

























# HCM 6th Signalized Intersection Summary

## 1: US-84 & SR-167

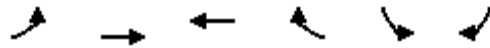
06/19/2023

												
Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	55	141	185	8	68	32	43	518	51	70	376	43
Future Volume (veh/h)	55	141	185	8	68	32	43	518	51	70	376	43
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	1633	1767	1811	1707	1722	1663	1826	1767	1663	1693	1796	1870
Adj Flow Rate, veh/h	64	164	0	9	79	0	50	602	0	81	437	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	18	9	6	13	12	16	5	9	16	14	7	2
Cap, veh/h	126	280		27	161		120	1164		150	1264	
Arrive On Green	0.08	0.16	0.00	0.02	0.09	0.00	0.07	0.35	0.00	0.09	0.37	0.00
Sat Flow, veh/h	1555	1767	1535	1626	1722	1409	1739	3357	1409	1612	3413	1585
Grp Volume(v), veh/h	64	164	0	9	79	0	50	602	0	81	437	0
Grp Sat Flow(s),veh/h/ln	1555	1767	1535	1626	1722	1409	1739	1678	1409	1612	1706	1585
Q Serve(g_s), s	2.0	4.5	0.0	0.3	2.3	0.0	1.4	7.4	0.0	2.5	4.8	0.0
Cycle Q Clear(g_c), s	2.0	4.5	0.0	0.3	2.3	0.0	1.4	7.4	0.0	2.5	4.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	126	280		27	161		120	1164		150	1264	
V/C Ratio(X)	0.51	0.59		0.34	0.49		0.42	0.52		0.54	0.35	
Avail Cap(c_a), veh/h	210	613		219	597		234	1164		217	1264	
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.8	20.3	0.0	25.2	22.3	0.0	23.1	13.5	0.0	22.5	11.8	0.0
Incr Delay (d2), s/veh	3.1	1.9	0.0	7.2	2.3	0.0	2.3	1.6	0.0	3.0	0.2	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	0.7	1.6	0.0	0.1	0.9	0.0	0.6	2.2	0.0	0.9	1.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.0	22.2	0.0	32.5	24.6	0.0	25.4	15.1	0.0	25.5	12.0	0.0
LnGrp LOS	C	C		C	C		C	B		C	B	
Approach Vol, veh/h		228			88			652			518	
Approach Delay, s/veh		23.2			25.4			15.9			14.1	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.8	23.0	9.2	9.9	8.6	24.2	5.9	13.2				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	7.0	18.0	7.0	18.0	7.0	18.0	7.0	18.0				
Max Q Clear Time (g_c+I1), s	4.5	9.4	4.0	4.3	3.4	6.8	2.3	6.5				
Green Ext Time (p_c), s	0.0	2.3	0.0	0.2	0.0	1.9	0.0	0.5				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			17.0									
HCM 6th LOS			B									
<b>Notes</b>												
Unsignalized Delay for [NER, NBR, SBR, SWR] is excluded from calculations of the approach delay and intersection delay.												

# HCM 6th Signalized Intersection Summary

## 14: SR-52 & SR-27

06/19/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↕	↗	↖		↘	↘
Traffic Volume (veh/h)	125	261	329	33	25	201
Future Volume (veh/h)	125	261	329	33	25	201
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	1811	1722	1811	1811	1722	1826
Adj Flow Rate, veh/h	132	275	346	0	26	212
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	12	6	6	12	5
Cap, veh/h	537	941	481		289	273
Arrive On Green	0.14	0.55	0.27	0.00	0.18	0.18
Sat Flow, veh/h	1725	1722	1811	0	1640	1547
Grp Volume(v), veh/h	132	275	346	0	26	212
Grp Sat Flow(s),veh/h/ln	1725	1722	1811	0	1640	1547
Q Serve(g_s), s	1.6	3.1	6.3	0.0	0.5	4.7
Cycle Q Clear(g_c), s	1.6	3.1	6.3	0.0	0.5	4.7
Prop In Lane	1.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	537	941	481		289	273
V/C Ratio(X)	0.25	0.29	0.72		0.09	0.78
Avail Cap(c_a), veh/h	627	1481	954		409	386
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	1.00	1.00
Uniform Delay (d), s/veh	6.7	4.4	12.0	0.0	12.4	14.2
Incr Delay (d2), s/veh	0.2	0.2	2.0	0.0	0.1	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.4	1.9	0.0	0.1	4.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	6.9	4.6	14.1	0.0	12.6	20.5
LnGrp LOS	A	A	B		B	C
Approach Vol, veh/h		407	346		238	
Approach Delay, s/veh		5.4	14.1		19.7	
Approach LOS		A	B		B	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		24.7		11.4	10.1	14.6
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		31.0		9.0	7.0	19.0
Max Q Clear Time (g_c+I1), s		5.1		6.7	3.6	8.3
Green Ext Time (p_c), s		1.4		0.2	0.1	1.3

