	0	372	39	288	18	151	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Frt					0.987			0.950				
Flt Protected		0.990						0.969				
Satd. Flow (prot)	0	3279	0	0	1850	0	0	2786	0	0	0	0
Flt Permitted		0.749						0.969				
Satd. Flow (perm)	0	2481	0	0	1850	0	0	2786	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					5			117				
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		353			1397			1065			1401	
Travel Time (s)		6.0			23.8			16.1			21.2	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	33%	3%	0%	0%	1%	5%	28%	0%	5%	0%	0%	0%
Adj. Flow (vph)	122	489	0	0	428	45	331	21	174	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	611	0	0	473	0	0	526	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2		1	2				
Detector Template	Left	Thru			Thru		Left	Thru				
Leading Detector (ft)	20	100			100		20	100				
Trailing Detector (ft)	0	0			0		0	0				
Detector 1 Position(ft)	0	0			0		0	0				
Detector 1 Size(ft)	20	6			6		20	6				
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0			0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0			0.0		0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4						2					
Detector Phase	4	4			8		2	2				
Switch Phase												

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	6
Permitted Phases	
Detector Phase	
Switch Phase	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	5.0	5.0			5.0		5.0	5.0				
Minimum Split (s)	24.0	24.0			24.0		64.0	64.0				
Total Split (s)	46.0	46.0			46.0		64.0	64.0				
Total Split (%)	41.8%	41.8%			41.8%		58.2%	58.2%				
Maximum Green (s)	40.0	40.0			40.0		58.0	58.0				
Yellow Time (s)	4.0	4.0			4.0		4.0	4.0				
All-Red Time (s)	2.0	2.0			2.0		2.0	2.0				
Lost Time Adjust (s)		0.0			0.0			0.0				
Total Lost Time (s)		6.0			6.0			6.0				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0				
Recall Mode	None	None			None		Min	Min				
Act Effct Green (s)		40.1			40.1			15.7				
Actuated g/C Ratio		0.59			0.59			0.23				
v/c Ratio		0.42			0.43			0.72				
Control Delay		5.8			9.8			24.2				
Queue Delay		0.1			0.0			0.0				
Total Delay		5.9			9.8			24.2				
LOS		A			A			C				
Approach Delay		5.9			9.8			24.2				
Approach LOS		A			A			C				

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 67.9			
Natural Cycle: 110			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 13.0		Intersection LOS: B	
Intersection Capacity Utilization 67.7%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 102: US 59 N Bypass NBFR & Old Cold Spring Road/Belcher Street

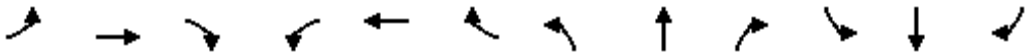


Lane Group	Ø6
Minimum Initial (s)	5.0
Minimum Split (s)	24.0
Total Split (s)	64.0
Total Split (%)	58%
Maximum Green (s)	58.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	Min
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Lane Group	EBT	WBT	NBT
Lane Group Flow (vph)	611	473	526
v/c Ratio	0.42	0.43	0.72
Control Delay	5.8	9.8	24.2
Queue Delay	0.1	0.0	0.0
Total Delay	5.9	9.8	24.2
Queue Length 50th (ft)	40	93	81
Queue Length 95th (ft)	56	180	124
Internal Link Dist (ft)	273	1317	985
Turn Bay Length (ft)			
Base Capacity (vph)	1466	1095	2404
Starvation Cap Reductn	133	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.46	0.43	0.22

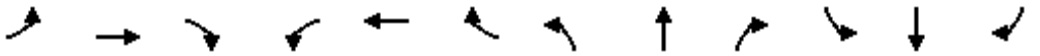
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	425	0	0	372	39	288	18	151	0	0	0
Future Volume (vph)	106	425	0	0	372	39	288	18	151	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0			6.0				
Lane Util. Factor		0.95			1.00			0.95				
Frt		1.00			0.99			0.95				
Flt Protected		0.99			1.00			0.97				
Satd. Flow (prot)		3279			1850			2789				
Flt Permitted		0.75			1.00			0.97				
Satd. Flow (perm)		2480			1850			2789				
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	122	489	0	0	428	45	331	21	174	0	0	0
RTOR Reduction (vph)	0	0	0	0	2	0	0	90	0	0	0	0
Lane Group Flow (vph)	0	611	0	0	471	0	0	436	0	0	0	0
Heavy Vehicles (%)	33%	3%	0%	0%	1%	5%	28%	0%	5%	0%	0%	0%
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		40.1			40.1			15.7				
Effective Green, g (s)		40.1			40.1			15.7				
Actuated g/C Ratio		0.59			0.59			0.23				
Clearance Time (s)		6.0			6.0			6.0				
Vehicle Extension (s)		3.0			3.0			3.0				
Lane Grp Cap (vph)		1466			1094			645				
v/s Ratio Prot					c0.25							
v/s Ratio Perm		0.25						0.16				
v/c Ratio		0.42			0.43			0.68				
Uniform Delay, d1		7.5			7.6			23.7				
Progression Factor		0.59			1.00			1.00				
Incremental Delay, d2		0.2			0.3			2.8				
Delay (s)		4.6			7.9			26.5				
Level of Service		A			A			C				
Approach Delay (s)		4.6			7.9			26.5			0.0	
Approach LOS		A			A			C			A	

Intersection Summary			
HCM 2000 Control Delay	12.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	67.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	67.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology does not support clustered intersections.

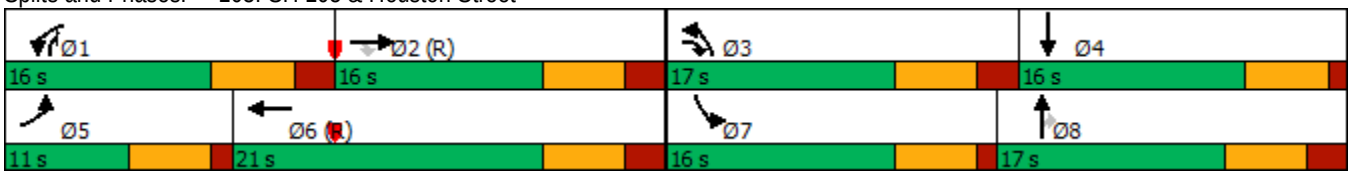


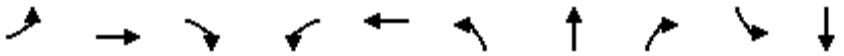
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	293	405	449	439	5	497	21	426	10	29	53
Future Volume (vph)	32	293	405	449	439	5	497	21	426	10	29	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	500		500	560		0	0		300	175		0
Storage Lanes	1		1	2		0	2		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	0.95	0.97	1.00	1.00	1.00	0.95	0.95
Frt			0.850		0.998				0.850		0.903	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	3282	1442	3155	3433	0	3335	1900	1455	1805	3132	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	3282	1442	3155	3433	0	3335	1900	1455	1805	3132	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			440		1				463		58	
Link Speed (mph)		55			60			60			30	
Link Distance (ft)		1108			4415			2711			551	
Travel Time (s)		13.7			50.2			30.8			12.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	10%	12%	11%	5%	0%	5%	0%	11%	0%	6%	3%
Adj. Flow (vph)	35	318	440	488	477	5	540	23	463	11	32	58
Shared Lane Traffic (%)												
Lane Group Flow (vph)	35	318	440	488	482	0	540	23	463	11	90	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2	3	1	6		3	8	1	7	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			2						8			
Detector Phase	5	2	3	1	6		3	8	1	7	4	
Switch Phase												
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0		5.0	5.0	5.0	10.0	10.0	
Minimum Split (s)	11.0	16.0	11.0	11.0	16.0		11.0	11.0	11.0	16.0	16.0	
Total Split (s)	11.0	16.0	17.0	16.0	21.0		17.0	17.0	16.0	16.0	16.0	
Total Split (%)	16.9%	24.6%	26.2%	24.6%	32.3%		26.2%	26.2%	24.6%	24.6%	24.6%	
Maximum Green (s)	6.0	10.0	11.0	10.0	15.0		11.0	11.0	10.0	11.0	11.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	5.0	5.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	4.0	3.0	3.0	4.0		3.0	3.0	3.0	4.0	4.0	
Recall Mode	None	C-Max	None	None	C-Max		None	None	None	None	None	
Act Effct Green (s)	6.4	12.1	29.1	11.9	25.2		11.0	20.0	37.9	10.0	10.0	
Actuated g/C Ratio	0.10	0.19	0.45	0.18	0.39		0.17	0.31	0.58	0.15	0.15	
v/c Ratio	0.21	0.52	0.49	0.85	0.36		0.96	0.04	0.44	0.04	0.17	
Control Delay	29.8	28.5	3.7	43.1	18.2		58.5	17.7	2.7	23.9	12.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	29.8	28.5	3.7	43.1	18.2		58.5	17.7	2.7	23.9	12.6	
LOS	C	C	A	D	B		E	B	A	C	B	
Approach Delay		14.8			30.7			32.4			13.8	
Approach LOS		B			C			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 26.4		Intersection LOS: C	
Intersection Capacity Utilization 60.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 103: SH 105 & Houston Street

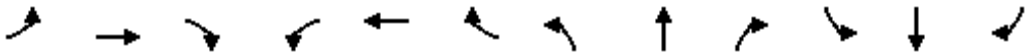




Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	35	318	440	488	482	540	23	463	11	90
v/c Ratio	0.21	0.52	0.49	0.85	0.36	0.96	0.04	0.44	0.04	0.17
Control Delay	29.8	28.5	3.7	43.1	18.2	58.5	17.7	2.7	23.9	12.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.8	28.5	3.7	43.1	18.2	58.5	17.7	2.7	23.9	12.6
Queue Length 50th (ft)	13	63	0	98	65	110	5	0	4	5
Queue Length 95th (ft)	37	101	48	#181	135	#201	26	47	16	23
Internal Link Dist (ft)		1028			4335		2631			471
Turn Bay Length (ft)	500		500	560				300	175	
Base Capacity (vph)	173	611	889	576	1331	564	584	1041	305	578
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	0.20	0.52	0.49	0.85	0.36	0.96	0.04	0.44	0.04	0.16

Intersection Summary

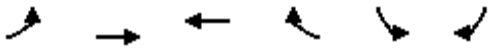
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



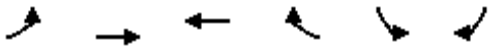
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	293	405	449	439	5	497	21	426	10	29	53
Future Volume (vph)	32	293	405	449	439	5	497	21	426	10	29	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	5.0	5.0	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.97	1.00	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.90	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1719	3282	1442	3155	3434		3335	1900	1455	1805	3134	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1719	3282	1442	3155	3434		3335	1900	1455	1805	3134	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	35	318	440	488	477	5	540	23	463	11	32	58
RTOR Reduction (vph)	0	0	311	0	1	0	0	0	236	0	48	0
Lane Group Flow (vph)	35	318	129	488	481	0	540	23	227	11	42	0
Heavy Vehicles (%)	5%	10%	12%	11%	5%	0%	5%	0%	11%	0%	6%	3%
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2						8			
Actuated Green, G (s)	2.8	8.1	19.1	11.9	18.2		11.0	20.0	31.9	2.0	11.0	
Effective Green, g (s)	2.8	8.1	19.1	11.9	18.2		11.0	20.0	31.9	2.0	11.0	
Actuated g/C Ratio	0.04	0.12	0.29	0.18	0.28		0.17	0.31	0.49	0.03	0.17	
Clearance Time (s)	5.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	5.0	5.0	
Vehicle Extension (s)	3.0	4.0	3.0	3.0	4.0		3.0	3.0	3.0	4.0	4.0	
Lane Grp Cap (vph)	74	408	556	577	961		564	584	848	55	530	
v/s Ratio Prot	0.02	c0.10	0.04	c0.15	0.14		c0.16	0.01	c0.05	0.01	0.01	
v/s Ratio Perm			0.05						0.11			
v/c Ratio	0.47	0.78	0.23	0.85	0.50		0.96	0.04	0.27	0.20	0.08	
Uniform Delay, d1	30.4	27.6	17.4	25.7	19.6		26.8	15.8	9.7	30.7	22.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	4.7	13.7	0.2	11.0	1.9		27.3	0.0	0.2	2.4	0.1	
Delay (s)	35.1	41.3	17.6	36.6	21.5		54.0	15.8	9.9	33.2	22.8	
Level of Service	D	D	B	D	C		D	B	A	C	C	
Approach Delay (s)		27.9			29.1			33.2			23.9	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	30.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	23.0
Intersection Capacity Utilization	60.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology supports speed limit in the range of 25 to 55 mph.



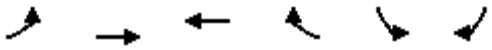
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	275	224	28	37	34
Future Volume (vph)	27	275	224	28	37	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			500	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1736	3282	3406	1568	1719	1599
Flt Permitted	0.572				0.950	
Satd. Flow (perm)	1045	3282	3406	1568	1719	1599
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				37		45
Link Speed (mph)		65	65		30	
Link Distance (ft)		2030	1363		297	
Travel Time (s)		21.3	14.3		6.8	
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Heavy Vehicles (%)	4%	10%	6%	3%	5%	1%
Adj. Flow (vph)	36	362	295	37	49	45
Shared Lane Traffic (%)						
Lane Group Flow (vph)	36	362	295	37	49	45
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Perm	NA	NA	Perm	Prot	Perm
Protected Phases		4	8		6	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	4			8		6
Detector Phase	4	4	8	8	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	66.0	66.0	66.0	66.0	24.0	24.0
Total Split (%)	73.3%	73.3%	73.3%	73.3%	26.7%	26.7%
Maximum Green (s)	60.0	60.0	60.0	60.0	18.0	18.0
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	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	Min	Min
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	8.3	8.3	8.3	8.3	6.2	6.2
Actuated g/C Ratio	0.31	0.31	0.31	0.31	0.23	0.23
v/c Ratio	0.11	0.35	0.28	0.07	0.12	0.11
Control Delay	7.5	8.2	7.7	3.3	9.2	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.5	8.2	7.7	3.3	9.2	4.3
LOS	A	A	A	A	A	A
Approach Delay		8.1	7.2		6.8	
Approach LOS		A	A		A	

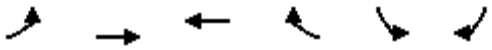
Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 26.6			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.35			
Intersection Signal Delay: 7.6		Intersection LOS: A	
Intersection Capacity Utilization 29.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 201: US 90 & Waco Street



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	36	362	295	37	49	45
v/c Ratio	0.11	0.35	0.28	0.07	0.12	0.11
Control Delay	7.5	8.2	7.7	3.3	9.2	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.5	8.2	7.7	3.3	9.2	4.3
Queue Length 50th (ft)	3	18	14	0	5	0
Queue Length 95th (ft)	10	28	23	6	14	8
Internal Link Dist (ft)		1950	1283		217	
Turn Bay Length (ft)	200			500		
Base Capacity (vph)	1045	3282	3406	1568	1170	1102
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	0.03	0.11	0.09	0.02	0.04	0.04

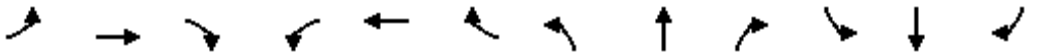
Intersection Summary



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	275	224	28	37	34
Future Volume (vph)	27	275	224	28	37	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1736	3282	3406	1568	1719	1599
Flt Permitted	0.57	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1044	3282	3406	1568	1719	1599
Peak-hour factor, PHF	0.76	0.76	0.76	0.76	0.76	0.76
Adj. Flow (vph)	36	362	295	37	49	45
RTOR Reduction (vph)	0	0	0	25	0	34
Lane Group Flow (vph)	36	362	295	12	49	11
Heavy Vehicles (%)	4%	10%	6%	3%	5%	1%
Turn Type	Perm	NA	NA	Perm	Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4			8		6
Actuated Green, G (s)	8.3	8.3	8.3	8.3	6.2	6.2
Effective Green, g (s)	8.3	8.3	8.3	8.3	6.2	6.2
Actuated g/C Ratio	0.31	0.31	0.31	0.31	0.23	0.23
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	326	1027	1066	491	402	374
v/s Ratio Prot		c0.11	0.09		c0.03	
v/s Ratio Perm	0.03			0.01		0.01
v/c Ratio	0.11	0.35	0.28	0.02	0.12	0.03
Uniform Delay, d1	6.5	7.0	6.8	6.3	8.0	7.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.2	0.1	0.0	0.1	0.0
Delay (s)	6.6	7.2	7.0	6.3	8.1	7.9
Level of Service	A	A	A	A	A	A
Approach Delay (s)		7.2	6.9		8.0	
Approach LOS		A	A		A	

Intersection Summary			
HCM 2000 Control Delay	7.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	26.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	29.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology supports speed limit in the range of 25 to 55 mph.



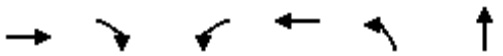
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	807	101	97	595	0	20	0	31	0	0	0
Future Volume (vph)	0	807	101	97	595	0	20	0	31	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	125		0	0		225	0		0
Storage Lanes	0		1	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	0.95	0.95	0.95
Frt			0.850					0.850				
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	3374	1509	1736	3374	0	1583	1482	0	0	3539	0
Flt Permitted				0.266			0.950					
Satd. Flow (perm)	0	3374	1509	486	3374	0	1583	1482	0	0	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			116					185				
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1974			2048			2080			1083	
Travel Time (s)		29.9			31.0			47.3			24.6	
Peak Hour Factor	0.92	0.87	0.87	0.87	0.87	0.92	0.87	0.92	0.87	0.92	0.92	0.92
Heavy Vehicles (%)	2%	7%	7%	4%	7%	2%	14%	2%	9%	2%	2%	2%
Adj. Flow (vph)	0	928	116	111	684	0	23	0	36	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	928	116	111	684	0	23	36	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60		9	15		60	15		9	60		60
Number of Detectors		2	1	1	2		1	2		1	2	
Detector Template		Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)		100	20	20	100		20	100		20	100	
Trailing Detector (ft)		0	0	0	0		0	0		0	0	
Detector 1 Position(ft)		0	0	0	0		0	0		0	0	
Detector 1 Size(ft)		6	20	20	6		20	6		20	6	
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)		0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)		0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type		NA	pm+ov	pm+pt	NA		pm+pt	NA				
Protected Phases		2	3	1	6		3	8			4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			2	6			8			4		
Detector Phase		2	3	1	6		3	8		4	4	
Switch Phase												
Minimum Initial (s)		10.0	5.0	5.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)		15.0	10.0	10.0	15.0		10.0	10.0		22.5	22.5	
Total Split (s)		42.0	11.0	10.0	52.0		11.0	33.0		22.0	22.0	
Total Split (%)		49.4%	12.9%	11.8%	61.2%		12.9%	38.8%		25.9%	25.9%	
Maximum Green (s)		37.0	6.0	5.0	47.0		6.0	28.0		17.5	17.5	
Yellow Time (s)		4.0	4.0	4.0	4.0		4.0	4.0		3.5	3.5	
All-Red Time (s)		1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)		5.0	5.0	5.0	5.0		5.0	5.0			4.5	
Lead/Lag		Lag	Lead	Lead			Lead			Lag	Lag	
Lead-Lag Optimize?		Yes	Yes	Yes			Yes			Yes	Yes	
Vehicle Extension (s)		2.0	2.0	2.0	2.0		2.0	2.0		3.0	3.0	
Recall Mode		C-Max	None	None	Max		None	None		None	None	
Walk Time (s)										7.0	7.0	
Flash Dont Walk (s)										11.0	11.0	
Pedestrian Calls (#/hr)										0	0	
Act Effct Green (s)		63.9	72.4	71.5	72.5		5.5	5.5				
Actuated g/C Ratio		0.75	0.85	0.84	0.85		0.06	0.06				
v/c Ratio		0.37	0.09	0.23	0.24		0.23	0.13				
Control Delay		5.5	0.5	2.6	1.8		42.9	1.0				
Queue Delay		0.0	0.0	0.0	0.0		0.0	0.0				
Total Delay		5.5	0.5	2.6	1.8		42.9	1.0				
LOS		A	A	A	A		D	A				
Approach Delay		4.9			1.9			17.4				
Approach LOS		A			A			B				

Intersection Summary

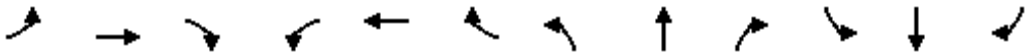
Area Type: Other
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.37
Intersection Signal Delay: 4.1 Intersection LOS: A
Intersection Capacity Utilization 44.3% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 202: Waco Street & FM 1960



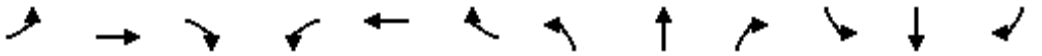
Lane Group	EBT	EBR	WBL	WBT	NBL	NBT
Lane Group Flow (vph)	928	116	111	684	23	36
v/c Ratio	0.37	0.09	0.23	0.24	0.23	0.13
Control Delay	5.5	0.5	2.6	1.8	42.9	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.5	0.5	2.6	1.8	42.9	1.0
Queue Length 50th (ft)	94	0	8	30	12	0
Queue Length 95th (ft)	126	7	15	41	34	0
Internal Link Dist (ft)	1894			1968		2000
Turn Bay Length (ft)		200	125			
Base Capacity (vph)	2535	1307	491	2876	111	612
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	0.37	0.09	0.23	0.24	0.21	0.06

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	807	101	97	595	0	20	0	31	0	0	0
Future Volume (vph)	0	807	101	97	595	0	20	0	31	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0	5.0	5.0		5.0	5.0				
Lane Util. Factor		0.95	1.00	1.00	0.95		1.00	1.00				
Frt		1.00	0.85	1.00	1.00		1.00	0.85				
Flt Protected		1.00	1.00	0.95	1.00		0.95	1.00				
Satd. Flow (prot)		3374	1509	1736	3374		1583	1482				
Flt Permitted		1.00	1.00	0.27	1.00		0.95	1.00				
Satd. Flow (perm)		3374	1509	486	3374		1583	1482				
Peak-hour factor, PHF	0.92	0.87	0.87	0.87	0.87	0.92	0.87	0.92	0.87	0.92	0.92	0.92
Adj. Flow (vph)	0	928	116	111	684	0	23	0	36	0	0	0
RTOR Reduction (vph)	0	0	27	0	0	0	0	34	0	0	0	0
Lane Group Flow (vph)	0	928	89	111	684	0	23	2	0	0	0	0
Heavy Vehicles (%)	2%	7%	7%	4%	7%	2%	14%	2%	9%	2%	2%	2%
Turn Type		NA	pm+ov	pm+pt	NA		pm+pt	NA				
Protected Phases		2	3	1	6		3	8			4	
Permitted Phases			2	6			8			4		
Actuated Green, G (s)		60.9	65.4	70.5	70.5		4.5	4.5				
Effective Green, g (s)		60.9	65.4	70.5	70.5		4.5	4.5				
Actuated g/C Ratio		0.72	0.77	0.83	0.83		0.05	0.05				
Clearance Time (s)		5.0	5.0	5.0	5.0		5.0	5.0				
Vehicle Extension (s)		2.0	2.0	2.0	2.0		2.0	2.0				
Lane Grp Cap (vph)		2417	1249	470	2798		83	78				
v/s Ratio Prot		c0.28	0.00	0.01	c0.20		c0.01	0.00				
v/s Ratio Perm			0.06	0.18								
v/c Ratio		0.38	0.07	0.24	0.24		0.28	0.02				
Uniform Delay, d1		4.7	2.4	1.9	1.6		38.7	38.2				
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00				
Incremental Delay, d2		0.5	0.0	0.1	0.2		0.7	0.0				
Delay (s)		5.2	2.4	2.0	1.8		39.4	38.2				
Level of Service		A	A	A	A		D	D				
Approach Delay (s)		4.9			1.8			38.7			0.0	
Approach LOS		A			A			D			A	

Intersection Summary			
HCM 2000 Control Delay	4.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	44.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



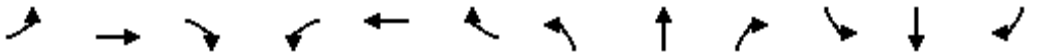
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	807	101	97	595	0	20	0	31	0	0	0
Future Volume (veh/h)	0	807	101	97	595	0	20	0	31	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1796	1796	1841	1796	1870	1693	1870	1767	1870	1870	1870
Adj Flow Rate, veh/h	0	928	116	111	684	0	23	0	36	0	0	0
Peak Hour Factor	0.92	0.87	0.87	0.87	0.87	0.92	0.87	0.92	0.87	0.92	0.92	0.92
Percent Heavy Veh, %	0	7	7	4	7	2	14	2	9	2	2	2
Cap, veh/h	0	2459	1164	516	2860	0	156	0	70	0	4	0
Arrive On Green	0.00	0.72	0.72	0.06	0.84	0.00	0.04	0.00	0.04	0.00	0.00	0.00
Sat Flow, veh/h	0	3503	1522	1753	3503	0	1612	0	1585	0	-91648	0
Grp Volume(v), veh/h	0	928	116	111	684	0	23	0	36	0	0	0
Grp Sat Flow(s),veh/h/ln	0	1706	1522	1753	1706	0	1612	0	1585	0	1777	0
Q Serve(g_s), s	0.0	8.9	1.6	1.1	3.4	0.0	1.2	0.0	1.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	8.9	1.6	1.1	3.4	0.0	1.2	0.0	1.9	0.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	0	2459	1164	516	2860	0	156	0	70	0	4	0
V/C Ratio(X)	0.00	0.38	0.10	0.22	0.24	0.00	0.15	0.00	0.51	0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	2459	1164	516	2860	0	198	0	522	0	732	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.14	0.14	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	4.6	2.5	2.6	1.4	0.0	39.3	0.0	39.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.2	0.0	0.0	0.0	0.2	0.0	2.2	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.1	0.4	0.1	0.1	0.0	0.5	0.0	0.8	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	5.0	2.7	2.7	1.4	0.0	39.4	0.0	41.9	0.0	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	D	A	D	A	A	A
Approach Vol, veh/h		1044			795			59			0	
Approach Delay, s/veh		4.7			1.6			40.9			0.0	
Approach LOS		A			A			D				

Timer - Assigned Phs	1	2	3	4		6		8				
Phs Duration (G+Y+Rc), s	10.0	66.2	8.8	0.0		76.2		8.8				
Change Period (Y+Rc), s	5.0	5.0	5.0	* 5		5.0		5.0				
Max Green Setting (Gmax), s	5.0	37.0	6.0	* 18		47.0		28.0				
Max Q Clear Time (g_c+I1), s	3.1	10.9	3.2	0.0		5.4		3.9				
Green Ext Time (p_c), s	0.0	4.3	0.0	0.0		2.9		0.1				

Intersection Summary	
HCM 6th Ctrl Delay	4.6
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

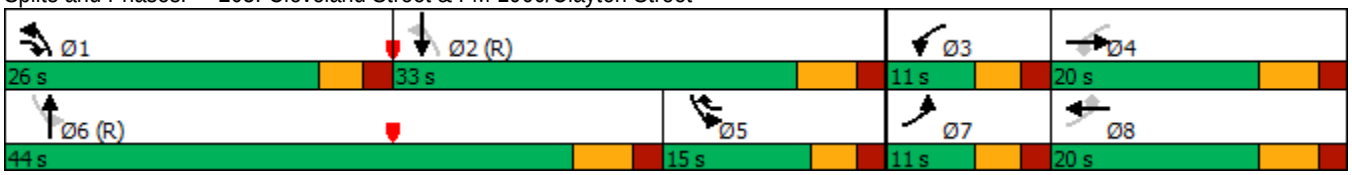


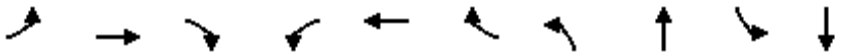
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	122	113	446	59	254	55	420	352	65	36	805	123
Future Volume (vph)	122	113	446	59	254	55	420	352	65	36	805	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	600		600	0		300	225		0	100		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.900	0.850			0.850		0.977			0.980	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1626	2936	1374	1399	1881	1524	1612	3099	0	1805	3329	0
Flt Permitted	0.292			0.419			0.154			0.467		
Satd. Flow (perm)	500	2936	1374	617	1881	1524	261	3099	0	887	3329	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		243	170			158		29			19	
Link Speed (mph)		35			35			55			45	
Link Distance (ft)		2048			1513			495			3038	
Travel Time (s)		39.9			29.5			6.1			46.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	11%	4%	7%	29%	1%	6%	12%	11%	29%	0%	6%	8%
Adj. Flow (vph)	133	123	485	64	276	60	457	383	71	39	875	134
Shared Lane Traffic (%)			50%									
Lane Group Flow (vph)	133	366	242	64	276	60	457	454	0	39	1009	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA	pm+ov	D.P+P	NA	pm+ov	D.P+P	NA		D.P+P	NA	
Protected Phases	7	4	1	3	8	5	1	6		5	2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	8		4	4		8	2			6		
Detector Phase	7	4	1	3	8	5	1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0	10.0	6.0	10.0	10.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	16.0	15.0	11.0	16.0	15.0	15.0	16.0		15.0	16.0	
Total Split (s)	11.0	20.0	26.0	11.0	20.0	15.0	26.0	44.0		15.0	33.0	
Total Split (%)	12.2%	22.2%	28.9%	12.2%	22.2%	16.7%	28.9%	48.9%		16.7%	36.7%	
Maximum Green (s)	6.0	14.0	21.0	6.0	14.0	10.0	21.0	38.0		10.0	27.0	
Yellow Time (s)	3.0	4.0	3.0	3.0	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	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	6.0	5.0	5.0	6.0	5.0	5.0	6.0		5.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	4.0	4.0	3.0	5.0	4.0	4.0	4.0		4.0	4.0	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	
Act Effct Green (s)	21.0	16.2	43.2	22.0	14.0	25.0	49.0	41.0		50.0	27.0	
Actuated g/C Ratio	0.23	0.18	0.48	0.24	0.16	0.28	0.54	0.46		0.56	0.30	
v/c Ratio	0.70	0.50	0.32	0.32	0.95	0.11	1.00	0.32		0.07	1.00	
Control Delay	47.3	14.8	6.3	28.8	80.2	0.4	68.0	16.2		6.9	61.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	47.3	14.8	6.3	28.8	80.2	0.4	68.0	16.2		6.9	61.3	
LOS	D	B	A	C	F	A	E	B		A	E	
Approach Delay		17.8			60.0			42.2			59.3	
Approach LOS		B			E			D			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:NBSB, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay: 44.5		Intersection LOS: D	
Intersection Capacity Utilization 87.9%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 203: Cleveland Street & FM 1960/Clayton Street

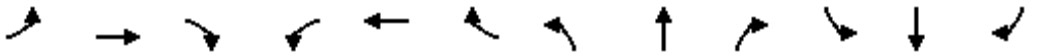




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	133	366	242	64	276	60	457	454	39	1009
v/c Ratio	0.70	0.50	0.32	0.32	0.95	0.11	1.00	0.32	0.07	1.00
Control Delay	47.3	14.8	6.3	28.8	80.2	0.4	68.0	16.2	6.9	61.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.3	14.8	6.3	28.8	80.2	0.4	68.0	16.2	6.9	61.3
Queue Length 50th (ft)	58	34	25	27	157	0	208	83	11	315
Queue Length 95th (ft)	#107	79	75	59	#308	0	#410	120	m15	#448
Internal Link Dist (ft)		1968			1433			415		2958
Turn Bay Length (ft)	600		600			300	225		100	
Base Capacity (vph)	191	727	747	203	292	537	457	1427	594	1012
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	0.70	0.50	0.32	0.32	0.95	0.11	1.00	0.32	0.07	1.00

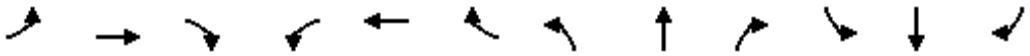
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	122	113	446	59	254	55	420	352	65	36	805	123
Future Volume (vph)	122	113	446	59	254	55	420	352	65	36	805	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0	5.0	5.0	6.0	5.0	5.0	6.0		5.0	6.0	
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.90	0.85	1.00	1.00	0.85	1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1626	2938	1374	1399	1881	1524	1612	3097		1805	3329	
Flt Permitted	0.29	1.00	1.00	0.42	1.00	1.00	0.15	1.00		0.47	1.00	
Satd. Flow (perm)	499	2938	1374	617	1881	1524	261	3097		888	3329	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	133	123	485	64	276	60	457	383	71	39	875	134
RTOR Reduction (vph)	0	199	100	0	0	45	0	16	0	0	14	0
Lane Group Flow (vph)	133	167	142	64	276	15	457	438	0	39	995	0
Heavy Vehicles (%)	11%	4%	7%	29%	1%	6%	12%	11%	29%	0%	6%	8%
Turn Type	D.P+P	NA	pm+ov	D.P+P	NA	pm+ov	D.P+P	NA		D.P+P	NA	
Protected Phases	7	4	1	3	8	5	1	6		5	2	
Permitted Phases	8		4	4		8	2			6		
Actuated Green, G (s)	21.0	16.2	37.2	21.0	15.0	23.0	47.0	39.0		47.0	26.0	
Effective Green, g (s)	21.0	16.2	37.2	21.0	15.0	23.0	47.0	39.0		47.0	26.0	
Actuated g/C Ratio	0.23	0.18	0.41	0.23	0.17	0.26	0.52	0.43		0.52	0.29	
Clearance Time (s)	5.0	6.0	5.0	5.0	6.0	5.0	5.0	6.0		5.0	6.0	
Vehicle Extension (s)	3.0	4.0	4.0	3.0	5.0	4.0	4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	191	528	567	185	313	389	451	1342		545	961	
v/s Ratio Prot	c0.05	0.06	0.06	0.02	c0.15	0.00	c0.24	0.14		0.01	c0.30	
v/s Ratio Perm	0.12		0.05	0.06		0.01	0.29			0.03		
v/c Ratio	0.70	0.32	0.25	0.35	0.88	0.04	1.01	0.33		0.07	1.04	
Uniform Delay, d1	29.3	32.1	17.3	27.8	36.6	25.2	25.1	16.8		11.6	32.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		0.84	1.13	
Incremental Delay, d2	10.5	0.5	0.3	1.1	25.4	0.1	45.8	0.6		0.1	36.7	
Delay (s)	39.8	32.6	17.6	28.9	62.1	25.2	70.9	17.5		9.9	72.8	
Level of Service	D	C	B	C	E	C	E	B		A	E	
Approach Delay (s)		29.0			51.2			44.3			70.4	
Approach LOS		C			D			D			E	

Intersection Summary			
HCM 2000 Control Delay	50.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	87.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



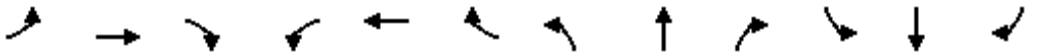
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	113	446	59	254	55	420	352	65	36	805	123
Future Volume (veh/h)	122	113	446	59	254	55	420	352	65	36	805	123
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1737	1841	1796	1470	1885	1811	1722	1737	1470	1900	1811	1781
Adj Flow Rate, veh/h	133	123	485	64	276	60	457	383	71	39	875	134
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	11	4	7	29	1	6	12	11	29	0	6	8
Cap, veh/h	201	311	1225	224	293	392	467	1175	216	574	897	137
Arrive On Green	0.07	0.17	0.17	0.05	0.16	0.16	0.23	0.42	0.42	0.03	0.10	0.10
Sat Flow, veh/h	1654	1841	3045	1400	1885	1535	1640	2784	511	1810	2991	458
Grp Volume(v), veh/h	133	123	485	64	276	60	457	226	228	39	503	506
Grp Sat Flow(s),veh/h/ln	1654	1841	1522	1400	1885	1535	1640	1650	1645	1810	1721	1729
Q Serve(g_s), s	6.0	5.4	10.2	3.4	13.0	0.4	20.2	8.2	8.4	0.0	26.3	26.3
Cycle Q Clear(g_c), s	6.0	5.4	10.2	3.4	13.0	0.4	20.2	8.2	8.4	0.0	26.3	26.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.31	1.00		0.26
Lane Grp Cap(c), veh/h	201	311	1225	224	293	392	467	697	695	574	516	519
V/C Ratio(X)	0.66	0.40	0.40	0.29	0.94	0.15	0.98	0.32	0.33	0.07	0.98	0.98
Avail Cap(c_a), veh/h	201	311	1225	243	293	392	467	697	695	594	516	519
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.94	0.94	0.94	0.84	0.84	0.84	1.00	1.00	1.00	0.83	0.83	0.83
Uniform Delay (d), s/veh	30.9	33.3	19.1	28.7	37.6	11.9	24.6	17.4	17.4	16.5	40.2	40.2
Incr Delay (d2), s/veh	7.4	1.1	0.3	0.6	33.9	0.3	36.1	1.2	1.3	0.1	30.5	30.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	2.4	3.5	1.1	8.6	0.6	11.4	3.0	3.0	0.5	16.3	16.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.3	34.4	19.4	29.3	71.5	12.2	60.7	18.6	18.7	16.5	70.7	70.6
LnGrp LOS	D	C	B	C	E	B	E	B	B	B	E	E
Approach Vol, veh/h		741			400			911			1048	
Approach Delay, s/veh		25.3			55.8			39.7			68.6	
Approach LOS		C			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.0	33.0	9.8	21.2	15.0	44.0	11.0	20.0
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	6.0	* 6	5.0	6.0
Max Green Setting (Gmax), s	21.0	27.0	6.0	14.0	10.0	* 38	6.0	14.0
Max Q Clear Time (g_c+I1), s	22.2	28.3	5.4	12.2	2.0	10.4	8.0	15.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.7	0.0	3.5	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	48.1
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

