
Appendix H – 2020 Existing Synchro and Sim Traffic Reports

Intersection						
Int Delay, s/veh	5.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	TT		T			T
Traffic Vol, veh/h	153	10	207	40	5	520
Future Vol, veh/h	153	10	207	40	5	520
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	87	87	87	87	87	87
Heavy Vehicles, %	0	0	4	0	0	0
Mvmt Flow	176	11	238	46	6	598

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	871	261	0	0	284
Stage 1	261	-	-	-	-
Stage 2	610	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2
Pot Cap-1 Maneuver	324	783	-	-	1290
Stage 1	787	-	-	-	-
Stage 2	546	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	322	783	-	-	1290
Mov Cap-2 Maneuver	322	-	-	-	-
Stage 1	787	-	-	-	-
Stage 2	542	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	28.7	0	0.1
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	334	1290
HCM Lane V/C Ratio	-	-	0.561	0.004
HCM Control Delay (s)	-	-	28.7	7.8
HCM Lane LOS	-	-	D	A
HCM 95th %tile Q(veh)	-	-	3.3	0

Intersection												
Int Delay, s/veh	25.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	0	0	0	269	0	28	0	292	88	19	688	0
Future Vol, veh/h	0	0	0	269	0	28	0	292	88	19	688	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	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	1	4	0	0	0
Mvmt Flow	0	0	0	296	0	31	0	321	97	21	756	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	959	1216	378	790	1168	209	756	0	0	418	0	0
Stage 1	798	798	-	370	370	-	-	-	-	-	-	-
Stage 2	161	418	-	420	798	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	214	183	625	~284	195	803	864	-	-	1152	-	-
Stage 1	350	401	-	628	624	-	-	-	-	-	-	-
Stage 2	831	594	-	587	401	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	203	180	625	~280	191	803	864	-	-	1152	-	-
Mov Cap-2 Maneuver	203	180	-	~280	191	-	-	-	-	-	-	-
Stage 1	350	394	-	628	624	-	-	-	-	-	-	-
Stage 2	799	594	-	576	394	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	118.6	0	0.2
HCM LOS	A	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	864	-	-	-	298	1152	-	-
HCM Lane V/C Ratio	-	-	-	-	1.095	0.018	-	-
HCM Control Delay (s)	0	-	-	0	118.6	8.2	-	-
HCM Lane LOS	A	-	-	A	F	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	13	0.1	-	-

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

HCM 6th TWSC
 3: W Martintown Rd & I-20 WB Off Ramp

2020 Existing Condition AM Peak Hour

Intersection						
Int Delay, s/veh	2.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑↑			↑↑
Traffic Vol, veh/h	131	53	332	0	0	535
Future Vol, veh/h	131	53	332	0	0	535
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	125	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	9	2	0	0	1
Mvmt Flow	144	58	365	0	0	588

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	659	183	0	-	-	-
Stage 1	365	-	-	-	-	-
Stage 2	294	-	-	-	-	-
Critical Hdwy	6.84	7.08	-	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.39	-	-	-	-
Pot Cap-1 Maneuver	397	807	-	0	0	-
Stage 1	673	-	-	0	0	-
Stage 2	730	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	397	807	-	-	-	-
Mov Cap-2 Maneuver	397	-	-	-	-	-
Stage 1	673	-	-	-	-	-
Stage 2	730	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.4	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBTWBLn1	WBLn2	SBT
Capacity (veh/h)	-	397	807
HCM Lane V/C Ratio	-	0.363	0.072
HCM Control Delay (s)	-	19.1	9.8
HCM Lane LOS	-	C	A
HCM 95th %tile Q(veh)	-	1.6	0.2

HCM 6th TWSC
4: W Martintown Rd & I-20 EB Off Ramp

2020 Existing Condition AM Peak Hour

Intersection						
Int Delay, s/veh	5.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	136	377	0	922	609	0
Future Vol, veh/h	136	377	0	922	609	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	100	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	4	2	0	1	1	0
Mvmt Flow	142	393	0	960	634	0