### Intersection Summary

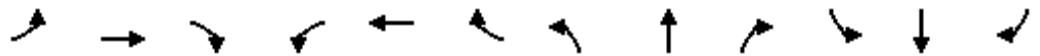
HCM 6th Ctrl Delay	11.8
HCM 6th LOS	B

### Notes

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

HCM 6th Signalized Intersection Summary  
 15: Commerce St & SR-52

06/19/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	245	37	122	397	1	16	2	154	1	0	0
Future Volume (veh/h)	2	245	37	122	397	1	16	2	154	1	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	1900	1767	1856	1826	1811	1900	1900	1159	1752	1900	1900	1900
Adj Flow Rate, veh/h	2	282	43	140	456	1	18	2	0	1	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
Percent Heavy Veh, %	0	9	3	5	6	0	0	50	10	0	0	0
Cap, veh/h	634	718	110	777	1103	2	185	2		218	0	0
Arrive On Green	0.00	0.48	0.48	0.13	0.61	0.61	0.03	0.03	0.00	0.03	0.00	0.00
Sat Flow, veh/h	1810	1497	228	1739	1806	4	814	90	0	1754	0	0
Grp Volume(v), veh/h	2	0	325	140	0	457	20	0	0	1	0	0
Grp Sat Flow(s),veh/h/ln	1810	0	1726	1739	0	1810	905	0	0	1754	0	0
Q Serve(g_s), s	0.0	0.0	5.0	1.2	0.0	5.5	0.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	5.0	1.2	0.0	5.5	0.9	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.13	1.00		0.00	0.90		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	634	0	828	777	0	1105	187	0		218	0	0
V/C Ratio(X)	0.00	0.00	0.39	0.18	0.00	0.41	0.11	0.00		0.00	0.00	0.00
Avail Cap(c_a), veh/h	931	0	828	834	0	1105	553	0		801	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	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.6	0.0	7.0	3.3	0.0	4.2	20.2	0.0	0.0	19.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.4	0.1	0.0	0.2	0.2	0.0	0.0	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	0.0	1.3	0.1	0.0	0.7	0.2	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.6	0.0	8.4	3.4	0.0	4.5	20.5	0.0	0.0	19.8	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C	A		B	A	A
Approach Vol, veh/h		327			597			20				1
Approach Delay, s/veh		8.3			4.2			20.5				19.8
Approach LOS		A			A			C				B
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.6	25.0		6.1	5.2	30.5		6.1				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	7.0	20.0		18.0	7.0	20.0		18.0				
Max Q Clear Time (g_c+I1), s	3.2	7.0		2.0	2.0	7.5		2.9				
Green Ext Time (p_c), s	0.1	1.4		0.0	0.0	2.1		0.0				

Intersection Summary

HCM 6th Ctrl Delay	6.0
HCM 6th LOS	A

Notes

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

Intersection	
Intersection Delay, s/veh	11.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕		↕			↕	
Traffic Vol, veh/h	12	198	11	14	197	54	15	110	46	50	66	28
Future Vol, veh/h	12	198	11	14	197	54	15	110	46	50	66	28
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, %	17	14	27	14	12	15	7	16	2	6	30	25
Mvmt Flow	13	220	12	16	219	60	17	122	51	56	73	31
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	1
HCM Control Delay	12.6	12.1	11.2	11
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	9%	5%	7%	0%	35%
Vol Thru, %	64%	90%	93%	0%	46%
Vol Right, %	27%	5%	0%	100%	19%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	171	221	211	54	144
LT Vol	15	12	14	0	50
Through Vol	110	198	197	0	66
RT Vol	46	11	0	54	28
Lane Flow Rate	190	246	234	60	160
Geometry Grp	2	5	7	7	2
Degree of Util (X)	0.302	0.396	0.401	0.09	0.26
Departure Headway (Hd)	5.713	5.804	6.163	5.386	5.85
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	627	619	584	664	611
Service Time	3.767	3.853	3.91	3.132	3.906
HCM Lane V/C Ratio	0.303	0.397	0.401	0.09	0.262
HCM Control Delay	11.2	12.6	13	8.7	11
HCM Lane LOS	B	B	B	A	B
HCM 95th-tile Q	1.3	1.9	1.9	0.3	1

Intersection						
Int Delay, s/veh	2.7					
Movement	WBL	WBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Vol, veh/h	1	81	54	116	207	5
Future Vol, veh/h	1	81	54	116	207	5
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	-	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	10	7	21	12	0
Mvmt Flow	1	84	56	121	216	5

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	452	219	221	0	0
Stage 1	219	-	-	-	-
Stage 2	233	-	-	-	-
Critical Hdwy	6.4	6.3	4.17	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.39	2.263	-	-
Pot Cap-1 Maneuver	569	801	1319	-	-
Stage 1	822	-	-	-	-
Stage 2	810	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	545	801	1319	-	-
Mov Cap-2 Maneuver	545	-	-	-	-
Stage 1	787	-	-	-	-
Stage 2	810	-	-	-	-

Approach	WB	SE	NW
HCM Control Delay, s	10.1	2.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NWT	NWRWBLn1	SEL	SET
Capacity (veh/h)	-	-	796	1319
HCM Lane V/C Ratio	-	-	0.107	0.043
HCM Control Delay (s)	-	-	10.1	7.9
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1