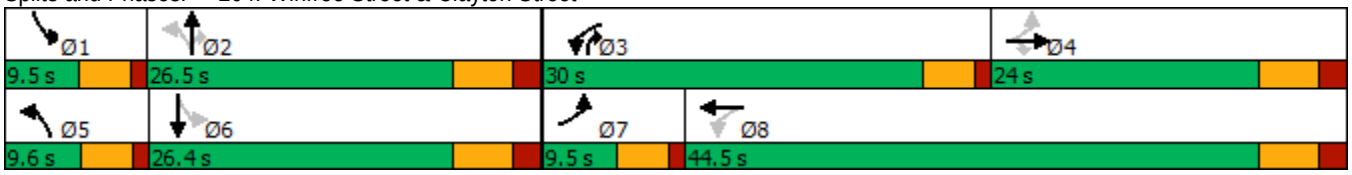


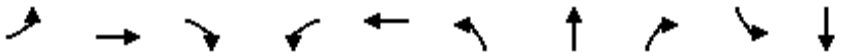
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	170	57	613	723	29	83	129	37	5	297	51
Future Volume (vph)	25	170	57	613	723	29	83	129	37	5	297	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		300	300		0	300		0	300		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.994				0.850		0.978	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3139	1553	1787	3539	0	1770	1863	1568	1805	1832	0
Flt Permitted	0.328			0.472			0.215			0.663		
Satd. Flow (perm)	623	3139	1553	888	3539	0	400	1863	1568	1260	1832	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			200		5				91		9	
Link Speed (mph)		45			30			30			30	
Link Distance (ft)		1513			1036			419			1496	
Travel Time (s)		22.9			23.5			9.5			34.0	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	0%	15%	4%	1%	1%	11%	2%	2%	3%	0%	1%	4%
Adj. Flow (vph)	29	195	66	705	831	33	95	148	43	6	341	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	29	195	66	705	864	0	95	148	43	6	400	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8			2		2	6		
Detector Phase	7	4	4	3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	24.0	24.0	9.5	24.0		9.5	24.0	9.5	9.5	24.0	
Total Split (s)	9.5	24.0	24.0	30.0	44.5		9.6	26.5	30.0	9.5	26.4	
Total Split (%)	10.6%	26.7%	26.7%	33.3%	49.4%		10.7%	29.4%	33.3%	10.6%	29.3%	
Maximum Green (s)	5.0	18.0	18.0	25.5	38.5		5.1	20.5	25.5	5.0	20.4	
Yellow Time (s)	3.5	4.0	4.0	3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0		1.0	2.0	1.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	6.0	6.0	4.5	6.0		4.5	6.0	4.5	4.5	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None	None	None	None		None	Min	None	None	Min	
Act Effct Green (s)	17.2	10.6	10.6	41.4	36.3		27.9	25.4	56.2	25.2	19.9	
Actuated g/C Ratio	0.22	0.13	0.13	0.52	0.46		0.35	0.32	0.71	0.32	0.25	
v/c Ratio	0.14	0.46	0.17	0.95	0.53		0.41	0.25	0.04	0.01	0.86	
Control Delay	15.3	36.4	1.0	40.9	18.2		23.9	23.0	0.2	17.4	49.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	15.3	36.4	1.0	40.9	18.2		23.9	23.0	0.2	17.4	49.4	
LOS	B	D	A	D	B		C	C	A	B	D	
Approach Delay		26.3			28.4			19.9			48.9	
Approach LOS		C			C			B			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 79.2			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay: 30.5		Intersection LOS: C	
Intersection Capacity Utilization 79.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 204: Winfree Street & Clayton Street

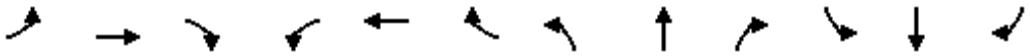




Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	29	195	66	705	864	95	148	43	6	400
v/c Ratio	0.14	0.46	0.17	0.95	0.53	0.41	0.25	0.04	0.01	0.86
Control Delay	15.3	36.4	1.0	40.9	18.2	23.9	23.0	0.2	17.4	49.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.3	36.4	1.0	40.9	18.2	23.9	23.0	0.2	17.4	49.4
Queue Length 50th (ft)	7	50	0	279	149	31	52	0	2	194
Queue Length 95th (ft)	19	79	0	#432	237	66	117	1	10	#363
Internal Link Dist (ft)		1433			956		339			1416
Turn Bay Length (ft)	300		300	300		300			300	
Base Capacity (vph)	211	724	512	758	1773	230	619	1161	435	485
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	0.14	0.27	0.13	0.93	0.49	0.41	0.24	0.04	0.01	0.82

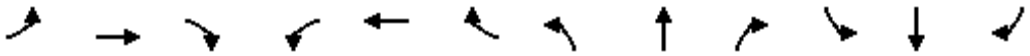
Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	170	57	613	723	29	83	129	37	5	297	51
Future Volume (vph)	25	170	57	613	723	29	83	129	37	5	297	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0	6.0	4.5	6.0		4.5	6.0	4.5	4.5	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	3139	1553	1787	3540		1770	1863	1568	1805	1832	
Flt Permitted	0.33	1.00	1.00	0.47	1.00		0.21	1.00	1.00	0.66	1.00	
Satd. Flow (perm)	623	3139	1553	888	3540		400	1863	1568	1259	1832	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	29	195	66	705	831	33	95	148	43	6	341	59
RTOR Reduction (vph)	0	0	56	0	3	0	0	0	18	0	7	0
Lane Group Flow (vph)	29	195	10	705	861	0	95	148	25	6	393	0
Heavy Vehicles (%)	0%	15%	4%	1%	1%	11%	2%	2%	3%	0%	1%	4%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases	4		4	8			2		2	6		
Actuated Green, G (s)	15.4	13.5	13.5	42.7	36.3		29.3	25.4	50.1	23.3	22.4	
Effective Green, g (s)	15.4	13.5	13.5	42.7	36.3		29.3	25.4	50.1	23.3	22.4	
Actuated g/C Ratio	0.18	0.16	0.16	0.50	0.42		0.34	0.30	0.59	0.27	0.26	
Clearance Time (s)	4.5	6.0	6.0	4.5	6.0		4.5	6.0	4.5	4.5	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	138	495	245	703	1502		199	553	918	348	479	
v/s Ratio Prot	0.00	0.06		c0.29	0.24		c0.02	0.08	0.01	0.00	c0.21	
v/s Ratio Perm	0.03		0.01	c0.21			0.14		0.01	0.00		
v/c Ratio	0.21	0.39	0.04	1.00	0.57		0.48	0.27	0.03	0.02	0.82	
Uniform Delay, d1	29.2	32.3	30.5	18.7	18.7		21.0	22.9	7.4	22.7	29.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.8	0.5	0.1	34.6	0.5		1.8	0.3	0.0	0.0	10.8	
Delay (s)	30.0	32.8	30.6	53.3	19.2		22.8	23.2	7.5	22.7	40.5	
Level of Service	C	C	C	D	B		C	C	A	C	D	
Approach Delay (s)		32.0			34.5			20.7			40.2	
Approach LOS		C			C			C			D	

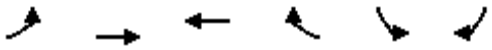
Intersection Summary			
HCM 2000 Control Delay	33.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	85.5	Sum of lost time (s)	21.0
Intersection Capacity Utilization	79.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	170	57	613	723	29	83	129	37	5	297	51
Future Volume (veh/h)	25	170	57	613	723	29	83	129	37	5	297	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1678	1841	1885	1885	1737	1870	1870	1856	1900	1885	1841
Adj Flow Rate, veh/h	29	195	66	705	831	33	95	148	43	6	341	59
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	15	4	1	1	11	2	2	3	0	1	4
Cap, veh/h	211	309	151	730	1397	55	226	546	979	388	381	66
Arrive On Green	0.03	0.10	0.10	0.33	0.40	0.40	0.06	0.29	0.29	0.01	0.24	0.24
Sat Flow, veh/h	1810	3188	1560	1795	3512	139	1781	1870	1572	1810	1566	271
Grp Volume(v), veh/h	29	195	66	705	424	440	95	148	43	6	0	400
Grp Sat Flow(s),veh/h/ln	1810	1594	1560	1795	1791	1860	1781	1870	1572	1810	0	1836
Q Serve(g_s), s	1.1	4.5	3.1	25.5	14.4	14.4	3.0	4.7	0.8	0.2	0.0	16.2
Cycle Q Clear(g_c), s	1.1	4.5	3.1	25.5	14.4	14.4	3.0	4.7	0.8	0.2	0.0	16.2
Prop In Lane	1.00		1.00	1.00		0.07	1.00		1.00	1.00		0.15
Lane Grp Cap(c), veh/h	211	309	151	730	712	740	226	546	979	388	0	447
V/C Ratio(X)	0.14	0.63	0.44	0.97	0.59	0.60	0.42	0.27	0.04	0.02	0.00	0.89
Avail Cap(c_a), veh/h	274	744	364	730	894	929	244	546	979	491	0	486
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.9	33.5	32.8	19.7	18.3	18.3	21.2	21.0	5.6	21.7	0.0	28.2
Incr Delay (d2), s/veh	0.3	2.1	2.0	25.0	0.8	0.8	1.2	0.3	0.0	0.0	0.0	17.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.7	1.2	15.3	5.7	5.9	1.3	2.0	0.2	0.1	0.0	9.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.2	35.6	34.8	44.7	19.1	19.1	22.5	21.2	5.7	21.7	0.0	46.1
LnGrp LOS	C	D	C	D	B	B	C	C	A	C	A	D
Approach Vol, veh/h		290			1569			286			406	
Approach Delay, s/veh		34.9			30.6			19.3			45.8	
Approach LOS		C			C			B			D	

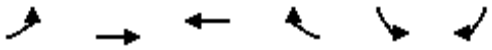
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.1	28.5	30.0	13.5	8.8	24.8	6.8	36.7
Change Period (Y+Rc), s	4.5	6.0	4.5	6.0	4.5	6.0	4.5	6.0
Max Green Setting (Gmax), s	5.0	20.5	25.5	18.0	5.1	20.4	5.0	38.5
Max Q Clear Time (g_c+I1), s	2.2	6.7	27.5	6.5	5.0	18.2	3.1	16.4
Green Ext Time (p_c), s	0.0	0.7	0.0	0.9	0.0	0.5	0.0	5.8

Intersection Summary	
HCM 6th Ctrl Delay	32.2
HCM 6th LOS	C



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	2	285	965	11	0	2
Future Volume (vph)	2	285	965	11	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.998		0.865	
Flt Protected						
Satd. Flow (prot)	0	3375	1878	0	1644	0
Flt Permitted						
Satd. Flow (perm)	0	3375	1878	0	1644	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		1036	1081		1292	
Travel Time (s)		15.7	16.4		29.4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	7%	1%	0%	0%	0%
Adj. Flow (vph)	2	303	1027	12	0	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	305	1039	0	2	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 61.5%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	285	965	11	0	2
Future Volume (Veh/h)	2	285	965	11	0	2
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	2	303	1027	12	0	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1036				
pX, platoon unblocked					1.00	
vC, conflicting volume	1039				1188	1033
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1039				1183	1033
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	99
cM capacity (veh/h)	677				184	233

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	103	202	1039	2
Volume Left	2	0	0	0
Volume Right	0	0	12	2
cSH	677	1700	1700	233
Volume to Capacity	0.00	0.12	0.61	0.01
Queue Length 95th (ft)	0	0	0	1
Control Delay (s)	0.2	0.0	0.0	20.6
Lane LOS	A			C
Approach Delay (s)	0.1		0.0	20.6
Approach LOS				C

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	61.5%	ICU Level of Service	B
Analysis Period (min)	15		

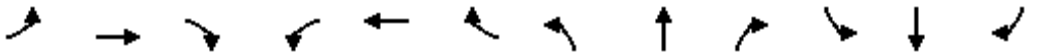
Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	285	965	11	0	2
Future Vol, veh/h	2	285	965	11	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	7	1	0	0	0
Mvmt Flow	2	303	1027	12	0	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1039	0	-	0	1189	1033
Stage 1	-	-	-	-	1033	-
Stage 2	-	-	-	-	156	-
Critical Hdwy	4.1	-	-	-	6.6	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	677	-	-	-	196	285
Stage 1	-	-	-	-	346	-
Stage 2	-	-	-	-	862	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	677	-	-	-	195	285
Mov Cap-2 Maneuver	-	-	-	-	195	-
Stage 1	-	-	-	-	345	-
Stage 2	-	-	-	-	862	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	17.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	677	-	-	-	285
HCM Lane V/C Ratio	0.003	-	-	-	0.007
HCM Control Delay (s)	10.3	0	-	-	17.7
HCM Lane LOS	B	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	8	37	18	23	30	8	602	15	15	933	44
Future Volume (vph)	82	8	37	18	23	30	8	602	15	15	933	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.961				0.850		0.996			0.993	
Flt Protected		0.969			0.978			0.999			0.999	
Satd. Flow (prot)	0	1769	0	0	1688	1553	0	3335	0	0	3331	0
Flt Permitted		0.775			0.825			0.936			0.939	
Satd. Flow (perm)	0	1415	0	0	1424	1553	0	3125	0	0	3131	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20				37		6			11	
Link Speed (mph)		30			30			45			55	
Link Distance (ft)		594			763			3038			1923	
Travel Time (s)		13.5			17.3			46.0			23.8	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	0%	0%	0%	0%	18%	4%	0%	8%	0%	0%	8%	0%
Adj. Flow (vph)	100	10	45	22	28	37	10	734	18	18	1138	54
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	155	0	0	50	37	0	762	0	0	1210	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4			8		8	6			2		
Detector Phase	4	4		8	8	8	6	6		2	2	
Switch Phase												

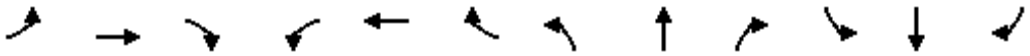
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	11.0		24.0	24.0	24.0	16.0	16.0		16.0	16.0	
Total Split (s)	24.0	24.0		24.0	24.0	24.0	66.0	66.0		66.0	66.0	
Total Split (%)	26.7%	26.7%		26.7%	26.7%	26.7%	73.3%	73.3%		73.3%	73.3%	
Maximum Green (s)	18.0	18.0		18.0	18.0	18.0	60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0	0.0		0.0			0.0	
Total Lost Time (s)		6.0			6.0	6.0		6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	4.0	4.0		4.0	4.0	
Recall Mode	None	None		None	None	None	C-Max	C-Max		C-Max	C-Max	
Walk Time (s)				5.0	5.0	5.0						
Flash Dont Walk (s)				13.0	13.0	13.0						
Pedestrian Calls (#/hr)				0	0	0						
Act Effct Green (s)		12.7			12.7	12.7		65.3			65.3	
Actuated g/C Ratio		0.14			0.14	0.14		0.73			0.73	
v/c Ratio		0.71			0.25	0.15		0.34			0.53	
Control Delay		49.4			35.5	11.8		2.9			7.1	
Queue Delay		0.0			0.0	0.0		0.0			0.0	
Total Delay		49.4			35.5	11.8		2.9			7.1	
LOS		D			D	B		A			A	
Approach Delay		49.4			25.4			2.9			7.1	
Approach LOS		D			C			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 9.3		Intersection LOS: A	
Intersection Capacity Utilization 61.8%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 206: Cleveland Street & Linney Street

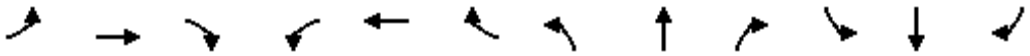
Lane Group	EBT	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	155	50	37	762	1210
v/c Ratio	0.71	0.25	0.15	0.34	0.53
Control Delay	49.4	35.5	11.8	2.9	7.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	49.4	35.5	11.8	2.9	7.1
Queue Length 50th (ft)	74	26	0	47	135
Queue Length 95th (ft)	117	50	21	59	190
Internal Link Dist (ft)	514	683		2958	1843
Turn Bay Length (ft)					
Base Capacity (vph)	299	284	340	2268	2274
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.52	0.18	0.11	0.34	0.53

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	8	37	18	23	30	8	602	15	15	933	44
Future Volume (vph)	82	8	37	18	23	30	8	602	15	15	933	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0	6.0		6.0			6.0	
Lane Util. Factor		1.00			1.00	1.00		0.95			0.95	
Frt		0.96			1.00	0.85		1.00			0.99	
Flt Protected		0.97			0.98	1.00		1.00			1.00	
Satd. Flow (prot)		1768			1689	1553		3338			3332	
Flt Permitted		0.77			0.83	1.00		0.94			0.94	
Satd. Flow (perm)		1414			1424	1553		3125			3130	
Peak-hour factor, PHF	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	100	10	45	22	28	37	10	734	18	18	1138	54
RTOR Reduction (vph)	0	17	0	0	0	32	0	2	0	0	3	0
Lane Group Flow (vph)	0	138	0	0	50	5	0	760	0	0	1207	0
Heavy Vehicles (%)	0%	0%	0%	0%	18%	4%	0%	8%	0%	0%	8%	0%
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4			8		8	6			2		
Actuated Green, G (s)		12.7			12.7	12.7		65.3			65.3	
Effective Green, g (s)		12.7			12.7	12.7		65.3			65.3	
Actuated g/C Ratio		0.14			0.14	0.14		0.73			0.73	
Clearance Time (s)		6.0			6.0	6.0		6.0			6.0	
Vehicle Extension (s)		2.0			2.0	2.0		4.0			4.0	
Lane Grp Cap (vph)		199			200	219		2267			2270	
v/s Ratio Prot												
v/s Ratio Perm		c0.10			0.04	0.00		0.24			c0.39	
v/c Ratio		0.69			0.25	0.02		0.34			0.53	
Uniform Delay, d1		36.8			34.4	33.3		4.5			5.5	
Progression Factor		1.00			1.00	1.00		0.50			1.00	
Incremental Delay, d2		8.1			0.2	0.0		0.4			0.9	
Delay (s)		44.9			34.6	33.3		2.6			6.4	
Level of Service		D			C	C		A			A	
Approach Delay (s)		44.9			34.1			2.6			6.4	
Approach LOS		D			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	8.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	61.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



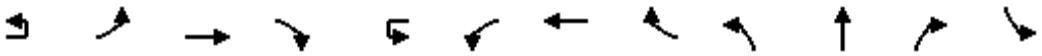
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	8	37	18	23	30	8	602	15	15	933	44
Future Volume (veh/h)	82	8	37	18	23	30	8	602	15	15	933	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1633	1841	1900	1781	1900	1900	1781	1900
Adj Flow Rate, veh/h	100	10	45	22	28	37	10	734	18	18	1138	54
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	0	18	4	0	8	0	0	8	0
Cap, veh/h	176	23	54	129	136	225	51	2351	57	56	2291	108
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	1.00	1.00	1.00	0.72	0.72	0.72
Sat Flow, veh/h	761	156	375	493	941	1560	14	3254	79	20	3173	149
Grp Volume(v), veh/h	155	0	0	50	0	37	396	0	366	633	0	577
Grp Sat Flow(s),veh/h/ln	1292	0	0	1434	0	1560	1740	0	1607	1748	0	1594
Q Serve(g_s), s	8.4	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	14.2
Cycle Q Clear(g_c), s	10.8	0.0	0.0	2.4	0.0	1.9	0.0	0.0	0.0	13.8	0.0	14.2
Prop In Lane	0.65		0.29	0.44		1.00	0.03		0.05	0.03		0.09
Lane Grp Cap(c), veh/h	252	0	0	265	0	225	1298	0	1161	1304	0	1151
V/C Ratio(X)	0.61	0.00	0.00	0.19	0.00	0.16	0.31	0.00	0.31	0.49	0.00	0.50
Avail Cap(c_a), veh/h	333	0	0	342	0	312	1298	0	1161	1304	0	1151
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.93	0.00	0.93	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.1	0.0	0.0	34.0	0.0	33.7	0.0	0.0	0.0	5.4	0.0	5.4
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.1	0.0	0.1	0.6	0.0	0.7	1.3	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	0.0	1.0	0.0	0.7	0.2	0.0	0.2	3.4	0.0	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.0	0.0	0.0	34.1	0.0	33.9	0.6	0.0	0.7	6.7	0.0	7.0
LnGrp LOS	D	A	A	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		155			87			762			1210	
Approach Delay, s/veh		39.0			34.0			0.6			6.8	
Approach LOS		D			C			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		71.0		19.0		71.0		19.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		60.0		18.0		60.0		18.0				
Max Q Clear Time (g_c+I1), s		16.2		12.8		2.0		4.4				
Green Ext Time (p_c), s		14.0		0.2		7.8		0.1				

Intersection Summary												
HCM 6th Ctrl Delay			8.0									
HCM 6th LOS			A									

Notes

User approved ignoring U-Turning movement.



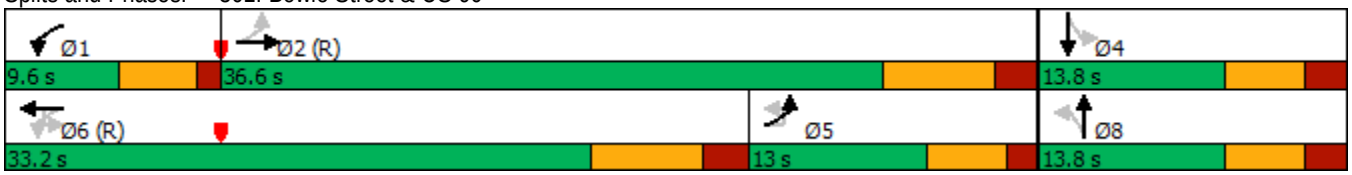
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	138	1681	34	2	8	1536	63	19	5	0	55
Future Volume (vph)	2	138	1681	34	2	8	1536	63	19	5	0	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		200		0		200		0	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.997				0.994					
Flt Protected		0.950				0.950				0.962		
Satd. Flow (prot)	0	1753	4752	0	0	1527	4647	0	0	1662	0	0
Flt Permitted		0.149				0.165				0.541		
Satd. Flow (perm)	0	275	4752	0	0	265	4647	0	0	934	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			7				13					
Link Speed (mph)			55				50			30		
Link Distance (ft)			1682				1949			1310		
Travel Time (s)			20.9				26.6			29.8		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	3%	9%	0%	100%	0%	11%	10%	0%	50%	0%	0%
Adj. Flow (vph)	2	147	1788	36	2	9	1634	67	20	5	0	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	149	1824	0	0	11	1701	0	0	25	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane			Yes				Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	2		1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru		Left
Leading Detector (ft)	20	20	100		20	20	100		20	100		20
Trailing Detector (ft)	0	0	0		0	0	0		0	0		0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0		0
Detector 1 Size(ft)	20	20	6		20	20	6		20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	custom	pm+pt	NA		Perm	pm+pt	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			8		

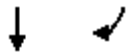
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	150
Future Volume (vph)	0	150
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.901	
Flt Protected	0.987	
Satd. Flow (prot)	1690	0
Flt Permitted	0.900	
Satd. Flow (perm)	1541	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	282	
Link Speed (mph)	30	
Link Distance (ft)	2374	
Travel Time (s)	54.0	
Peak Hour Factor	0.94	0.94
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	0	160
Shared Lane Traffic (%)		
Lane Group Flow (vph)	219	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	4	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Permitted Phases	5	2			6	6			8			4
Detector Phase	5	5	2		6	1	6		8	8		4
Switch Phase												
Minimum Initial (s)	8.0	8.0	10.0		10.0	5.0	10.0		8.0	8.0		8.0
Minimum Split (s)	13.0	13.0	17.0		22.5	9.5	22.5		13.5	13.5		13.5
Total Split (s)	13.0	13.0	36.6		33.2	9.6	33.2		13.8	13.8		13.8
Total Split (%)	21.7%	21.7%	61.0%		55.3%	16.0%	55.3%		23.0%	23.0%		23.0%
Maximum Green (s)	8.0	8.0	29.6		26.2	5.1	26.2		8.3	8.3		8.3
Yellow Time (s)	3.5	3.5	5.0		5.0	3.5	5.0		3.5	3.5		3.5
All-Red Time (s)	1.5	1.5	2.0		2.0	1.0	2.0		2.0	2.0		2.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)		5.0	7.0			4.5	7.0			5.5		
Lead/Lag	Lag	Lag	Lag		Lead	Lead	Lead					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	5.0	5.0	5.0		5.0	3.0	5.0		5.0	5.0		5.0
Recall Mode	None	None	C-Max		C-Max	None	C-Max		None	None		None
Act Effct Green (s)		39.4	37.4			31.4	28.9			8.2		
Actuated g/C Ratio		0.66	0.62			0.52	0.48			0.14		
v/c Ratio		0.40	0.62			0.04	0.76			0.20		
Control Delay		14.6	8.8			8.7	16.6			27.1		
Queue Delay		0.0	0.0			0.0	0.0			0.0		
Total Delay		14.6	8.8			8.7	16.6			27.1		
LOS		B	A			A	B			C		
Approach Delay			9.2				16.6			27.1		
Approach LOS			A				B			C		

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 12.3		Intersection LOS: B	
Intersection Capacity Utilization 65.1%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 301: Bowie Street & US 90





Lane Group	SBT	SBR
Permitted Phases		
Detector Phase	4	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	13.5	
Total Split (s)	13.8	
Total Split (%)	23.0%	
Maximum Green (s)	8.3	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	5.0	
Recall Mode	None	
Act Effct Green (s)	8.2	
Actuated g/C Ratio	0.14	
v/c Ratio	0.48	
Control Delay	5.5	
Queue Delay	0.0	
Total Delay	5.5	
LOS	A	
Approach Delay	5.5	
Approach LOS	A	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	149	1824	11	1701	25	219
v/c Ratio	0.40	0.62	0.04	0.76	0.20	0.48
Control Delay	14.6	8.8	8.7	16.6	27.1	5.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.6	8.8	8.7	16.6	27.1	5.5
Queue Length 50th (ft)	15	111	2	188	8	0
Queue Length 95th (ft)	54	239	9	247	28	29
Internal Link Dist (ft)		1602		1869	1230	2294
Turn Bay Length (ft)	200		200			
Base Capacity (vph)	377	2964	248	2246	129	456
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	0.40	0.62	0.04	0.76	0.19	0.48

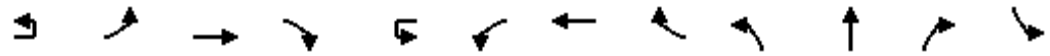
Intersection Summary

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	2	138	1681	34	2	8	1536	63	19	5	0	55
Future Volume (vph)	2	138	1681	34	2	8	1536	63	19	5	0	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	7.0			4.5	7.0			5.5		
Lane Util. Factor		1.00	0.91			1.00	0.91			1.00		
Frt		1.00	1.00			1.00	0.99			1.00		
Flt Protected		0.95	1.00			0.95	1.00			0.96		
Satd. Flow (prot)		1753	4752			1527	4647			1661		
Flt Permitted		0.15	1.00			0.16	1.00			0.54		
Satd. Flow (perm)		275	4752			265	4647			934		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	2	147	1788	36	2	9	1634	67	20	5	0	59
RTOR Reduction (vph)	0	0	3	0	0	0	8	0	0	0	0	0
Lane Group Flow (vph)	0	149	1821	0	0	11	1693	0	0	25	0	0
Heavy Vehicles (%)	0%	3%	9%	0%	100%	0%	11%	10%	0%	50%	0%	0%
Turn Type	custom	pm+pt	NA		Perm	pm+pt	NA		Perm	NA		Perm
Protected Phases		5	2			1	6			8		
Permitted Phases	5	2			6	6			8			4
Actuated Green, G (s)		35.8	33.8			25.3	25.3			8.2		
Effective Green, g (s)		35.8	33.8			25.3	25.3			8.2		
Actuated g/C Ratio		0.60	0.56			0.42	0.42			0.14		
Clearance Time (s)		5.0	7.0			4.5	7.0			5.5		
Vehicle Extension (s)		5.0	5.0			3.0	5.0			5.0		
Lane Grp Cap (vph)		385	2676			132	1959			127		
v/s Ratio Prot		0.06	c0.38			0.00	c0.36					
v/s Ratio Perm		0.17				0.03				c0.03		
v/c Ratio		0.39	0.68			0.08	0.86			0.20		
Uniform Delay, d1		13.0	9.3			11.5	15.8			23.0		
Progression Factor		1.00	1.00			1.00	1.00			1.00		
Incremental Delay, d2		1.4	1.4			0.3	5.4			1.6		
Delay (s)		14.3	10.7			11.8	21.2			24.6		
Level of Service		B	B			B	C			C		
Approach Delay (s)			11.0				21.1			24.6		
Approach LOS			B				C			C		

Intersection Summary			
HCM 2000 Control Delay	16.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	65.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	0	150
Future Volume (vph)	0	150
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.5	
Lane Util. Factor	1.00	
Frt	0.90	
Flt Protected	0.99	
Satd. Flow (prot)	1690	
Flt Permitted	0.90	
Satd. Flow (perm)	1541	
Peak-hour factor, PHF	0.94	0.94
Adj. Flow (vph)	0	160
RTOR Reduction (vph)	189	0
Lane Group Flow (vph)	30	0
Heavy Vehicles (%)	0%	0%
Turn Type	NA	
Protected Phases	4	
Permitted Phases		
Actuated Green, G (s)	8.2	
Effective Green, g (s)	8.2	
Actuated g/C Ratio	0.14	
Clearance Time (s)	5.5	
Vehicle Extension (s)	5.0	
Lane Grp Cap (vph)	210	
v/s Ratio Prot		
v/s Ratio Perm	0.02	
v/c Ratio	0.14	
Uniform Delay, d1	22.8	
Progression Factor	1.00	
Incremental Delay, d2	0.7	
Delay (s)	23.5	
Level of Service	C	
Approach Delay (s)	23.5	
Approach LOS	C	

Intersection Summary



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (veh/h)	2	138	1681	34	2	8	1536	63	19	5	0	55
Future Volume (veh/h)	2	138	1681	34	2	8	1536	63	19	5	0	55
Initial Q (Qb), veh		0	0	0		0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00		1.00	1.00		1.00	1.00
Parking Bus, Adj		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No				No			No		
Adj Sat Flow, veh/h/ln		1856	1767	1900		1900	1737	1752	1900	1159	1900	1900
Adj Flow Rate, veh/h		147	1788	36		9	1634	67	20	5	0	59
Peak Hour Factor		0.94	0.94	0.94		0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %		3	9	0		0	11	10	0	50	0	0
Cap, veh/h		1637	6369	128		232	2040	84	180	28	0	123
Arrive On Green		0.84	1.00	1.00		0.01	0.44	0.44	0.14	0.14	0.00	0.14
Sat Flow, veh/h		1767	4866	98		1810	4672	192	523	201	0	342
Grp Volume(v), veh/h		147	1181	643		9	1105	596	25	0	0	219
Grp Sat Flow(s),veh/h/ln		1767	1608	1749		1810	1581	1703	724	0	0	1582
Q Serve(g_s), s		0.0	0.0	0.0		0.2	18.2	18.2	0.0	0.0	0.0	6.7
Cycle Q Clear(g_c), s		0.0	0.0	0.0		0.2	18.2	18.2	1.6	0.0	0.0	8.3
Prop In Lane		1.00		0.06		1.00		0.11	0.80		0.00	0.27
Lane Grp Cap(c), veh/h		1637	4208	2289		232	1380	743	208	0	0	295
V/C Ratio(X)		0.09	0.28	0.28		0.04	0.80	0.80	0.12	0.00	0.00	0.74
Avail Cap(c_a), veh/h		1637	4208	2289		365	1380	743	208	0	0	295
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00		0.60	0.60	0.60	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh		0.9	0.0	0.0		11.1	14.6	14.6	22.9	0.0	0.0	25.8
Incr Delay (d2), s/veh		0.1	0.2	0.3		0.0	3.0	5.5	0.5	0.0	0.0	11.5
Initial Q Delay(d3),s/veh		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		0.0	0.1	0.2		0.1	5.3	6.3	0.3	0.0	0.0	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		1.0	0.2	0.3		11.1	17.7	20.2	23.4	0.0	0.0	37.4
LnGrp LOS		A	A	A		B	B	C	C	A	A	D
Approach Vol, veh/h			1971				1710			25		
Approach Delay, s/veh			0.3				18.5			23.4		
Approach LOS			A				B			C		

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.2	86.8		13.8	58.8	33.2		13.8
Change Period (Y+Rc), s	4.5	7.0		5.5	7.0	* 7		5.5
Max Green Setting (Gmax), s	5.1	29.6		8.3	8.0	* 26		8.3
Max Q Clear Time (g_c+I1), s	2.2	2.0		10.3	2.0	20.2		3.6
Green Ext Time (p_c), s	0.0	21.9		0.0	0.4	5.4		0.0

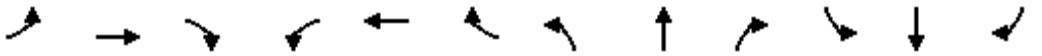
Intersection Summary	
HCM 6th Ctrl Delay	10.4
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	0	150
Future Volume (veh/h)	0	150
Initial Q (Qb), veh	0	0
Ped-Bike Adj(A_pbT)		1.00
Parking Bus, Adj	1.00	1.00
Work Zone On Approach	No	
Adj Sat Flow, veh/h/ln	1900	1900
Adj Flow Rate, veh/h	0	160
Peak Hour Factor	0.94	0.94
Percent Heavy Veh, %	0	0
Cap, veh/h	12	160
Arrive On Green	0.00	0.14
Sat Flow, veh/h	84	1156
Grp Volume(v), veh/h	0	0
Grp Sat Flow(s),veh/h/ln	0	0
Q Serve(g_s), s	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0
Prop In Lane		0.73
Lane Grp Cap(c), veh/h	0	0
V/C Ratio(X)	0.00	0.00
Avail Cap(c_a), veh/h	0	0
HCM Platoon Ratio	1.00	1.00
Upstream Filter(I)	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0
Unsig. Movement Delay, s/veh		
LnGrp Delay(d),s/veh	0.0	0.0
LnGrp LOS	A	A
Approach Vol, veh/h	219	
Approach Delay, s/veh	37.4	
Approach LOS	D	
Timer - Assigned Phs		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	338	1094	14	37	1136	109	14	31	43	150	23	410
Future Volume (vph)	338	1094	14	37	1136	109	14	31	43	150	23	410
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	200		0	100		0	0		0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.987			0.912				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	4628	0	1049	4548	0	1583	1328	0	1805	1900	1568
Flt Permitted	0.134			0.215			0.740			0.466		
Satd. Flow (perm)	252	4628	0	238	4548	0	1233	1328	0	885	1900	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			23			48				163
Link Speed (mph)		55			50			55			30	
Link Distance (ft)		1949			4264			1352			297	
Travel Time (s)		24.2			58.1			16.8			6.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	12%	0%	72%	13%	8%	14%	0%	52%	0%	0%	3%
Adj. Flow (vph)	376	1216	16	41	1262	121	16	34	48	167	26	456
Shared Lane Traffic (%)												
Lane Group Flow (vph)	376	1232	0	41	1383	0	16	82	0	167	26	456
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			8			4		4
Detector Phase	5	2		1	6		3	8		7	4	5
Switch Phase												
Minimum Initial (s)	8.0	10.0		8.0	10.0		5.0	8.0		5.0	8.0	8.0
Minimum Split (s)	13.0	16.5		13.0	16.5		9.5	14.0		9.5	14.0	13.0
Total Split (s)	19.0	38.2		13.0	32.2		9.5	14.0		9.8	14.3	19.0
Total Split (%)	25.3%	50.9%		17.3%	42.9%		12.7%	18.7%		13.1%	19.1%	25.3%
Maximum Green (s)	14.0	31.7		8.0	25.7		5.0	8.0		5.3	8.3	14.0
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.0		3.5	4.0	3.5
All-Red Time (s)	1.5	2.0		1.5	2.0		1.0	2.0		1.0	2.0	1.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.5		5.0	6.5		4.5	6.0		4.5	6.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.5	3.5		3.5	3.5		3.0	4.5		3.0	4.5	3.5
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
Act Effct Green (s)	48.2	38.9		37.9	28.4		12.7	8.0		16.5	13.9	33.2
Actuated g/C Ratio	0.64	0.52		0.51	0.38		0.17	0.11		0.22	0.19	0.44
v/c Ratio	0.87	0.51		0.20	0.80		0.07	0.45		0.62	0.07	0.58
Control Delay	37.4	14.7		9.3	27.9		21.9	24.5		36.4	26.7	13.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	37.4	14.7		9.3	27.9		21.9	24.5		36.4	26.7	13.2
LOS	D	B		A	C		C	C		D	C	B
Approach Delay		20.0			27.3			24.1			19.7	
Approach LOS		C			C			C			B	