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1018	317	-	0	-	0
Stage 1	634	-	-	-	-	-
Stage 2	384	-	-	-	-	-
Critical Hdwy	6.33	6.94	-	-	-	-
Critical Hdwy Stg 1	5.88	-	-	-	-	-
Critical Hdwy Stg 2	6.08	-	-	-	-	-
Follow-up Hdwy	3.69	3.32	-	-	-	-
Pot Cap-1 Maneuver	262	679	0	-	-	0
Stage 1	471	-	0	-	-	0
Stage 2	617	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	262	679	-	-	-	-
Mov Cap-2 Maneuver	262	-	-	-	-	-
Stage 1	471	-	-	-	-	-
Stage 2	617	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	21.7	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	262	679	-
HCM Lane V/C Ratio	-	0.541	0.578	-
HCM Control Delay (s)	-	33.8	17.3	-
HCM Lane LOS	-	D	C	-
HCM 95th %tile Q(veh)	-	3	3.7	-

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘↗		↘	↑↑	↑↑	↘
Traffic Vol, veh/h	4	1	5	918	984	2
Future Vol, veh/h	4	1	5	918	984	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	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	1	0	0
Mvmt Flow	4	1	6	1020	1093	2

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1615	547	1095	0	-	0
Stage 1	1093	-	-	-	-	-
Stage 2	522	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	97	486	645	-	-	-
Stage 1	287	-	-	-	-	-
Stage 2	566	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	96	486	645	-	-	-
Mov Cap-2 Maneuver	96	-	-	-	-	-
Stage 1	284	-	-	-	-	-
Stage 2	566	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	38.2	0.1	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	645	-	114	-	-
HCM Lane V/C Ratio	0.009	-	0.049	-	-
HCM Control Delay (s)	10.6	-	38.2	-	-
HCM Lane LOS	B	-	E	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	TT		T	TT	TT	
Traffic Vol, veh/h	24	29	13	903	976	4
Future Vol, veh/h	24	29	13	903	976	4
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	-	175	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	3	8	1	1	0
Mvmt Flow	26	31	14	961	1038	4

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1549	521	1042	0	-	0
Stage 1	1040	-	-	-	-	-
Stage 2	509	-	-	-	-	-
Critical Hdwy	6.8	6.96	4.26	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.33	2.28	-	-	-
Pot Cap-1 Maneuver	107	498	629	-	-	-
Stage 1	306	-	-	-	-	-
Stage 2	574	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	105	498	629	-	-	-
Mov Cap-2 Maneuver	221	-	-	-	-	-
Stage 1	299	-	-	-	-	-
Stage 2	574	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.7	0.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	629	-	318	-	-
HCM Lane V/C Ratio	0.022	-	0.177	-	-
HCM Control Delay (s)	10.9	-	18.7	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.6	-	-

Intersection						
Int Delay, s/veh	2.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↕		↖	↗
Traffic Vol, veh/h	34	187	729	99	172	833
Future Vol, veh/h	34	187	729	99	172	833
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	125	0	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	2	0	0	1	2
Mvmt Flow	37	201	784	106	185	896

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1655	445	0	0	890
Stage 1	837	-	-	-	-
Stage 2	818	-	-	-	-
Critical Hdwy	6.8	6.94	-	-	4.12
Critical Hdwy Stg 1	5.8	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-
Follow-up Hdwy	3.5	3.32	-	-	2.21
Pot Cap-1 Maneuver	91	561	-	-	764
Stage 1	390	-	-	-	-
Stage 2	399	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	69	561	-	-	764
Mov Cap-2 Maneuver	186	-	-	-	-
Stage 1	390	-	-	-	-
Stage 2	302	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.2	0	1.9
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	186	561	764
HCM Lane V/C Ratio	-	-	0.197	0.358	0.242
HCM Control Delay (s)	-	-	29	15	11.2
HCM Lane LOS	-	-	D	C	B
HCM 95th %tile Q(veh)	-	-	0.7	1.6	0.9

Intersection						
Int Delay, s/veh	2.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	84	11	569	169	13	277
Future Vol, veh/h	84	11	569	169	13	277
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, %	4	9	0	2	0	1
Mvmt Flow	88	12	599	178	14	292