Intersection												
Int Delay, s/veh	4.3											
Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	152	22	7	98	13	15	77	13	11	42	14
Future Vol, veh/h	2	152	22	7	98	13	15	77	13	11	42	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	16	9	14	24	8	7	12	15	9	17	14
Mvmt Flow	2	171	25	8	110	15	17	87	15	12	47	16

Major/Minor	Major1			Major2			Minor2			Minor1		
Conflicting Flow All	110	0	0	171	0	0	333	309	118	358	314	184
Stage 1	-	-	-	-	-	-	134	134	-	188	188	-
Stage 2	-	-	-	-	-	-	199	175	-	170	126	-
Critical Hdwy	4.1	-	-	4.24	-	-	7.17	6.62	6.35	7.19	6.67	6.34
Critical Hdwy Stg 1	-	-	-	-	-	-	6.17	5.62	-	6.19	5.67	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.17	5.62	-	6.19	5.67	-
Follow-up Hdwy	2.2	-	-	2.326	-	-	3.563	4.108	3.435	3.581	4.153	3.426
Pot Cap-1 Maneuver	1493	-	-	1337	-	-	611	589	900	585	578	828
Stage 1	-	-	-	-	-	-	857	767	-	798	717	-
Stage 2	-	-	-	-	-	-	791	736	-	816	764	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1493	-	-	1337	-	-	558	584	900	507	573	828
Mov Cap-2 Maneuver	-	-	-	-	-	-	558	584	-	507	573	-
Stage 1	-	-	-	-	-	-	855	762	-	796	716	-
Stage 2	-	-	-	-	-	-	723	735	-	707	759	-

Approach	NB			SB			NE			SW		
HCM Control Delay, s	0.1			0.5			11.6			10.7		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NELn1	NBL	NBT	NBR	SBL	SBT	SBR	SWLn1
Capacity (veh/h)	661	1493	-	-	1337	-	-	705
HCM Lane V/C Ratio	0.178	0.002	-	-	0.006	-	-	0.107
HCM Control Delay (s)	11.6	7.4	0	-	7.7	0	-	10.7
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0.4

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↖	↗	↖	↖	↗
Traffic Vol, veh/h	24	30	0	16	5	3	0	122	24	3	87	18
Future Vol, veh/h	24	30	0	16	5	3	0	122	24	3	87	18
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	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	-	-	-	-	-	-	300	-	300	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	16	3	0	6	20	0	0	11	17	33	28	6
Mvmt Flow	29	36	0	19	6	4	0	147	29	4	105	22

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	263	260	105	278	260	147	105	0	0	147	0	0
Stage 1	113	113	-	147	147	-	-	-	-	-	-	-
Stage 2	150	147	-	131	113	-	-	-	-	-	-	-
Critical Hdwy	7.26	6.53	6.2	7.16	6.7	6.2	4.1	-	-	4.43	-	-
Critical Hdwy Stg 1	6.26	5.53	-	6.16	5.7	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.26	5.53	-	6.16	5.7	-	-	-	-	-	-	-
Follow-up Hdwy	3.644	4.027	3.3	3.554	4.18	3.3	2.2	-	-	2.497	-	-
Pot Cap-1 Maneuver	662	643	955	666	615	905	1499	-	-	1266	-	-
Stage 1	859	800	-	846	742	-	-	-	-	-	-	-
Stage 2	820	774	-	863	768	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	653	641	955	636	613	905	1499	-	-	1266	-	-
Mov Cap-2 Maneuver	653	641	-	636	613	-	-	-	-	-	-	-
Stage 1	859	798	-	846	742	-	-	-	-	-	-	-
Stage 2	810	774	-	821	766	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	11.2		10.2		0		0.2	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1499	-	-	646	720	1266	-	-
HCM Lane V/C Ratio	-	-	-	0.101	0.04	0.003	-	-
HCM Control Delay (s)	0	-	-	11.2	10.2	7.9	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.1	0	-	-

Intersection						
Int Delay, s/veh	1.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	29	1	135	38	0	94
Future Vol, veh/h	29	1	135	38	0	94
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	93	93	93	93	93	93
Heavy Vehicles, %	24	0	22	16	0	25
Mvmt Flow	31	1	145	41	0	101

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	267	166	0	0	186
Stage 1	166	-	-	-	-
Stage 2	101	-	-	-	-
Critical Hdwy	6.64	6.2	-	-	4.1
Critical Hdwy Stg 1	5.64	-	-	-	-
Critical Hdwy Stg 2	5.64	-	-	-	-
Follow-up Hdwy	3.716	3.3	-	-	2.2
Pot Cap-1 Maneuver	677	884	-	-	1401
Stage 1	813	-	-	-	-
Stage 2	871	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	677	884	-	-	1401
Mov Cap-2 Maneuver	677	-	-	-	-
Stage 1	813	-	-	-	-
Stage 2	871	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	682	1401
HCM Lane V/C Ratio	-	-	0.047	-
HCM Control Delay (s)	-	-	10.5	0
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0