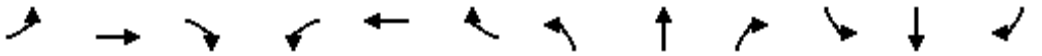
Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay: 22.8		Intersection LOS: C	
Intersection Capacity Utilization 72.7%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 302: Main Street & US 90

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	376	1232	41	1383	16	82	167	26	456
v/c Ratio	0.87	0.51	0.20	0.80	0.07	0.45	0.62	0.07	0.58
Control Delay	37.4	14.7	9.3	27.9	21.9	24.5	36.4	26.7	13.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.4	14.7	9.3	27.9	21.9	24.5	36.4	26.7	13.2
Queue Length 50th (ft)	111	158	5	249	6	15	64	9	80
Queue Length 95th (ft)	#258	203	m9	#316	20	55	#138	33	209
Internal Link Dist (ft)		1869		4184		1272		217	
Turn Bay Length (ft)	150		200		100				
Base Capacity (vph)	448	2399	207	1736	232	184	269	354	799
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	0.84	0.51	0.20	0.80	0.07	0.45	0.62	0.07	0.57

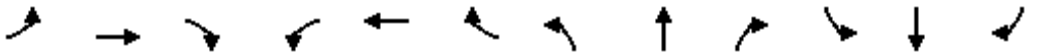
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	338	1094	14	37	1136	109	14	31	43	150	23	410
Future Volume (vph)	338	1094	14	37	1136	109	14	31	43	150	23	410
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.5		5.0	6.5		4.5	6.0		4.5	6.0	5.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00		1.00	0.99		1.00	0.91		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1787	4629		1049	4548		1583	1329		1805	1900	1568
Flt Permitted	0.13	1.00		0.22	1.00		0.74	1.00		0.47	1.00	1.00
Satd. Flow (perm)	253	4629		238	4548		1234	1329		885	1900	1568
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	376	1216	16	41	1262	121	16	34	48	167	26	456
RTOR Reduction (vph)	0	2	0	0	15	0	0	42	0	0	0	104
Lane Group Flow (vph)	376	1230	0	41	1368	0	16	40	0	167	26	352
Heavy Vehicles (%)	1%	12%	0%	72%	13%	8%	14%	0%	52%	0%	0%	3%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	43.1	33.3		29.6	24.8		9.8	8.8		19.4	13.9	27.2
Effective Green, g (s)	43.1	33.3		29.6	24.8		9.8	8.8		19.4	13.9	27.2
Actuated g/C Ratio	0.57	0.44		0.39	0.33		0.13	0.12		0.26	0.19	0.36
Clearance Time (s)	5.0	6.5		5.0	6.5		4.5	6.0		4.5	6.0	5.0
Vehicle Extension (s)	3.5	3.5		3.5	3.5		3.0	4.5		3.0	4.5	3.5
Lane Grp Cap (vph)	417	2055		145	1503		165	155		303	352	568
v/s Ratio Prot	c0.16	0.27		0.02	0.30		0.00	0.03		c0.04	0.01	c0.11
v/s Ratio Perm	c0.36			0.09			0.01			0.10		0.11
v/c Ratio	0.90	0.60		0.28	0.91		0.10	0.26		0.55	0.07	0.62
Uniform Delay, d1	18.4	15.8		14.3	24.0		28.6	30.1		22.9	25.2	19.7
Progression Factor	1.00	1.00		1.04	1.11		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	22.6	1.3		1.1	8.7		0.3	1.5		2.2	0.2	2.1
Delay (s)	41.0	17.1		16.0	35.5		28.9	31.6		25.0	25.4	21.8
Level of Service	D	B		B	D		C	C		C	C	C
Approach Delay (s)		22.7			34.9			31.2			22.8	
Approach LOS		C			C			C			C	

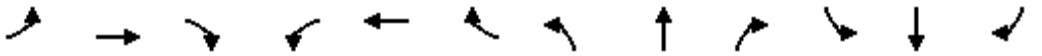
Intersection Summary			
HCM 2000 Control Delay	27.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	338	1094	14	37	1136	109	14	31	43	150	23	410
Future Volume (veh/h)	338	1094	14	37	1136	109	14	31	43	150	23	410
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1722	1900	833	1707	1781	1693	1900	1129	1900	1900	1856
Adj Flow Rate, veh/h	376	1216	16	41	1262	121	16	34	48	167	26	456
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	12	0	72	13	8	14	0	52	0	0	3
Cap, veh/h	421	2238	29	202	1615	155	215	76	107	307	301	494
Arrive On Green	0.16	0.47	0.47	0.06	0.37	0.37	0.02	0.11	0.11	0.07	0.16	0.16
Sat Flow, veh/h	1795	4782	63	793	4325	415	1612	713	1006	1810	1900	1572
Grp Volume(v), veh/h	376	797	435	41	907	476	16	0	82	167	26	456
Grp Sat Flow(s),veh/h/ln	1795	1567	1711	793	1554	1633	1612	0	1719	1810	1900	1572
Q Serve(g_s), s	9.3	13.6	13.6	2.3	19.4	19.4	0.7	0.0	3.4	5.3	0.9	11.9
Cycle Q Clear(g_c), s	9.3	13.6	13.6	2.3	19.4	19.4	0.7	0.0	3.4	5.3	0.9	11.9
Prop In Lane	1.00		0.04	1.00		0.25	1.00		0.59	1.00		1.00
Lane Grp Cap(c), veh/h	421	1467	801	202	1160	610	215	0	183	307	301	494
V/C Ratio(X)	0.89	0.54	0.54	0.20	0.78	0.78	0.07	0.00	0.45	0.54	0.09	0.92
Avail Cap(c_a), veh/h	477	1467	801	238	1160	610	292	0	183	307	301	494
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.75	0.75	0.75	0.82	0.82	0.82	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.8	14.2	14.2	13.0	20.8	20.8	29.0	0.0	31.4	27.5	26.9	24.8
Incr Delay (d2), s/veh	14.1	1.1	2.0	0.5	4.4	8.0	0.1	0.0	2.9	2.0	0.2	23.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	4.0	4.6	0.4	6.6	7.6	0.2	0.0	1.4	2.7	0.4	9.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.0	15.3	16.2	13.5	25.1	28.8	29.1	0.0	34.3	29.5	27.1	48.2
LnGrp LOS	C	B	B	B	C	C	C	A	C	C	C	D
Approach Vol, veh/h		1608			1424			98			649	
Approach Delay, s/veh		19.0			26.0			33.5			42.6	
Approach LOS		B			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	41.6	5.9	17.9	16.7	34.5	9.8	14.0
Change Period (Y+Rc), s	5.0	6.5	4.5	6.0	5.0	6.5	4.5	6.0
Max Green Setting (Gmax), s	8.0	31.7	5.0	8.3	14.0	25.7	5.3	8.0
Max Q Clear Time (g_c+I1), s	4.3	15.6	2.7	13.9	11.3	21.4	7.3	5.4
Green Ext Time (p_c), s	0.0	7.7	0.0	0.0	0.4	3.2	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	26.1
HCM 6th LOS	C

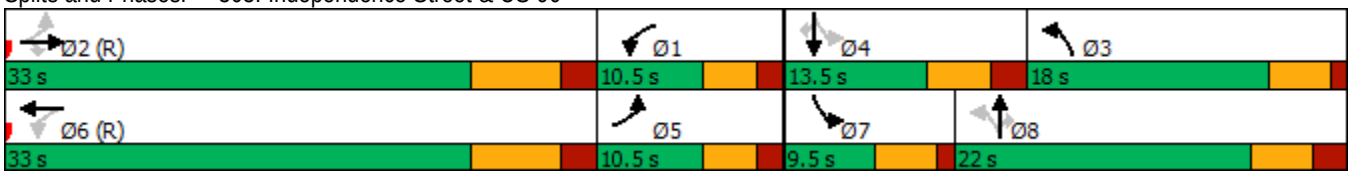


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	904	182	47	973	26	312	113	61	14	43	35
Future Volume (vph)	18	904	182	47	973	26	312	113	61	14	43	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	130		0	100		0	0		0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.996				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3252	1292	1671	4508	0	1583	1863	1615	1399	1900	1615
Flt Permitted	0.215			0.196			0.727			0.741		
Satd. Flow (perm)	408	3252	1292	345	4508	0	1212	1863	1615	1091	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			194		6				189			204
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		4264			1976			555			937	
Travel Time (s)		64.6			29.9			12.6			21.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	11%	25%	8%	15%	0%	14%	2%	0%	29%	0%	0%
Adj. Flow (vph)	19	962	194	50	1035	28	332	120	65	15	46	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	19	962	194	50	1063	0	332	120	65	15	46	37
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8		8	4		4
Detector Phase	5	2	2	1	6		3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	6.0	10.0	10.0	6.0	10.0		5.0	8.0	8.0	5.0	8.0	8.0
Minimum Split (s)	10.5	17.0	17.0	10.5	17.0		9.5	13.5	13.5	9.5	13.5	13.5
Total Split (s)	10.5	33.0	33.0	10.5	33.0		18.0	22.0	22.0	9.5	13.5	13.5
Total Split (%)	14.0%	44.0%	44.0%	14.0%	44.0%		24.0%	29.3%	29.3%	12.7%	18.0%	18.0%
Maximum Green (s)	6.0	26.0	26.0	6.0	26.0		13.5	16.5	16.5	5.0	8.0	8.0
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	2.0	2.0	1.5	2.0		1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	7.0	7.0	4.5	7.0		4.5	5.5	5.5	4.5	5.5	5.5
Lead/Lag	Lag	Lead	Lead	Lag	Lead		Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.5	5.0	5.0	3.5	5.0		3.0	3.5	3.5	3.0	3.5	3.5
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	None
Act Effct Green (s)	44.3	35.8	35.8	46.1	40.0		19.5	18.5	18.5	8.3	8.0	8.0
Actuated g/C Ratio	0.59	0.48	0.48	0.61	0.53		0.26	0.25	0.25	0.11	0.11	0.11
v/c Ratio	0.05	0.62	0.27	0.16	0.44		0.91	0.26	0.12	0.11	0.23	0.10
Control Delay	6.0	15.6	4.9	10.7	12.9		58.1	24.3	0.5	31.3	33.8	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.0	15.6	4.9	10.7	12.9		58.1	24.3	0.5	31.3	33.8	0.6
LOS	A	B	A	B	B		E	C	A	C	C	A
Approach Delay		13.6			12.8			43.0			20.9	
Approach LOS		B			B			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay: 18.8		Intersection LOS: B	
Intersection Capacity Utilization 68.1%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 303: Independence Street & US 90

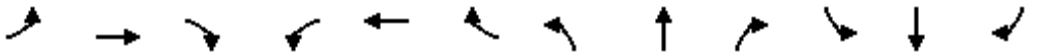


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	19	962	194	50	1063	332	120	65	15	46	37
v/c Ratio	0.05	0.62	0.27	0.16	0.44	0.91	0.26	0.12	0.11	0.23	0.10
Control Delay	6.0	15.6	4.9	10.7	12.9	58.1	24.3	0.5	31.3	33.8	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.0	15.6	4.9	10.7	12.9	58.1	24.3	0.5	31.3	33.8	0.6
Queue Length 50th (ft)	2	217	21	9	94	139	43	0	6	20	0
Queue Length 95th (ft)	m7	#325	m100	27	197	#307	91	0	23	50	0
Internal Link Dist (ft)		4184			1896		475			857	
Turn Bay Length (ft)	200			130		100					
Base Capacity (vph)	353	1553	718	318	2408	435	470	549	142	202	354
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.62	0.27	0.16	0.44	0.76	0.26	0.12	0.11	0.23	0.10

Intersection Summary

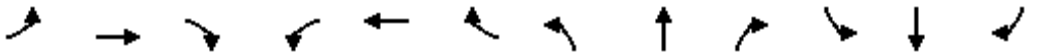
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	904	182	47	973	26	312	113	61	14	43	35
Future Volume (vph)	18	904	182	47	973	26	312	113	61	14	43	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	7.0	7.0	4.5	7.0		4.5	5.5	5.5	4.5	5.5	5.5
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1805	3252	1292	1671	4508		1583	1863	1615	1399	1900	1615
Flt Permitted	0.22	1.00	1.00	0.20	1.00		0.73	1.00	1.00	0.74	1.00	1.00
Satd. Flow (perm)	409	3252	1292	345	4508		1212	1863	1615	1091	1900	1615
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	19	962	194	50	1035	28	332	120	65	15	46	37
RTOR Reduction (vph)	0	0	120	0	3	0	0	0	49	0	0	34
Lane Group Flow (vph)	19	962	74	50	1060	0	332	120	16	15	46	3
Heavy Vehicles (%)	0%	11%	25%	8%	15%	0%	14%	2%	0%	29%	0%	0%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6			8		8	4		4
Actuated Green, G (s)	29.8	28.6	28.6	38.2	32.8		19.5	18.5	18.5	6.4	6.4	6.4
Effective Green, g (s)	29.8	28.6	28.6	38.2	32.8		19.5	18.5	18.5	6.4	6.4	6.4
Actuated g/C Ratio	0.40	0.38	0.38	0.51	0.44		0.26	0.25	0.25	0.09	0.09	0.09
Clearance Time (s)	4.5	7.0	7.0	4.5	7.0		4.5	5.5	5.5	4.5	5.5	5.5
Vehicle Extension (s)	3.5	5.0	5.0	3.5	5.0		3.0	3.5	3.5	3.0	3.5	3.5
Lane Grp Cap (vph)	184	1240	492	271	1971		379	459	398	97	162	137
v/s Ratio Prot	0.00	c0.30		c0.01	0.24		c0.15	0.06		0.00	c0.02	
v/s Ratio Perm	0.04		0.06	0.08			c0.07		0.01	0.01		0.00
v/c Ratio	0.10	0.78	0.15	0.18	0.54		0.88	0.26	0.04	0.15	0.28	0.02
Uniform Delay, d1	17.2	20.4	15.2	17.0	15.5		25.6	22.7	21.5	31.7	32.2	31.4
Progression Factor	0.68	0.78	1.35	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	4.2	0.6	0.4	1.1		19.7	0.4	0.0	0.7	1.1	0.1
Delay (s)	11.9	20.0	21.0	17.3	16.6		45.2	23.1	21.5	32.5	33.3	31.5
Level of Service	B	B	C	B	B		D	C	C	C	C	C
Approach Delay (s)		20.0			16.6			37.1			32.5	
Approach LOS		C			B			D			C	

Intersection Summary			
HCM 2000 Control Delay	22.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	21.5
Intersection Capacity Utilization	68.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



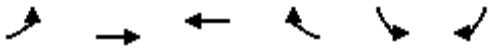
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	904	182	47	973	26	312	113	61	14	43	35
Future Volume (veh/h)	18	904	182	47	973	26	312	113	61	14	43	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1737	1530	1781	1678	1900	1693	1870	1900	1470	1900	1900
Adj Flow Rate, veh/h	19	962	194	50	1035	28	332	120	65	15	46	37
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	11	25	8	15	0	14	2	0	29	0	0
Cap, veh/h	362	1144	449	302	1589	43	368	504	434	121	202	171
Arrive On Green	0.10	0.35	0.35	0.10	0.35	0.35	0.17	0.27	0.27	0.02	0.11	0.11
Sat Flow, veh/h	1810	3300	1296	1697	4585	124	1612	1870	1610	1400	1900	1610
Grp Volume(v), veh/h	19	962	194	50	689	374	332	120	65	15	46	37
Grp Sat Flow(s),veh/h/ln	1810	1650	1296	1697	1527	1655	1612	1870	1610	1400	1900	1610
Q Serve(g_s), s	0.0	20.2	8.6	0.0	14.3	14.3	10.4	3.8	1.6	0.8	1.7	1.6
Cycle Q Clear(g_c), s	0.0	20.2	8.6	0.0	14.3	14.3	10.4	3.8	1.6	0.8	1.7	1.6
Prop In Lane	1.00		1.00	1.00		0.07	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	362	1144	449	302	1059	574	368	504	434	121	202	171
V/C Ratio(X)	0.05	0.84	0.43	0.17	0.65	0.65	0.90	0.24	0.15	0.12	0.23	0.22
Avail Cap(c_a), veh/h	362	1144	449	302	1059	574	388	504	434	189	203	172
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.84	0.84	0.84	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.5	22.6	18.8	28.2	20.7	20.7	28.8	21.4	10.5	32.7	30.7	30.7
Incr Delay (d2), s/veh	0.1	6.4	2.5	0.3	3.1	5.7	22.9	0.3	0.2	0.5	0.7	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	7.8	2.8	0.8	4.9	5.7	7.9	1.6	0.8	0.3	0.8	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.6	29.0	21.4	28.5	23.8	26.3	51.7	21.7	10.7	33.1	31.4	31.4
LnGrp LOS	C	C	C	C	C	C	D	C	B	C	C	C
Approach Vol, veh/h		1175			1113			517			98	
Approach Delay, s/veh		27.6			24.9			39.6			31.7	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.1	33.0	18.1	13.5	12.1	33.0	5.8	25.7
Change Period (Y+Rc), s	4.5	7.0	5.5	* 5.5	4.5	7.0	4.5	5.5
Max Green Setting (Gmax), s	6.0	26.0	13.5	* 8	6.0	26.0	5.0	16.5
Max Q Clear Time (g_c+I1), s	2.0	22.2	12.4	3.7	2.0	16.3	2.8	5.8
Green Ext Time (p_c), s	0.0	3.0	0.1	0.1	0.0	6.5	0.0	0.7

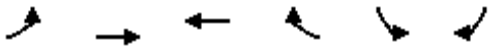
Intersection Summary	
HCM 6th Ctrl Delay	28.8
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



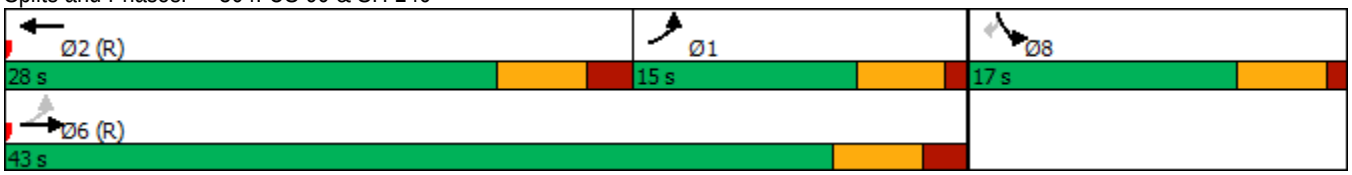
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	327	487	508	150	116	442
Future Volume (vph)	327	487	508	150	116	442
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			300	0	0
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.966			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1543	3252	3240	0	1641	1324
Flt Permitted	0.333				0.950	
Satd. Flow (perm)	541	3252	3240	0	1641	1324
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			72			421
Link Speed (mph)		50	50		55	
Link Distance (ft)		470	2799		7877	
Travel Time (s)		6.4	38.2		97.6	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	17%	11%	9%	3%	10%	22%
Adj. Flow (vph)	359	535	558	165	127	486
Shared Lane Traffic (%)						
Lane Group Flow (vph)	359	535	723	0	127	486
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2		1	1
Detector Template	Left	Thru	Thru		Left	Right
Leading Detector (ft)	20	100	100		20	20
Trailing Detector (ft)	0	0	0		0	0
Detector 1 Position(ft)	0	0	0		0	0
Detector 1 Size(ft)	20	6	6		20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	1	6	2		8	

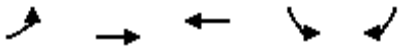


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	6					8
Detector Phase	1	6	2		8	8
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0		5.0	5.0
Minimum Split (s)	15.0	16.0	16.0		10.0	10.0
Total Split (s)	15.0	43.0	28.0		17.0	17.0
Total Split (%)	25.0%	71.7%	46.7%		28.3%	28.3%
Maximum Green (s)	10.0	37.0	22.0		12.0	12.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	2.0	2.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0		5.0	5.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0	2.0	2.0		2.0	2.0
Recall Mode	None	C-Max	C-Max		None	None
Act Effct Green (s)	40.5	39.5	24.5		9.5	9.5
Actuated g/C Ratio	0.68	0.66	0.41		0.16	0.16
v/c Ratio	0.67	0.25	0.53		0.49	0.86
Control Delay	18.8	5.0	14.3		28.8	22.3
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	18.8	5.0	14.3		28.8	22.3
LOS	B	A	B		C	C
Approach Delay		10.5	14.3		23.7	
Approach LOS		B	B		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 15.4		Intersection LOS: B	
Intersection Capacity Utilization 56.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 304: US 90 & SH 146

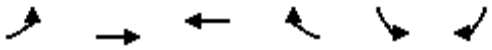




Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	359	535	723	127	486
v/c Ratio	0.67	0.25	0.53	0.49	0.86
Control Delay	18.8	5.0	14.3	28.8	22.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	18.8	5.0	14.3	28.8	22.3
Queue Length 50th (ft)	47	36	91	42	21
Queue Length 95th (ft)	#107	60	145	84	#165
Internal Link Dist (ft)		390	2719	7797	
Turn Bay Length (ft)	250				
Base Capacity (vph)	532	2140	1364	328	601
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.67	0.25	0.53	0.39	0.81

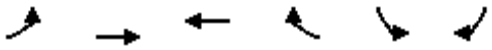
Intersection Summary

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



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	327	487	508	150	116	442
Future Volume (vph)	327	487	508	150	116	442
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0	6.0		5.0	5.0
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.97		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1543	3252	3239		1641	1324
Flt Permitted	0.33	1.00	1.00		0.95	1.00
Satd. Flow (perm)	541	3252	3239		1641	1324
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	359	535	558	165	127	486
RTOR Reduction (vph)	0	0	43	0	0	354
Lane Group Flow (vph)	359	535	680	0	127	132
Heavy Vehicles (%)	17%	11%	9%	3%	10%	22%
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	1	6	2		8	
Permitted Phases	6					8
Actuated Green, G (s)	40.5	39.5	24.5		9.5	9.5
Effective Green, g (s)	40.5	39.5	24.5		9.5	9.5
Actuated g/C Ratio	0.68	0.66	0.41		0.16	0.16
Clearance Time (s)	5.0	6.0	6.0		5.0	5.0
Vehicle Extension (s)	3.0	2.0	2.0		2.0	2.0
Lane Grp Cap (vph)	532	2140	1322		259	209
v/s Ratio Prot	c0.11	0.16	0.21		0.08	
v/s Ratio Perm	c0.34					c0.10
v/c Ratio	0.67	0.25	0.51		0.49	0.63
Uniform Delay, d1	9.9	4.2	13.3		23.0	23.6
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	3.4	0.3	1.4		0.5	4.2
Delay (s)	13.2	4.5	14.7		23.6	27.8
Level of Service	B	A	B		C	C
Approach Delay (s)		8.0	14.7		27.0	
Approach LOS		A	B		C	

Intersection Summary			
HCM 2000 Control Delay	15.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	327	487	508	150	116	442
Future Volume (veh/h)	327	487	508	150	116	442
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1648	1737	1767	1856	1752	1574
Adj Flow Rate, veh/h	359	535	558	0	127	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	17	11	9	3	10	22
Cap, veh/h	674	2379	1231		160	
Arrive On Green	0.25	0.72	0.37	0.00	0.10	0.00
Sat Flow, veh/h	1570	3387	3533	0	1668	1334
Grp Volume(v), veh/h	359	535	558	0	127	0
Grp Sat Flow(s),veh/h/ln	1570	1650	1678	0	1668	1334
Q Serve(g_s), s	0.0	3.2	7.6	0.0	4.5	0.0
Cycle Q Clear(g_c), s	0.0	3.2	7.6	0.0	4.5	0.0
Prop In Lane	1.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	674	2379	1231		160	
V/C Ratio(X)	0.53	0.22	0.45		0.79	
Avail Cap(c_a), veh/h	674	2379	1231		334	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.53	0.00
Uniform Delay (d), s/veh	14.0	2.8	14.4	0.0	26.6	0.0
Incr Delay (d2), s/veh	0.8	0.2	1.2	0.0	1.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.3	2.5	0.0	1.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.8	3.0	15.6	0.0	28.4	0.0
LnGrp LOS	B	A	B		C	
Approach Vol, veh/h		894	558	A	127	A
Approach Delay, s/veh		7.7	15.6		28.4	
Approach LOS		A	B		C	

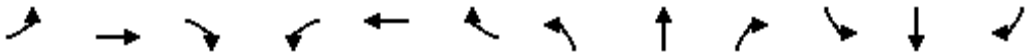
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	21.3	28.0			49.3	10.7
Change Period (Y+Rc), s	6.0	* 6			6.0	5.0
Max Green Setting (Gmax), s	10.0	* 22			37.0	12.0
Max Q Clear Time (g_c+I1), s	2.0	9.6			5.2	6.5
Green Ext Time (p_c), s	0.7	1.8			2.1	0.1

Intersection Summary	
HCM 6th Ctrl Delay	12.2
HCM 6th LOS	B

Notes

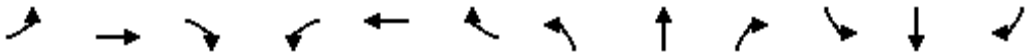
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	24	6	0	0	0	2	167	37	2	51	8
Future Volume (vph)	13	24	6	0	0	0	2	167	37	2	51	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.982						0.976			0.983	
Flt Protected		0.985						0.999			0.998	
Satd. Flow (prot)	0	1838	0	0	1900	0	0	1853	0	0	1864	0
Flt Permitted		0.985						0.999			0.998	
Satd. Flow (perm)	0	1838	0	0	1900	0	0	1853	0	0	1864	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		803			358			401			590	
Travel Time (s)		18.3			8.1			9.1			13.4	
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	18	34	8	0	0	0	3	235	52	3	72	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	60	0	0	0	0	0	290	0	0	86	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			50			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 21.9%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	13	24	6	0	0	0	2	167	37	2	51	8
Future Volume (vph)	13	24	6	0	0	0	2	167	37	2	51	8
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Hourly flow rate (vph)	18	34	8	0	0	0	3	235	52	3	72	11

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	60	0	290	86
Volume Left (vph)	18	0	3	3
Volume Right (vph)	8	0	52	11
Hadj (s)	-0.02	0.00	-0.11	-0.07
Departure Headway (s)	4.7	4.8	4.0	4.3
Degree Utilization, x	0.08	0.00	0.32	0.10
Capacity (veh/h)	705	694	873	810
Control Delay (s)	8.1	7.8	9.0	7.7
Approach Delay (s)	8.1	0.0	9.0	7.7
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.6			
Level of Service	A			
Intersection Capacity Utilization	21.9%	ICU Level of Service	A	
Analysis Period (min)	15			

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	13	24	6	0	0	0	2	167	37	2	51	8
Future Vol, veh/h	13	24	6	0	0	0	2	167	37	2	51	8
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	18	34	8	0	0	0	3	235	52	3	72	11
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.1	0	8.9	7.7
HCM LOS	A	-	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	30%	0%	3%
Vol Thru, %	81%	56%	100%	84%
Vol Right, %	18%	14%	0%	13%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	206	43	0	61
LT Vol	2	13	0	2
Through Vol	167	24	0	51
RT Vol	37	6	0	8
Lane Flow Rate	290	61	0	86
Geometry Grp	1	1	1	1
Degree of Util (X)	0.32	0.079	0	0.102
Departure Headway (Hd)	3.966	4.673	4.779	4.26
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	897	770	0	846
Service Time	2.038	2.678	2.787	2.26
HCM Lane V/C Ratio	0.323	0.079	0	0.102
HCM Control Delay	8.9	8.1	7.8	7.7
HCM Lane LOS	A	A	N	A
HCM 95th-tile Q	1.4	0.3	0	0.3

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	138	105	159	142	137	119
Future Volume (vph)	138	105	159	142	137	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1787	1170	1827	1524	1367	1900
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1787	1170	1827	1524	1367	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	1292		2374			1487
Travel Time (s)	29.4		54.0			33.8
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles (%)	1%	38%	4%	6%	32%	0%
Adj. Flow (vph)	209	159	241	215	208	180
Shared Lane Traffic (%)						
Lane Group Flow (vph)	209	159	241	215	208	180
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Stop			Stop

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.6%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	138	105	159	142	137	119
Future Volume (vph)	138	105	159	142	137	119
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66
Hourly flow rate (vph)	209	159	241	215	208	180

Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	209	159	241	215	208	180
Volume Left (vph)	209	0	0	0	208	0
Volume Right (vph)	0	159	0	215	0	0
Hadj (s)	0.52	-0.05	0.07	-0.60	1.04	0.00
Departure Headway (s)	7.2	6.6	6.4	5.8	7.4	6.4
Degree Utilization, x	0.42	0.29	0.43	0.34	0.43	0.32
Capacity (veh/h)	477	515	542	602	468	543
Control Delay (s)	14.1	11.1	13.0	10.5	14.8	11.2
Approach Delay (s)	12.8		11.9		13.1	
Approach LOS	B		B		B	

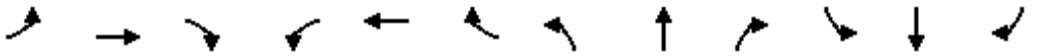
Intersection Summary			
Delay	12.5		
Level of Service	B		
Intersection Capacity Utilization	33.6%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	13.5
Intersection LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	138	105	159	142	137	119
Future Vol, veh/h	138	105	159	142	137	119
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles, %	1	38	4	6	32	0
Mvmt Flow	209	159	241	215	208	180
Number of Lanes	1	1	1	1	1	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay	13.9	12.8	14
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	100%	0%	100%	0%
Vol Thru, %	100%	0%	0%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	159	142	138	105	137	119
LT Vol	0	0	138	0	137	0
Through Vol	159	0	0	0	0	119
RT Vol	0	142	0	105	0	0
Lane Flow Rate	241	215	209	159	208	180
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.43	0.344	0.421	0.295	0.429	0.32
Departure Headway (Hd)	6.432	5.754	7.25	6.671	7.446	6.382
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	559	622	496	538	484	561
Service Time	4.189	3.511	5.005	4.425	5.205	4.141
HCM Lane V/C Ratio	0.431	0.346	0.421	0.296	0.43	0.321
HCM Control Delay	14	11.5	15.2	12.2	15.7	12.1
HCM Lane LOS	B	B	C	B	C	B
HCM 95th-tile Q	2.1	1.5	2.1	1.2	2.1	1.4

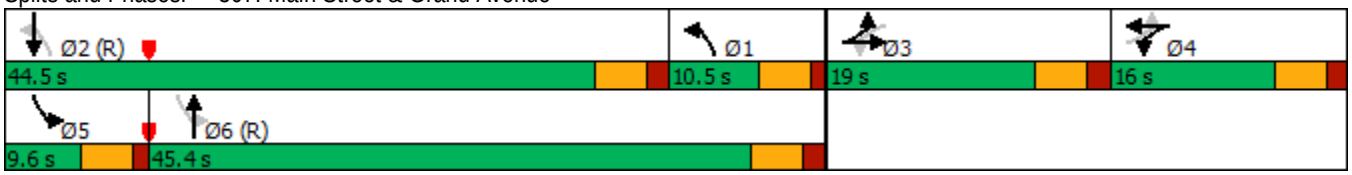


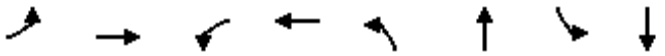
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	206	127	85	6	142	64	58	537	6	31	767	251
Future Volume (vph)	206	127	85	6	142	64	58	537	6	31	767	251
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	100		0	100		0	200		125
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt		0.940			0.953			0.998			0.963	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1530	1765	0	1805	1782	0	1805	1890	0	1687	3425	0
Flt Permitted	0.364			0.286			0.101			0.109		
Satd. Flow (perm)	586	1765	0	543	1782	0	192	1890	0	194	3425	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		32			21			1			63	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		345			825			1581			1585	
Travel Time (s)		7.8			18.8			35.9			36.0	
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Heavy Vehicles (%)	18%	2%	0%	0%	1%	3%	0%	0%	33%	7%	2%	0%
Adj. Flow (vph)	290	179	120	8	200	90	82	756	8	44	1080	354
Shared Lane Traffic (%)												
Lane Group Flow (vph)	290	299	0	8	290	0	82	764	0	44	1434	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA		D.P+P	NA		D.P+P	NA		D.P+P	NA	
Protected Phases	3	3		4	4		1	6		5	2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			3			2			6		
Detector Phase	3	3		4	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	13.0	13.0		13.0	13.0		9.5	15.0		9.5	15.0	
Total Split (s)	19.0	19.0		16.0	16.0		10.5	45.4		9.6	44.5	
Total Split (%)	21.1%	21.1%		17.8%	17.8%		11.7%	50.4%		10.7%	49.4%	
Maximum Green (s)	14.0	14.0		11.0	11.0		6.0	40.4		5.1	39.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		4.5	5.0		4.5	5.0	
Lead/Lag	Lead	Lead		Lag	Lag		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		2.0	2.0		3.0	3.5		3.0	3.5	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	25.0	14.0		25.0	11.0		46.9	44.2		47.8	41.6	
Actuated g/C Ratio	0.28	0.16		0.28	0.12		0.52	0.49		0.53	0.46	
v/c Ratio	0.94	0.99		0.03	1.23		0.40	0.82		0.24	0.89	
Control Delay	66.4	86.5		21.2	168.1		26.1	30.2		12.2	30.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	66.4	86.5		21.2	168.1		26.1	30.2		12.2	30.3	
LOS	E	F		C	F		C	C		B	C	
Approach Delay		76.6			164.2			29.8			29.7	
Approach LOS		E			F			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:NBSB, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.23			
Intersection Signal Delay: 50.8		Intersection LOS: D	
Intersection Capacity Utilization 72.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 307: Main Street & Grand Avenue



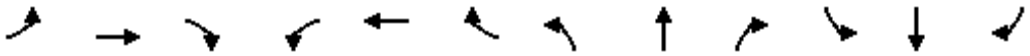


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	290	299	8	290	82	764	44	1434
v/c Ratio	0.94	0.99	0.03	1.23	0.40	0.82	0.24	0.89
Control Delay	66.4	86.5	21.2	168.1	26.1	30.2	12.2	30.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.4	86.5	21.2	168.1	26.1	30.2	12.2	30.3
Queue Length 50th (ft)	134	155	3	~195	20	388	10	381
Queue Length 95th (ft)	#167	#210	10	#247	31	373	20	321
Internal Link Dist (ft)		265		745		1501		1505
Turn Bay Length (ft)	150		100		100		200	
Base Capacity (vph)	309	301	305	236	207	929	187	1616
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	0.94	0.99	0.03	1.23	0.40	0.82	0.24	0.89

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

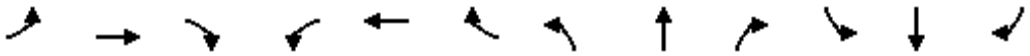
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	206	127	85	6	142	64	58	537	6	31	767	251
Future Volume (vph)	206	127	85	6	142	64	58	537	6	31	767	251
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0		4.5	5.0		4.5	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	0.95	
Frt	1.00	0.94		1.00	0.95		1.00	1.00		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1530	1764		1805	1783		1805	1890		1687	3425	
Flt Permitted	0.36	1.00		0.29	1.00		0.10	1.00		0.11	1.00	
Satd. Flow (perm)	586	1764		543	1783		191	1890		194	3425	
Peak-hour factor, PHF	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Adj. Flow (vph)	290	179	120	8	200	90	82	756	8	44	1080	354
RTOR Reduction (vph)	0	27	0	0	18	0	0	1	0	0	35	0
Lane Group Flow (vph)	290	272	0	8	272	0	82	763	0	44	1399	0
Heavy Vehicles (%)	18%	2%	0%	0%	1%	3%	0%	0%	33%	7%	2%	0%
Turn Type	D.P+P	NA		D.P+P	NA		D.P+P	NA		D.P+P	NA	
Protected Phases	3	3		4	4		1	6		5	2	
Permitted Phases	4			3			2			6		
Actuated Green, G (s)	25.0	14.0		25.0	11.0		45.5	42.4		45.5	39.8	
Effective Green, g (s)	25.0	14.0		25.0	11.0		45.5	42.4		45.5	39.8	
Actuated g/C Ratio	0.28	0.16		0.28	0.12		0.51	0.47		0.51	0.44	
Clearance Time (s)	5.0	5.0		5.0	5.0		4.5	5.0		4.5	5.0	
Vehicle Extension (s)	3.0	3.0		2.0	2.0		3.0	3.5		3.0	3.5	
Lane Grp Cap (vph)	309	274		305	217		198	890		149	1514	
v/s Ratio Prot	0.15	c0.15		0.00	c0.15		0.03	c0.40		0.01	c0.41	
v/s Ratio Perm	0.11			0.00			0.18			0.14		
v/c Ratio	0.94	0.99		0.03	1.25		0.41	0.86		0.30	0.92	
Uniform Delay, d1	29.8	37.9		31.4	39.5		35.1	21.1		16.7	23.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	34.9	52.1		0.0	145.3		1.4	10.5		1.1	10.9	
Delay (s)	64.7	90.0		31.4	184.8		36.5	31.6		17.8	34.6	
Level of Service	E	F		C	F		D	C		B	C	
Approach Delay (s)		77.6			180.7			32.1			34.1	
Approach LOS		E			F			C			C	