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1008	688	0	0	777
Stage 1	688	-	-	-	-
Stage 2	320	-	-	-	-
Critical Hdwy	6.44	6.29	-	-	4.1
Critical Hdwy Stg 1	5.44	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-
Follow-up Hdwy	3.536	3.381	-	-	2.2
Pot Cap-1 Maneuver	264	434	-	-	848
Stage 1	495	-	-	-	-
Stage 2	732	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	259	434	-	-	848
Mov Cap-2 Maneuver	259	-	-	-	-
Stage 1	495	-	-	-	-
Stage 2	717	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	25.7	0	0.4
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	272	848
HCM Lane V/C Ratio	-	-	0.368	0.016
HCM Control Delay (s)	-	-	25.7	9.3
HCM Lane LOS	-	-	D	A
HCM 95th %tile Q(veh)	-	-	1.6	0

HCM 6th TWSC
2: W Martintown Rd & Bergen Rd

2020 Existing Condition PM Peak Hour

Intersection												
Int Delay, s/veh	17.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	0	0	0	129	0	10	0	735	253	19	383	0
Future Vol, veh/h	0	0	0	129	0	10	0	735	253	19	383	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	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	0	1	0	0	0
Mvmt Flow	0	0	0	147	0	11	0	835	288	22	435	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	897	1602	218	1241	1458	562	435	0	0	1123	0	0
Stage 1	479	479	-	979	979	-	-	-	-	-	-	-
Stage 2	418	1123	-	262	479	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	238	107	792	~ 133	131	475	1135	-	-	629	-	-
Stage 1	542	558	-	272	331	-	-	-	-	-	-	-
Stage 2	588	283	-	726	558	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	226	103	792	~ 129	126	475	1135	-	-	629	-	-
Mov Cap-2 Maneuver	226	103	-	~ 129	126	-	-	-	-	-	-	-
Stage 1	542	538	-	272	331	-	-	-	-	-	-	-
Stage 2	574	283	-	701	538	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	0		190.9		0		0.5	
HCM LOS	A		F					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1135	-	-	-	-	136	629	-
HCM Lane V/C Ratio	-	-	-	-	1.161	0.034	-	-
HCM Control Delay (s)	0	-	-	0	190.9	10.9	-	-
HCM Lane LOS	A	-	-	A	F	B	-	-
HCM 95th %tile Q(veh)	0	-	-	-	9.2	0.1	-	-

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

HCM 6th TWSC
 3: W Martintown Rd & I-20 WB Off Ramp

2020 Existing Condition PM Peak Hour

Intersection						
Int Delay, s/veh	4.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑↑			↑↑
Traffic Vol, veh/h	104	101	890	0	0	285
Future Vol, veh/h	104	101	890	0	0	285
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	125	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	1	0	0	1
Mvmt Flow	112	109	957	0	0	306

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1110	479	0	-	-	-
Stage 1	957	-	-	-	-	-
Stage 2	153	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	-	-
Pot Cap-1 Maneuver	207	538	-	0	0	-
Stage 1	338	-	-	0	0	-
Stage 2	865	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	207	538	-	-	-	-
Mov Cap-2 Maneuver	207	-	-	-	-	-
Stage 1	338	-	-	-	-	-
Stage 2	865	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	27.5	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBTWBLn1	WBLn2	SBT
Capacity (veh/h)	-	207	538
HCM Lane V/C Ratio	-	0.54	0.202
HCM Control Delay (s)	-	41.1	13.4
HCM Lane LOS	-	E	B
HCM 95th %tile Q(veh)	-	2.8	0.7

HCM 6th TWSC
4: W Martintown Rd & I-20 EB Off Ramp

2020 Existing Condition PM Peak Hour

Intersection						
Int Delay, s/veh	28.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	372	713	0	1127	341	0
Future Vol, veh/h	372	713	0	1127	341	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	100	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	0	0	0	1	0
Mvmt Flow	392	751	0	1186	359	0

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	833	180	-	0	-	0
Stage 1	359	-	-	-	-	-
Stage 2	474	-	-	-	-	-
Critical Hdwy	6.27	6.9	-	-	-	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-
Follow-up Hdwy	3.66	3.3	-	-	-	-
Pot Cap-1 Maneuver	~ 342	838	0	-	-	0
Stage 1	657	-	0	-	-	0
Stage 2	561	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 342	838	-	-	-	-
Mov Cap-2 Maneuver	~ 342	-	-	-	-	-
Stage 1	657	-	-	-	-	-
Stage 2	561	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	66.2	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	342	838	-
HCM Lane V/C Ratio	-	1.145	0.896	-
HCM Control Delay (s)	-	128.7	33.6	-
HCM Lane LOS	-	F	D	-
HCM 95th %tile Q(veh)	-	15.6	12.2	-