Intersection						
Int Delay, s/veh	2					
Movement	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations	T			T		T
Traffic Vol, veh/h	1	52	36	149	156	1
Future Vol, veh/h	1	52	36	149	156	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	98	98	98	98	98	98
Heavy Vehicles, %	0	12	11	14	12	0
Mvmt Flow	1	53	37	152	159	1

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	386	160	160	0	0
Stage 1	160	-	-	-	-
Stage 2	226	-	-	-	-
Critical Hdwy	6.4	6.32	4.21	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.408	2.299	-	-
Pot Cap-1 Maneuver	621	860	1366	-	-
Stage 1	874	-	-	-	-
Stage 2	816	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	602	860	1366	-	-
Mov Cap-2 Maneuver	602	-	-	-	-
Stage 1	848	-	-	-	-
Stage 2	816	-	-	-	-

Approach	SB	NE	SW
HCM Control Delay, s	9.5	1.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NEL	NET	SBLn1	SWT	SWR
Capacity (veh/h)	1366	-	853	-	-
HCM Lane V/C Ratio	0.027	-	0.063	-	-
HCM Control Delay (s)	7.7	0	9.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection						
Int Delay, s/veh	2.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	203	59	6	234	106	10
Future Vol, veh/h	203	59	6	234	106	10
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	93	93	93	93	93	93
Heavy Vehicles, %	11	19	17	8	6	20
Mvmt Flow	218	63	6	252	114	11

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	281	0	514
Stage 1	-	-	-	-	250
Stage 2	-	-	-	-	264
Critical Hdwy	-	-	4.27	-	6.46
Critical Hdwy Stg 1	-	-	-	-	5.46
Critical Hdwy Stg 2	-	-	-	-	5.46
Follow-up Hdwy	-	-	2.353	-	3.554
Pot Cap-1 Maneuver	-	-	1200	-	514
Stage 1	-	-	-	-	782
Stage 2	-	-	-	-	771
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1200	-	511
Mov Cap-2 Maneuver	-	-	-	-	511
Stage 1	-	-	-	-	782
Stage 2	-	-	-	-	766

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	14
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	525	-	-	1200	-
HCM Lane V/C Ratio	0.238	-	-	0.005	-
HCM Control Delay (s)	14	-	-	8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.9	-	-	0	-

HCM 6th TWSC  
13: McDougald St/Martin St & SR-52

06/19/2023

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	256	8	1	339	1	12	0	3	2	0	4
Future Vol, veh/h	1	256	8	1	339	1	12	0	3	2	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	13	0	100	7	100	0	0	33	0	0	0
Mvmt Flow	1	278	9	1	368	1	13	0	3	2	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	369	0	0	287	0	0	658	656	283	657	660	369
Stage 1	-	-	-	-	-	-	285	285	-	371	371	-
Stage 2	-	-	-	-	-	-	373	371	-	286	289	-
Critical Hdwy	4.1	-	-	5.1	-	-	7.1	6.5	6.53	7.1	6.5	6.2
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	2.2	-	-	3.1	-	-	3.5	4	3.597	3.5	4	3.3
Pot Cap-1 Maneuver	1201	-	-	873	-	-	380	388	688	381	386	681
Stage 1	-	-	-	-	-	-	727	679	-	653	623	-
Stage 2	-	-	-	-	-	-	652	623	-	726	677	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1201	-	-	873	-	-	377	387	688	379	385	681
Mov Cap-2 Maneuver	-	-	-	-	-	-	377	387	-	379	385	-
Stage 1	-	-	-	-	-	-	726	678	-	652	622	-
Stage 2	-	-	-	-	-	-	647	622	-	722	676	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			14.1			11.8		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	414	1201	-	-	873	-	-	538
HCM Lane V/C Ratio	0.039	0.001	-	-	0.001	-	-	0.012
HCM Control Delay (s)	14.1	8	0	-	9.1	0	-	11.8
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	283	20	2	411	0	12	0	5	0	0	0
Future Vol, veh/h	0	283	20	2	411	0	12	0	5	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Yield	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
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	8	0	0	5	0	0	0	0	0	0	0
Mvmt Flow	0	349	25	2	507	0	15	0	6	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	507	0	0	374	0	0	873	873	362	873	885	507
Stage 1	-	-	-	-	-	-	362	362	-	511	511	-
Stage 2	-	-	-	-	-	-	511	511	-	362	374	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
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	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1068	-	-	1196	-	-	273	291	687	273	286	570
Stage 1	-	-	-	-	-	-	661	629	-	549	540	-
Stage 2	-	-	-	-	-	-	549	540	-	661	621	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1068	-	-	1196	-	-	272	290	687	270	285	570
Mov Cap-2 Maneuver	-	-	-	-	-	-	272	290	-	270	285	-
Stage 1	-	-	-	-	-	-	661	629	-	549	539	-
Stage 2	-	-	-	-	-	-	548	539	-	655	621	-

























Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			16.6			0		
HCM LOS							C			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	331	1068	-	-	1196	-	-	-
HCM Lane V/C Ratio	0.063	-	-	-	0.002	-	-	-
HCM Control Delay (s)	16.6	0	-	-	8	0	-	0
HCM Lane LOS	C	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	-