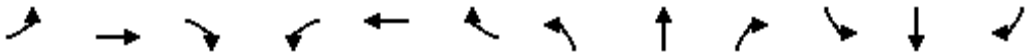
Intersection Summary			
HCM 2000 Control Delay	55.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	72.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology expects strict NEMA phasing.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	135	0	145	0	71	114	238	80	0
Future Volume (vph)	0	0	0	135	0	145	0	71	114	238	80	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.850				0.850			
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	1900	0	1805	1615	0	0	1845	1615	1805	1845	0
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	1900	0	1805	1615	0	0	1845	1615	1805	1845	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		433			707			1487			1399	
Travel Time (s)		9.8			16.1			33.8			31.8	
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	3%	0%
Adj. Flow (vph)	0	0	0	245	0	264	0	129	207	433	145	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	245	264	0	0	129	207	433	145	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.5%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	135	0	145	0	71	114	238	80	0
Future Volume (Veh/h)	0	0	0	135	0	145	0	71	114	238	80	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Hourly flow rate (vph)	0	0	0	245	0	264	0	129	207	433	145	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1404	1347	145	1140	1140	129	145			336		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1404	1347	145	1140	1140	129	145			336		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	0	100	71	100			65		
cM capacity (veh/h)	62	99	908	131	132	926	1450			1235		

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	0	245	264	129	207	433	145
Volume Left	0	245	0	0	0	433	0
Volume Right	0	0	264	0	207	0	0
cSH	1700	131	926	1450	1700	1235	1700
Volume to Capacity	0.00	1.87	0.29	0.00	0.12	0.35	0.09
Queue Length 95th (ft)	0	477	29	0	0	40	0
Control Delay (s)	0.0	478.1	10.4	0.0	0.0	9.5	0.0
Lane LOS	A	F	B			A	
Approach Delay (s)	0.0	235.5		0.0		7.1	
Approach LOS	A	F					

Intersection Summary				
Average Delay	87.1			
Intersection Capacity Utilization	35.5%	ICU Level of Service		A
Analysis Period (min)	15			

Intersection	
Int Delay, s/veh	87.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	135	0	145	0	71	114	238	80	0
Future Vol, veh/h	0	0	0	135	0	145	0	71	114	238	80	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	-	-	0	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	55	55	55	55	55	55	55	55	55	55	55	55
Heavy Vehicles, %	0	0	0	0	0	0	0	3	0	0	3	0
Mvmt Flow	0	0	0	245	0	264	0	129	207	433	145	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1376	1347	145	1140	1140	129	145	0	0	336	0	0
Stage 1	1011	1011	-	129	129	-	-	-	-	-	-	-
Stage 2	365	336	-	1011	1011	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	124	152	908	~ 180	203	926	1450	-	-	1235	-	-
Stage 1	291	320	-	880	793	-	-	-	-	-	-	-
Stage 2	658	645	-	291	320	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	64	99	908	~ 131	132	926	1450	-	-	1235	-	-
Mov Cap-2 Maneuver	64	99	-	~ 131	132	-	-	-	-	-	-	-
Stage 1	291	208	-	880	793	-	-	-	-	-	-	-
Stage 2	471	645	-	~ 189	208	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	235.7	0	7.1
HCM LOS	A	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1450	-	-	-	131	926	1235	-	-
HCM Lane V/C Ratio	-	-	-	-	1.874	0.285	0.35	-	-
HCM Control Delay (s)	0	-	-	0$	477.7	10.4	9.5	-	-
HCM Lane LOS	A	-	-	A	F	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	19.1	1.2	1.6	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	8	23	159	0	0	106
Future Volume (vph)	8	23	159	0	0	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.899				0.865	
Flt Protected				0.950		
Satd. Flow (prot)	1708	0	0	1787	1611	0
Flt Permitted				0.950		
Satd. Flow (perm)	1708	0	0	1787	1611	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	720			80	1399	
Travel Time (s)	16.4			1.8	31.8	
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles (%)	0%	0%	1%	0%	0%	2%
Adj. Flow (vph)	12	35	241	0	0	161
Shared Lane Traffic (%)						
Lane Group Flow (vph)	47	0	0	241	161	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Stop			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 28.7%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	8	23	159	0	0	106
Future Volume (vph)	8	23	159	0	0	106
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66
Hourly flow rate (vph)	12	35	241	0	0	161

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	47	241	161
Volume Left (vph)	0	241	0
Volume Right (vph)	35	0	161
Hadj (s)	-0.45	0.22	-0.57
Departure Headway (s)	4.1	4.5	4.0
Degree Utilization, x	0.05	0.30	0.18
Capacity (veh/h)	835	765	842
Control Delay (s)	7.3	9.5	7.9
Approach Delay (s)	7.3	9.5	7.9
Approach LOS	A	A	A

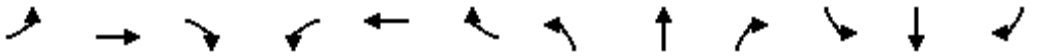
Intersection Summary			
Delay	8.7		
Level of Service	A		
Intersection Capacity Utilization	28.7%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	8	23	159	0	0	106
Future Vol, veh/h	8	23	159	0	0	106
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles, %	0	0	1	0	0	2
Mvmt Flow	12	35	241	0	0	161
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.3	9.4	7.8
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	0%	0%	100%
Vol Thru, %	0%	26%	0%
Vol Right, %	100%	74%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	106	31	159
LT Vol	0	0	159
Through Vol	0	8	0
RT Vol	106	23	0
Lane Flow Rate	161	47	241
Geometry Grp	1	1	1
Degree of Util (X)	0.177	0.053	0.297
Departure Headway (Hd)	3.966	4.054	4.437
Convergence, Y/N	Yes	Yes	Yes
Cap	909	885	800
Service Time	1.97	2.071	2.515
HCM Lane V/C Ratio	0.177	0.053	0.301
HCM Control Delay	7.8	7.3	9.4
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.6	0.2	1.2

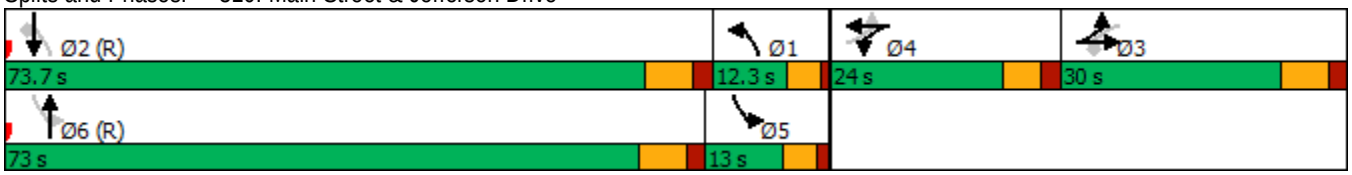


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	346	174	63	142	238	27	117	902	183	0	1414	484
Future Volume (vph)	346	174	63	142	238	27	117	902	183	0	1414	484
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		300	300		0	200		300	200		250
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	1.00
Frt			0.850		0.985			0.975				0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1805	1900	1615	1770	3509	0	1703	3491	0	1900	3539	1615
Flt Permitted	0.329			0.407			0.060					
Satd. Flow (perm)	625	1900	1615	758	3509	0	108	3491	0	1900	3539	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			117		7			23				351
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1006			727			3897			1103	
Travel Time (s)		17.1			12.4			66.4			18.8	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	0%	0%	0%	2%	0%	13%	6%	1%	0%	0%	2%	0%
Adj. Flow (vph)	422	212	77	173	290	33	143	1100	223	0	1724	590
Shared Lane Traffic (%)												
Lane Group Flow (vph)	422	212	77	173	323	0	143	1323	0	0	1724	590
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA	Perm	D.P+P	NA		D.P+P	NA		D.P+P	NA	Perm
Protected Phases	3	3		4	4		1	6		5	2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		3	3			2			6		2
Detector Phase	3	3	3	4	4		1	6		5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	8.0	8.0		5.0	10.0		8.0	10.0	10.0
Minimum Split (s)	25.0	25.0	25.0	24.0	24.0		9.5	25.0		13.0	25.0	25.0
Total Split (s)	30.0	30.0	30.0	24.0	24.0		12.3	73.0		13.0	73.7	73.7
Total Split (%)	21.4%	21.4%	21.4%	17.1%	17.1%		8.8%	52.1%		9.3%	52.6%	52.6%
Maximum Green (s)	23.0	23.0	23.0	18.0	18.0		7.8	66.0		8.0	66.7	66.7
Yellow Time (s)	5.0	5.0	5.0	4.0	4.0		3.5	5.0		3.5	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		1.0	2.0		1.5	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	6.0	6.0		4.5	7.0		5.0	7.0	7.0
Lead/Lag	Lag	Lag	Lag	Lead	Lead		Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5		3.0	3.5		3.0	3.5	3.5
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	40.0	24.2	24.2	42.0	16.8		77.0	79.0			66.7	66.7
Actuated g/C Ratio	0.29	0.17	0.17	0.30	0.12		0.55	0.56			0.48	0.48
v/c Ratio	1.10	0.65	0.20	0.50	0.76		0.97	0.67			1.02	0.62
Control Delay	125.7	64.6	3.4	39.1	70.1		114.5	23.0			64.0	13.2
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	0.0
Total Delay	125.7	64.6	3.4	39.1	70.1		114.5	23.0			64.0	13.2
LOS	F	E	A	D	E		F	C			E	B
Approach Delay		94.2			59.3			31.9			51.1	
Approach LOS		F			E			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:NBSB, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.10			
Intersection Signal Delay: 52.4		Intersection LOS: D	
Intersection Capacity Utilization 92.6%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 310: Main Street & Jefferson Drive

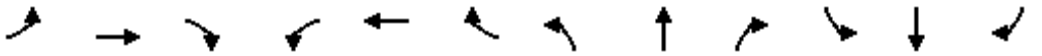


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	422	212	77	173	323	143	1323	1724	590
v/c Ratio	1.10	0.65	0.20	0.50	0.76	0.97	0.67	1.02	0.62
Control Delay	125.7	64.6	3.4	39.1	70.1	114.5	23.0	64.0	13.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	125.7	64.6	3.4	39.1	70.1	114.5	23.0	64.0	13.2
Queue Length 50th (ft)	~392	184	0	115	147	80	420	~876	153
Queue Length 95th (ft)	#543	246	5	159	181	#185	425	#812	210
Internal Link Dist (ft)		926			647		3817	1023	
Turn Bay Length (ft)	300		300	300		200			250
Base Capacity (vph)	382	328	376	363	457	148	1979	1686	953
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	1.10	0.65	0.20	0.48	0.71	0.97	0.67	1.02	0.62

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

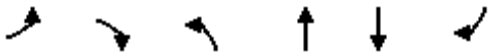
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	346	174	63	142	238	27	117	902	183	0	1414	484
Future Volume (vph)	346	174	63	142	238	27	117	902	183	0	1414	484
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0	6.0	6.0		4.5	7.0			7.0	7.0
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95		1.00	0.95			0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.97			1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)	1805	1900	1615	1770	3508		1703	3490			3539	1615
Flt Permitted	0.33	1.00	1.00	0.41	1.00		0.06	1.00			1.00	1.00
Satd. Flow (perm)	626	1900	1615	758	3508		107	3490			3539	1615
Peak-hour factor, PHF	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	422	212	77	173	290	33	143	1100	223	0	1724	590
RTOR Reduction (vph)	0	0	64	0	6	0	0	10	0	0	0	184
Lane Group Flow (vph)	422	212	13	173	317	0	143	1313	0	0	1724	406
Heavy Vehicles (%)	0%	0%	0%	2%	0%	13%	6%	1%	0%	0%	2%	0%
Turn Type	D.P+P	NA	Perm	D.P+P	NA		D.P+P	NA		D.P+P	NA	Perm
Protected Phases	3	3		4	4		1	6		5	2	
Permitted Phases	4		3	3			2			6		2
Actuated Green, G (s)	41.0	24.2	24.2	41.0	16.8		74.5	79.0			66.7	66.7
Effective Green, g (s)	41.0	24.2	24.2	41.0	16.8		74.5	79.0			66.7	66.7
Actuated g/C Ratio	0.29	0.17	0.17	0.29	0.12		0.53	0.56			0.48	0.48
Clearance Time (s)	7.0	7.0	7.0	6.0	6.0		4.5	7.0			7.0	7.0
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5		3.0	3.5			3.5	3.5
Lane Grp Cap (vph)	387	328	279	343	420		145	1969			1686	769
v/s Ratio Prot	c0.19	0.11		0.06	0.09		c0.05	0.38			c0.49	
v/s Ratio Perm	c0.13		0.01	0.09			0.46					0.25
v/c Ratio	1.09	0.65	0.05	0.50	0.75		0.99	0.67			1.02	0.53
Uniform Delay, d1	51.5	53.9	48.3	39.1	59.6		62.7	21.3			36.6	25.6
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	72.3	4.5	0.1	1.4	7.7		70.0	1.8			27.8	2.6
Delay (s)	123.7	58.4	48.4	40.5	67.4		132.7	23.1			64.5	28.2
Level of Service	F	E	D	D	E		F	C			E	C
Approach Delay (s)		96.1			58.0			33.8			55.2	
Approach LOS		F			E			C			E	

Intersection Summary			
HCM 2000 Control Delay	55.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	92.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology expects strict NEMA phasing.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	27	132	87	1128	1867	51
Future Volume (vph)	27	132	87	1128	1867	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	200			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Frt		0.850			0.996	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1805	1568	1805	3574	3554	0
Flt Permitted	0.950		0.056			
Satd. Flow (perm)	1805	1568	106	3574	3554	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		113			5	
Link Speed (mph)	30			40	40	
Link Distance (ft)	1219			1103	1788	
Travel Time (s)	27.7			18.8	30.5	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	3%	0%	1%	1%	7%
Adj. Flow (vph)	30	148	98	1267	2098	57
Shared Lane Traffic (%)						
Lane Group Flow (vph)	30	148	98	1267	2155	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	
Detector Template	Left	Right	Left	Thru	Thru	
Leading Detector (ft)	20	20	20	100	100	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	20	20	20	6	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0	6.0	10.0	10.0	
Minimum Split (s)	24.0	24.0	10.5	25.0	25.0	
Total Split (s)	24.0	24.0	10.8	76.0	65.2	
Total Split (%)	24.0%	24.0%	10.8%	76.0%	65.2%	
Maximum Green (s)	18.0	18.0	6.3	69.0	58.2	
Yellow Time (s)	4.0	4.0	3.0	5.0	5.0	
All-Red Time (s)	2.0	2.0	1.5	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	4.5	7.0	7.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.5	3.5	3.0	4.0	4.0	
Recall Mode	None	None	None	C-Max	C-Max	
Act Effct Green (s)	9.9	9.9	79.6	77.1	67.5	
Actuated g/C Ratio	0.10	0.10	0.80	0.77	0.68	
v/c Ratio	0.17	0.58	0.48	0.46	0.90	
Control Delay	42.1	22.3	17.8	4.9	21.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	42.1	22.3	17.8	4.9	21.7	
LOS	D	C	B	A	C	
Approach Delay	25.6			5.9	21.7	
Approach LOS	C			A	C	

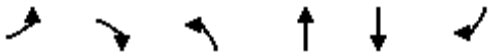
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 16.0		Intersection LOS: B	
Intersection Capacity Utilization 79.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 311: Main Street & Cook Road

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	30	148	98	1267	2155
v/c Ratio	0.17	0.58	0.48	0.46	0.90
Control Delay	42.1	22.3	17.8	4.9	21.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	42.1	22.3	17.8	4.9	21.7
Queue Length 50th (ft)	18	21	9	110	525
Queue Length 95th (ft)	43	77	60	190	#908
Internal Link Dist (ft)	1139			1023	1708
Turn Bay Length (ft)			200		
Base Capacity (vph)	324	374	207	2754	2400
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.09	0.40	0.47	0.46	0.90

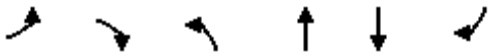
Intersection Summary

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



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	27	132	87	1128	1867	51
Future Volume (vph)	27	132	87	1128	1867	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.5	7.0	7.0	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	
Frt	1.00	0.85	1.00	1.00	1.00	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1805	1568	1805	3574	3554	
Flt Permitted	0.95	1.00	0.06	1.00	1.00	
Satd. Flow (perm)	1805	1568	107	3574	3554	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	30	148	98	1267	2098	57
RTOR Reduction (vph)	0	102	0	0	2	0
Lane Group Flow (vph)	30	46	98	1267	2153	0
Heavy Vehicles (%)	0%	3%	0%	1%	1%	7%
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Actuated Green, G (s)	9.9	9.9	77.1	77.1	66.6	
Effective Green, g (s)	9.9	9.9	77.1	77.1	66.6	
Actuated g/C Ratio	0.10	0.10	0.77	0.77	0.67	
Clearance Time (s)	6.0	6.0	4.5	7.0	7.0	
Vehicle Extension (s)	3.5	3.5	3.0	4.0	4.0	
Lane Grp Cap (vph)	178	155	184	2755	2366	
v/s Ratio Prot	0.02		0.03	c0.35	c0.61	
v/s Ratio Perm		c0.03	0.38			
v/c Ratio	0.17	0.30	0.53	0.46	0.91	
Uniform Delay, d1	41.3	41.8	21.6	4.1	14.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.5	1.3	2.9	0.6	6.6	
Delay (s)	41.8	43.1	24.6	4.6	20.8	
Level of Service	D	D	C	A	C	
Approach Delay (s)	42.9			6.1	20.8	
Approach LOS	D			A	C	

Intersection Summary			
HCM 2000 Control Delay	16.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	79.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	27	132	87	1128	1867	51
Future Volume (veh/h)	27	132	87	1128	1867	51
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1856	1900	1885	1885	1796
Adj Flow Rate, veh/h	30	148	98	1267	2098	57
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	3	0	1	1	7
Cap, veh/h	207	180	202	2706	2331	63
Arrive On Green	0.11	0.11	0.06	0.76	0.65	0.65
Sat Flow, veh/h	1810	1572	1810	3676	3657	96
Grp Volume(v), veh/h	30	148	98	1267	1050	1105
Grp Sat Flow(s),veh/h/ln	1810	1572	1810	1791	1791	1868
Q Serve(g_s), s	1.5	9.2	1.5	13.4	49.0	50.1
Cycle Q Clear(g_c), s	1.5	9.2	1.5	13.4	49.0	50.1
Prop In Lane	1.00	1.00	1.00			0.05
Lane Grp Cap(c), veh/h	207	180	202	2706	1172	1222
V/C Ratio(X)	0.14	0.82	0.48	0.47	0.90	0.90
Avail Cap(c_a), veh/h	326	283	215	2706	1172	1222
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.54	0.54	1.00	1.00
Uniform Delay (d), s/veh	39.9	43.3	24.3	4.6	14.4	14.6
Incr Delay (d2), s/veh	0.4	11.8	1.0	0.3	10.8	11.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	8.3	1.6	3.5	19.4	20.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	40.2	55.0	25.3	4.9	25.2	25.7
LnGrp LOS	D	E	C	A	C	C
Approach Vol, veh/h	178			1365	2155	
Approach Delay, s/veh	52.5			6.4	25.5	
Approach LOS	D			A	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		82.5		17.5	10.1	72.4
Change Period (Y+Rc), s		7.0		6.0	4.5	7.0
Max Green Setting (Gmax), s		69.0		18.0	6.3	58.2
Max Q Clear Time (g_c+I1), s		15.4		11.2	3.5	52.1
Green Ext Time (p_c), s		18.7		0.3	0.0	5.8

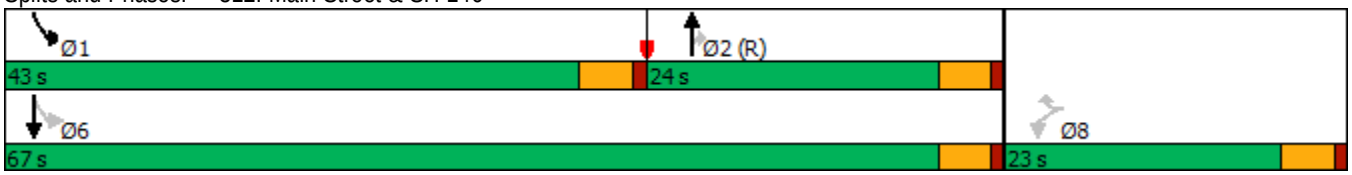
Intersection Summary	
HCM 6th Ctrl Delay	19.7
HCM 6th LOS	B

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	183	349	523	146	521	1195
Future Volume (vph)	183	349	523	146	521	1195
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		300	135	
Storage Lanes	1	1		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1719	1302	3539	1583	1388	3539
Flt Permitted	0.950				0.167	
Satd. Flow (perm)	1719	1302	3539	1583	244	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		397		166		
Link Speed (mph)	55		40			40
Link Distance (ft)	7877		885			960
Travel Time (s)	97.6		15.1			16.4
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	5%	24%	2%	2%	30%	2%
Adj. Flow (vph)	208	397	594	166	592	1358
Shared Lane Traffic (%)						
Lane Group Flow (vph)	208	397	594	166	592	1358
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Turn Type	Perm	Perm	NA	Perm	pm+pt	NA
Protected Phases			2		1	6
Permitted Phases	8	8		2	6	
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	23.0	23.0	24.0	24.0	43.0	67.0
Total Split (%)	25.6%	25.6%	26.7%	26.7%	47.8%	74.4%
Maximum Green (s)	18.5	18.5	19.5	19.5	38.5	62.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	18.5	18.5	19.5	19.5	62.5	62.5
Actuated g/C Ratio	0.21	0.21	0.22	0.22	0.69	0.69

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
v/c Ratio	0.59	0.68	0.78	0.35	0.90	0.55
Control Delay	40.1	10.2	41.3	7.2	37.0	7.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.1	10.2	41.3	7.2	37.0	7.9
LOS	D	B	D	A	D	A
Approach Delay	20.4		33.8			16.7
Approach LOS	C		C			B

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 21.3		Intersection LOS: C	
Intersection Capacity Utilization 64.7%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 312: Main Street & SH 146



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	208	397	594	166	592	1358
v/c Ratio	0.59	0.68	0.78	0.35	0.90	0.55
Control Delay	40.1	10.2	41.3	7.2	37.0	7.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.1	10.2	41.3	7.2	37.0	7.9
Queue Length 50th (ft)	108	0	168	0	256	173
Queue Length 95th (ft)	176	76	223	47	#457	212
Internal Link Dist (ft)	7797		805			880
Turn Bay Length (ft)				300	135	
Base Capacity (vph)	353	583	766	473	658	2457
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	0.59	0.68	0.78	0.35	0.90	0.55

Intersection Summary

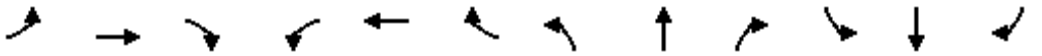
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	183	349	523	146	521	1195
Future Volume (vph)	183	349	523	146	521	1195
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1719	1302	3539	1583	1388	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.17	1.00
Satd. Flow (perm)	1719	1302	3539	1583	244	3539
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	208	397	594	166	592	1358
RTOR Reduction (vph)	0	315	0	130	0	0
Lane Group Flow (vph)	208	82	594	36	592	1358
Heavy Vehicles (%)	5%	24%	2%	2%	30%	2%
Turn Type	Perm	Perm	NA	Perm	pm+pt	NA
Protected Phases			2		1	6
Permitted Phases	8	8		2	6	
Actuated Green, G (s)	18.5	18.5	19.5	19.5	62.5	62.5
Effective Green, g (s)	18.5	18.5	19.5	19.5	62.5	62.5
Actuated g/C Ratio	0.21	0.21	0.22	0.22	0.69	0.69
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Grp Cap (vph)	353	267	766	342	658	2457
v/s Ratio Prot			0.17		c0.38	0.38
v/s Ratio Perm	c0.12	0.06		0.02	c0.24	
v/c Ratio	0.59	0.31	0.78	0.11	0.90	0.55
Uniform Delay, d1	32.3	30.3	33.2	28.3	18.4	6.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.0	2.9	7.6	0.6	17.6	0.9
Delay (s)	39.4	33.2	40.7	28.9	36.0	7.7
Level of Service	D	C	D	C	D	A
Approach Delay (s)	35.3		38.1			16.3
Approach LOS	D		D			B

Intersection Summary			
HCM 2000 Control Delay	24.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	64.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

HCM 6th Edition methodology does not support Non-NEMA phasing.

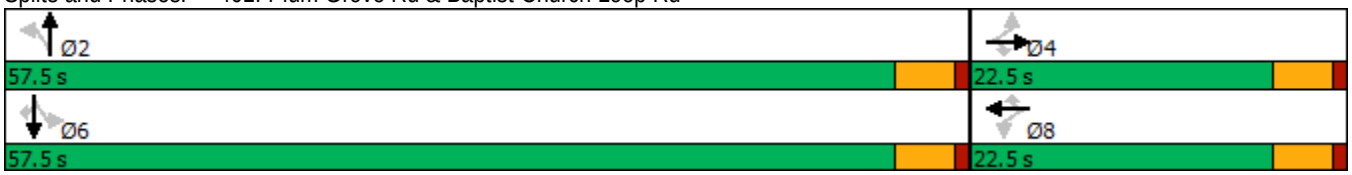


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	147	28	107	289	1732	866	512	239	45	76	234	451
Future Volume (vph)	147	28	107	289	1732	866	512	239	45	76	234	451
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		0	100		0	0		100
Storage Lanes	1		1	1		1	2		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.976				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1863	1615	1770	3539	1583	3467	1732	0	1770	1610	1615
Flt Permitted	0.217			0.738			0.602			0.540		
Satd. Flow (perm)	412	1863	1615	1375	3539	1583	2197	1732	0	1006	1610	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			116			606		25				20
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1187			1032			1385			1025	
Travel Time (s)		27.0			23.5			31.5			23.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	0%	2%	2%	2%	1%	8%	2%	2%	18%	0%
Adj. Flow (vph)	160	30	116	314	1883	941	557	260	49	83	254	490
Shared Lane Traffic (%)												
Lane Group Flow (vph)	160	30	116	314	1883	941	557	309	0	83	254	490
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	60		60	15		60	60		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8		8	2			6		6
Detector Phase	4	4	4	8	8	8	2	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5		22.5	22.5	22.5
Total Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	57.5	57.5		57.5	57.5	57.5
Total Split (%)	28.1%	28.1%	28.1%	28.1%	28.1%	28.1%	71.9%	71.9%		71.9%	71.9%	71.9%
Maximum Green (s)	18.0	18.0	18.0	18.0	18.0	18.0	53.0	53.0		53.0	53.0	53.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	Min	Min		Min	Min	Min
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0		0	0	0
Act Effct Green (s)	18.4	18.4	18.4	18.4	18.4	18.4	21.0	21.0		21.0	21.0	21.0
Actuated g/C Ratio	0.38	0.38	0.38	0.38	0.38	0.38	0.43	0.43		0.43	0.43	0.43
v/c Ratio	1.03	0.04	0.17	0.61	1.41	0.97	0.59	0.40		0.19	0.36	0.69
Control Delay	109.5	13.1	4.5	22.2	208.4	31.8	12.6	9.7		8.8	10.2	15.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	109.5	13.1	4.5	22.2	208.4	31.8	12.6	9.7		8.8	10.2	15.7
LOS	F	B	A	C	F	C	B	A		A	B	B
Approach Delay		60.2			136.8			11.6			13.3	
Approach LOS		E			F			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 48.6			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.41			
Intersection Signal Delay: 91.3		Intersection LOS: F	
Intersection Capacity Utilization 101.7%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 401: Plum Grove Rd & Baptist Church Loop Rd

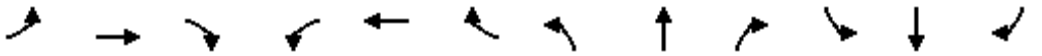


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	160	30	116	314	1883	941	557	309	83	254	490
v/c Ratio	1.03	0.04	0.17	0.61	1.41	0.97	0.59	0.40	0.19	0.36	0.69
Control Delay	109.5	13.1	4.5	22.2	208.4	31.8	12.6	9.7	8.8	10.2	15.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	109.5	13.1	4.5	22.2	208.4	31.8	12.6	9.7	8.8	10.2	15.7
Queue Length 50th (ft)	~46	5	0	68	~390	76	56	50	13	44	97
Queue Length 95th (ft)	#178	24	30	#219	#685	#417	89	90	32	81	171
Internal Link Dist (ft)		1107			952			1305		945	
Turn Bay Length (ft)	100						100				100
Base Capacity (vph)	155	704	682	519	1338	975	2144	1691	982	1571	1576
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.03	0.04	0.17	0.61	1.41	0.97	0.26	0.18	0.08	0.16	0.31

Intersection Summary

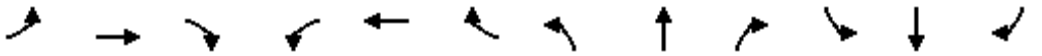
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	147	28	107	289	1732	866	512	239	45	76	234	451
Future Volume (vph)	147	28	107	289	1732	866	512	239	45	76	234	451
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.97	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1805	1863	1615	1770	3539	1583	3467	1733		1770	1610	1615
Flt Permitted	0.22	1.00	1.00	0.74	1.00	1.00	0.60	1.00		0.54	1.00	1.00
Satd. Flow (perm)	413	1863	1615	1374	3539	1583	2196	1733		1007	1610	1615
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	160	30	116	314	1883	941	557	260	49	83	254	490
RTOR Reduction (vph)	0	0	72	0	0	376	0	14	0	0	0	11
Lane Group Flow (vph)	160	30	44	314	1883	565	557	295	0	83	254	479
Heavy Vehicles (%)	0%	2%	0%	2%	2%	2%	1%	8%	2%	2%	18%	0%
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		6
Actuated Green, G (s)	18.4	18.4	18.4	18.4	18.4	18.4	21.1	21.1		21.1	21.1	21.1
Effective Green, g (s)	18.4	18.4	18.4	18.4	18.4	18.4	21.1	21.1		21.1	21.1	21.1
Actuated g/C Ratio	0.38	0.38	0.38	0.38	0.38	0.38	0.44	0.44		0.44	0.44	0.44
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	156	706	612	521	1342	600	955	753		438	700	702
v/s Ratio Prot		0.02			c0.53			0.17			0.16	
v/s Ratio Perm	0.39		0.03	0.23		0.36	0.25			0.08		c0.30
v/c Ratio	1.03	0.04	0.07	0.60	1.40	0.94	0.58	0.39		0.19	0.36	0.68
Uniform Delay, d1	15.1	9.5	9.6	12.1	15.1	14.5	10.4	9.3		8.4	9.2	11.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	79.0	0.0	0.1	2.0	186.0	23.2	0.9	0.3		0.2	0.3	2.7
Delay (s)	94.0	9.5	9.7	14.1	201.0	37.7	11.3	9.7		8.6	9.5	13.7
Level of Service	F	A	A	B	F	D	B	A		A	A	B
Approach Delay (s)		53.8			133.3			10.7			11.9	
Approach LOS		D			F			B			B	

Intersection Summary			
HCM 2000 Control Delay	88.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	48.5	Sum of lost time (s)	9.0
Intersection Capacity Utilization	101.7%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

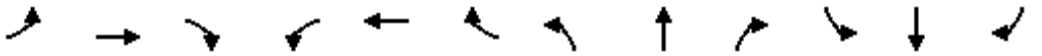


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	28	107	289	1732	866	512	239	45	76	234	451
Future Volume (veh/h)	147	28	107	289	1732	866	512	239	45	76	234	451
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1900	1870	1870	1870	1885	1781	1870	1870	1633	1900
Adj Flow Rate, veh/h	160	30	116	314	1883	941	557	260	49	83	254	490
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	0	2	2	2	1	8	2	2	18	0
Cap, veh/h	114	535	460	493	1016	453	918	833	157	626	933	920
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.57	0.57	0.57	0.57	0.57	0.57
Sat Flow, veh/h	96	1870	1610	1380	3554	1585	1400	1457	275	1070	1633	1610
Grp Volume(v), veh/h	160	30	116	314	1883	941	557	0	309	83	254	490
Grp Sat Flow(s),veh/h/ln	96	1870	1610	1380	1777	1585	700	0	1732	1070	1633	1610
Q Serve(g_s), s	0.0	0.7	3.5	13.5	18.0	18.0	21.1	0.0	5.9	2.8	5.0	11.8
Cycle Q Clear(g_c), s	18.0	0.7	3.5	14.2	18.0	18.0	26.1	0.0	5.9	8.6	5.0	11.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	114	535	460	493	1016	453	918	0	990	626	933	920
V/C Ratio(X)	1.40	0.06	0.25	0.64	1.85	2.08	0.61	0.00	0.31	0.13	0.27	0.53
Avail Cap(c_a), veh/h	114	535	460	493	1016	453	1296	0	1457	915	1374	1355
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.5	16.3	17.3	21.5	22.5	22.5	13.5	0.0	7.0	9.3	6.9	8.3
Incr Delay (d2), s/veh	224.1	0.0	0.3	2.7	388.1	492.3	0.7	0.0	0.2	0.1	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	0.3	1.2	4.4	61.6	68.0	2.9	0.0	1.8	0.6	1.4	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	255.6	16.4	17.6	24.2	410.6	514.8	14.1	0.0	7.2	9.4	7.0	8.8
LnGrp LOS	F	B	B	C	F	F	B	A	A	A	A	A
Approach Vol, veh/h		306			3138			866			827	
Approach Delay, s/veh		141.9			403.2			11.7			8.3	
Approach LOS		F			F			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		40.5		22.5		40.5		22.5				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		53.0		18.0		53.0		18.0				
Max Q Clear Time (g_c+I1), s		28.1		20.0		13.8		20.0				
Green Ext Time (p_c), s		7.9		0.0		4.1		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			258.1									
HCM 6th LOS			F									

Improved Network 2045 PM



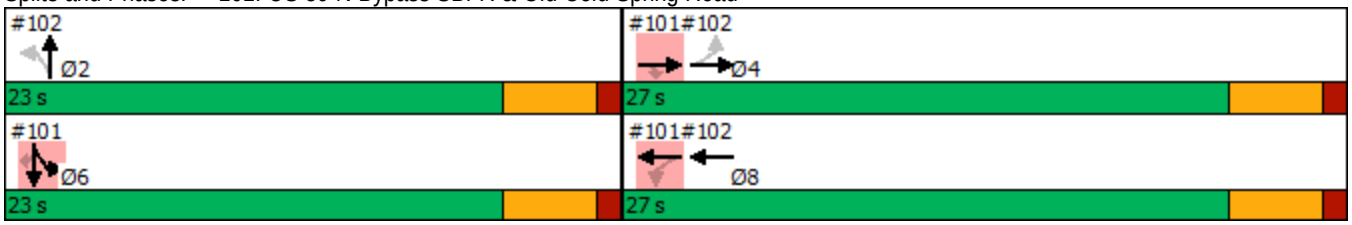
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	330	328	95	764	0	0	0	0	80	35	117
Future Volume (vph)	0	330	328	95	764	0	0	0	0	80	35	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected					0.995						0.966	
Satd. Flow (prot)	0	1743	1495	0	3385	0	0	0	0	0	1808	1170
Flt Permitted					0.869						0.966	
Satd. Flow (perm)	0	1743	1495	0	2956	0	0	0	0	0	1808	1170
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			353									97
Link Speed (mph)		40			40			30			45	
Link Distance (ft)		930			353			1253			1599	
Travel Time (s)		15.9			6.0			28.5			24.2	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	9%	8%	7%	6%	0%	0%	0%	0%	0%	5%	38%
Adj. Flow (vph)	0	355	353	102	822	0	0	0	0	86	38	126
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	355	353	0	924	0	0	0	0	0	124	126
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Perm	Perm	NA					Split	NA	Perm
Protected Phases		4			8					6	6	
Permitted Phases			4	8								6
Detector Phase		4	4	8	8					6	6	6
Switch Phase												

Lane Group	Ø2
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	2
Permitted Phases	
Detector Phase	
Switch Phase	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)		5.0	5.0	5.0	5.0					5.0	5.0	5.0
Minimum Split (s)		22.5	22.5	22.5	22.5					22.5	22.5	22.5
Total Split (s)		27.0	27.0	27.0	27.0					23.0	23.0	23.0
Total Split (%)		54.0%	54.0%	54.0%	54.0%					46.0%	46.0%	46.0%
Maximum Green (s)		22.5	22.5	22.5	22.5					18.5	18.5	18.5
Yellow Time (s)		3.5	3.5	3.5	3.5					3.5	3.5	3.5
All-Red Time (s)		1.0	1.0	1.0	1.0					1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0						0.0	0.0
Total Lost Time (s)		4.5	4.5		4.5						4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Recall Mode		None	None	None	None					Min	Min	Min
Walk Time (s)		7.0	7.0	7.0	7.0					7.0	7.0	7.0
Flash Dont Walk (s)		11.0	11.0	11.0	11.0					11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0	0	0					0	0	0
Act Effct Green (s)		19.7	19.7		19.7						13.6	13.6
Actuated g/C Ratio		0.46	0.46		0.46						0.32	0.32
v/c Ratio		0.44	0.40		0.68						0.21	0.29
Control Delay		10.5	2.8		11.2						12.2	6.4
Queue Delay		0.0	0.0		0.0						0.0	0.0
Total Delay		10.5	2.8		11.2						12.2	6.4
LOS		B	A		B						B	A
Approach Delay		6.7			11.2						9.3	
Approach LOS		A			B						A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 42.6			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 9.2		Intersection LOS: A	
Intersection Capacity Utilization 61.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 101: US 59 N Bypass SBFR & Old Cold Spring Road

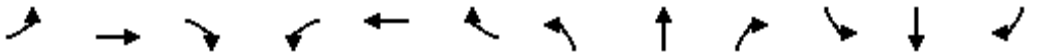


Lane Group	Ø2
Minimum Initial (s)	5.0
Minimum Split (s)	22.5
Total Split (s)	23.0
Total Split (%)	46%
Maximum Green (s)	18.5
Yellow Time (s)	3.5
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	Min
Walk Time (s)	7.0
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Lane Group	EBT	EBR	WBT	SBT	SBR
Lane Group Flow (vph)	355	353	924	124	126
v/c Ratio	0.44	0.40	0.68	0.21	0.29
Control Delay	10.5	2.8	11.2	12.2	6.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	10.5	2.8	11.2	12.2	6.4
Queue Length 50th (ft)	53	0	86	24	5
Queue Length 95th (ft)	122	35	132	52	32
Internal Link Dist (ft)	850		273	1519	
Turn Bay Length (ft)					
Base Capacity (vph)	954	977	1617	813	579
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.37	0.36	0.57	0.15	0.22

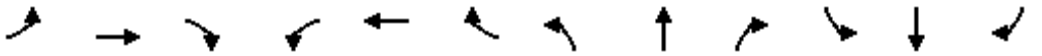
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	330	328	95	764	0	0	0	0	80	35	117
Future Volume (vph)	0	330	328	95	764	0	0	0	0	80	35	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5		4.5						4.5	4.5
Lane Util. Factor		1.00	1.00		0.95						1.00	1.00
Frt		1.00	0.85		1.00						1.00	0.85
Flt Protected		1.00	1.00		0.99						0.97	1.00
Satd. Flow (prot)		1743	1495		3383						1809	1170
Flt Permitted		1.00	1.00		0.87						0.97	1.00
Satd. Flow (perm)		1743	1495		2958						1809	1170
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	355	353	102	822	0	0	0	0	86	38	126
RTOR Reduction (vph)	0	0	189	0	0	0	0	0	0	0	0	66
Lane Group Flow (vph)	0	355	164	0	924	0	0	0	0	0	124	60
Heavy Vehicles (%)	0%	9%	8%	7%	6%	0%	0%	0%	0%	0%	5%	38%
Turn Type		NA	Perm	Perm	NA					Split	NA	Perm
Protected Phases		4			8					6	6	
Permitted Phases			4	8								6
Actuated Green, G (s)		19.7	19.7		19.7						13.6	13.6
Effective Green, g (s)		19.7	19.7		19.7						13.6	13.6
Actuated g/C Ratio		0.47	0.47		0.47						0.32	0.32
Clearance Time (s)		4.5	4.5		4.5						4.5	4.5
Vehicle Extension (s)		3.0	3.0		3.0						3.0	3.0
Lane Grp Cap (vph)		811	696		1377						581	376
v/s Ratio Prot		0.20									c0.07	
v/s Ratio Perm			0.11		c0.31							0.05
v/c Ratio		0.44	0.24		0.67						0.21	0.16
Uniform Delay, d1		7.6	6.8		8.8						10.5	10.3
Progression Factor		1.00	1.00		0.89						1.00	1.00
Incremental Delay, d2		0.4	0.2		1.2						0.2	0.2
Delay (s)		8.0	7.0		9.0						10.6	10.5
Level of Service		A	A		A						B	B
Approach Delay (s)		7.5			9.0			0.0			10.6	
Approach LOS		A			A			A			B	

Intersection Summary			
HCM 2000 Control Delay	8.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	42.3	Sum of lost time (s)	9.0
Intersection Capacity Utilization	61.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology does not support clustered intersections.