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

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘↗		↘	↑↑	↑↑	↘
Traffic Vol, veh/h	2	2	5	1125	1052	2
Future Vol, veh/h	2	2	5	1125	1052	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	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	2	6	1250	1169	2

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1806	585	1171	0	-	0
Stage 1	1169	-	-	-	-	-
Stage 2	637	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	72	459	604	-	-	-
Stage 1	262	-	-	-	-	-
Stage 2	494	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	71	459	604	-	-	-
Mov Cap-2 Maneuver	71	-	-	-	-	-
Stage 1	259	-	-	-	-	-
Stage 2	494	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	35.4	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	604	-	123	-	-
HCM Lane V/C Ratio	0.009	-	0.036	-	-
HCM Control Delay (s)	11	-	35.4	-	-
HCM Lane LOS	B	-	E	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	WT		WT	TT	TT	
Traffic Vol, veh/h	15	20	41	1088	1016	24
Future Vol, veh/h	15	20	41	1088	1016	24
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	-	175	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	5	0	0	1	0
Mvmt Flow	16	21	44	1157	1081	26

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1761	554	1107	0	-	0
Stage 1	1094	-	-	-	-	-
Stage 2	667	-	-	-	-	-
Critical Hdwy	6.8	7	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.35	2.2	-	-	-
Pot Cap-1 Maneuver	77	468	638	-	-	-
Stage 1	287	-	-	-	-	-
Stage 2	477	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	72	468	638	-	-	-
Mov Cap-2 Maneuver	186	-	-	-	-	-
Stage 1	267	-	-	-	-	-
Stage 2	477	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19.6	0.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	638	-	284	-	-
HCM Lane V/C Ratio	0.068	-	0.131	-	-
HCM Control Delay (s)	11.1	-	19.6	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0.2	-	0.4	-	-

Intersection						
Int Delay, s/veh	2.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↕		↖	↗
Traffic Vol, veh/h	21	110	1019	25	167	869
Future Vol, veh/h	21	110	1019	25	167	869
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	125	0	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	1	1
Mvmt Flow	23	120	1108	27	182	945

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1959	568	0	0	1135
Stage 1	1122	-	-	-	-
Stage 2	837	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.12
Critical Hdwy Stg 1	5.8	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.21
Pot Cap-1 Maneuver	57	471	-	-	617
Stage 1	277	-	-	-	-
Stage 2	390	-	-	-	-
Platoon blocked, %					
Mov Cap-1 Maneuver	40	471	-	-	617
Mov Cap-2 Maneuver	144	-	-	-	-
Stage 1	277	-	-	-	-
Stage 2	275	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.3	0	2.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	144	471	617
HCM Lane V/C Ratio	-	-	0.159	0.254	0.294
HCM Control Delay (s)	-	-	34.7	15.2	13.2
HCM Lane LOS	-	-	D	C	B
HCM 95th %tile Q(veh)	-	-	0.5	1	1.2

Appendix I – 2040 No-Build Synchro and Sim Traffic Reports

Intersection						
Int Delay, s/veh	35					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	219	22	375	70	8	600
Future Vol, veh/h	219	22	375	70	8	600
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	87	87	87	87	87	87
Heavy Vehicles, %	0	0	4	0	0	0
Mvmt Flow	252	25	431	80	9	690

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1179	471	0	0	511
Stage 1	471	-	-	-	-
Stage 2	708	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2
Pot Cap-1 Maneuver	~ 212	597	-	-	1065
Stage 1	632	-	-	-	-
Stage 2	492	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	~ 209	597	-	-	1065
Mov Cap-2 Maneuver	~ 209	-	-	-	-
Stage 1	632	-	-	-	-
Stage 2	485	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	187.5	0	0.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	222	1065
HCM Lane V/C Ratio	-	-	1.248	0.009
HCM Control Delay (s)	-	-	187.5	8.4
HCM Lane LOS	-	-	F	A
HCM 95th %tile Q(veh)	-	-	14.2	0