# HCM 6th Signalized Intersection Summary

## 1: US-84 & SR-167

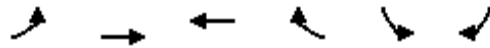
06/19/2023

												
Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	28	67	144	24	88	31	16	376	47	208	476	31
Future Volume (veh/h)	28	67	144	24	88	31	16	376	47	208	476	31
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	1633	1856	1781	1900	1781	1900	1900	1826	1811	1811	1841	1900
Adj Flow Rate, veh/h	29	70	0	25	92	0	17	392	0	217	496	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
Percent Heavy Veh, %	18	3	8	0	8	0	0	5	6	6	4	0
Cap, veh/h	72	176		74	160		53	1199		232	1577	
Arrive On Green	0.05	0.09	0.00	0.04	0.09	0.00	0.03	0.35	0.00	0.13	0.45	0.00
Sat Flow, veh/h	1555	1856	1510	1810	1781	1610	1810	3469	1535	1725	3497	1610
Grp Volume(v), veh/h	29	70	0	25	92	0	17	392	0	217	496	0
Grp Sat Flow(s),veh/h/ln	1555	1856	1510	1810	1781	1610	1810	1735	1535	1725	1749	1610
Q Serve(g_s), s	0.9	1.8	0.0	0.7	2.6	0.0	0.5	4.3	0.0	6.5	4.7	0.0
Cycle Q Clear(g_c), s	0.9	1.8	0.0	0.7	2.6	0.0	0.5	4.3	0.0	6.5	4.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	72	176		74	160		53	1199		232	1577	
V/C Ratio(X)	0.40	0.40		0.34	0.58		0.32	0.33		0.94	0.31	
Avail Cap(c_a), veh/h	209	642		243	616		243	1199		232	1577	
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.1	22.2	0.0	24.3	22.8	0.0	24.8	12.6	0.0	22.3	9.1	0.0
Incr Delay (d2), s/veh	3.6	1.5	0.0	2.7	3.3	0.0	3.4	0.7	0.0	41.6	0.1	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	0.7	0.0	0.3	1.1	0.0	0.2	1.3	0.0	4.9	1.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.8	23.6	0.0	27.0	26.0	0.0	28.2	13.3	0.0	64.0	9.3	0.0
LnGrp LOS	C	C		C	C		C	B		E	A	
Approach Vol, veh/h		99			117			409			713	
Approach Delay, s/veh		24.8			26.2			13.9			25.9	
Approach LOS		C			C			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.0	23.0	7.4	9.7	6.5	28.5	7.1	9.9				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	7.0	18.0	7.0	18.0	7.0	18.0	7.0	18.0				
Max Q Clear Time (g_c+I1), s	8.5	6.3	2.9	4.6	2.5	6.7	2.7	3.8				
Green Ext Time (p_c), s	0.0	1.6	0.0	0.3	0.0	2.2	0.0	0.2				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			22.2									
HCM 6th LOS			C									
<b>Notes</b>												
Unsignalized Delay for [NER, NBR, SBR, SWR] is excluded from calculations of the approach delay and intersection delay.												

# HCM 6th Signalized Intersection Summary

## 14: SR-52 & SR-27

06/19/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑	↗		↙	↘
Traffic Volume (veh/h)	203	325	336	50	60	233
Future Volume (veh/h)	203	325	336	50	60	233
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	1841	1781	1796	1781	1781	1826
Adj Flow Rate, veh/h	236	378	391	0	70	271
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	4	8	7	8	8	5
Cap, veh/h	535	1004	509		329	300
Arrive On Green	0.16	0.56	0.28	0.00	0.19	0.19
Sat Flow, veh/h	1753	1781	1796	0	1697	1547
Grp Volume(v), veh/h	236	378	391	0	70	271
Grp Sat Flow(s),veh/h/ln	1753	1781	1796	0	1697	1547
Q Serve(g_s), s	3.3	4.8	8.2	0.0	1.4	7.1
Cycle Q Clear(g_c), s	3.3	4.8	8.2	0.0	1.4	7.1
Prop In Lane	1.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	535	1004	509		329	300
V/C Ratio(X)	0.44	0.38	0.77		0.21	0.90
Avail Cap(c_a), veh/h	555	1383	871		329	300
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	1.00	1.00
Uniform Delay (d), s/veh	7.9	5.0	13.5	0.0	14.0	16.2
Incr Delay (d2), s/veh	0.6	0.2	2.5	0.0	0.3	28.5
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	0.7	2.7	0.0	0.4	2.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	8.4	5.2	16.0	0.0	14.3	44.7
LnGrp LOS	A	A	B		B	D
Approach Vol, veh/h		614	391		341	
Approach Delay, s/veh		6.5	16.0		38.5	
Approach LOS		A	B		D	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		28.2		13.0	11.5	16.7
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		32.0		8.0	7.0	20.0
Max Q Clear Time (g_c+I1), s		6.8		9.1	5.3	10.2
Green Ext Time (p_c), s		2.1		0.0	0.1	1.5