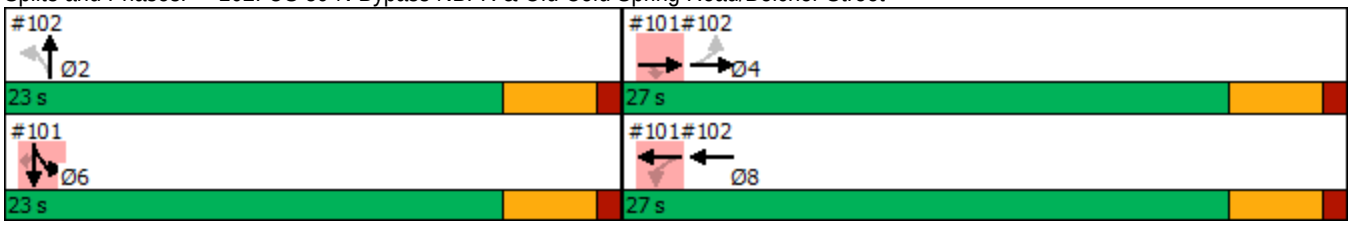
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	98	310	0	0	421	45	444	43	129	0	0	0
Future Volume (vph)	98	310	0	0	421	45	444	43	129	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Frt					0.987			0.969				
Flt Protected		0.988						0.965				
Satd. Flow (prot)	0	3287	0	0	1803	0	0	3137	0	0	0	0
Flt Permitted		0.756						0.965				
Satd. Flow (perm)	0	2515	0	0	1803	0	0	3137	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					14			75				
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		353			1397			1065			1401	
Travel Time (s)		6.0			23.8			16.1			21.2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	26%	3%	0%	0%	4%	4%	9%	7%	3%	0%	0%	0%
Adj. Flow (vph)	102	323	0	0	439	47	463	45	134	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	425	0	0	486	0	0	642	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2		1	2				
Detector Template	Left	Thru			Thru		Left	Thru				
Leading Detector (ft)	20	100			100		20	100				
Trailing Detector (ft)	0	0			0		0	0				
Detector 1 Position(ft)	0	0			0		0	0				
Detector 1 Size(ft)	20	6			6		20	6				
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0			0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0			0.0		0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4						2					
Detector Phase	4	4			8		2	2				
Switch Phase												

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	6
Permitted Phases	
Detector Phase	
Switch Phase	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	5.0	5.0			5.0		5.0	5.0				
Minimum Split (s)	22.5	22.5			22.5		22.5	22.5				
Total Split (s)	27.0	27.0			27.0		23.0	23.0				
Total Split (%)	54.0%	54.0%			54.0%		46.0%	46.0%				
Maximum Green (s)	22.5	22.5			22.5		18.5	18.5				
Yellow Time (s)	3.5	3.5			3.5		3.5	3.5				
All-Red Time (s)	1.0	1.0			1.0		1.0	1.0				
Lost Time Adjust (s)		0.0			0.0			0.0				
Total Lost Time (s)		4.5			4.5			4.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0				
Recall Mode	None	None			None		Min	Min				
Walk Time (s)	7.0	7.0			7.0		7.0	7.0				
Flash Dont Walk (s)	11.0	11.0			11.0		11.0	11.0				
Pedestrian Calls (#/hr)	0	0			0		0	0				
Act Effct Green (s)		19.7			19.7			13.6				
Actuated g/C Ratio		0.46			0.46			0.32				
v/c Ratio		0.37			0.58			0.61				
Control Delay		5.5			12.2			13.8				
Queue Delay		0.0			0.0			0.0				
Total Delay		5.5			12.2			13.8				
LOS		A			B			B				
Approach Delay		5.5			12.2			13.8				
Approach LOS		A			B			B				

Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 42.6			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 11.0		Intersection LOS: B	
Intersection Capacity Utilization 72.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 102: US 59 N Bypass NBFR & Old Cold Spring Road/Belcher Street

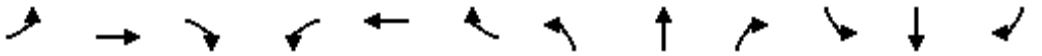


Lane Group	Ø6
Minimum Initial (s)	5.0
Minimum Split (s)	22.5
Total Split (s)	23.0
Total Split (%)	46%
Maximum Green (s)	18.5
Yellow Time (s)	3.5
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	Min
Walk Time (s)	7.0
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Lane Group	EBT	WBT	NBT
Lane Group Flow (vph)	425	486	642
v/c Ratio	0.37	0.58	0.61
Control Delay	5.5	12.2	13.8
Queue Delay	0.0	0.0	0.0
Total Delay	5.5	12.2	13.8
Queue Length 50th (ft)	20	77	64
Queue Length 95th (ft)	32	173	104
Internal Link Dist (ft)	273	1317	985
Turn Bay Length (ft)			
Base Capacity (vph)	1376	993	1452
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.31	0.49	0.44

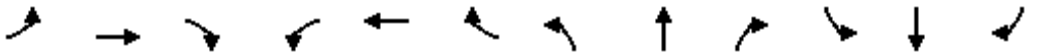
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	98	310	0	0	421	45	444	43	129	0	0	0
Future Volume (vph)	98	310	0	0	421	45	444	43	129	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5			4.5				
Lane Util. Factor		0.95			1.00			0.95				
Frt		1.00			0.99			0.97				
Flt Protected		0.99			1.00			0.97				
Satd. Flow (prot)		3287			1803			3137				
Flt Permitted		0.76			1.00			0.97				
Satd. Flow (perm)		2514			1803			3137				
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	102	323	0	0	439	47	462	45	134	0	0	0
RTOR Reduction (vph)	0	0	0	0	7	0	0	51	0	0	0	0
Lane Group Flow (vph)	0	425	0	0	479	0	0	591	0	0	0	0
Heavy Vehicles (%)	26%	3%	0%	0%	4%	4%	9%	7%	3%	0%	0%	0%
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		19.7			19.7			13.6				
Effective Green, g (s)		19.7			19.7			13.6				
Actuated g/C Ratio		0.47			0.47			0.32				
Clearance Time (s)		4.5			4.5			4.5				
Vehicle Extension (s)		3.0			3.0			3.0				
Lane Grp Cap (vph)		1170			839			1008				
v/s Ratio Prot					c0.27							
v/s Ratio Perm		0.17						0.19				
v/c Ratio		0.36			0.57			0.59				
Uniform Delay, d1		7.3			8.2			12.0				
Progression Factor		0.57			1.00			1.00				
Incremental Delay, d2		0.2			0.9			0.9				
Delay (s)		4.3			9.2			12.9				
Level of Service		A			A			B				
Approach Delay (s)		4.3			9.2			12.9			0.0	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM 2000 Control Delay	9.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	42.3	Sum of lost time (s)	9.0
Intersection Capacity Utilization	72.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology does not support clustered intersections.

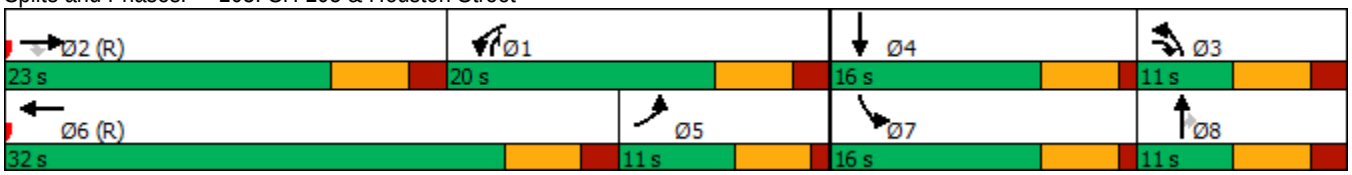


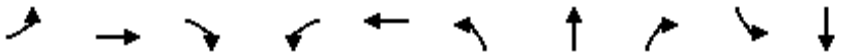
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	785	267	632	637	13	145	13	436	26	55	29
Future Volume (vph)	55	785	267	632	637	13	145	13	436	26	55	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	500		500	560		0	0		300	175		0
Storage Lanes	1		1	2		0	2		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	0.95	0.97	1.00	1.00	1.00	0.95	0.95
Frt			0.850		0.997				0.850		0.948	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3505	1599	3303	3399	0	3467	1900	1538	1805	3294	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1805	3505	1599	3303	3399	0	3467	1900	1538	1805	3294	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			272		3				352		30	
Link Speed (mph)		55			60			60			30	
Link Distance (ft)		1108			4415			2711			551	
Travel Time (s)		13.7			50.2			30.8			12.5	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	1%	6%	6%	0%	1%	0%	5%	0%	6%	0%
Adj. Flow (vph)	56	801	272	645	650	13	148	13	445	27	56	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	56	801	272	645	663	0	148	13	445	27	86	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2	3	1	6		3	8	1	7	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			2						8			
Detector Phase	5	2	3	1	6		3	8	1	7	4	
Switch Phase												
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0		5.0	5.0	5.0	10.0	10.0	
Minimum Split (s)	11.0	16.0	11.0	11.0	16.0		11.0	11.0	11.0	16.0	16.0	
Total Split (s)	11.0	23.0	11.0	20.0	32.0		11.0	11.0	20.0	16.0	16.0	
Total Split (%)	15.7%	32.9%	15.7%	28.6%	45.7%		15.7%	15.7%	28.6%	22.9%	22.9%	
Maximum Green (s)	6.0	17.0	5.0	14.0	26.0		5.0	5.0	14.0	11.0	11.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	5.0	5.0	
Lead/Lag	Lag	Lead	Lag	Lag	Lead		Lag	Lag	Lag	Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	4.0	3.0	3.0	4.0		3.0	3.0	3.0	4.0	4.0	
Recall Mode	None	C-Max	None	None	C-Max		None	None	None	None	None	
Act Effct Green (s)	5.9	20.0	32.0	14.0	33.4		6.0	15.0	33.8	10.0	10.0	
Actuated g/C Ratio	0.08	0.29	0.46	0.20	0.48		0.09	0.21	0.48	0.14	0.14	
v/c Ratio	0.37	0.80	0.31	0.98	0.41		0.49	0.03	0.48	0.11	0.17	
Control Delay	37.6	33.2	3.0	60.3	15.2		36.7	24.2	4.4	27.3	19.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	37.6	33.2	3.0	60.3	15.2		36.7	24.2	4.4	27.3	19.8	
LOS	D	C	A	E	B		D	C	A	C	B	
Approach Delay		26.1			37.5			12.7			21.6	
Approach LOS		C			D			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay: 28.1		Intersection LOS: C	
Intersection Capacity Utilization 71.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 103: SH 105 & Houston Street

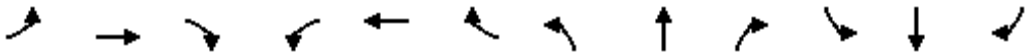




Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	56	801	272	645	663	148	13	445	27	86
v/c Ratio	0.37	0.80	0.31	0.98	0.41	0.49	0.03	0.48	0.11	0.17
Control Delay	37.6	33.2	3.0	60.3	15.2	36.7	24.2	4.4	27.3	19.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.6	33.2	3.0	60.3	15.2	36.7	24.2	4.4	27.3	19.8
Queue Length 50th (ft)	23	178	0	143	114	31	4	16	10	11
Queue Length 95th (ft)	56	#287	40	#246	161	59	21	55	31	30
Internal Link Dist (ft)		1028			4335		2631			471
Turn Bay Length (ft)	500		500	560				300	175	
Base Capacity (vph)	154	999	878	660	1621	299	408	925	283	542
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	0.36	0.80	0.31	0.98	0.41	0.49	0.03	0.48	0.10	0.16

Intersection Summary

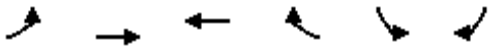
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



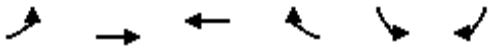
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	785	267	632	637	13	145	13	436	26	55	29
Future Volume (vph)	55	785	267	632	637	13	145	13	436	26	55	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	5.0	5.0	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.97	1.00	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	3505	1599	3303	3399		3467	1900	1538	1805	3292	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	3505	1599	3303	3399		3467	1900	1538	1805	3292	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	56	801	272	645	650	13	148	13	445	27	56	30
RTOR Reduction (vph)	0	0	183	0	2	0	0	0	196	0	27	0
Lane Group Flow (vph)	56	801	89	645	661	0	148	13	249	27	59	0
Heavy Vehicles (%)	0%	3%	1%	6%	6%	0%	1%	0%	5%	0%	6%	0%
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2						8			
Actuated Green, G (s)	3.6	14.0	23.0	16.0	27.4		9.0	15.0	31.0	2.0	8.0	
Effective Green, g (s)	3.6	14.0	23.0	16.0	27.4		9.0	15.0	31.0	2.0	8.0	
Actuated g/C Ratio	0.05	0.20	0.33	0.23	0.39		0.13	0.21	0.44	0.03	0.11	
Clearance Time (s)	5.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	5.0	5.0	
Vehicle Extension (s)	3.0	4.0	3.0	3.0	4.0		3.0	3.0	3.0	4.0	4.0	
Lane Grp Cap (vph)	92	701	662	754	1330		445	407	681	51	376	
v/s Ratio Prot	0.03	c0.23	0.02	c0.20	0.19		0.04	0.01	c0.08	c0.01	0.02	
v/s Ratio Perm			0.04						0.08			
v/c Ratio	0.61	1.14	0.14	0.86	0.50		0.33	0.03	0.37	0.53	0.16	
Uniform Delay, d1	32.5	28.0	16.5	25.9	16.1		27.8	21.8	13.0	33.5	28.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	10.9	80.6	0.1	9.4	1.3		0.4	0.0	0.3	12.3	0.3	
Delay (s)	43.4	108.6	16.6	35.3	17.4		28.2	21.8	13.3	45.8	28.2	
Level of Service	D	F	B	D	B		C	C	B	D	C	
Approach Delay (s)		83.2			26.2			17.1			32.4	
Approach LOS		F			C			B			C	

Intersection Summary			
HCM 2000 Control Delay	45.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	23.0
Intersection Capacity Utilization	71.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology supports speed limit in the range of 25 to 55 mph.



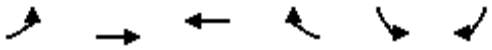
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	75	337	226	82	14	22
Future Volume (vph)	75	337	226	82	14	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			500	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1787	3406	3374	1568	1656	1495
Flt Permitted	0.603				0.950	
Satd. Flow (perm)	1134	3406	3374	1568	1656	1495
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				87		23
Link Speed (mph)		65	65		30	
Link Distance (ft)		2030	1363		297	
Travel Time (s)		21.3	14.3		6.8	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	1%	6%	7%	3%	9%	8%
Adj. Flow (vph)	80	359	240	87	15	23
Shared Lane Traffic (%)						
Lane Group Flow (vph)	80	359	240	87	15	23
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Perm	NA	NA	Perm	Prot	Perm
Protected Phases		4	8		6	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	4			8		6
Detector Phase	4	4	8	8	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	127.0	127.0	127.0	127.0	23.0	23.0
Total Split (%)	84.7%	84.7%	84.7%	84.7%	15.3%	15.3%
Maximum Green (s)	122.5	122.5	122.5	122.5	18.5	18.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	Min	Min
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	7.6	7.6	7.6	7.6	5.7	5.7
Actuated g/C Ratio	0.34	0.34	0.34	0.34	0.26	0.26
v/c Ratio	0.21	0.31	0.21	0.15	0.04	0.06
Control Delay	6.7	6.2	5.7	2.3	6.8	4.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.7	6.2	5.7	2.3	6.8	4.0
LOS	A	A	A	A	A	A
Approach Delay		6.3	4.8		5.1	
Approach LOS		A	A		A	

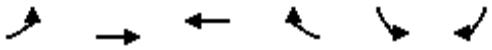
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 22.3			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.31			
Intersection Signal Delay: 5.6		Intersection LOS: A	
Intersection Capacity Utilization 25.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 201: US 90 & Waco Street



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	80	359	240	87	15	23
v/c Ratio	0.21	0.31	0.21	0.15	0.04	0.06
Control Delay	6.7	6.2	5.7	2.3	6.8	4.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.7	6.2	5.7	2.3	6.8	4.0
Queue Length 50th (ft)	5	12	8	0	1	0
Queue Length 95th (ft)	15	23	16	8	6	6
Internal Link Dist (ft)		1950	1283		217	
Turn Bay Length (ft)	200			500		
Base Capacity (vph)	1134	3406	3374	1568	1374	1244
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	0.07	0.11	0.07	0.06	0.01	0.02

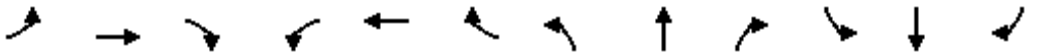
Intersection Summary



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	75	337	226	82	14	22
Future Volume (vph)	75	337	226	82	14	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1787	3406	3374	1568	1656	1495
Flt Permitted	0.60	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1134	3406	3374	1568	1656	1495
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	80	359	240	87	15	23
RTOR Reduction (vph)	0	0	0	57	0	17
Lane Group Flow (vph)	80	359	240	30	15	6
Heavy Vehicles (%)	1%	6%	7%	3%	9%	8%
Turn Type	Perm	NA	NA	Perm	Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4			8		6
Actuated Green, G (s)	7.6	7.6	7.6	7.6	5.7	5.7
Effective Green, g (s)	7.6	7.6	7.6	7.6	5.7	5.7
Actuated g/C Ratio	0.34	0.34	0.34	0.34	0.26	0.26
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	386	1160	1149	534	423	382
v/s Ratio Prot		c0.11	0.07		c0.01	
v/s Ratio Perm	0.07			0.02		0.00
v/c Ratio	0.21	0.31	0.21	0.06	0.04	0.02
Uniform Delay, d1	5.2	5.4	5.2	4.9	6.2	6.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	0.2	0.1	0.0	0.0	0.0
Delay (s)	5.5	5.6	5.3	5.0	6.3	6.2
Level of Service	A	A	A	A	A	A
Approach Delay (s)		5.6	5.2		6.2	
Approach LOS		A	A		A	

Intersection Summary			
HCM 2000 Control Delay	5.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.19		
Actuated Cycle Length (s)	22.3	Sum of lost time (s)	9.0
Intersection Capacity Utilization	25.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology supports speed limit in the range of 25 to 55 mph.

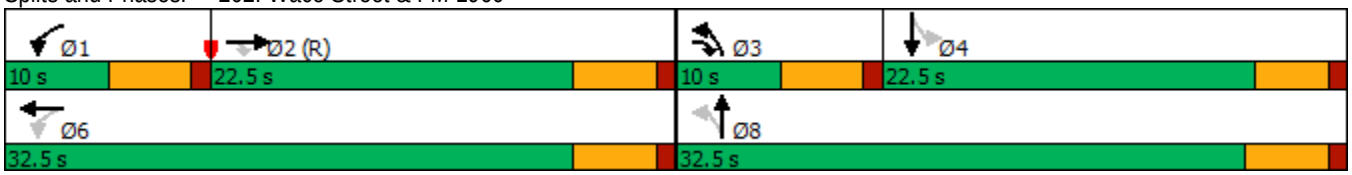


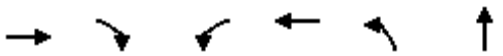
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	890	45	90	752	0	89	0	133	0	0	0
Future Volume (vph)	0	890	45	90	752	0	89	0	133	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	125		0	0		225	0		0
Storage Lanes	0		1	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	0.95	0.95	0.95
Frt			0.850					0.850				
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	3539	1468	1770	3539	0	1787	1599	0	0	3539	0
Flt Permitted				0.247			0.950					
Satd. Flow (perm)	0	3539	1468	460	3539	0	1787	1599	0	0	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			117					249				
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1974			2048			2080			1083	
Travel Time (s)		29.9			31.0			47.3			24.6	
Peak Hour Factor	0.92	0.95	0.95	0.95	0.95	0.92	0.95	0.92	0.95	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	10%	2%	2%	2%	1%	2%	1%	2%	2%	2%
Adj. Flow (vph)	0	937	47	95	792	0	94	0	140	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	937	47	95	792	0	94	140	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2		1	2		1	2	
Detector Template		Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)		100	20	20	100		20	100		20	100	
Trailing Detector (ft)		0	0	0	0		0	0		0	0	
Detector 1 Position(ft)		0	0	0	0		0	0		0	0	
Detector 1 Size(ft)		6	20	20	6		20	6		20	6	
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)		0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)		0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type		NA	pm+ov	pm+pt	NA		pm+pt	NA				
Protected Phases		2	3	1	6		3	8			4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			2	6			8			4		
Detector Phase		2	3	1	6		3	8		4	4	
Switch Phase												
Minimum Initial (s)		10.0	5.0	5.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)		15.0	10.0	10.0	15.0		10.0	10.0		22.5	22.5	
Total Split (s)		22.5	10.0	10.0	32.5		10.0	32.5		22.5	22.5	
Total Split (%)		34.6%	15.4%	15.4%	50.0%		15.4%	50.0%		34.6%	34.6%	
Maximum Green (s)		17.5	5.0	5.0	27.5		5.0	27.5		18.0	18.0	
Yellow Time (s)		4.0	4.0	4.0	4.0		4.0	4.0		3.5	3.5	
All-Red Time (s)		1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)		5.0	5.0	5.0	5.0		5.0	5.0			4.5	
Lead/Lag		Lag	Lead	Lead			Lead			Lag	Lag	
Lead-Lag Optimize?		Yes	Yes	Yes			Yes			Yes	Yes	
Vehicle Extension (s)		2.0	2.0	2.0	2.0		2.0	2.0		3.0	3.0	
Recall Mode		C-Max	None	None	Max		None	None		None	None	
Walk Time (s)										7.0	7.0	
Flash Dont Walk (s)										11.0	11.0	
Pedestrian Calls (#/hr)										0	0	
Act Effct Green (s)		44.6	52.6	52.0	53.0		5.0	5.0				
Actuated g/C Ratio		0.69	0.81	0.80	0.82		0.08	0.08				
v/c Ratio		0.39	0.04	0.20	0.27		0.69	0.40				
Control Delay		6.6	0.1	2.8	2.2		57.3	3.5				
Queue Delay		0.0	0.0	0.0	0.0		0.0	0.0				
Total Delay		6.6	0.1	2.8	2.2		57.3	3.5				
LOS		A	A	A	A		E	A				
Approach Delay		6.3			2.3			25.1				
Approach LOS		A			A			C				

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 6.7		Intersection LOS: A	
Intersection Capacity Utilization 50.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 202: Waco Street & FM 1960

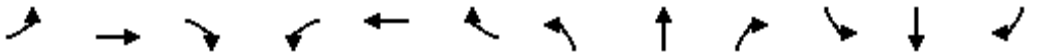




Lane Group	EBT	EBR	WBL	WBT	NBL	NBT
Lane Group Flow (vph)	937	47	95	792	94	140
v/c Ratio	0.39	0.04	0.20	0.27	0.69	0.40
Control Delay	6.6	0.1	2.8	2.2	57.3	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.6	0.1	2.8	2.2	57.3	3.5
Queue Length 50th (ft)	90	0	6	33	37	0
Queue Length 95th (ft)	131	0	14	47	#105	3
Internal Link Dist (ft)	1894			1968		2000
Turn Bay Length (ft)		200	125			
Base Capacity (vph)	2426	1209	477	2885	137	820
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	0.39	0.04	0.20	0.27	0.69	0.17

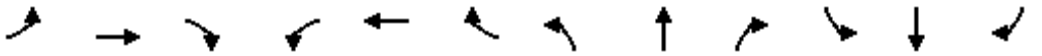
Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	890	45	90	752	0	89	0	133	0	0	0
Future Volume (vph)	0	890	45	90	752	0	89	0	133	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0	5.0	5.0		5.0	5.0				
Lane Util. Factor		0.95	1.00	1.00	0.95		1.00	1.00				
Frt		1.00	0.85	1.00	1.00		1.00	0.85				
Flt Protected		1.00	1.00	0.95	1.00		0.95	1.00				
Satd. Flow (prot)		3539	1468	1770	3539		1787	1599				
Flt Permitted		1.00	1.00	0.25	1.00		0.95	1.00				
Satd. Flow (perm)		3539	1468	461	3539		1787	1599				
Peak-hour factor, PHF	0.92	0.95	0.95	0.95	0.95	0.92	0.95	0.92	0.95	0.92	0.92	0.92
Adj. Flow (vph)	0	937	47	95	792	0	94	0	140	0	0	0
RTOR Reduction (vph)	0	0	14	0	0	0	0	131	0	0	0	0
Lane Group Flow (vph)	0	937	33	95	792	0	94	9	0	0	0	0
Heavy Vehicles (%)	2%	2%	10%	2%	2%	2%	1%	2%	1%	2%	2%	2%
Turn Type		NA	pm+ov	pm+pt	NA		pm+pt	NA				
Protected Phases		2	3	1	6		3	8			4	
Permitted Phases			2	6			8			4		
Actuated Green, G (s)		41.6	45.6	51.0	51.0		4.0	4.0				
Effective Green, g (s)		41.6	45.6	51.0	51.0		4.0	4.0				
Actuated g/C Ratio		0.64	0.70	0.78	0.78		0.06	0.06				
Clearance Time (s)		5.0	5.0	5.0	5.0		5.0	5.0				
Vehicle Extension (s)		2.0	2.0	2.0	2.0		2.0	2.0				
Lane Grp Cap (vph)		2264	1142	450	2776		109	98				
v/s Ratio Prot		c0.26	0.00	0.01	c0.22		c0.05	0.01				
v/s Ratio Perm			0.02	0.15								
v/c Ratio		0.41	0.03	0.21	0.29		0.86	0.09				
Uniform Delay, d1		5.7	3.0	2.3	1.9		30.2	28.8				
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00				
Incremental Delay, d2		0.6	0.0	0.1	0.3		44.9	0.1				
Delay (s)		6.3	3.0	2.4	2.2		75.1	28.9				
Level of Service		A	A	A	A		E	C				
Approach Delay (s)		6.1			2.2			47.5			0.0	
Approach LOS		A			A			D			A	

Intersection Summary			
HCM 2000 Control Delay	9.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	50.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



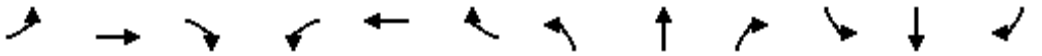
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	890	45	90	752	0	89	0	133	0	0	0
Future Volume (veh/h)	0	890	45	90	752	0	89	0	133	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1752	1870	1870	1870	1885	1870	1885	1870	1870	1870
Adj Flow Rate, veh/h	0	937	47	95	792	0	94	0	140	0	0	0
Peak Hour Factor	0.92	0.95	0.95	0.95	0.95	0.92	0.95	0.92	0.95	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	10	2	2	2	1	2	1	2	2	2
Cap, veh/h	0	2028	961	486	2574	0	249	0	193	0	5	0
Arrive On Green	0.00	0.57	0.57	0.08	0.72	0.00	0.08	0.00	0.12	0.00	0.00	0.00
Sat Flow, veh/h	0	3647	1485	1781	3647	0	1795	0	1585	0	-37191	0
Grp Volume(v), veh/h	0	937	47	95	792	0	94	0	140	0	0	0
Grp Sat Flow(s),veh/h/ln	0	1777	1485	1781	1777	0	1795	0	1585	0	1777	0
Q Serve(g_s), s	0.0	10.0	0.7	1.2	5.1	0.0	3.3	0.0	5.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	10.0	0.7	1.2	5.1	0.0	3.3	0.0	5.5	0.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	0	2028	961	486	2574	0	249	0	193	0	5	0
V/C Ratio(X)	0.00	0.46	0.05	0.20	0.31	0.00	0.38	0.00	0.73	0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	2028	961	486	2574	0	249	0	671	0	984	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.43	0.43	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	8.1	4.2	4.9	3.2	0.0	29.1	0.0	27.5	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	0.1	0.0	0.1	0.0	0.4	0.0	1.9	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.9	0.2	0.2	0.8	0.0	1.4	0.0	2.1	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	8.9	4.3	4.9	3.3	0.0	29.5	0.0	29.4	0.0	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C	A	C	A	A	A
Approach Vol, veh/h		984			887			234			0	
Approach Delay, s/veh		8.7			3.5			29.5			0.0	
Approach LOS		A			A			C				

Timer - Assigned Phs	1	2	3	4		6		8				
Phs Duration (G+Y+Rc), s	10.0	42.1	10.0	2.9		52.1		12.9				
Change Period (Y+Rc), s	5.0	5.0	5.0	* 5		5.0		5.0				
Max Green Setting (Gmax), s	5.0	17.5	5.0	* 18		27.5		27.5				
Max Q Clear Time (g_c+I1), s	3.2	12.0	5.3	0.0		7.1		7.5				
Green Ext Time (p_c), s	0.0	2.1	0.0	0.0		3.2		0.5				

Intersection Summary	
HCM 6th Ctrl Delay	8.8
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

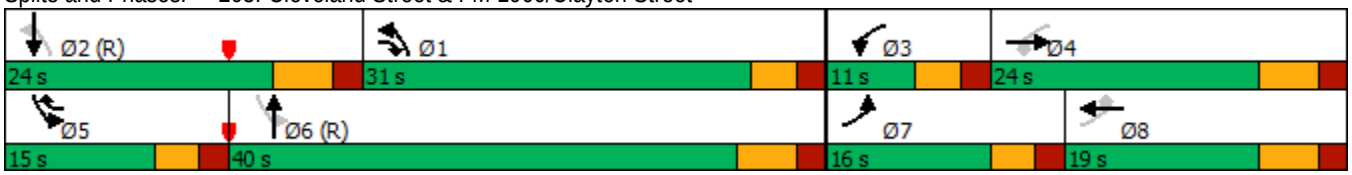


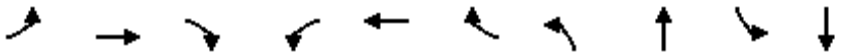
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	302	342	504	54	249	33	562	1080	82	142	160	57
Future Volume (vph)	302	342	504	54	249	33	562	1080	82	142	160	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	600		600	0		300	225		0	100		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.939	0.850			0.850		0.989			0.960	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	3208	1427	1517	1863	1553	1736	3495	0	1805	3257	0
Flt Permitted	0.315			0.219			0.612			0.121		
Satd. Flow (perm)	581	3208	1427	350	1863	1553	1118	3495	0	230	3257	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		145	276			170		10			50	
Link Speed (mph)		35			35			55			45	
Link Distance (ft)		2048			1513			495			3038	
Travel Time (s)		39.9			29.5			6.1			46.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	3%	0%	3%	19%	2%	4%	4%	2%	4%	0%	8%	2%
Adj. Flow (vph)	311	353	520	56	257	34	579	1113	85	146	165	59
Shared Lane Traffic (%)			47%									
Lane Group Flow (vph)	311	597	276	56	257	34	579	1198	0	146	224	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA	pm+ov	D.P+P	NA	pm+ov	D.P+P	NA		D.P+P	NA	
Protected Phases	7	4	1	3	8	5	1	6		5	2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	8		4	4		8	2			6		
Detector Phase	7	4	1	3	8	5	1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0	10.0	6.0	10.0	10.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	16.0	15.0	11.0	16.0	15.0	15.0	16.0		15.0	16.0	
Total Split (s)	16.0	24.0	31.0	11.0	19.0	15.0	31.0	40.0		15.0	24.0	
Total Split (%)	17.8%	26.7%	34.4%	12.2%	21.1%	16.7%	34.4%	44.4%		16.7%	26.7%	
Maximum Green (s)	11.0	18.0	26.0	6.0	13.0	10.0	26.0	34.0		10.0	18.0	
Yellow Time (s)	3.0	4.0	3.0	3.0	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	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	6.0	5.0	5.0	6.0	5.0	5.0	6.0		5.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	4.0	4.0	3.0	5.0	4.0	4.0	4.0		4.0	4.0	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	
Act Effct Green (s)	25.0	20.2	48.2	26.0	13.0	29.0	45.0	34.0		45.0	18.0	
Actuated g/C Ratio	0.28	0.22	0.54	0.29	0.14	0.32	0.50	0.38		0.50	0.20	
v/c Ratio	1.02	0.72	0.31	0.31	0.96	0.06	0.79	0.90		0.50	0.32	
Control Delay	86.9	30.7	1.8	25.9	85.1	0.2	28.2	37.3		18.3	25.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	86.9	30.7	1.8	25.9	85.1	0.2	28.2	37.3		18.3	25.2	
LOS	F	C	A	C	F	A	C	D		B	C	
Approach Delay		38.7			67.2			34.4			22.5	
Approach LOS		D			E			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:NBSB, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay: 37.7		Intersection LOS: D	
Intersection Capacity Utilization 89.0%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 203: Cleveland Street & FM 1960/Clayton Street