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

HCM 6th TWSC
2: W Martintown Rd & Bergen Rd

2040 No Improvements AM Peak Hour

Intersection												
Int Delay, s/veh	253.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	0	0	0	441	0	61	0	457	153	30	822	0
Future Vol, veh/h	0	0	0	441	0	61	0	457	153	30	822	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	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	1	4	0	0	0
Mvmt Flow	0	0	0	485	0	67	0	502	168	33	903	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1220	1639	452	1104	1555	335	903	0	0	670	0	0
Stage 1	969	969	-	586	586	-	-	-	-	-	-	-
Stage 2	251	670	-	518	969	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	138	101	560	~ 168	114	667	761	-	-	930	-	-
Stage 1	276	334	-	~ 468	500	-	-	-	-	-	-	-
Stage 2	737	459	-	514	334	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	121	97	560	~ 163	110	667	761	-	-	930	-	-
Mov Cap-2 Maneuver	121	97	-	~ 163	110	-	-	-	-	-	-	-
Stage 1	276	322	-	~ 468	500	-	-	-	-	-	-	-
Stage 2	663	459	-	496	322	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	\$ 990.8	0	0.3
HCM LOS	A	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	761	-	-	-	179	930	-	-
HCM Lane V/C Ratio	-	-	-	-	3.082	0.035	-	-
HCM Control Delay (s)	0	-	-	0	\$ 990.8	9	-	-
HCM Lane LOS	A	-	-	A	F	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	50.7	0.1	-	-

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

HCM 6th TWSC
3: W Martintown Rd & I-20 WB Off Ramp

2040 No Improvements AM Peak Hour

Intersection						
Int Delay, s/veh	6.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑↑			↑↑
Traffic Vol, veh/h	158	62	548	0	0	752
Future Vol, veh/h	158	62	548	0	0	752
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	125	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	9	2	0	0	1
Mvmt Flow	174	68	602	0	0	826

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1015	301	0	-	-	-
Stage 1	602	-	-	-	-	-
Stage 2	413	-	-	-	-	-
Critical Hdwy	6.84	7.08	-	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.39	-	-	-	-
Pot Cap-1 Maneuver	234	675	-	0	0	-
Stage 1	510	-	-	0	0	-
Stage 2	636	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	234	675	-	-	-	-
Mov Cap-2 Maneuver	234	-	-	-	-	-
Stage 1	510	-	-	-	-	-
Stage 2	636	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	42.3	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBTWBLn1	WBLn2	SBT
Capacity (veh/h)	-	234	675
HCM Lane V/C Ratio	-	0.742	0.101
HCM Control Delay (s)	-	54.6	10.9
HCM Lane LOS	-	F	B
HCM 95th %tile Q(veh)	-	5.1	0.3

HCM 6th TWSC
4: W Martintown Rd & I-20 EB Off Ramp

2040 No Improvements AM Peak Hour

Intersection												
Int Delay, s/veh	420.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖		↗		↑↑↑	↗	↖	↑↑	
Traffic Vol, veh/h	178	217	386	173	0	212	0	1144	267	63	768	0
Future Vol, veh/h	178	217	386	173	0	212	0	1144	267	63	768	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	-	-	Yield	-	-	None	-	-	None	-	-	None
Storage Length	100	-	500	0	-	0	-	-	250	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	92	96	92	92	92	96	96	92	92	96	96
Heavy Vehicles, %	4	2	2	2	2	2	0	1	2	2	1	0
Mvmt Flow	185	236	402	188	0	230	0	1192	290	68	800	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1413	2418	400	1846	-	596	-	0	0	1482	0	0
Stage 1	936	936	-	1192	-	-	-	-	-	-	-	-
Stage 2	477	1482	-	654	-	-	-	-	-	-	-	-
Critical Hdwy	7.03	6.54	6.94	6.99	-	7.14	-	-	-	5.34	-	-
Critical Hdwy Stg 1	6.58	5.54	-	7.34	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.78	5.54	-	6.54	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.69	4.02	3.32	3.67	-	3.92	-	-	-	3.12	-	-
Pot Cap-1 Maneuver	~ 117	~ 32	600	~ 60	0	383	0	-	-	227	-	0
Stage 1	274	342	-	~ 149	0	-	0	-	-	-	-	0
Stage 2	502	~ 187	-	410	0	-	0	-	-	-	-	0
Platoon blocked, %								-	-			
Mov Cap-1 Maneuver	~ 36	~ 22	600	-	-	383	-	-	-	227	-	-
Mov Cap-2 Maneuver	~ 36	~ 22	-	-	-	-	-	-	-	-	-	-
Stage 1	274	239	-	~ 149	-	-	-	-	-	-	-	-
Stage 2	200	~ 187	-	~ 1	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, \$	1832.6		0	2.2
HCM LOS	F	-		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	36	22	600	-	383	227	-
HCM Lane V/C Ratio	-	-	5.15	10.721	0.67	-	0.602	0.302	-
HCM Control Delay (s)	-	-	\$ 2089	\$ 4716.8	22.3	-	27.6	27.6	-
HCM Lane LOS	-	-	F	F	C	-	D	D	-
HCM 95th %tile Q(veh)	-	-	21.9	29.7	5.1	-	3.8	1.2	-