### Intersection Summary

HCM 6th Ctrl Delay	17.3
HCM 6th LOS	B

### Notes

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

HCM 6th Signalized Intersection Summary  
 15: Commerce St & SR-52

06/19/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Volume (veh/h)	12	311	27	222	352	0	51	3	191	3	4	3
Future Volume (veh/h)	12	311	27	222	352	0	51	3	191	3	4	3
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	1796	1900	1781	1856	1900	1870	1900	1811	1900	1900	1900
Adj Flow Rate, veh/h	13	338	29	241	383	0	55	3	0	3	4	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
Percent Heavy Veh, %	0	7	0	8	3	0	2	0	6	0	0	0
Cap, veh/h	661	733	63	711	1068	0	247	5		132	52	34
Arrive On Green	0.02	0.45	0.45	0.15	0.58	0.00	0.06	0.06	0.00	0.06	0.06	0.06
Sat Flow, veh/h	1810	1631	140	1697	1856	0	1403	77	0	426	812	530
Grp Volume(v), veh/h	13	0	367	241	383	0	58	0	0	10	0	0
Grp Sat Flow(s),veh/h/ln	1810	0	1771	1697	1856	0	1479	0	0	1768	0	0
Q Serve(g_s), s	0.2	0.0	6.4	2.6	4.9	0.0	1.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.2	0.0	6.4	2.6	4.9	0.0	1.7	0.0	0.0	0.2	0.0	0.0
Prop In Lane	1.00		0.08	1.00		0.00	0.95		0.00	0.30		0.30
Lane Grp Cap(c), veh/h	661	0	796	711	1068	0	252	0		218	0	0
V/C Ratio(X)	0.02	0.00	0.46	0.34	0.36	0.00	0.23	0.00		0.05	0.00	0.00
Avail Cap(c_a), veh/h	903	0	796	724	1068	0	746	0		781	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	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.2	0.0	8.5	4.3	5.0	0.0	20.3	0.0	0.0	19.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.9	0.3	0.2	0.0	0.5	0.0	0.0	0.1	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	0.0	0.0	1.9	0.3	0.9	0.0	0.6	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.2	0.0	10.4	4.6	5.3	0.0	20.7	0.0	0.0	19.7	0.0	0.0
LnGrp LOS	A	A	B	A	A	A	C	A		B	A	A
Approach Vol, veh/h		380			624			58			10	
Approach Delay, s/veh		10.3			5.0			20.7			19.7	
Approach LOS		B			A			C			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.6	25.0		7.8	6.0	30.6		7.8				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	7.0	20.0		18.0	7.0	20.0		18.0				
Max Q Clear Time (g_c+I1), s	4.6	8.4		2.2	2.2	6.9		3.7				
Green Ext Time (p_c), s	0.2	1.5		0.0	0.0	1.7		0.2				

Intersection Summary

HCM 6th Ctrl Delay	7.9
HCM 6th LOS	A

Notes

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

Intersection	
Intersection Delay, s/veh	12
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕		↕			↕	
Traffic Vol, veh/h	18	169	21	16	218	36	27	95	19	57	129	32
Future Vol, veh/h	18	169	21	16	218	36	27	95	19	57	129	32
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	11	29	19	7	6	4	8	11	7	11	3
Mvmt Flow	19	178	22	17	229	38	28	100	20	60	136	34
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	1
HCM Control Delay	11.5	13	10.7	12
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	19%	9%	7%	0%	26%
Vol Thru, %	67%	81%	93%	0%	59%
Vol Right, %	13%	10%	0%	100%	15%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	141	208	234	36	218
LT Vol	27	18	16	0	57
Through Vol	95	169	218	0	129
RT Vol	19	21	0	36	32
Lane Flow Rate	148	219	246	38	229
Geometry Grp	2	5	7	7	2
Degree of Util (X)	0.239	0.339	0.43	0.056	0.364
Departure Headway (Hd)	5.807	5.578	6.282	5.33	5.705
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	616	644	571	670	629
Service Time	3.865	3.63	4.028	3.077	3.755
HCM Lane V/C Ratio	0.24	0.34	0.431	0.057	0.364
HCM Control Delay	10.7	11.5	13.7	8.4	12
HCM Lane LOS	B	B	B	A	B
HCM 95th-tile Q	0.9	1.5	2.1	0.2	1.7



Intersection						
Int Delay, s/veh	1.8					
Movement	WBL	WBR	SEL	SET	NWT	NWR
Lane Configurations	↔		↔	↑	↑	
Traffic Vol, veh/h	4	45	61	244	155	2
Future Vol, veh/h	4	45	61	244	155	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	-	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	3	7	12	0
Mvmt Flow	4	48	65	260	165	2

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	556	166	167	0	0
Stage 1	166	-	-	-	-
Stage 2	390	-	-	-	-
Critical Hdwy	6.4	6.2	4.13	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.227	-	-
Pot Cap-1 Maneuver	496	884	1405	-	-
Stage 1	868	-	-	-	-
Stage 2	689	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	473	884	1405	-	-
Mov Cap-2 Maneuver	473	-	-	-	-
Stage 1	828	-	-	-	-
Stage 2	689	-	-	-	-