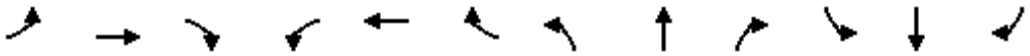


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	311	597	276	56	257	34	579	1198	146	224
v/c Ratio	1.02	0.72	0.31	0.31	0.96	0.06	0.79	0.90	0.50	0.32
Control Delay	86.9	30.7	1.8	25.9	85.1	0.2	28.2	37.3	18.3	25.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	86.9	30.7	1.8	25.9	85.1	0.2	28.2	37.3	18.3	25.2
Queue Length 50th (ft)	~146	135	0	22	147	0	205	330	38	44
Queue Length 95th (ft)	#292	#205	25	49	#296	0	#317	#463	81	77
Internal Link Dist (ft)		1968			1433			415		2958
Turn Bay Length (ft)	600		600			300	225		100	
Base Capacity (vph)	304	832	892	179	269	615	737	1326	290	691
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	0.72	0.31	0.31	0.96	0.06	0.79	0.90	0.50	0.32

Intersection Summary

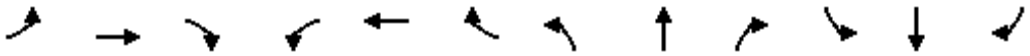
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	302	342	504	54	249	33	562	1080	82	142	160	57
Future Volume (vph)	302	342	504	54	249	33	562	1080	82	142	160	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0	5.0	5.0	6.0	5.0	5.0	6.0		5.0	6.0	
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.94	0.85	1.00	1.00	0.85	1.00	0.99		1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1752	3207	1427	1517	1863	1553	1736	3497		1805	3258	
Flt Permitted	0.31	1.00	1.00	0.22	1.00	1.00	0.61	1.00		0.12	1.00	
Satd. Flow (perm)	581	3207	1427	350	1863	1553	1118	3497		230	3258	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	311	353	520	56	257	34	579	1113	85	146	165	59
RTOR Reduction (vph)	0	112	134	0	0	25	0	6	0	0	41	0
Lane Group Flow (vph)	311	485	142	56	257	9	579	1192	0	146	183	0
Heavy Vehicles (%)	3%	0%	3%	19%	2%	4%	4%	2%	4%	0%	8%	2%
Turn Type	D.P+P	NA	pm+ov	D.P+P	NA	pm+ov	D.P+P	NA		D.P+P	NA	
Protected Phases	7	4	1	3	8	5	1	6		5	2	
Permitted Phases	8		4	4		8	2			6		
Actuated Green, G (s)	25.0	20.2	46.2	25.0	14.0	24.0	43.0	33.0		43.0	17.0	
Effective Green, g (s)	25.0	20.2	46.2	25.0	14.0	24.0	43.0	33.0		43.0	17.0	
Actuated g/C Ratio	0.28	0.22	0.51	0.28	0.16	0.27	0.48	0.37		0.48	0.19	
Clearance Time (s)	5.0	6.0	5.0	5.0	6.0	5.0	5.0	6.0		5.0	6.0	
Vehicle Extension (s)	3.0	4.0	4.0	3.0	5.0	4.0	4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	304	719	732	159	289	414	712	1282		284	615	
v/s Ratio Prot	c0.12	0.15	0.06	0.02	0.14	0.00	0.23	c0.34		0.06	0.06	
v/s Ratio Perm	c0.16		0.04	0.08		0.00	c0.15			0.19		
v/c Ratio	1.02	0.67	0.19	0.35	0.89	0.02	0.81	0.93		0.51	0.30	
Uniform Delay, d1	30.2	31.9	11.8	24.9	37.2	24.3	19.5	27.4		17.4	31.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	57.6	2.7	0.2	1.3	28.0	0.0	7.4	13.1		2.1	1.2	
Delay (s)	87.8	34.6	12.0	26.3	65.3	24.4	26.9	40.5		19.5	32.6	
Level of Service	F	C	B	C	E	C	C	D		B	C	
Approach Delay (s)		43.3			55.0			36.1			27.4	
Approach LOS		D			D			D			C	

Intersection Summary			
HCM 2000 Control Delay	39.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	89.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



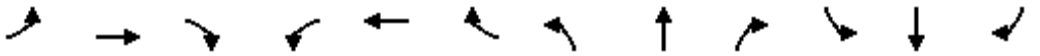
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	302	342	504	54	249	33	562	1080	82	142	160	57
Future Volume (veh/h)	302	342	504	54	249	33	562	1080	82	142	160	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1900	1856	1618	1870	1841	1841	1870	1841	1900	1781	1870
Adj Flow Rate, veh/h	311	353	520	56	257	34	579	1113	85	146	165	59
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	0	3	19	2	4	4	2	4	0	8	2
Cap, veh/h	305	411	1554	178	270	394	727	1274	97	310	494	170
Arrive On Green	0.12	0.22	0.22	0.05	0.14	0.14	0.28	0.38	0.38	0.11	0.20	0.20
Sat Flow, veh/h	1767	1900	3145	1541	1870	1560	1753	3346	255	1810	2469	852
Grp Volume(v), veh/h	311	353	520	56	257	34	579	591	607	146	111	113
Grp Sat Flow(s),veh/h/ln	1767	1900	1572	1541	1870	1560	1753	1777	1824	1810	1692	1628
Q Serve(g_s), s	11.0	16.1	1.9	2.5	12.3	1.5	13.7	27.8	27.8	4.0	5.1	5.4
Cycle Q Clear(g_c), s	11.0	16.1	1.9	2.5	12.3	1.5	13.7	27.8	27.8	4.0	5.1	5.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.52
Lane Grp Cap(c), veh/h	305	411	1554	178	270	394	727	676	694	310	338	326
V/C Ratio(X)	1.02	0.86	0.33	0.31	0.95	0.09	0.80	0.87	0.87	0.47	0.33	0.35
Avail Cap(c_a), veh/h	305	411	1554	203	270	394	746	676	694	315	338	326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.93	0.97	0.97	0.97	1.00	1.00	1.00	0.96	0.96	0.96
Uniform Delay (d), s/veh	31.9	33.9	4.4	26.7	38.2	25.7	23.8	25.9	25.9	18.6	30.8	30.9
Incr Delay (d2), s/veh	55.0	15.9	0.2	1.0	41.4	0.2	6.3	14.6	14.4	1.5	2.5	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	9.0	1.1	0.9	8.5	0.6	9.5	12.9	13.2	1.6	2.2	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	86.9	49.8	4.6	27.7	79.6	25.9	30.1	40.5	40.3	20.1	33.3	33.7
LnGrp LOS	F	D	A	C	E	C	C	D	D	C	C	C
Approach Vol, veh/h		1184			347			1777			370	
Approach Delay, s/veh		39.7			65.9			37.0			28.2	
Approach LOS		D			E			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	31.0	24.0	9.5	25.5	14.7	40.3	16.0	19.0
Change Period (Y+Rc), s	6.0	* 6	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	26.0	* 18	6.0	18.0	10.0	34.0	11.0	13.0
Max Q Clear Time (g_c+I1), s	15.7	7.4	4.5	18.1	6.0	29.8	13.0	14.3
Green Ext Time (p_c), s	2.3	1.1	0.0	0.0	0.2	3.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	39.7
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

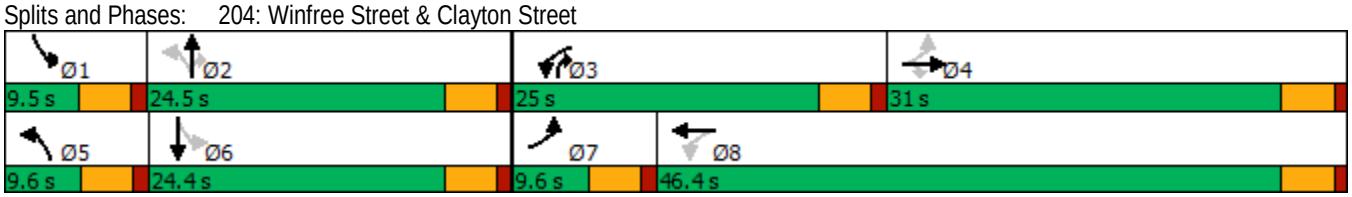


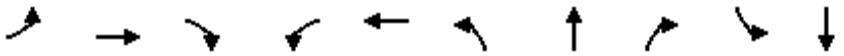
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	54	964	98	436	481	8	92	238	424	18	158	36
Future Volume (vph)	54	964	98	436	481	8	92	238	424	18	158	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		300	300		0	300		0	300		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.998				0.850		0.972	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1641	3574	1615	1770	3499	0	1770	1900	1615	1805	1818	0
Flt Permitted	0.469			0.125			0.426			0.463		
Satd. Flow (perm)	810	3574	1615	233	3499	0	794	1900	1615	880	1818	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			182		2				160		12	
Link Speed (mph)		45			30			30			30	
Link Distance (ft)		1513			1036			419			1496	
Travel Time (s)		22.9			23.5			9.5			34.0	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	10%	1%	0%	2%	3%	0%	2%	0%	0%	0%	1%	4%
Adj. Flow (vph)	55	984	100	445	491	8	94	243	433	18	161	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	55	984	100	445	499	0	94	243	433	18	198	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8			2		2	6		
Detector Phase	7	4	4	3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5		9.5	22.5	9.5	9.5	22.5	
Total Split (s)	9.6	31.0	31.0	25.0	46.4		9.6	24.5	25.0	9.5	24.4	
Total Split (%)	10.7%	34.4%	34.4%	27.8%	51.6%		10.7%	27.2%	27.8%	10.6%	27.1%	
Maximum Green (s)	5.1	26.5	26.5	20.5	41.9		5.1	20.0	20.5	5.0	19.9	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None	None	None	None		None	Min	None	None	Min	
Walk Time (s)		7.0	7.0		7.0			7.0			7.0	
Flash Dont Walk (s)		11.0	11.0		11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	30.7	25.4	25.4	49.1	43.8		20.0	18.2	41.9	18.2	14.4	
Actuated g/C Ratio	0.38	0.32	0.32	0.61	0.55		0.25	0.23	0.52	0.23	0.18	
v/c Ratio	0.15	0.87	0.16	0.87	0.26		0.36	0.56	0.47	0.07	0.59	
Control Delay	11.3	37.3	0.5	40.4	12.1		26.9	34.5	9.8	21.8	37.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	11.3	37.3	0.5	40.4	12.1		26.9	34.5	9.8	21.8	37.1	
LOS	B	D	A	D	B		C	C	A	C	D	
Approach Delay		32.8			25.5			19.7			35.8	
Approach LOS		C			C			B			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 80			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay: 27.4		Intersection LOS: C	
Intersection Capacity Utilization 82.5%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 204: Winfree Street & Clayton Street

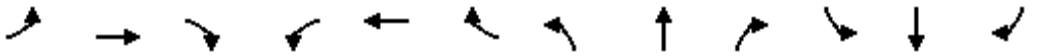




Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	55	984	100	445	499	94	243	433	18	198
v/c Ratio	0.15	0.87	0.16	0.87	0.26	0.36	0.56	0.47	0.07	0.59
Control Delay	11.3	37.3	0.5	40.4	12.1	26.9	34.5	9.8	21.8	37.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.3	37.3	0.5	40.4	12.1	26.9	34.5	9.8	21.8	37.1
Queue Length 50th (ft)	10	255	0	170	76	38	105	67	7	92
Queue Length 95th (ft)	29	#410	1	#379	124	74	201	170	22	159
Internal Link Dist (ft)		1433			956		339			1416
Turn Bay Length (ft)	300		300	300		300			300	
Base Capacity (vph)	364	1222	672	549	1976	262	511	960	259	476
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	0.15	0.81	0.15	0.81	0.25	0.36	0.48	0.45	0.07	0.42

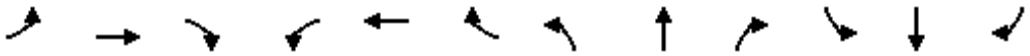
Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	54	964	98	436	481	8	92	238	424	18	158	36
Future Volume (vph)	54	964	98	436	481	8	92	238	424	18	158	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1641	3574	1615	1770	3498		1770	1900	1615	1805	1818	
Flt Permitted	0.47	1.00	1.00	0.12	1.00		0.43	1.00	1.00	0.46	1.00	
Satd. Flow (perm)	810	3574	1615	233	3498		794	1900	1615	880	1818	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	55	984	100	445	491	8	94	243	433	18	161	37
RTOR Reduction (vph)	0	0	67	0	1	0	0	0	89	0	10	0
Lane Group Flow (vph)	55	984	33	445	498	0	94	243	344	18	188	0
Heavy Vehicles (%)	10%	1%	0%	2%	3%	0%	2%	0%	0%	0%	1%	4%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases	4		4	8			2		2	6		
Actuated Green, G (s)	30.3	27.5	27.5	51.1	43.8		22.0	18.2	37.3	18.0	16.2	
Effective Green, g (s)	30.3	27.5	27.5	51.1	43.8		22.0	18.2	37.3	18.0	16.2	
Actuated g/C Ratio	0.36	0.33	0.33	0.60	0.52		0.26	0.22	0.44	0.21	0.19	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	317	1161	524	487	1811		250	408	797	206	348	
v/s Ratio Prot	0.01	0.28		c0.21	0.14		c0.02	c0.13	0.10	0.00	0.10	
v/s Ratio Perm	0.06		0.02	c0.35			0.08		0.12	0.02		
v/c Ratio	0.17	0.85	0.06	0.91	0.28		0.38	0.60	0.43	0.09	0.54	
Uniform Delay, d1	18.0	26.6	19.7	22.6	11.5		24.7	29.9	16.3	26.6	30.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.3	5.9	0.0	21.6	0.1		1.0	2.3	0.4	0.2	1.7	
Delay (s)	18.3	32.5	19.7	44.1	11.6		25.6	32.2	16.7	26.8	32.6	
Level of Service	B	C	B	D	B		C	C	B	C	C	
Approach Delay (s)		30.7			26.9			22.7			32.1	
Approach LOS		C			C			C			C	

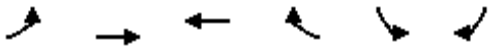
Intersection Summary			
HCM 2000 Control Delay	27.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	84.6	Sum of lost time (s)	18.0
Intersection Capacity Utilization	82.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	964	98	436	481	8	92	238	424	18	158	36
Future Volume (veh/h)	54	964	98	436	481	8	92	238	424	18	158	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1885	1900	1870	1856	1900	1870	1900	1900	1900	1885	1841
Adj Flow Rate, veh/h	55	984	100	445	491	8	94	243	433	18	161	37
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	10	1	0	2	3	0	2	0	0	0	1	4
Cap, veh/h	424	1114	501	489	1692	28	312	448	717	222	294	68
Arrive On Green	0.04	0.31	0.31	0.21	0.48	0.48	0.06	0.24	0.24	0.02	0.20	0.20
Sat Flow, veh/h	1668	3582	1610	1781	3550	58	1781	1900	1610	1810	1483	341
Grp Volume(v), veh/h	55	984	100	445	244	255	94	243	433	18	0	198
Grp Sat Flow(s),veh/h/ln	1668	1791	1610	1781	1763	1845	1781	1900	1610	1810	0	1824
Q Serve(g_s), s	1.8	21.0	3.7	14.3	6.8	6.8	3.3	9.0	16.5	0.6	0.0	7.9
Cycle Q Clear(g_c), s	1.8	21.0	3.7	14.3	6.8	6.8	3.3	9.0	16.5	0.6	0.0	7.9
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		0.19
Lane Grp Cap(c), veh/h	424	1114	501	489	840	879	312	448	717	222	0	362
V/C Ratio(X)	0.13	0.88	0.20	0.91	0.29	0.29	0.30	0.54	0.60	0.08	0.00	0.55
Avail Cap(c_a), veh/h	457	1177	529	568	916	959	321	471	737	297	0	450
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.3	26.4	20.4	19.4	12.8	12.8	23.6	27.0	17.0	25.1	0.0	29.1
Incr Delay (d2), s/veh	0.1	7.9	0.2	17.3	0.2	0.2	0.5	1.1	1.3	0.2	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	9.3	1.4	7.7	2.5	2.7	1.4	4.1	5.9	0.3	0.0	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.5	34.3	20.6	36.7	13.0	13.0	24.2	28.1	18.3	25.2	0.0	30.4
LnGrp LOS	B	C	C	D	B	B	C	C	B	C	A	C
Approach Vol, veh/h		1139			944			770			216	
Approach Delay, s/veh		32.3			24.2			22.1			29.9	
Approach LOS		C			C			C			C	

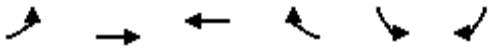
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.2	23.5	21.4	29.6	9.2	20.5	8.0	42.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.0	20.0	20.5	26.5	5.1	19.9	5.1	41.9
Max Q Clear Time (g_c+I1), s	2.6	18.5	16.3	23.0	5.3	9.9	3.8	8.8
Green Ext Time (p_c), s	0.0	0.5	0.6	2.0	0.0	0.7	0.0	3.2

Intersection Summary	
HCM 6th Ctrl Delay	27.1
HCM 6th LOS	C



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	19	1576	692	0	0	66
Future Volume (vph)	19	1576	692	0	0	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt					0.865	
Flt Protected		0.999				
Satd. Flow (prot)	0	3571	1881	0	1644	0
Flt Permitted		0.999				
Satd. Flow (perm)	0	3571	1881	0	1644	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		1036	1081		1292	
Travel Time (s)		15.7	16.4		29.4	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	1%	1%	0%	0%	0%
Adj. Flow (vph)	21	1771	778	0	0	74
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1792	778	0	74	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 67.7%		ICU Level of Service C	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	19	1576	692	0	0	66
Future Volume (Veh/h)	19	1576	692	0	0	66
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	21	1771	778	0	0	74
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1036				
pX, platoon unblocked					0.74	
vC, conflicting volume	778				1706	778
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	778				1246	778
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				100	78
cM capacity (veh/h)	848				121	343

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	611	1181	778	74
Volume Left	21	0	0	0
Volume Right	0	0	0	74
cSH	848	1700	1700	343
Volume to Capacity	0.02	0.69	0.46	0.22
Queue Length 95th (ft)	2	0	0	20
Control Delay (s)	0.7	0.0	0.0	18.3
Lane LOS	A			C
Approach Delay (s)	0.2		0.0	18.3
Approach LOS				C

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	67.7%	ICU Level of Service	C
Analysis Period (min)	15		

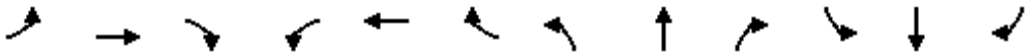
Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	19	1576	692	0	0	66
Future Vol, veh/h	19	1576	692	0	0	66
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	1	1	0	0	0
Mvmt Flow	21	1771	778	0	0	74

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	778	0	-	0	1706	778
Stage 1	-	-	-	-	778	-
Stage 2	-	-	-	-	928	-
Critical Hdwy	4.1	-	-	-	6.6	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	848	-	-	-	92	400
Stage 1	-	-	-	-	456	-
Stage 2	-	-	-	-	350	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	848	-	-	-	0	400
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	350	-

Approach	EB	WB	SB
HCM Control Delay, s	4.7	0	16
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	848	-	-	-	400
HCM Lane V/C Ratio	0.025	-	-	-	0.185
HCM Control Delay (s)	9.4	4.6	-	-	16
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	27	20	11	28	83	27	1214	27	12	562	27
Future Volume (vph)	106	27	20	11	28	83	27	1214	27	12	562	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.982				0.850		0.997			0.993	
Flt Protected		0.967			0.986			0.999			0.999	
Satd. Flow (prot)	0	1792	0	0	1772	1583	0	3463	0	0	3391	0
Flt Permitted		0.768			0.895			0.933			0.919	
Satd. Flow (perm)	0	1423	0	0	1609	1583	0	3234	0	0	3119	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13				55		5			11	
Link Speed (mph)		30			30			45			55	
Link Distance (ft)		594			763			3038			1923	
Travel Time (s)		13.5			17.3			46.0			23.8	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	1%	0%	0%	20%	0%	2%	0%	4%	0%	0%	6%	0%
Adj. Flow (vph)	114	29	22	12	30	89	29	1305	29	13	604	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	165	0	0	42	89	0	1363	0	0	646	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4			8		8	6			2		
Detector Phase	4	4		8	8	8	6	6		2	2	
Switch Phase												

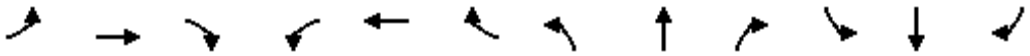
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	11.0		24.0	24.0	24.0	16.0	16.0		16.0	16.0	
Total Split (s)	24.0	24.0		24.0	24.0	24.0	36.0	36.0		36.0	36.0	
Total Split (%)	40.0%	40.0%		40.0%	40.0%	40.0%	60.0%	60.0%		60.0%	60.0%	
Maximum Green (s)	18.0	18.0		18.0	18.0	18.0	30.0	30.0		30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0	0.0		0.0			0.0	
Total Lost Time (s)		6.0			6.0	6.0		6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	4.0	4.0		4.0	4.0	
Recall Mode	None	None		None	None	None	C-Max	C-Max		C-Max	C-Max	
Walk Time (s)				5.0	5.0	5.0						
Flash Dont Walk (s)				13.0	13.0	13.0						
Pedestrian Calls (#/hr)				0	0	0						
Act Effct Green (s)		10.8			10.7	10.7		40.7			40.7	
Actuated g/C Ratio		0.18			0.18	0.18		0.68			0.68	
v/c Ratio		0.62			0.15	0.27		0.62			0.30	
Control Delay		30.3			19.8	11.7		9.6			6.2	
Queue Delay		0.0			0.0	0.0		0.0			0.0	
Total Delay		30.3			19.8	11.7		9.6			6.2	
LOS		C			B	B		A			A	
Approach Delay		30.3			14.3			9.6			6.2	
Approach LOS		C			B			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay: 10.4		Intersection LOS: B	
Intersection Capacity Utilization 78.9%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 206: Cleveland Street & Linney Street

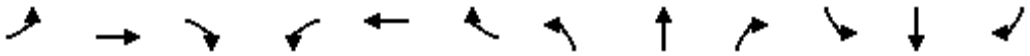
Lane Group	EBT	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	165	42	89	1363	646
v/c Ratio	0.62	0.15	0.27	0.62	0.30
Control Delay	30.3	19.8	11.7	9.6	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	30.3	19.8	11.7	9.6	6.2
Queue Length 50th (ft)	51	13	10	144	48
Queue Length 95th (ft)	93	32	38	271	96
Internal Link Dist (ft)	514	683		2958	1843
Turn Bay Length (ft)					
Base Capacity (vph)	436	482	513	2195	2119
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.38	0.09	0.17	0.62	0.30

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	27	20	11	28	83	27	1214	27	12	562	27
Future Volume (vph)	106	27	20	11	28	83	27	1214	27	12	562	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0	6.0		6.0			6.0	
Lane Util. Factor		1.00			1.00	1.00		0.95			0.95	
Frt		0.98			1.00	0.85		1.00			0.99	
Flt Protected		0.97			0.99	1.00		1.00			1.00	
Satd. Flow (prot)		1791			1772	1583		3462			3392	
Flt Permitted		0.77			0.89	1.00		0.93			0.92	
Satd. Flow (perm)		1422			1608	1583		3232			3119	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	114	29	22	12	30	89	29	1305	29	13	604	29
RTOR Reduction (vph)	0	11	0	0	0	46	0	2	0	0	4	0
Lane Group Flow (vph)	0	154	0	0	42	43	0	1361	0	0	642	0
Heavy Vehicles (%)	1%	0%	0%	20%	0%	2%	0%	4%	0%	0%	6%	0%
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4			8		8	6			2		
Actuated Green, G (s)		9.7			9.7	9.7		38.3			38.3	
Effective Green, g (s)		9.7			9.7	9.7		38.3			38.3	
Actuated g/C Ratio		0.16			0.16	0.16		0.64			0.64	
Clearance Time (s)		6.0			6.0	6.0		6.0			6.0	
Vehicle Extension (s)		2.0			2.0	2.0		4.0			4.0	
Lane Grp Cap (vph)		229			259	255		2063			1990	
v/s Ratio Prot												
v/s Ratio Perm		c0.11			0.03	0.03		c0.42			0.21	
v/c Ratio		0.67			0.16	0.17		0.66			0.32	
Uniform Delay, d1		23.7			21.7	21.7		6.8			4.9	
Progression Factor		1.00			1.00	1.00		1.00			1.00	
Incremental Delay, d2		6.0			0.1	0.1		1.7			0.4	
Delay (s)		29.7			21.8	21.8		8.5			5.4	
Level of Service		C			C	C		A			A	
Approach Delay (s)		29.7			21.8			8.5			5.4	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	9.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	78.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	27	20	11	28	83	27	1214	27	12	562	27
Future Volume (veh/h)	106	27	20	11	28	83	27	1214	27	12	562	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1900	1604	1900	1870	1900	1841	1900	1900	1811	1900
Adj Flow Rate, veh/h	114	29	22	12	30	89	29	1305	29	13	604	29
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	0	0	20	0	2	0	4	0	0	6	0
Cap, veh/h	236	50	28	124	243	249	84	2155	47	75	2053	97
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	855	320	181	298	1547	1585	33	3352	74	19	3192	151
Grp Volume(v), veh/h	165	0	0	42	0	89	710	0	653	335	0	311
Grp Sat Flow(s),veh/h/ln	1356	0	0	1845	0	1585	1796	0	1662	1742	0	1621
Q Serve(g_s), s	6.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	13.9	0.0	0.0	5.1
Cycle Q Clear(g_c), s	7.1	0.0	0.0	1.1	0.0	3.0	13.4	0.0	13.9	4.9	0.0	5.1
Prop In Lane	0.69		0.13	0.29		1.00	0.04		0.04	0.04		0.09
Lane Grp Cap(c), veh/h	314	0	0	367	0	249	1218	0	1069	1183	0	1042
V/C Ratio(X)	0.53	0.00	0.00	0.11	0.00	0.36	0.58	0.00	0.61	0.28	0.00	0.30
Avail Cap(c_a), veh/h	516	0	0	612	0	476	1218	0	1069	1183	0	1042
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.30	0.00	0.30	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.4	0.0	0.0	21.8	0.0	22.6	6.2	0.0	6.3	4.7	0.0	4.7
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.1	0.0	0.3	0.6	0.0	0.8	0.6	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	0.0	0.5	0.0	1.1	3.0	0.0	2.8	1.0	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.9	0.0	0.0	21.9	0.0	22.9	6.8	0.0	7.1	5.3	0.0	5.5
LnGrp LOS	C	A	A	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		165			131			1363			646	
Approach Delay, s/veh		24.9			22.6			7.0			5.4	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	44.6	15.4	44.6	15.4
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	30.0	18.0	30.0	18.0
Max Q Clear Time (g_c+I1), s	7.1	9.1	15.9	5.0
Green Ext Time (p_c), s	5.1	0.4	9.3	0.2

Intersection Summary	
HCM 6th Ctrl Delay	8.7
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.

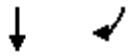
Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	6	151	2303	42	8	2028	72	18	5	8	2	56
Future Volume (vph)	6	151	2303	42	8	2028	72	18	5	8	2	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		200		0	200		0	0		0		0
Storage Lanes		1		0	1		0	0		0		0
Taper Length (ft)		25			25			25				25
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00
Frt			0.997			0.995			0.965			
Flt Protected		0.950			0.950				0.972			
Satd. Flow (prot)	0	1732	5023	0	1805	4969	0	0	1476	0	0	0
Flt Permitted		0.074			0.082				0.607			
Satd. Flow (perm)	0	135	5023	0	156	4969	0	0	922	0	0	0
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			5			9			9			
Link Speed (mph)			55			50			30			
Link Distance (ft)			1682			1949			1310			
Travel Time (s)			20.9			26.6			29.8			
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	33%	3%	3%	0%	0%	4%	0%	25%	0%	25%	0%	0%
Adj. Flow (vph)	7	170	2588	47	9	2279	81	20	6	9	2	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	177	2635	0	9	2360	0	0	35	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left
Median Width(ft)			12			12			0			
Link Offset(ft)			0			0			0			
Crosswalk Width(ft)			16			16			16			
Two way Left Turn Lane			Yes			Yes						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	15		9	15		9	9	15
Number of Detectors	1	1	2		1	2		1	2		1	1
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru		Left	Left
Leading Detector (ft)	20	20	100		20	100		20	100		20	20
Trailing Detector (ft)	0	0	0		0	0		0	0		0	0
Detector 1 Position(ft)	0	0	0		0	0		0	0		0	0
Detector 1 Size(ft)	20	20	6		20	6		20	6		20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)			94			94			94			
Detector 2 Size(ft)			6			6			6			
Detector 2 Type			Cl+Ex			Cl+Ex			Cl+Ex			
Detector 2 Channel												
Detector 2 Extend (s)			0.0			0.0			0.0			
Turn Type	custom	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	Perm
Protected Phases		5	2		1	6			8			

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	13	187
Future Volume (vph)	13	187
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.902	
Flt Protected	0.989	
Satd. Flow (prot)	1671	0
Flt Permitted	0.913	
Satd. Flow (perm)	1542	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	101	
Link Speed (mph)	30	
Link Distance (ft)	2374	
Travel Time (s)	54.0	
Peak Hour Factor	0.89	0.89
Heavy Vehicles (%)	0%	2%
Adj. Flow (vph)	15	210
Shared Lane Traffic (%)		
Lane Group Flow (vph)	290	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	4	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Permitted Phases	5	2			6			8			4	4
Detector Phase	5	5	2		1	6		8	8		4	4
Switch Phase												
Minimum Initial (s)	8.0	8.0	10.0		5.0	10.0		8.0	8.0		8.0	8.0
Minimum Split (s)	13.0	13.0	17.0		9.5	22.5		13.5	13.5		13.5	13.5
Total Split (s)	13.0	13.0	58.4		9.6	55.0		22.0	22.0		22.0	22.0
Total Split (%)	14.4%	14.4%	64.9%		10.7%	61.1%		24.4%	24.4%		24.4%	24.4%
Maximum Green (s)	8.0	8.0	51.4		5.1	48.0		16.5	16.5		16.5	16.5
Yellow Time (s)	3.5	3.5	5.0		3.5	5.0		3.5	3.5		3.5	3.5
All-Red Time (s)	1.5	1.5	2.0		1.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0			0.0			
Total Lost Time (s)		5.0	7.0		4.5	7.0			5.5			
Lead/Lag	Lead	Lead	Lag		Lead	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes						
Vehicle Extension (s)	5.0	5.0	5.0		3.0	5.0		5.0	5.0		5.0	5.0
Recall Mode	None	None	C-Max		None	C-Max		None	None		None	None
Act Effct Green (s)		63.8	60.2		56.6	48.8			15.4			
Actuated g/C Ratio		0.71	0.67		0.63	0.54			0.17			
v/c Ratio		0.73	0.78		0.05	0.87			0.21			
Control Delay		35.0	13.8		4.4	17.3			28.7			
Queue Delay		0.0	0.0		0.0	0.0			0.0			
Total Delay		35.0	13.8		4.4	17.3			28.7			
LOS		C	B		A	B			C			
Approach Delay			15.1			17.2			28.7			
Approach LOS			B			B			C			

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay: 17.7		Intersection LOS: B	
Intersection Capacity Utilization 79.7%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 301: Bowie Street & US 90



Lane Group	SBT	SBR
Permitted Phases		
Detector Phase	4	
Switch Phase		
Minimum Initial (s)	8.0	
Minimum Split (s)	13.5	
Total Split (s)	22.0	
Total Split (%)	24.4%	
Maximum Green (s)	16.5	
Yellow Time (s)	3.5	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.5	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	5.0	
Recall Mode	None	
Act Effct Green (s)	15.4	
Actuated g/C Ratio	0.17	
v/c Ratio	0.83	
Control Delay	44.7	
Queue Delay	0.0	
Total Delay	44.7	
LOS	D	
Approach Delay	44.7	
Approach LOS	D	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	177	2635	9	2360	35	290
v/c Ratio	0.73	0.78	0.05	0.87	0.21	0.83
Control Delay	35.0	13.8	4.4	17.3	28.7	44.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.0	13.8	4.4	17.3	28.7	44.7
Queue Length 50th (ft)	47	323	1	247	13	104
Queue Length 95th (ft)	#146	532	m1	m274	39	#229
Internal Link Dist (ft)		1602		1869	1230	2294
Turn Bay Length (ft)	200		200			
Base Capacity (vph)	242	3359	193	2699	176	365
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	0.78	0.05	0.87	0.20	0.79

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	6	151	2303	42	8	2028	72	18	5	8	2	56
Future Volume (vph)	6	151	2303	42	8	2028	72	18	5	8	2	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	7.0		4.5	7.0			5.5			
Lane Util. Factor		1.00	0.91		1.00	0.91			1.00			
Frt		1.00	1.00		1.00	0.99			0.97			
Flt Protected		0.95	1.00		0.95	1.00			0.97			
Satd. Flow (prot)		1732	5025		1805	4968			1477			
Flt Permitted		0.07	1.00		0.08	1.00			0.61			
Satd. Flow (perm)		136	5025		156	4968			922			
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	7	170	2588	47	9	2279	81	20	6	9	2	63
RTOR Reduction (vph)	0	0	2	0	0	4	0	0	7	0	0	0
Lane Group Flow (vph)	0	177	2633	0	9	2356	0	0	28	0	0	0
Heavy Vehicles (%)	33%	3%	3%	0%	0%	4%	0%	25%	0%	25%	0%	0%
Turn Type	custom	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	Perm
Protected Phases		5	2		1	6			8			
Permitted Phases	5	2			6			8			4	4
Actuated Green, G (s)		62.1	56.6		49.8	48.8			15.4			
Effective Green, g (s)		62.1	56.6		49.8	48.8			15.4			
Actuated g/C Ratio		0.69	0.63		0.55	0.54			0.17			
Clearance Time (s)		5.0	7.0		4.5	7.0			5.5			
Vehicle Extension (s)		5.0	5.0		3.0	5.0			5.0			
Lane Grp Cap (vph)		241	3160		104	2693			157			
v/s Ratio Prot		c0.07	c0.52		0.00	0.47						
v/s Ratio Perm		0.44			0.05				0.03			
v/c Ratio		0.73	0.83		0.09	0.87			0.18			
Uniform Delay, d1		21.3	13.0		12.3	17.9			31.9			
Progression Factor		1.00	1.00		0.94	0.78			1.00			
Incremental Delay, d2		13.2	2.7		0.2	2.7			1.1			
Delay (s)		34.5	15.8		11.8	16.7			33.0			
Level of Service		C	B		B	B			C			
Approach Delay (s)			16.9			16.7			33.0			
Approach LOS			B			B			C			

Intersection Summary			
HCM 2000 Control Delay	18.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	79.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	13	187
Future Volume (vph)	13	187
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.5	
Lane Util. Factor	1.00	
Frt	0.90	
Flt Protected	0.99	
Satd. Flow (prot)	1671	
Flt Permitted	0.91	
Satd. Flow (perm)	1542	
Peak-hour factor, PHF	0.89	0.89
Adj. Flow (vph)	15	210
RTOR Reduction (vph)	84	0
Lane Group Flow (vph)	206	0
Heavy Vehicles (%)	0%	2%
Turn Type	NA	
Protected Phases	4	
Permitted Phases		
Actuated Green, G (s)	15.4	
Effective Green, g (s)	15.4	
Actuated g/C Ratio	0.17	
Clearance Time (s)	5.5	
Vehicle Extension (s)	5.0	
Lane Grp Cap (vph)	263	
v/s Ratio Prot		
v/s Ratio Perm	c0.13	
v/c Ratio	0.78	
Uniform Delay, d1	35.7	
Progression Factor	1.00	
Incremental Delay, d2	16.2	
Delay (s)	51.9	
Level of Service	D	
Approach Delay (s)	51.9	
Approach LOS	D	

Intersection Summary

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (veh/h)	6	151	2303	42	8	2028	72	18	5	8	2	56
Future Volume (veh/h)	6	151	2303	42	8	2028	72	18	5	8	2	56
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0		0
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00	1.00		1.00		1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
Work Zone On Approach			No			No			No			
Adj Sat Flow, veh/h/ln		1856	1856	1900	1900	1841	1900	1530	1900	1530		1900
Adj Flow Rate, veh/h		170	2588	47	9	2279	81	20	6	9		63
Peak Hour Factor		0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89		0.89
Percent Heavy Veh, %		3	3	0	0	4	0	25	0	25		0
Cap, veh/h		315	3159	57	126	2664	94	151	49	47		100
Arrive On Green		0.09	0.62	0.62	0.02	1.00	1.00	0.18	0.18	0.18		0.18
Sat Flow, veh/h		1767	5123	93	1810	4983	176	479	266	258		277
Grp Volume(v), veh/h		170	1703	932	9	1529	831	35	0	0		288
Grp Sat Flow(s),veh/h/ln		1767	1689	1839	1810	1675	1809	1002	0	0		1597
Q Serve(g_s), s		3.4	35.1	35.5	0.2	0.0	0.0	0.0	0.0	0.0		12.9
Cycle Q Clear(g_c), s		3.4	35.1	35.5	0.2	0.0	0.0	1.4	0.0	0.0		16.2
Prop In Lane		1.00		0.05	1.00		0.10	0.57		0.26		0.22
Lane Grp Cap(c), veh/h		315	2082	1134	126	1791	967	247	0	0		342
V/C Ratio(X)		0.54	0.82	0.82	0.07	0.85	0.86	0.14	0.00	0.00		0.84
Avail Cap(c_a), veh/h		317	2082	1134	208	1791	967	247	0	0		342
HCM Platoon Ratio		1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00		1.00
Upstream Filter(I)		1.00	1.00	1.00	0.37	0.37	0.37	1.00	0.00	0.00		1.00
Uniform Delay (d), s/veh		8.9	13.3	13.4	13.9	0.0	0.0	30.6	0.0	0.0		36.5
Incr Delay (d2), s/veh		3.3	3.7	6.8	0.1	2.1	4.0	0.6	0.0	0.0		18.6
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
%ile BackOfQ(50%),veh/ln		1.2	10.7	12.7	0.1	0.5	1.1	0.7	0.0	0.0		7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		12.2	17.0	20.2	14.0	2.1	4.0	31.2	0.0	0.0		55.2
LnGrp LOS		B	B	C	B	A	A	C	A	A		E
Approach Vol, veh/h			2805			2369			35			
Approach Delay, s/veh			17.8			2.8			31.2			
Approach LOS			B			A			C			

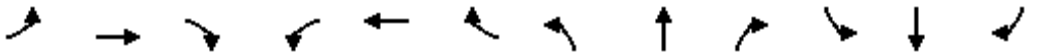
Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	62.5		22.0	12.9	55.1		22.0
Change Period (Y+Rc), s	4.5	7.0		5.5	5.0	7.0		5.5
Max Green Setting (Gmax), s	5.1	51.4		16.5	8.0	48.0		16.5
Max Q Clear Time (g_c+I1), s	2.2	37.5		18.2	5.4	2.0		3.4
Green Ext Time (p_c), s	0.0	13.5		0.0	0.2	40.8		0.1

Intersection Summary	
HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	13	187
Future Volume (veh/h)	13	187
Initial Q (Qb), veh	0	0
Ped-Bike Adj(A_pbT)		1.00
Parking Bus, Adj	1.00	1.00
Work Zone On Approach	No	
Adj Sat Flow, veh/h/ln	1900	1870
Adj Flow Rate, veh/h	15	210
Peak Hour Factor	0.89	0.89
Percent Heavy Veh, %	0	2
Cap, veh/h	29	213
Arrive On Green	0.18	0.18
Sat Flow, veh/h	156	1164
Grp Volume(v), veh/h	0	0
Grp Sat Flow(s),veh/h/ln	0	0
Q Serve(g_s), s	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0
Prop In Lane		0.73
Lane Grp Cap(c), veh/h	0	0
V/C Ratio(X)	0.00	0.00
Avail Cap(c_a), veh/h	0	0
HCM Platoon Ratio	1.00	1.00
Upstream Filter(I)	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0
Unsig. Movement Delay, s/veh		
LnGrp Delay(d),s/veh	0.0	0.0
LnGrp LOS	A	A
Approach Vol, veh/h	288	
Approach Delay, s/veh	55.2	
Approach LOS	E	
Timer - Assigned Phs		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	523	1756	18	19	1396	68	23	39	53	196	35	523
Future Volume (vph)	523	1756	18	19	1396	68	23	39	53	196	35	523
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	200		0	100		0	0		0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.993			0.913				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	4973	0	1626	4948	0	1641	1735	0	1805	1900	1599
Flt Permitted	0.123			0.145			0.732			0.441		
Satd. Flow (perm)	234	4973	0	248	4948	0	1264	1735	0	838	1900	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			9			58				125
Link Speed (mph)		55			50			55			30	
Link Distance (ft)		1949			4264			1352			297	
Travel Time (s)		24.2			58.1			16.8			6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	13%	11%	4%	6%	10%	0%	0%	0%	0%	1%
Adj. Flow (vph)	568	1909	20	21	1517	74	25	42	58	213	38	568
Shared Lane Traffic (%)												
Lane Group Flow (vph)	568	1929	0	21	1591	0	25	100	0	213	38	568
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			8			4		4
Detector Phase	5	2		1	6		3	8		7	4	5
Switch Phase												
Minimum Initial (s)	8.0	10.0		8.0	10.0		5.0	8.0		5.0	8.0	8.0
Minimum Split (s)	13.0	16.5		13.0	16.5		9.5	14.0		9.5	14.0	13.0
Total Split (s)	28.0	51.4		13.0	36.4		9.5	14.0		11.6	16.1	28.0
Total Split (%)	31.1%	57.1%		14.4%	40.4%		10.6%	15.6%		12.9%	17.9%	31.1%
Maximum Green (s)	23.0	44.9		8.0	29.9		5.0	8.0		7.1	10.1	23.0
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.0		3.5	4.0	3.5
All-Red Time (s)	1.5	2.0		1.5	2.0		1.0	2.0		1.0	2.0	1.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.5		5.0	6.5		4.5	6.0		4.5	6.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.5	3.5		3.5	3.5		3.0	4.5		3.0	4.5	3.5
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
Act Effct Green (s)	61.7	55.0		39.7	30.2		12.6	8.0		17.8	13.5	44.5
Actuated g/C Ratio	0.69	0.61		0.44	0.34		0.14	0.09		0.20	0.15	0.49
v/c Ratio	0.95	0.63		0.09	0.95		0.13	0.48		0.86	0.13	0.67
Control Delay	50.8	19.4		8.8	43.7		28.7	27.5		65.0	35.4	18.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	50.8	19.4		8.8	43.7		28.7	27.5		65.0	35.4	18.7
LOS	D	B		A	D		C	C		E	D	B
Approach Delay		26.6			43.3			27.8			31.5	
Approach LOS		C			D			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay: 32.7		Intersection LOS: C	
Intersection Capacity Utilization 89.6%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 302: Main Street & US 90

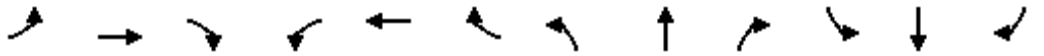
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	568	1929	21	1591	25	100	213	38	568
v/c Ratio	0.95	0.63	0.09	0.95	0.13	0.48	0.86	0.13	0.67
Control Delay	50.8	19.4	8.8	43.7	28.7	27.5	65.0	35.4	18.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.8	19.4	8.8	43.7	28.7	27.5	65.0	35.4	18.7
Queue Length 50th (ft)	~325	261	4	320	11	23	106	17	161
Queue Length 95th (ft)	m#495	405	11	#429	31	72	#178	50	342
Internal Link Dist (ft)		1869		4184		1272		217	
Turn Bay Length (ft)	150		200		100				
Base Capacity (vph)	596	3040	232	1666	197	207	247	293	853
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	0.95	0.63	0.09	0.95	0.13	0.48	0.86	0.13	0.67

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

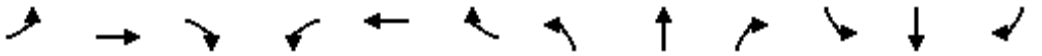
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	523	1756	18	19	1396	68	23	39	53	196	35	523
Future Volume (vph)	523	1756	18	19	1396	68	23	39	53	196	35	523
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.5		5.0	6.5		4.5	6.0		4.5	6.0	5.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00		1.00	0.99		1.00	0.91		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1805	4975		1626	4948		1641	1735		1805	1900	1599
Flt Permitted	0.12	1.00		0.15	1.00		0.73	1.00		0.44	1.00	1.00
Satd. Flow (perm)	234	4975		249	4948		1265	1735		838	1900	1599
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	568	1909	20	21	1517	74	25	42	58	213	38	568
RTOR Reduction (vph)	0	1	0	0	6	0	0	53	0	0	0	72
Lane Group Flow (vph)	568	1928	0	21	1585	0	25	47	0	213	38	496
Heavy Vehicles (%)	0%	4%	13%	11%	4%	6%	10%	0%	0%	0%	0%	1%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	57.5	49.3		30.7	27.5		9.9	7.9		20.0	13.5	38.5
Effective Green, g (s)	57.5	49.3		30.7	27.5		9.9	7.9		20.0	13.5	38.5
Actuated g/C Ratio	0.64	0.55		0.34	0.31		0.11	0.09		0.22	0.15	0.43
Clearance Time (s)	5.0	6.5		5.0	6.5		4.5	6.0		4.5	6.0	5.0
Vehicle Extension (s)	3.5	3.5		3.5	3.5		3.0	4.5		3.0	4.5	3.5
Lane Grp Cap (vph)	585	2725		133	1511		147	152		267	285	684
v/s Ratio Prot	c0.27	0.39		0.01	0.32		0.00	0.03		c0.07	0.02	0.20
v/s Ratio Perm	c0.35			0.05			0.01			c0.11		0.11
v/c Ratio	0.97	0.71		0.16	1.05		0.17	0.31		0.80	0.13	0.73
Uniform Delay, d1	25.1	15.0		19.8	31.2		36.2	38.5		31.8	33.2	21.4
Progression Factor	1.37	1.43		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	22.0	0.9		0.7	37.1		0.6	2.0		15.2	0.4	4.0
Delay (s)	56.3	22.4		20.5	68.4		36.7	40.5		47.0	33.5	25.3
Level of Service	E	C		C	E		D	D		D	C	C
Approach Delay (s)		30.1			67.7			39.7			31.4	
Approach LOS		C			E			D			C	

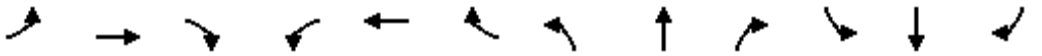
Intersection Summary			
HCM 2000 Control Delay	42.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	89.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	523	1756	18	19	1396	68	23	39	53	196	35	523
Future Volume (veh/h)	523	1756	18	19	1396	68	23	39	53	196	35	523
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1841	1707	1737	1841	1811	1752	1900	1900	1900	1900	1885
Adj Flow Rate, veh/h	568	1909	20	21	1517	74	25	42	58	213	38	568
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	4	13	11	4	6	10	0	0	0	0	1
Cap, veh/h	553	2828	30	191	1631	80	191	64	89	266	270	635
Arrive On Green	0.17	0.37	0.37	0.04	0.33	0.33	0.03	0.09	0.09	0.08	0.14	0.14
Sat Flow, veh/h	1810	5127	54	1654	4908	239	1668	723	998	1810	1900	1598
Grp Volume(v), veh/h	568	1247	682	21	1035	556	25	0	100	213	38	568
Grp Sat Flow(s),veh/h/ln	1810	1675	1831	1654	1675	1798	1668	0	1720	1810	1900	1598
Q Serve(g_s), s	23.0	28.1	28.2	0.7	26.9	26.9	1.2	0.0	5.1	7.1	1.6	12.8
Cycle Q Clear(g_c), s	23.0	28.1	28.2	0.7	26.9	26.9	1.2	0.0	5.1	7.1	1.6	12.8
Prop In Lane	1.00		0.03	1.00		0.13	1.00		0.58	1.00		1.00
Lane Grp Cap(c), veh/h	553	1847	1010	191	1113	597	191	0	153	266	270	635
V/C Ratio(X)	1.03	0.67	0.68	0.11	0.93	0.93	0.13	0.00	0.65	0.80	0.14	0.89
Avail Cap(c_a), veh/h	553	1847	1010	278	1113	597	240	0	153	266	270	635
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.53	0.53	0.53	0.75	0.75	0.75	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.6	21.6	21.6	18.6	29.0	29.0	35.8	0.0	39.7	35.6	33.8	25.3
Incr Delay (d2), s/veh	34.8	1.1	1.9	0.2	11.8	18.9	0.3	0.0	11.7	16.0	0.4	15.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.3	11.1	12.4	0.3	11.5	13.5	0.5	0.0	2.5	2.3	0.8	12.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.4	22.7	23.5	18.8	40.8	47.9	36.1	0.0	51.3	51.6	34.2	41.0
LnGrp LOS	F	C	C	B	D	D	D	A	D	D	C	D
Approach Vol, veh/h		2497			1612			125			819	
Approach Delay, s/veh		32.4			43.0			48.3			43.4	
Approach LOS		C			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	56.1	6.8	18.8	28.0	36.4	11.6	14.0
Change Period (Y+Rc), s	5.0	6.5	4.5	6.0	5.0	6.5	4.5	6.0
Max Green Setting (Gmax), s	8.0	44.9	5.0	10.1	23.0	29.9	7.1	8.0
Max Q Clear Time (g_c+I1), s	2.7	30.2	3.2	14.8	25.0	28.9	9.1	7.1
Green Ext Time (p_c), s	0.0	11.0	0.0	0.0	0.0	0.9	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	38.0
HCM 6th LOS	D



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	1636	333	106	1284	56	283	85	232	14	109	32
Future Volume (vph)	56	1636	333	106	1284	56	283	85	232	14	109	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	130		0	100		0	0		0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.994				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3471	1599	1805	4920	0	1752	1845	1568	1805	1863	1509
Flt Permitted	0.112			0.081			0.679			0.667		
Satd. Flow (perm)	213	3471	1599	154	4920	0	1253	1845	1568	1267	1863	1509
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			310		9				181			153
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		4264			1976			555			937	
Travel Time (s)		64.6			29.9			12.6			21.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	4%	1%	0%	5%	0%	3%	3%	3%	0%	2%	7%
Adj. Flow (vph)	62	1818	370	118	1427	62	314	94	258	16	121	36
Shared Lane Traffic (%)												
Lane Group Flow (vph)	62	1818	370	118	1489	0	314	94	258	16	121	36
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8		8	4		4
Detector Phase	5	2	2	1	6		3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	6.0	10.0	10.0	6.0	10.0		8.0	8.0	8.0	5.0	8.0	8.0
Minimum Split (s)	10.5	17.0	17.0	10.5	17.0		13.5	13.5	13.5	9.5	13.5	13.5
Total Split (s)	10.5	57.6	57.6	10.5	57.6		18.4	22.4	22.4	9.5	13.5	13.5
Total Split (%)	10.5%	57.6%	57.6%	10.5%	57.6%		18.4%	22.4%	22.4%	9.5%	13.5%	13.5%
Maximum Green (s)	6.0	50.6	50.6	6.0	50.6		12.9	16.9	16.9	5.0	8.0	8.0
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.5	2.0	2.0	1.5	2.0		2.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	7.0	7.0	4.5	7.0		5.5	5.5	5.5	4.5	5.5	5.5
Lead/Lag	Lag	Lead	Lead	Lag	Lead		Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.5	5.0	5.0	3.5	5.0		3.5	3.5	3.5	3.0	3.5	3.5
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	None
Act Effct Green (s)	59.3	50.8	50.8	60.2	52.9		22.4	22.4	22.4	9.0	8.0	8.0
Actuated g/C Ratio	0.59	0.51	0.51	0.60	0.53		0.22	0.22	0.22	0.09	0.08	0.08
v/c Ratio	0.28	1.03	0.38	0.61	0.57		0.91	0.23	0.52	0.11	0.81	0.14
Control Delay	15.4	55.5	4.1	39.8	17.4		72.1	35.5	16.3	43.9	83.4	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.4	55.5	4.1	39.8	17.4		72.1	35.5	16.3	43.9	83.4	1.1
LOS	B	E	A	D	B		E	D	B	D	F	A
Approach Delay		45.9			19.0			45.3			62.6	
Approach LOS		D			B			D			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.03			
Intersection Signal Delay: 37.3		Intersection LOS: D	
Intersection Capacity Utilization 87.6%		ICU Level of Service E	
Analysis Period (min) 15			

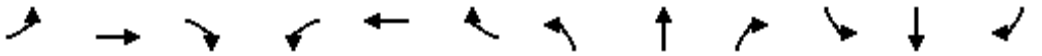
Splits and Phases: 303: Independence Street & US 90

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	62	1818	370	118	1489	314	94	258	16	121	36
v/c Ratio	0.28	1.03	0.38	0.61	0.57	0.91	0.23	0.52	0.11	0.81	0.14
Control Delay	15.4	55.5	4.1	39.8	17.4	72.1	35.5	16.3	43.9	83.4	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.4	55.5	4.1	39.8	17.4	72.1	35.5	16.3	43.9	83.4	1.1
Queue Length 50th (ft)	13	~651	18	26	230	182	47	38	10	77	0
Queue Length 95th (ft)	29	#798	67	#88	280	#403	101	127	30	#177	0
Internal Link Dist (ft)		4184			1896		475			857	
Turn Bay Length (ft)	200			130		100					
Base Capacity (vph)	221	1762	964	192	2605	347	413	492	140	149	261
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	1.03	0.38	0.61	0.57	0.90	0.23	0.52	0.11	0.81	0.14

Intersection Summary

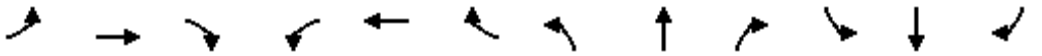
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	1636	333	106	1284	56	283	85	232	14	109	32
Future Volume (vph)	56	1636	333	106	1284	56	283	85	232	14	109	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	7.0	7.0	4.5	7.0		5.5	5.5	5.5	4.5	5.5	5.5
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1805	3471	1599	1805	4919		1752	1845	1568	1805	1863	1509
Flt Permitted	0.11	1.00	1.00	0.08	1.00		0.68	1.00	1.00	0.67	1.00	1.00
Satd. Flow (perm)	212	3471	1599	154	4919		1253	1845	1568	1267	1863	1509
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	62	1818	370	118	1427	62	314	94	258	16	121	36
RTOR Reduction (vph)	0	0	164	0	5	0	0	0	140	0	0	33
Lane Group Flow (vph)	62	1818	206	118	1484	0	314	94	118	16	121	3
Heavy Vehicles (%)	0%	4%	1%	0%	5%	0%	3%	3%	3%	0%	2%	7%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6			8		8	4		4
Actuated Green, G (s)	52.0	47.2	47.2	56.2	49.3		22.4	22.4	22.4	8.0	8.0	8.0
Effective Green, g (s)	52.0	47.2	47.2	56.2	49.3		22.4	22.4	22.4	8.0	8.0	8.0
Actuated g/C Ratio	0.52	0.47	0.47	0.56	0.49		0.22	0.22	0.22	0.08	0.08	0.08
Clearance Time (s)	4.5	7.0	7.0	4.5	7.0		5.5	5.5	5.5	4.5	5.5	5.5
Vehicle Extension (s)	3.5	5.0	5.0	3.5	5.0		3.5	3.5	3.5	3.0	3.5	3.5
Lane Grp Cap (vph)	186	1638	754	200	2425		357	413	351	112	149	120
v/s Ratio Prot	0.02	c0.52		c0.04	0.30		c0.14	0.05		0.00	c0.06	
v/s Ratio Perm	0.16		0.13	0.29			c0.06		0.07	0.01		0.00
v/c Ratio	0.33	1.11	0.27	0.59	0.61		0.88	0.23	0.33	0.14	0.81	0.02
Uniform Delay, d1	24.8	26.4	16.0	41.8	18.4		36.4	31.7	32.6	42.7	45.3	42.4
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.3	58.8	0.9	4.7	1.2		21.4	0.3	0.7	0.6	28.1	0.1
Delay (s)	26.1	85.2	16.9	46.5	19.6		57.8	32.1	33.2	43.3	73.3	42.5
Level of Service	C	F	B	D	B		E	C	C	D	E	D
Approach Delay (s)		72.3			21.5			44.6			64.1	
Approach LOS		E			C			D			E	

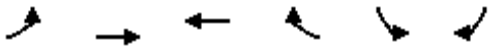
Intersection Summary			
HCM 2000 Control Delay	50.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	87.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



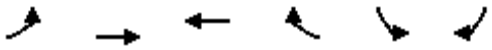
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	1636	333	106	1284	56	283	85	232	14	109	32
Future Volume (veh/h)	56	1636	333	106	1284	56	283	85	232	14	109	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1841	1885	1900	1826	1900	1856	1856	1856	1900	1870	1796
Adj Flow Rate, veh/h	62	1818	370	118	1427	62	314	94	258	16	121	36
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	4	1	0	5	0	3	3	3	0	2	7
Cap, veh/h	289	1770	808	181	2478	108	300	373	316	104	150	122
Arrive On Green	0.06	0.51	0.51	0.06	0.51	0.51	0.13	0.20	0.20	0.02	0.08	0.08
Sat Flow, veh/h	1810	3497	1598	1810	4898	213	1767	1856	1572	1810	1870	1522
Grp Volume(v), veh/h	62	1818	370	118	968	521	314	94	258	16	121	36
Grp Sat Flow(s),veh/h/ln	1810	1749	1598	1810	1662	1788	1767	1856	1572	1810	1870	1522
Q Serve(g_s), s	0.0	50.6	14.9	2.3	20.3	20.3	12.9	4.3	12.5	0.8	6.4	2.2
Cycle Q Clear(g_c), s	0.0	50.6	14.9	2.3	20.3	20.3	12.9	4.3	12.5	0.8	6.4	2.2
Prop In Lane	1.00		1.00	1.00		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	289	1770	808	181	1682	905	300	373	316	104	150	122
V/C Ratio(X)	0.21	1.03	0.46	0.65	0.58	0.58	1.05	0.25	0.82	0.15	0.81	0.30
Avail Cap(c_a), veh/h	289	1770	808	181	1682	905	300	373	316	162	150	122
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.70	0.70	0.70	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.5	24.7	15.9	44.6	17.2	17.2	42.0	33.6	24.4	45.1	45.2	43.3
Incr Delay (d2), s/veh	0.3	25.3	1.3	8.7	1.4	2.7	64.7	0.4	15.5	0.7	27.6	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	24.4	5.5	3.1	7.3	8.1	12.3	2.0	5.9	0.4	4.1	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.8	50.0	17.2	53.2	18.7	19.9	106.7	34.0	39.9	45.8	72.9	45.0
LnGrp LOS	C	F	B	D	B	B	F	C	D	D	E	D
Approach Vol, veh/h		2250			1607			666			173	
Approach Delay, s/veh		43.9			21.6			70.6			64.5	
Approach LOS		D			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	57.6	18.4	13.5	10.5	57.6	6.3	25.6
Change Period (Y+Rc), s	4.5	7.0	5.5	5.5	4.5	7.0	4.5	5.5
Max Green Setting (Gmax), s	6.0	50.6	12.9	8.0	6.0	50.6	5.0	16.9
Max Q Clear Time (g_c+I1), s	4.3	52.6	14.9	8.4	2.0	22.3	2.8	14.5
Green Ext Time (p_c), s	0.1	0.0	0.0	0.0	0.0	19.3	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	40.8
HCM 6th LOS	D



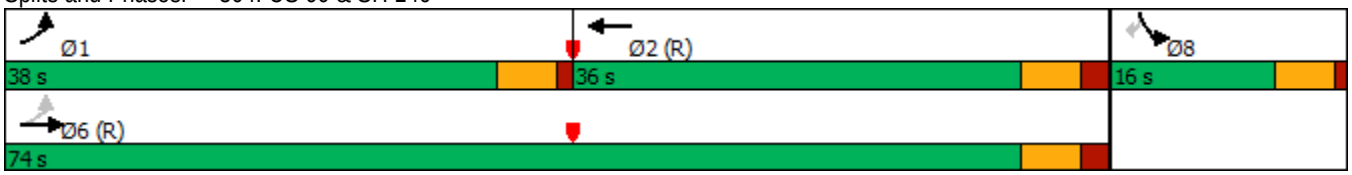
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	684	648	806	203	180	433
Future Volume (vph)	684	648	806	203	180	433
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			300	0	0
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.970			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1752	3471	3303	0	1752	1568
Flt Permitted	0.114				0.950	
Satd. Flow (perm)	210	3471	3303	0	1752	1568
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			37			461
Link Speed (mph)		50	50		55	
Link Distance (ft)		470	2799		7877	
Travel Time (s)		6.4	38.2		97.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	3%	4%	6%	6%	3%	3%
Adj. Flow (vph)	728	689	857	216	191	461
Shared Lane Traffic (%)						
Lane Group Flow (vph)	728	689	1073	0	191	461
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2		1	1
Detector Template	Left	Thru	Thru		Left	Right
Leading Detector (ft)	20	100	100		20	20
Trailing Detector (ft)	0	0	0		0	0
Detector 1 Position(ft)	0	0	0		0	0
Detector 1 Size(ft)	20	6	6		20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	1	6	2		8	

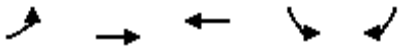


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	6					8
Detector Phase	1	6	2		8	8
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0		5.0	5.0
Minimum Split (s)	15.0	16.0	16.0		10.0	10.0
Total Split (s)	38.0	74.0	36.0		16.0	16.0
Total Split (%)	42.2%	82.2%	40.0%		17.8%	17.8%
Maximum Green (s)	33.0	68.0	30.0		11.0	11.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	2.0	2.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	6.0	6.0		5.0	5.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0	2.0	2.0		2.0	2.0
Recall Mode	None	C-Max	C-Max		None	None
Act Effct Green (s)	69.1	68.1	30.0		10.9	10.9
Actuated g/C Ratio	0.77	0.76	0.33		0.12	0.12
v/c Ratio	1.00	0.26	0.95		0.90	0.77
Control Delay	57.6	3.6	47.2		81.0	14.0
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	57.6	3.6	47.2		81.0	14.0
LOS	E	A	D		F	B
Approach Delay		31.3	47.2		33.6	
Approach LOS		C	D		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay: 37.2		Intersection LOS: D	
Intersection Capacity Utilization 90.0%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 304: US 90 & SH 146



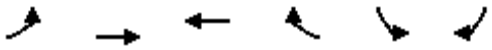


Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	728	689	1073	191	461
v/c Ratio	1.00	0.26	0.95	0.90	0.77
Control Delay	57.6	3.6	47.2	81.0	14.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	57.6	3.6	47.2	81.0	14.0
Queue Length 50th (ft)	~354	50	302	109	0
Queue Length 95th (ft)	#604	67	#440	#233	#128
Internal Link Dist (ft)		390	2719	7797	
Turn Bay Length (ft)	250				
Base Capacity (vph)	727	2624	1125	214	596
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.00	0.26	0.95	0.89	0.77

Intersection Summary

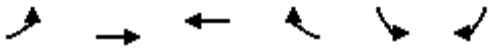
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	684	648	806	203	180	433
Future Volume (vph)	684	648	806	203	180	433
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0	6.0		5.0	5.0
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.97		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3471	3303		1752	1568
Flt Permitted	0.11	1.00	1.00		0.95	1.00
Satd. Flow (perm)	211	3471	3303		1752	1568
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	728	689	857	216	191	461
RTOR Reduction (vph)	0	0	25	0	0	405
Lane Group Flow (vph)	728	689	1048	0	191	56
Heavy Vehicles (%)	3%	4%	6%	6%	3%	3%
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	1	6	2		8	
Permitted Phases	6					8
Actuated Green, G (s)	68.1	68.1	30.0		10.9	10.9
Effective Green, g (s)	68.1	68.1	30.0		10.9	10.9
Actuated g/C Ratio	0.76	0.76	0.33		0.12	0.12
Clearance Time (s)	5.0	6.0	6.0		5.0	5.0
Vehicle Extension (s)	3.0	2.0	2.0		2.0	2.0
Lane Grp Cap (vph)	726	2626	1101		212	189
v/s Ratio Prot	c0.37	0.20	0.32		c0.11	
v/s Ratio Perm	c0.39					0.04
v/c Ratio	1.00	0.26	0.95		0.90	0.30
Uniform Delay, d1	23.6	3.3	29.3		39.0	36.0
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	34.1	0.2	17.8		35.3	0.3
Delay (s)	57.7	3.6	47.1		74.3	36.4
Level of Service	E	A	D		E	D
Approach Delay (s)		31.4	47.1		47.5	
Approach LOS		C	D		D	

Intersection Summary			
HCM 2000 Control Delay	40.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	90.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



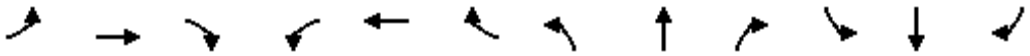
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	684	648	806	203	180	433
Future Volume (veh/h)	684	648	806	203	180	433
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1856	1841	1811	1811	1856	1856
Adj Flow Rate, veh/h	728	689	857	0	191	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	4	6	6	3	3
Cap, veh/h	765	2642	1277		216	
Arrive On Green	0.33	0.76	0.37	0.00	0.12	0.00
Sat Flow, veh/h	1767	3589	3622	0	1767	1572
Grp Volume(v), veh/h	728	689	857	0	191	0
Grp Sat Flow(s),veh/h/ln	1767	1749	1721	0	1767	1572
Q Serve(g_s), s	26.4	5.4	18.8	0.0	9.6	0.0
Cycle Q Clear(g_c), s	26.4	5.4	18.8	0.0	9.6	0.0
Prop In Lane	1.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	765	2642	1277		216	
V/C Ratio(X)	0.95	0.26	0.67		0.88	
Avail Cap(c_a), veh/h	832	2642	1277		216	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.84	0.00
Uniform Delay (d), s/veh	18.4	3.3	23.7	0.0	38.9	0.0
Incr Delay (d2), s/veh	19.6	0.2	2.8	0.0	27.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.4	1.1	7.3	0.0	5.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	38.0	3.6	26.5	0.0	66.4	0.0
LnGrp LOS	D	A	C		E	
Approach Vol, veh/h		1417	857	A	191	A
Approach Delay, s/veh		21.3	26.5		66.4	
Approach LOS		C	C		E	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	34.6	39.4			74.0	16.0
Change Period (Y+Rc), s	5.0	6.0			6.0	5.0
Max Green Setting (Gmax), s	33.0	30.0			68.0	11.0
Max Q Clear Time (g_c+I1), s	28.4	20.8			7.4	11.6
Green Ext Time (p_c), s	1.2	2.5			2.8	0.0

Intersection Summary	
HCM 6th Ctrl Delay	26.6
HCM 6th LOS	C

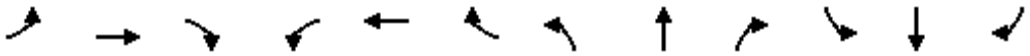
Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	47	24	6	0	0	5	97	32	26	105	31
Future Volume (vph)	2	47	24	6	0	0	5	97	32	26	105	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.956						0.968			0.974	
Flt Protected		0.999			0.950			0.998			0.992	
Satd. Flow (prot)	0	1815	0	0	1805	0	0	1836	0	0	1836	0
Flt Permitted		0.999			0.950			0.998			0.992	
Satd. Flow (perm)	0	1815	0	0	1805	0	0	1836	0	0	1836	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		803			358			401			590	
Travel Time (s)		18.3			8.1			9.1			13.4	
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	71	36	9	0	0	8	147	48	39	159	47
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	110	0	0	9	0	0	203	0	0	245	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			50			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 29.7%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	2	47	24	6	0	0	5	97	32	26	105	31
Future Volume (vph)	2	47	24	6	0	0	5	97	32	26	105	31
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Hourly flow rate (vph)	3	71	36	9	0	0	8	147	48	39	159	47

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	110	9	203	245
Volume Left (vph)	3	9	8	39
Volume Right (vph)	36	0	48	47
Hadj (s)	-0.19	0.20	-0.13	-0.08
Departure Headway (s)	4.7	5.3	4.3	4.3
Degree Utilization, x	0.14	0.01	0.24	0.30
Capacity (veh/h)	697	611	798	796
Control Delay (s)	8.5	8.3	8.7	9.1
Approach Delay (s)	8.5	8.3	8.7	9.1
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.9			
Level of Service	A			
Intersection Capacity Utilization	29.7%	ICU Level of Service	A	
Analysis Period (min)	15			

Intersection	
Intersection Delay, s/veh	8.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	47	24	6	0	0	5	97	32	26	105	31
Future Vol, veh/h	2	47	24	6	0	0	5	97	32	26	105	31
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	71	36	9	0	0	8	147	48	39	159	47
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.5	8.3	8.7	9.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	4%	3%	100%	16%
Vol Thru, %	72%	64%	0%	65%
Vol Right, %	24%	33%	0%	19%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	134	73	6	162
LT Vol	5	2	6	26
Through Vol	97	47	0	105
RT Vol	32	24	0	31
Lane Flow Rate	203	111	9	245
Geometry Grp	1	1	1	1
Degree of Util (X)	0.243	0.144	0.013	0.295
Departure Headway (Hd)	4.313	4.694	5.229	4.321
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	832	763	683	832
Service Time	2.336	2.726	3.271	2.343
HCM Lane V/C Ratio	0.244	0.145	0.013	0.294
HCM Control Delay	8.7	8.5	8.3	9.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	1	0.5	0	1.2

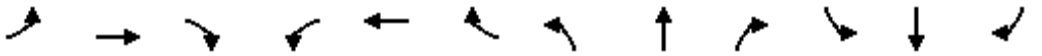
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	199	24	129	121	24	122
Future Volume (vph)	199	24	129	121	24	122
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1787	1482	1845	1615	1805	1863
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1787	1482	1845	1615	1805	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	1292		2374			1487
Travel Time (s)	29.4		54.0			33.8
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	9%	3%	0%	0%	2%
Adj. Flow (vph)	221	27	143	134	27	136
Shared Lane Traffic (%)						
Lane Group Flow (vph)	221	27	143	134	27	136
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Free		Yield			Yield

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 31.1%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	199	24	129	121	24	122
Future Volume (Veh/h)	199	24	129	121	24	122
Sign Control	Free		Yield			Yield
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	221	27	143	134	27	136
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	0		469	0	648	442
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0		469	0	648	442
tC, single (s)	4.1		6.5	6.2	7.1	6.5
tC, 2 stage (s)						
tF (s)	2.2		4.0	3.3	3.5	4.0
p0 queue free %	86		66	88	88	69
cM capacity (veh/h)	1630		424	1091	226	441

Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	221	27	143	134	27	136
Volume Left	221	0	0	0	27	0
Volume Right	0	27	0	134	0	0
cSH	1630	1700	424	1091	226	441
Volume to Capacity	0.14	0.02	0.34	0.12	0.12	0.31
Queue Length 95th (ft)	12	0	37	10	10	32
Control Delay (s)	7.6	0.0	17.7	8.8	23.1	16.8
Lane LOS	A		C	A	C	C
Approach Delay (s)	6.7		13.4		17.8	
Approach LOS			B		C	

Intersection Summary			
Average Delay	12.0		
Intersection Capacity Utilization	31.1%	ICU Level of Service	A
Analysis Period (min)	15		

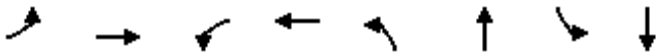


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	235	50	71	16	66	77	19	851	11	24	783	170
Future Volume (vph)	235	50	71	16	66	77	19	851	11	24	783	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	100		0	100		0	200		125
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt		0.912			0.919			0.998			0.973	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	1733	0	1805	1722	0	1626	1860	0	1805	3484	0
Flt Permitted	0.500			0.559			0.194			0.079		
Satd. Flow (perm)	941	1733	0	1062	1722	0	332	1860	0	150	3484	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		64			52			1			43	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		345			825			1581			1585	
Travel Time (s)		7.8			18.8			35.9			36.0	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	1%	0%	0%	0%	3%	0%	11%	2%	0%	0%	1%	0%
Adj. Flow (vph)	267	57	81	18	75	88	22	967	13	27	890	193
Shared Lane Traffic (%)												
Lane Group Flow (vph)	267	138	0	18	163	0	22	980	0	27	1083	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA		D.P+P	NA		D.P+P	NA		D.P+P	NA	
Protected Phases	3	3		4	4		1	6		5	2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			3			2			6		
Detector Phase	3	3		4	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		5.0	10.0		6.0	10.0	
Minimum Split (s)	13.0	13.0		13.0	13.0		9.5	15.0		10.0	15.0	
Total Split (s)	15.0	15.0		13.0	13.0		9.6	52.0		10.0	52.4	
Total Split (%)	16.7%	16.7%		14.4%	14.4%		10.7%	57.8%		11.1%	58.2%	
Maximum Green (s)	10.0	10.0		8.0	8.0		5.1	47.0		6.0	47.4	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.0	3.5	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		4.5	5.0		4.0	5.0	
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		2.0	2.0		3.0	3.5		2.0	3.5	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	18.0	10.0		18.0	8.0		55.7	53.0		56.4	53.2	
Actuated g/C Ratio	0.20	0.11		0.20	0.09		0.62	0.59		0.63	0.59	
v/c Ratio	0.95	0.55		0.06	0.81		0.08	0.89		0.13	0.52	
Control Delay	79.2	30.4		26.1	58.6		7.4	30.5		7.3	12.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	79.2	30.4		26.1	58.6		7.4	30.5		7.3	12.3	
LOS	E	C		C	E		A	C		A	B	
Approach Delay		62.5			55.3			29.9			12.1	
Approach LOS		E			E			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:NBSB, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay: 29.2		Intersection LOS: C	
Intersection Capacity Utilization 79.2%		ICU Level of Service D	
Analysis Period (min) 15			

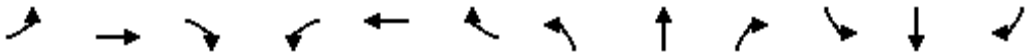
Splits and Phases: 307: Main Street & Grand Avenue