Approach	WB	SE	NW
HCM Control Delay, s	9.7	1.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NWT	NWRWBLn1	SEL	SET
Capacity (veh/h)	-	-	825	1405
HCM Lane V/C Ratio	-	-	0.063	0.046
HCM Control Delay (s)	-	-	9.7	7.7
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1

Intersection												
Int Delay, s/veh	4.3											
Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	125	11	13	184	18	12	42	19	22	76	11
Future Vol, veh/h	8	125	11	13	184	18	12	42	19	22	76	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	13	9	9	8	5	11	0	10	11	9	8	9
Mvmt Flow	8	132	12	14	194	19	13	44	20	23	80	12

Major/Minor	Major1			Major2			Minor2			Minor1		
Conflicting Flow All	194	0	0	132	0	0	420	380	204	398	376	138
Stage 1	-	-	-	-	-	-	232	232	-	154	154	-
Stage 2	-	-	-	-	-	-	188	148	-	244	222	-
Critical Hdwy	4.23	-	-	4.18	-	-	7.1	6.6	6.31	7.19	6.58	6.29
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.6	-	6.19	5.58	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.6	-	6.19	5.58	-
Follow-up Hdwy	2.317	-	-	2.272	-	-	3.5	4.09	3.399	3.581	4.072	3.381
Pot Cap-1 Maneuver	1316	-	-	1417	-	-	547	540	814	550	546	892
Stage 1	-	-	-	-	-	-	775	698	-	832	759	-
Stage 2	-	-	-	-	-	-	818	760	-	744	709	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1316	-	-	1417	-	-	472	530	814	496	536	892
Mov Cap-2 Maneuver	-	-	-	-	-	-	472	530	-	496	536	-
Stage 1	-	-	-	-	-	-	770	690	-	826	754	-
Stage 2	-	-	-	-	-	-	717	755	-	672	701	-

Approach	NB			SB			NE			SW		
HCM Control Delay, s	0.4			0.5			10.8			12.6		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NELn1	NBL	NBT	NBR	SBL	SBT	SBR	SWLn1
Capacity (veh/h)	697	1316	-	-	1417	-	-	586
HCM Lane V/C Ratio	0.11	0.006	-	-	0.01	-	-	0.196
HCM Control Delay (s)	10.8	7.8	0	-	7.6	0	-	12.6
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0.7

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↖	↗	↖	↖	↗
Traffic Vol, veh/h	17	9	1	26	28	6	0	136	16	2	151	22
Future Vol, veh/h	17	9	1	26	28	6	0	136	16	2	151	22
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	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	-	-	-	-	-	-	300	-	300	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	11	17	0	7	6	50	13	9
Mvmt Flow	20	10	1	30	32	7	0	156	18	2	174	25

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	350	334	174	339	334	156	174	0	0	156	0	0
Stage 1	178	178	-	156	156	-	-	-	-	-	-	-
Stage 2	172	156	-	183	178	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.61	6.37	4.1	-	-	4.6	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.61	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.61	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4.099	3.453	2.2	-	-	2.65	-	-
Pot Cap-1 Maneuver	608	589	875	619	572	852	1415	-	-	1178	-	-
Stage 1	828	756	-	851	752	-	-	-	-	-	-	-
Stage 2	835	772	-	823	735	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	576	588	875	609	571	852	1415	-	-	1178	-	-
Mov Cap-2 Maneuver	576	588	-	609	571	-	-	-	-	-	-	-
Stage 1	828	754	-	851	752	-	-	-	-	-	-	-
Stage 2	793	772	-	809	734	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	11.3		11.2		0		0.1	
HCM LOS	B		B					




Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1415	-	-	602	654	1178	-	-
HCM Lane V/C Ratio	-	-	-	0.052	0.105	0.002	-	-
HCM Control Delay (s)	0	-	-	11.3	11.2	8.1	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.4	0	-	-

Intersection						
Int Delay, s/veh	1.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	58	2	121	52	1	160
Future Vol, veh/h	58	2	121	52	1	160
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	95	95	95	95	95	95
Heavy Vehicles, %	9	0	7	8	0	12
Mvmt Flow	61	2	127	55	1	168

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	325	155	0	0	182
Stage 1	155	-	-	-	-
Stage 2	170	-	-	-	-
Critical Hdwy	6.49	6.2	-	-	4.1
Critical Hdwy Stg 1	5.49	-	-	-	-
Critical Hdwy Stg 2	5.49	-	-	-	-
Follow-up Hdwy	3.581	3.3	-	-	2.2
Pot Cap-1 Maneuver	655	896	-	-	1405
Stage 1	856	-	-	-	-
Stage 2	843	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	654	896	-	-	1405
Mov Cap-2 Maneuver	654	-	-	-	-
Stage 1	856	-	-	-	-
Stage 2	842	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	660	1405
HCM Lane V/C Ratio	-	-	0.096	0.001
HCM Control Delay (s)	-	-	11	7.6
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.3	0