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	267	138	18	163	22	980	27	1083
v/c Ratio	0.95	0.55	0.06	0.81	0.08	0.89	0.13	0.52
Control Delay	79.2	30.4	26.1	58.6	7.4	30.5	7.3	12.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	79.2	30.4	26.1	58.6	7.4	30.5	7.3	12.3
Queue Length 50th (ft)	133	40	8	63	4	389	5	147
Queue Length 95th (ft)	#292	95	24	#163	12	#797	13	252
Internal Link Dist (ft)		265		745		1501		1505
Turn Bay Length (ft)	150		100		100		200	
Base Capacity (vph)	282	249	278	200	278	1095	204	2075
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	0.95	0.55	0.06	0.81	0.08	0.89	0.13	0.52

Intersection Summary

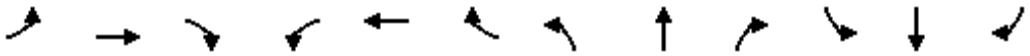
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	235	50	71	16	66	77	19	851	11	24	783	170
Future Volume (vph)	235	50	71	16	66	77	19	851	11	24	783	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0		4.5	5.0		4.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	0.95	
Frt	1.00	0.91		1.00	0.92		1.00	1.00		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1787	1733		1805	1722		1626	1860		1805	3485	
Flt Permitted	0.50	1.00		0.56	1.00		0.19	1.00		0.08	1.00	
Satd. Flow (perm)	941	1733		1062	1722		333	1860		150	3485	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	267	57	81	18	75	88	22	967	12	27	890	193
RTOR Reduction (vph)	0	57	0	0	47	0	0	0	0	0	19	0
Lane Group Flow (vph)	267	81	0	18	116	0	22	980	0	27	1064	0
Heavy Vehicles (%)	1%	0%	0%	0%	3%	0%	11%	2%	0%	0%	1%	0%
Turn Type	D.P+P	NA		D.P+P	NA		D.P+P	NA		D.P+P	NA	
Protected Phases	3	3		4	4		1	6		5	2	
Permitted Phases	4			3			2			6		
Actuated Green, G (s)	18.0	10.0		18.0	8.0		52.5	50.6		53.0	50.5	
Effective Green, g (s)	18.0	10.0		18.0	8.0		52.5	50.6		53.0	50.5	
Actuated g/C Ratio	0.20	0.11		0.20	0.09		0.58	0.56		0.59	0.56	
Clearance Time (s)	5.0	5.0		5.0	5.0		4.5	5.0		4.0	5.0	
Vehicle Extension (s)	3.0	3.0		2.0	2.0		3.0	3.5		2.0	3.5	
Lane Grp Cap (vph)	282	192		278	153		222	1045		132	1955	
v/s Ratio Prot	c0.11	0.05		0.01	0.07		0.00	c0.53		0.01	c0.31	
v/s Ratio Perm	c0.08			0.01			0.06			0.11		
v/c Ratio	0.95	0.42		0.06	0.76		0.10	0.94		0.20	0.54	
Uniform Delay, d1	36.1	37.3		29.1	40.0		15.1	18.2		17.9	12.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	39.0	1.5		0.0	17.0		0.2	16.3		0.3	1.1	
Delay (s)	75.1	38.8		29.1	57.1		15.3	34.6		18.1	13.6	
Level of Service	E	D		C	E		B	C		B	B	
Approach Delay (s)		62.7			54.3			34.1			13.7	
Approach LOS		E			D			C			B	

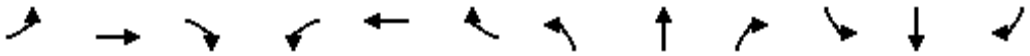
Intersection Summary			
HCM 2000 Control Delay	31.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	79.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology expects strict NEMA phasing.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	0	0	48	2	2	0	146	8	5	84	0
Future Volume (vph)	2	0	0	48	2	2	0	146	8	5	84	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.925				0.850			
Flt Protected		0.950		0.950						0.950		
Satd. Flow (prot)	0	1805	0	1805	1758	0	0	1845	1615	1805	1900	0
Flt Permitted		0.950		0.950						0.950		
Satd. Flow (perm)	0	1805	0	1805	1758	0	0	1845	1615	1805	1900	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		433			707			1487			1399	
Travel Time (s)		9.8			16.1			33.8			31.8	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%
Adj. Flow (vph)	2	0	0	59	2	2	0	180	10	6	104	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2	0	59	4	0	0	180	10	6	104	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 21.1%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	0	0	48	2	2	0	146	8	5	84	0
Future Volume (Veh/h)	2	0	0	48	2	2	0	146	8	5	84	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Hourly flow rate (vph)	2	0	0	59	2	2	0	180	10	6	104	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	299	306	104	296	296	180	104			190		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	299	306	104	296	296	180	104			190		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	91	100	100	100			100		
cM capacity (veh/h)	652	608	956	658	616	868	1500			1396		

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	2	59	4	180	10	6	104
Volume Left	2	59	0	0	0	6	0
Volume Right	0	0	2	0	10	0	0
cSH	652	658	721	1500	1700	1396	1700
Volume to Capacity	0.00	0.09	0.01	0.00	0.01	0.00	0.06
Queue Length 95th (ft)	0	7	0	0	0	0	0
Control Delay (s)	10.5	11.0	10.0	0.0	0.0	7.6	0.0
Lane LOS	B	B	B			A	
Approach Delay (s)	10.5	10.9		0.0		0.4	
Approach LOS	B	B					

Intersection Summary				
Average Delay	2.1			
Intersection Capacity Utilization	21.1%	ICU Level of Service		A
Analysis Period (min)	15			

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	0	48	2	2	0	146	8	5	84	0
Future Vol, veh/h	2	0	0	48	2	2	0	146	8	5	84	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	-	-	0	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0	0	3	0	0	0	0
Mvmt Flow	2	0	0	59	2	2	0	180	10	6	104	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	303	306	104	296	296	180	104	0	0	190	0	0
Stage 1	116	116	-	180	180	-	-	-	-	-	-	-
Stage 2	187	190	-	116	116	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	653	611	956	660	619	868	1500	-	-	1396	-	-
Stage 1	894	803	-	826	754	-	-	-	-	-	-	-
Stage 2	819	747	-	894	803	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	647	609	956	658	617	868	1500	-	-	1396	-	-
Mov Cap-2 Maneuver	647	609	-	658	617	-	-	-	-	-	-	-
Stage 1	894	800	-	826	754	-	-	-	-	-	-	-
Stage 2	814	747	-	890	800	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.6	10.9	0	0.4
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1500	-	-	647	658	721	1396	-	-
HCM Lane V/C Ratio	-	-	-	0.004	0.09	0.007	0.004	-	-
HCM Control Delay (s)	0	-	-	10.6	11	10	7.6	-	-
HCM Lane LOS	A	-	-	B	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.3	0	0	-	-

Lane Group	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	13	11	2	55	0	0	125
Future Volume (vph)	13	11	2	55	0	0	125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.937					0.865	
Flt Protected					0.950		
Satd. Flow (prot)	1780	0	0	0	1805	1580	0
Flt Permitted					0.950		
Satd. Flow (perm)	1780	0	0	0	1805	1580	0
Link Speed (mph)	30				30	30	
Link Distance (ft)	720				80	1399	
Travel Time (s)	16.4				1.8	31.8	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	4%
Adj. Flow (vph)	15	13	2	64	0	0	145
Shared Lane Traffic (%)							
Lane Group Flow (vph)	28	0	0	0	66	145	0
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	R NA	Left	Left	Left	Right
Median Width(ft)	0				0	12	
Link Offset(ft)	0				0	0	
Crosswalk Width(ft)	16				16	16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	9	15		15	9
Sign Control	Stop				Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 24.1%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Sign Control	Stop				Stop	Stop	
Traffic Volume (vph)	13	11	2	55	0	0	125
Future Volume (vph)	13	11	2	55	0	0	125
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	15	13	0	64	0	0	145

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	28	64	145
Volume Left (vph)	0	64	0
Volume Right (vph)	13	0	145
Hadj (s)	-0.28	0.20	-0.53
Departure Headway (s)	4.0	4.4	3.6
Degree Utilization, x	0.03	0.08	0.14
Capacity (veh/h)	868	788	975
Control Delay (s)	7.1	7.8	7.2
Approach Delay (s)	7.1	7.8	7.2
Approach LOS	A	A	A

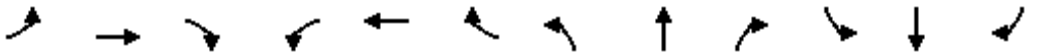
Intersection Summary			
Delay	7.3		
Level of Service	A		
Intersection Capacity Utilization	24.1%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Movement	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Vol, veh/h	13	11	2	55	0	0	125
Future Vol, veh/h	13	11	2	55	0	0	125
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	0	0	0	0	0	0	4
Mvmt Flow	15	13	2	64	0	0	145
Number of Lanes	1	0	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.1	7.8	7.1
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	0%	0%	100%
Vol Thru, %	0%	54%	0%
Vol Right, %	100%	46%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	125	24	57
LT Vol	0	0	57
Through Vol	0	13	0
RT Vol	125	11	0
Lane Flow Rate	145	28	66
Geometry Grp	1	1	1
Degree of Util (X)	0.14	0.03	0.081
Departure Headway (Hd)	3.462	3.931	4.377
Convergence, Y/N	Yes	Yes	Yes
Cap	1026	907	819
Service Time	1.514	1.972	2.403
HCM Lane V/C Ratio	0.141	0.031	0.081
HCM Control Delay	7.1	7.1	7.8
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.5	0.1	0.3

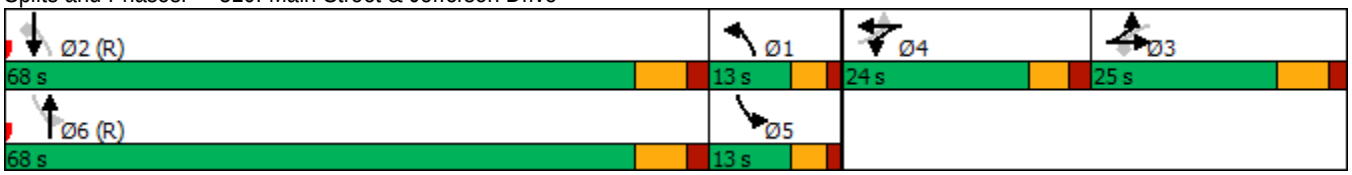


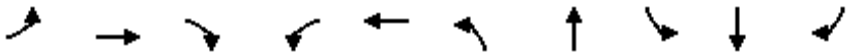
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	339	158	51	169	113	58	42	1382	166	27	1031	224
Future Volume (vph)	339	158	51	169	113	58	42	1382	166	27	1031	224
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		300	300		0	200		300	200		250
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	1.00
Frt			0.850		0.949			0.984				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1863	1615	1805	3316	0	1805	3513	0	1805	3574	1553
Flt Permitted	0.598			0.478			0.137			0.061		
Satd. Flow (perm)	1136	1863	1615	908	3316	0	260	3513	0	116	3574	1553
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			126		58			13				237
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1006			727			3897			1103	
Travel Time (s)		17.1			12.4			66.4			18.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	2%	0%	0%	5%	0%	0%	1%	2%	0%	1%	4%
Adj. Flow (vph)	381	178	57	190	127	65	47	1553	187	30	1158	252
Shared Lane Traffic (%)												
Lane Group Flow (vph)	381	178	57	190	192	0	47	1740	0	30	1158	252
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA	Perm	D.P+P	NA		D.P+P	NA		D.P+P	NA	Perm
Protected Phases	3	3		4	4		1	6		5	2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		3	3			2			6		2
Detector Phase	3	3	3	4	4		1	6		5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	8.0	8.0		8.0	10.0		8.0	10.0	10.0
Minimum Split (s)	25.0	25.0	25.0	24.0	24.0		13.0	25.0		13.0	25.0	25.0
Total Split (s)	25.0	25.0	25.0	24.0	24.0		13.0	68.0		13.0	68.0	68.0
Total Split (%)	19.2%	19.2%	19.2%	18.5%	18.5%		10.0%	52.3%		10.0%	52.3%	52.3%
Maximum Green (s)	18.0	18.0	18.0	18.0	18.0		8.0	61.0		8.0	61.0	61.0
Yellow Time (s)	5.0	5.0	5.0	4.0	4.0		3.5	5.0		3.5	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		1.5	2.0		1.5	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	6.0	6.0		5.0	7.0		5.0	7.0	7.0
Lead/Lag	Lag	Lag	Lag	Lead	Lead		Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5		3.0	3.5		3.0	3.5	3.5
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	34.1	19.7	19.7	36.1	15.4		74.5	67.1		75.5	64.5	64.5
Actuated g/C Ratio	0.26	0.15	0.15	0.28	0.12		0.57	0.52		0.58	0.50	0.50
v/c Ratio	0.95	0.63	0.16	0.53	0.43		0.19	0.96		0.18	0.65	0.28
Control Delay	81.6	63.1	1.0	39.0	39.4		17.2	44.2		23.0	27.6	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	81.6	63.1	1.0	39.0	39.4		17.2	44.2		23.0	27.6	3.9
LOS	F	E	A	D	D		B	D		C	C	A
Approach Delay		68.8			39.2			43.5			23.3	
Approach LOS		E			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:NBSB, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 39.9		Intersection LOS: D	
Intersection Capacity Utilization 85.6%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 310: Main Street & Jefferson Drive



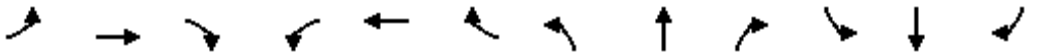


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	381	178	57	190	192	47	1740	30	1158	252
v/c Ratio	0.95	0.63	0.16	0.53	0.43	0.19	0.96	0.18	0.65	0.28
Control Delay	81.6	63.1	1.0	39.0	39.4	17.2	44.2	23.0	27.6	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	81.6	63.1	1.0	39.0	39.4	17.2	44.2	23.0	27.6	3.9
Queue Length 50th (ft)	275	142	0	120	55	16	~838	10	394	7
Queue Length 95th (ft)	#489	#227	0	183	91	33	#960	24	466	51
Internal Link Dist (ft)		926			647		3817		1023	
Turn Bay Length (ft)	300		300	300		200		200		250
Base Capacity (vph)	399	282	352	393	509	244	1818	171	1772	889
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	0.95	0.63	0.16	0.48	0.38	0.19	0.96	0.18	0.65	0.28

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

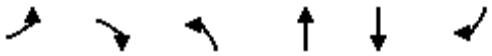
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	339	158	51	169	113	58	42	1382	166	27	1031	224
Future Volume (vph)	339	158	51	169	113	58	42	1382	166	27	1031	224
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0	6.0	6.0		5.0	7.0		5.0	7.0	7.0
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.95		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1805	1863	1615	1805	3317		1805	3513		1805	3574	1553
Flt Permitted	0.60	1.00	1.00	0.48	1.00		0.14	1.00		0.06	1.00	1.00
Satd. Flow (perm)	1135	1863	1615	908	3317		260	3513		117	3574	1553
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	381	178	57	190	127	65	47	1553	187	30	1158	252
RTOR Reduction (vph)	0	0	48	0	51	0	0	6	0	0	0	123
Lane Group Flow (vph)	381	178	9	190	141	0	47	1734	0	30	1158	129
Heavy Vehicles (%)	0%	2%	0%	0%	5%	0%	0%	1%	2%	0%	1%	4%
Turn Type	D.P+P	NA	Perm	D.P+P	NA		D.P+P	NA		D.P+P	NA	Perm
Protected Phases	3	3		4	4		1	6		5	2	
Permitted Phases	4		3	3			2			6		2
Actuated Green, G (s)	35.1	19.7	19.7	35.1	15.4		69.9	65.1		69.9	62.5	62.5
Effective Green, g (s)	35.1	19.7	19.7	35.1	15.4		69.9	65.1		69.9	62.5	62.5
Actuated g/C Ratio	0.27	0.15	0.15	0.27	0.12		0.54	0.50		0.54	0.48	0.48
Clearance Time (s)	7.0	7.0	7.0	6.0	6.0		5.0	7.0		5.0	7.0	7.0
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5		3.0	3.5		3.0	3.5	3.5
Lane Grp Cap (vph)	407	282	244	351	392		227	1759		125	1718	746
v/s Ratio Prot	c0.14	0.10		0.06	0.04		c0.01	c0.49		0.01	0.32	
v/s Ratio Perm	c0.11		0.01	0.08			0.10			0.12		0.08
v/c Ratio	0.94	0.63	0.04	0.54	0.36		0.21	0.99		0.24	0.67	0.17
Uniform Delay, d1	44.9	51.7	47.0	38.8	52.8		32.9	32.0		56.8	25.9	19.1
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	29.1	4.8	0.1	1.9	0.7		0.5	18.3		1.0	2.1	0.5
Delay (s)	74.0	56.5	47.1	40.7	53.4		33.3	50.3		57.8	28.1	19.6
Level of Service	E	E	D	D	D		C	D		E	C	B
Approach Delay (s)		66.5			47.1			49.8			27.2	
Approach LOS		E			D			D			C	

Intersection Summary			
HCM 2000 Control Delay	44.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	85.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology expects strict NEMA phasing.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	154	109	106	1687	1272	113
Future Volume (vph)	154	109	106	1687	1272	113
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	200			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Frt		0.850			0.988	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1805	1615	1805	3574	3502	0
Flt Permitted	0.950		0.078			
Satd. Flow (perm)	1805	1615	148	3574	3502	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		122			16	
Link Speed (mph)	30			40	40	
Link Distance (ft)	1219			1103	1788	
Travel Time (s)	27.7			18.8	30.5	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	0%	1%	2%	0%
Adj. Flow (vph)	173	122	119	1896	1429	127
Shared Lane Traffic (%)						
Lane Group Flow (vph)	173	122	119	1896	1556	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	
Detector Template	Left	Right	Left	Thru	Thru	
Leading Detector (ft)	20	20	20	100	100	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	20	20	20	6	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	

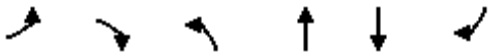
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0	6.0	10.0	10.0	
Minimum Split (s)	24.0	24.0	10.5	25.0	25.0	
Total Split (s)	24.0	24.0	10.5	66.0	55.5	
Total Split (%)	26.7%	26.7%	11.7%	73.3%	61.7%	
Maximum Green (s)	18.0	18.0	6.0	59.0	48.5	
Yellow Time (s)	4.0	4.0	3.0	5.0	5.0	
All-Red Time (s)	2.0	2.0	1.5	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	4.5	7.0	7.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.5	3.5	3.0	4.0	4.0	
Recall Mode	None	None	None	C-Max	C-Max	
Act Effct Green (s)	14.0	14.0	65.5	63.0	51.8	
Actuated g/C Ratio	0.16	0.16	0.73	0.70	0.58	
v/c Ratio	0.62	0.34	0.52	0.76	0.77	
Control Delay	44.7	9.0	16.4	11.8	18.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	44.7	9.0	16.4	11.8	18.4	
LOS	D	A	B	B	B	
Approach Delay	30.0			12.1	18.4	
Approach LOS	C			B	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 16.0		Intersection LOS: B	
Intersection Capacity Utilization 67.7%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 311: Main Street & Cook Road

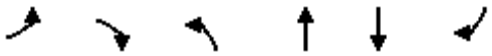
Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	173	122	119	1896	1556
v/c Ratio	0.62	0.34	0.52	0.76	0.77
Control Delay	44.7	9.0	16.4	11.8	18.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	44.7	9.0	16.4	11.8	18.4
Queue Length 50th (ft)	93	0	17	314	334
Queue Length 95th (ft)	149	43	62	462	449
Internal Link Dist (ft)	1139			1023	1708
Turn Bay Length (ft)			200		
Base Capacity (vph)	361	420	230	2501	2023
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.48	0.29	0.52	0.76	0.77

Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	154	109	106	1687	1272	113
Future Volume (vph)	154	109	106	1687	1272	113
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.5	7.0	7.0	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	
Frt	1.00	0.85	1.00	1.00	0.99	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1805	1615	1805	3574	3501	
Flt Permitted	0.95	1.00	0.08	1.00	1.00	
Satd. Flow (perm)	1805	1615	149	3574	3501	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	173	122	119	1896	1429	127
RTOR Reduction (vph)	0	103	0	0	7	0
Lane Group Flow (vph)	173	19	119	1896	1549	0
Heavy Vehicles (%)	0%	0%	0%	1%	2%	0%
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Actuated Green, G (s)	14.0	14.0	63.0	63.0	51.8	
Effective Green, g (s)	14.0	14.0	63.0	63.0	51.8	
Actuated g/C Ratio	0.16	0.16	0.70	0.70	0.58	
Clearance Time (s)	6.0	6.0	4.5	7.0	7.0	
Vehicle Extension (s)	3.5	3.5	3.0	4.0	4.0	
Lane Grp Cap (vph)	280	251	227	2501	2015	
v/s Ratio Prot	c0.10		0.04	c0.53	0.44	
v/s Ratio Perm		0.01	0.33			
v/c Ratio	0.62	0.08	0.52	0.76	0.77	
Uniform Delay, d1	35.5	32.5	12.1	8.6	14.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	4.2	0.2	2.2	2.2	2.9	
Delay (s)	39.7	32.6	14.3	10.8	17.4	
Level of Service	D	C	B	B	B	
Approach Delay (s)	36.8			11.0	17.4	
Approach LOS	D			B	B	

Intersection Summary			
HCM 2000 Control Delay	15.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	67.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	154	109	106	1687	1272	113
Future Volume (veh/h)	154	109	106	1687	1272	113
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1885	1870	1900
Adj Flow Rate, veh/h	173	122	119	1896	1429	127
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	1	2	0
Cap, veh/h	222	197	305	2625	2047	181
Arrive On Green	0.12	0.12	0.06	0.73	0.62	0.62
Sat Flow, veh/h	1810	1610	1810	3676	3396	292
Grp Volume(v), veh/h	173	122	119	1896	765	791
Grp Sat Flow(s),veh/h/ln	1810	1610	1810	1791	1777	1818
Q Serve(g_s), s	8.3	6.5	1.9	27.0	25.9	26.4
Cycle Q Clear(g_c), s	8.3	6.5	1.9	27.0	25.9	26.4
Prop In Lane	1.00	1.00	1.00			0.16
Lane Grp Cap(c), veh/h	222	197	305	2625	1101	1126
V/C Ratio(X)	0.78	0.62	0.39	0.72	0.69	0.70
Avail Cap(c_a), veh/h	362	322	311	2625	1101	1126
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.19	0.19	1.00	1.00
Uniform Delay (d), s/veh	38.3	37.5	11.1	6.8	11.4	11.5
Incr Delay (d2), s/veh	7.0	3.8	0.2	0.3	3.6	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	5.9	0.8	6.9	9.4	9.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	45.3	41.2	11.3	7.2	15.1	15.2
LnGrp LOS	D	D	B	A	B	B
Approach Vol, veh/h	295			2015	1556	
Approach Delay, s/veh	43.6			7.4	15.1	
Approach LOS	D			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		73.0		17.0	10.2	62.8
Change Period (Y+Rc), s		7.0		6.0	4.5	7.0
Max Green Setting (Gmax), s		59.0		18.0	6.0	48.5
Max Q Clear Time (g_c+I1), s		29.0		10.3	3.9	28.4
Green Ext Time (p_c), s		23.2		0.7	0.0	14.0

Intersection Summary	
HCM 6th Ctrl Delay	13.3
HCM 6th LOS	B

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	187	682	817	224	290	669
Future Volume (vph)	187	682	817	224	290	669
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		300	135	
Storage Lanes	1	1		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1787	1553	3610	1615	1641	3574
Flt Permitted	0.950				0.166	
Satd. Flow (perm)	1787	1553	3610	1615	287	3574
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		529		252		
Link Speed (mph)	55		40			40
Link Distance (ft)	7877		885			960
Travel Time (s)	97.6		15.1			16.4
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	1%	4%	0%	0%	10%	1%
Adj. Flow (vph)	210	766	918	252	326	752
Shared Lane Traffic (%)						
Lane Group Flow (vph)	210	766	918	252	326	752
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Turn Type	Perm	Perm	NA	Perm	pm+pt	NA
Protected Phases			2		1	6
Permitted Phases	8	8		2	6	
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	23.4	23.4	24.1	24.1	22.5	46.6
Total Split (%)	33.4%	33.4%	34.4%	34.4%	32.1%	66.6%
Maximum Green (s)	18.9	18.9	19.6	19.6	18.0	42.1
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	18.9	18.9	19.6	19.6	42.1	42.1
Actuated g/C Ratio	0.27	0.27	0.28	0.28	0.60	0.60

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
v/c Ratio	0.44	0.95	0.91	0.40	0.63	0.35
Control Delay	24.6	32.2	39.2	5.1	16.7	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.6	32.2	39.2	5.1	16.7	7.6
LOS	C	C	D	A	B	A
Approach Delay	30.6		31.9			10.3
Approach LOS	C		C			B

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay: 24.3		Intersection LOS: C	
Intersection Capacity Utilization 72.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 312: Main Street & SH 146

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	210	766	918	252	326	752
v/c Ratio	0.44	0.95	0.91	0.40	0.63	0.35
Control Delay	24.6	32.2	39.2	5.1	16.7	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.6	32.2	39.2	5.1	16.7	7.6
Queue Length 50th (ft)	75	104	200	0	70	76
Queue Length 95th (ft)	131	#339	#304	47	149	104
Internal Link Dist (ft)	7797		805			880
Turn Bay Length (ft)				300	135	
Base Capacity (vph)	482	805	1010	633	520	2149
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	0.44	0.95	0.91	0.40	0.63	0.35

Intersection Summary

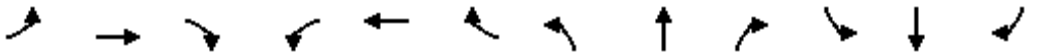
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	187	682	817	224	290	669
Future Volume (vph)	187	682	817	224	290	669
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1787	1553	3610	1615	1641	3574
Flt Permitted	0.95	1.00	1.00	1.00	0.17	1.00
Satd. Flow (perm)	1787	1553	3610	1615	287	3574
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	210	766	918	252	326	752
RTOR Reduction (vph)	0	386	0	181	0	0
Lane Group Flow (vph)	210	380	918	71	326	752
Heavy Vehicles (%)	1%	4%	0%	0%	10%	1%
Turn Type	Perm	Perm	NA	Perm	pm+pt	NA
Protected Phases			2		1	6
Permitted Phases	8	8		2	6	
Actuated Green, G (s)	18.9	18.9	19.6	19.6	42.1	42.1
Effective Green, g (s)	18.9	18.9	19.6	19.6	42.1	42.1
Actuated g/C Ratio	0.27	0.27	0.28	0.28	0.60	0.60
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Grp Cap (vph)	482	419	1010	452	520	2149
v/s Ratio Prot			c0.25		c0.16	0.21
v/s Ratio Perm	0.12	c0.24		0.04	0.22	
v/c Ratio	0.44	0.91	0.91	0.16	0.63	0.35
Uniform Delay, d1	21.1	24.7	24.3	19.0	11.7	7.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.9	25.8	13.4	0.7	5.6	0.5
Delay (s)	24.0	50.5	37.7	19.7	17.3	7.5
Level of Service	C	D	D	B	B	A
Approach Delay (s)	44.8		33.9			10.5
Approach LOS	D		C			B

Intersection Summary			
HCM 2000 Control Delay	29.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	72.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

HCM 6th Edition methodology does not support Non-NEMA phasing.

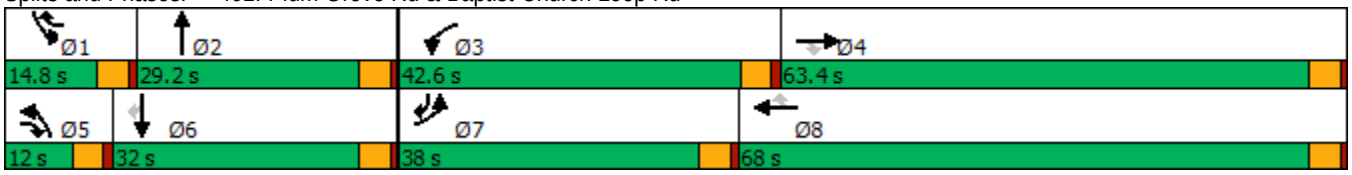


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	529	117	529	299	1794	897	215	196	46	48	263	168
Future Volume (vph)	529	117	529	299	1794	897	215	196	46	48	263	168
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		0	100		0	0		100
Storage Lanes	1		1	1		1	2		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.970				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1863	1615	1770	3539	1583	3433	1594	0	1770	1743	1615
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1805	1863	1615	1770	3539	1583	3433	1594	0	1770	1743	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			185			119		7				76
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1187			1032			1385			1025	
Travel Time (s)		27.0			23.5			31.5			23.3	
Peak Hour Factor	0.98	0.92	0.98	0.92	0.92	0.92	0.98	0.98	0.92	0.92	0.98	0.98
Heavy Vehicles (%)	0%	2%	0%	2%	2%	2%	2%	19%	2%	2%	9%	0%
Adj. Flow (vph)	540	127	540	325	1950	975	219	200	50	52	268	171
Shared Lane Traffic (%)												
Lane Group Flow (vph)	540	127	540	325	1950	975	219	250	0	52	268	171
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4	5	3	8	1	5	2		1	6	7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			4			8						6
Detector Phase	7	4	5	3	8	1	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	9.5	22.5	9.5	9.5	22.5		9.5	22.5	9.5
Total Split (s)	38.0	63.4	12.0	42.6	68.0	14.8	12.0	29.2		14.8	32.0	38.0
Total Split (%)	25.3%	42.3%	8.0%	28.4%	45.3%	9.9%	8.0%	19.5%		9.9%	21.3%	25.3%
Maximum Green (s)	33.5	58.9	7.5	38.1	63.5	10.3	7.5	24.7		10.3	27.5	33.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Min		None	Min	None
Act Effct Green (s)	33.5	65.2	77.2	31.8	63.5	78.3	7.5	24.3		10.3	27.1	65.1
Actuated g/C Ratio	0.22	0.44	0.52	0.21	0.42	0.52	0.05	0.16		0.07	0.18	0.44
v/c Ratio	1.34	0.16	0.59	0.86	1.30	1.10	1.28	0.95		0.43	0.85	0.23
Control Delay	211.2	27.8	19.6	78.6	175.4	92.4	215.5	102.5		78.4	83.3	15.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	211.2	27.8	19.6	78.6	175.4	92.4	215.5	102.5		78.4	83.3	15.1
LOS	F	C	B	E	F	F	F	F		E	F	B
Approach Delay		106.2			140.8			155.2			59.0	
Approach LOS		F			F			F			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 149.6			
Natural Cycle: 140			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.34			
Intersection Signal Delay: 126.9		Intersection LOS: F	
Intersection Capacity Utilization 113.9%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 401: Plum Grove Rd & Baptist Church Loop Rd

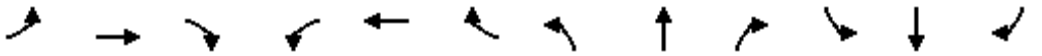


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	540	127	540	325	1950	975	219	250	52	268	171
v/c Ratio	1.34	0.16	0.59	0.86	1.30	1.10	1.28	0.95	0.43	0.85	0.23
Control Delay	211.2	27.8	19.6	78.6	175.4	92.4	215.5	102.5	78.4	83.3	15.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	211.2	27.8	19.6	78.6	175.4	92.4	215.5	102.5	78.4	83.3	15.1
Queue Length 50th (ft)	~687	75	239	308	~1282	~1025	~139	238	50	256	55
Queue Length 95th (ft)	#918	130	387	409	#1415	#1290	#228	#411	97	#406	107
Internal Link Dist (ft)		1107			952			1305		945	
Turn Bay Length (ft)	100						100				100
Base Capacity (vph)	404	811	922	450	1502	885	171	269	121	320	746
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.34	0.16	0.59	0.72	1.30	1.10	1.28	0.93	0.43	0.84	0.23

Intersection Summary

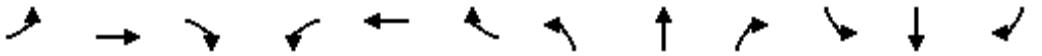
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	529	117	529	299	1794	897	215	196	46	48	263	168
Future Volume (vph)	529	117	529	299	1794	897	215	196	46	48	263	168
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	0.97	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1805	1863	1615	1770	3539	1583	3433	1594		1770	1743	1615
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1805	1863	1615	1770	3539	1583	3433	1594		1770	1743	1615
Peak-hour factor, PHF	0.98	0.92	0.98	0.92	0.92	0.92	0.98	0.98	0.92	0.92	0.98	0.98
Adj. Flow (vph)	540	127	540	325	1950	975	219	200	50	52	268	171
RTOR Reduction (vph)	0	0	95	0	0	60	0	6	0	0	0	45
Lane Group Flow (vph)	540	127	445	325	1950	915	219	244	0	52	268	126
Heavy Vehicles (%)	0%	2%	0%	2%	2%	2%	2%	19%	2%	2%	9%	0%
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4	5	3	8	1	5	2		1	6	7
Permitted Phases			4			8						6
Actuated Green, G (s)	33.5	65.2	72.7	31.8	63.5	73.8	7.5	24.3		10.3	27.1	60.6
Effective Green, g (s)	33.5	65.2	72.7	31.8	63.5	73.8	7.5	24.3		10.3	27.1	60.6
Actuated g/C Ratio	0.22	0.44	0.49	0.21	0.42	0.49	0.05	0.16		0.07	0.18	0.41
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	404	811	833	376	1502	828	172	258		121	315	702
v/s Ratio Prot	c0.30	0.07	0.03	0.18	c0.55	c0.08	0.06	c0.15		0.03	c0.15	0.04
v/s Ratio Perm			0.25			0.50						0.04
v/c Ratio	1.34	0.16	0.53	0.86	1.30	1.10	1.27	0.95		0.43	0.85	0.18
Uniform Delay, d1	58.0	25.6	26.7	56.8	43.0	37.9	71.0	62.0		66.8	59.3	28.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	167.5	0.1	0.7	18.2	139.2	64.0	160.4	41.1		2.4	19.2	0.1
Delay (s)	225.5	25.6	27.4	75.0	182.3	101.9	231.4	103.1		69.3	78.5	28.7
Level of Service	F	C	C	E	F	F	F	F		E	E	C
Approach Delay (s)		115.8			147.5			163.0			60.2	
Approach LOS		F			F			F			E	

Intersection Summary			
HCM 2000 Control Delay	133.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	149.6	Sum of lost time (s)	18.0
Intersection Capacity Utilization	113.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	529	117	529	299	1794	897	215	196	46	48	263	168
Future Volume (veh/h)	529	117	529	299	1794	897	215	196	46	48	263	168
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1900	1870	1870	1870	1870	1618	1870	1870	1767	1900
Adj Flow Rate, veh/h	540	127	540	325	1950	975	219	200	50	52	268	171
Peak Hour Factor	0.98	0.92	0.98	0.92	0.92	0.92	0.98	0.98	0.92	0.92	0.98	0.98
Percent Heavy Veh, %	0	2	0	2	2	2	2	19	2	2	9	0
Cap, veh/h	412	863	825	352	1533	744	176	226	57	67	296	636
Arrive On Green	0.23	0.46	0.46	0.20	0.43	0.43	0.05	0.18	0.18	0.04	0.17	0.17
Sat Flow, veh/h	1810	1870	1610	1781	3554	1585	3456	1250	312	1781	1767	1610
Grp Volume(v), veh/h	540	127	540	325	1950	975	219	0	250	52	268	171
Grp Sat Flow(s),veh/h/ln	1810	1870	1610	1781	1777	1585	1728	0	1562	1781	1767	1610
Q Serve(g_s), s	33.5	5.8	36.2	26.4	63.5	63.5	7.5	0.0	23.0	4.3	21.9	10.6
Cycle Q Clear(g_c), s	33.5	5.8	36.2	26.4	63.5	63.5	7.5	0.0	23.0	4.3	21.9	10.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	412	863	825	352	1533	744	176	0	283	67	296	636
V/C Ratio(X)	1.31	0.15	0.65	0.92	1.27	1.31	1.24	0.00	0.88	0.78	0.91	0.27
Avail Cap(c_a), veh/h	412	863	825	461	1533	744	176	0	283	125	330	667
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.8	22.9	26.3	58.0	41.8	39.1	69.8	0.0	58.8	70.2	60.1	30.1
Incr Delay (d2), s/veh	156.4	0.1	1.9	20.7	127.5	149.6	148.2	0.0	26.4	17.2	25.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	33.2	2.6	14.3	13.9	54.6	57.2	7.0	0.0	11.2	2.3	11.9	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	213.3	23.0	28.2	78.7	169.4	188.7	218.0	0.0	85.2	87.4	85.7	30.3
LnGrp LOS	F	C	C	E	F	F	F	A	F	F	F	C
Approach Vol, veh/h		1207			3250			469			491	
Approach Delay, s/veh		110.4			166.1			147.2			66.6	
Approach LOS		F			F			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	31.1	33.6	72.4	12.0	29.2	38.0	68.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.3	24.7	38.1	58.9	7.5	27.5	33.5	63.5
Max Q Clear Time (g_c+I1), s	6.3	25.0	28.4	38.2	9.5	23.9	35.5	65.5
Green Ext Time (p_c), s	0.0	0.0	0.7	2.8	0.0	0.8	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	143.0
HCM 6th LOS	F