Intersection						
Int Delay, s/veh	2.1					
Movement	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	3	60	42	181	179	3
Future Vol, veh/h	3	60	42	181	179	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	90	90	90	90	90	90
Heavy Vehicles, %	33	8	14	13	11	0
Mvmt Flow	3	67	47	201	199	3

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	496	201	202	0	0
Stage 1	201	-	-	-	-
Stage 2	295	-	-	-	-
Critical Hdwy	6.73	6.28	4.24	-	-
Critical Hdwy Stg 1	5.73	-	-	-	-
Critical Hdwy Stg 2	5.73	-	-	-	-
Follow-up Hdwy	3.797	3.372	2.326	-	-
Pot Cap-1 Maneuver	482	825	1301	-	-
Stage 1	764	-	-	-	-
Stage 2	690	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	462	825	1301	-	-
Mov Cap-2 Maneuver	462	-	-	-	-
Stage 1	733	-	-	-	-
Stage 2	690	-	-	-	-

Approach	SB	NE	SW
HCM Control Delay, s	10	1.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NEL	NET	SBLn1	SWT	SWR
Capacity (veh/h)	1301	-	795	-	-
HCM Lane V/C Ratio	0.036	-	0.088	-	-
HCM Control Delay (s)	7.9	0	10	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

Intersection						
Int Delay, s/veh	2.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Vol, veh/h	236	117	17	275	88	8
Future Vol, veh/h	236	117	17	275	88	8
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	93	93	93	93	93	93
Heavy Vehicles, %	9	8	24	8	6	13
Mvmt Flow	254	126	18	296	95	9

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	380	0	649 317
Stage 1	-	-	-	-	317 -
Stage 2	-	-	-	-	332 -
Critical Hdwy	-	-	4.34	-	6.46 6.33
Critical Hdwy Stg 1	-	-	-	-	5.46 -
Critical Hdwy Stg 2	-	-	-	-	5.46 -
Follow-up Hdwy	-	-	2.416	-	3.554 3.417
Pot Cap-1 Maneuver	-	-	1068	-	428 699
Stage 1	-	-	-	-	729 -
Stage 2	-	-	-	-	718 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1068	-	419 699
Mov Cap-2 Maneuver	-	-	-	-	419 -
Stage 1	-	-	-	-	729 -
Stage 2	-	-	-	-	704 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	15.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	433	-	-	1068	-
HCM Lane V/C Ratio	0.238	-	-	0.017	-
HCM Control Delay (s)	15.9	-	-	8.4	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.9	-	-	0.1	-

Intersection												
Int Delay, s/veh	0.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	350	16	5	356	2	12	1	0	3	0	6
Future Vol, veh/h	7	350	16	5	356	2	12	1	0	3	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	8	0	0	8	0	0	0	0	0	0	0
Mvmt Flow	8	376	17	5	383	2	13	1	0	3	0	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	385	0	0	393	0	0	798	796	385	795	803	384
Stage 1	-	-	-	-	-	-	401	401	-	394	394	-
Stage 2	-	-	-	-	-	-	397	395	-	401	409	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
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	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1185	-	-	1177	-	-	306	322	667	308	319	668
Stage 1	-	-	-	-	-	-	630	604	-	635	609	-
Stage 2	-	-	-	-	-	-	633	608	-	630	600	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1185	-	-	1177	-	-	300	317	667	304	315	668
Mov Cap-2 Maneuver	-	-	-	-	-	-	300	317	-	304	315	-
Stage 1	-	-	-	-	-	-	624	599	-	629	606	-
Stage 2	-	-	-	-	-	-	624	605	-	623	595	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2			0.1			17.5			12.7		
HCM LOS							C			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	301	1185	-	-	1177	-	-	477
HCM Lane V/C Ratio	0.046	0.006	-	-	0.005	-	-	0.02
HCM Control Delay (s)	17.5	8.1	0	-	8.1	0	-	12.7
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	337	29	10	382	0	5	0	2	0	0	0
Future Vol, veh/h	0	337	29	10	382	0	5	0	2	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Yield	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	5	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	0	387	33	11	439	0	6	0	2	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	439	0	0	420	0	0	865	865	404	865	881	439
Stage 1	-	-	-	-	-	-	404	404	-	461	461	-
Stage 2	-	-	-	-	-	-	461	461	-	404	420	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
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	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1132	-	-	1150	-	-	276	294	651	276	288	622
Stage 1	-	-	-	-	-	-	627	603	-	584	569	-
Stage 2	-	-	-	-	-	-	584	569	-	627	593	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1132	-	-	1150	-	-	273	290	651	272	284	622
Mov Cap-2 Maneuver	-	-	-	-	-	-	273	290	-	272	284	-
Stage 1	-	-	-	-	-	-	627	603	-	584	562	-
Stage 2	-	-	-	-	-	-	576	562	-	625	593	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.2			16.3			0		
HCM LOS							C			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	327	1132	-	-	1150	-	-	-
HCM Lane V/C Ratio	0.025	-	-	-	0.01	-	-	-
HCM Control Delay (s)	16.3	0	-	-	8.2	0	-	0
HCM Lane LOS	C	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	-