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

HCM 6th TWSC
5: W Martintown Rd & Frontage Rd

2040 No Improvements AM Peak Hour

Intersection												
Int Delay, s/veh	280.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑↑	↕	↕	↑↑	↕
Traffic Vol, veh/h	154	0	21	3	0	10	61	1247	22	22	1288	17
Future Vol, veh/h	154	0	21	3	0	10	61	1247	22	22	1288	17
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	-	-	-	-	-	-	100	-	150	150	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	92	90	92	92	92	90	90	92	92	90	90
Heavy Vehicles, %	0	2	0	2	2	2	0	1	2	2	0	0
Mvmt Flow	171	0	23	3	0	11	68	1386	24	24	1431	19

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2308	3025	716	2286	3020	693	1450	0	0	1410	0	0
Stage 1	1479	1479	-	1522	1522	-	-	-	-	-	-	-
Stage 2	829	1546	-	764	1498	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.54	6.9	7.54	6.54	6.94	4.1	-	-	4.14	-	-
Critical Hdwy Stg 1	6.5	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.02	3.3	3.52	4.02	3.32	2.2	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 21	13	377	21	13	386	473	-	-	480	-	-
Stage 1	~ 134	188	-	124	179	-	-	-	-	-	-	-
Stage 2	335	174	-	362	184	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 17	11	377	17	11	386	473	-	-	480	-	-
Mov Cap-2 Maneuver	~ 17	11	-	17	11	-	-	-	-	-	-	-
Stage 1	~ 115	179	-	106	153	-	-	-	-	-	-	-
Stage 2	279	149	-	323	175	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, \$	4550.1		76.5		0.6		0.2	
HCM LOS	F		F					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	473	-	-	19	64	480	-	-
HCM Lane V/C Ratio	0.143	-	-	10.234	0.221	0.05	-	-
HCM Control Delay (s)	13.9	-	-	\$ 4550.1	76.5	12.9	-	-
HCM Lane LOS	B	-	-	F	F	B	-	-
HCM 95th %tile Q(veh)	0.5	-	-	24.9	0.8	0.2	-	-

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

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↕	↗	↗	↕	↕
Traffic Vol, veh/h	24	0	29	3	0	10	13	1300	22	22	1281	4
Future Vol, veh/h	24	0	29	3	0	10	13	1300	22	22	1281	4
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	-	-	-	-	-	-	175	-	150	150	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	92	94	92	92	92	94	94	92	92	94	94
Heavy Vehicles, %	0	2	3	2	2	2	8	1	2	2	1	0
Mvmt Flow	26	0	31	3	0	11	14	1383	24	24	1363	4

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2133	2848	684	2141	2826	692	1367	0	0	1407	0	0
Stage 1	1413	1413	-	1411	1411	-	-	-	-	-	-	-
Stage 2	720	1435	-	730	1415	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.54	6.96	7.54	6.54	6.94	4.26	-	-	4.14	-	-
Critical Hdwy Stg 1	6.5	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.02	3.33	3.52	4.02	3.32	2.28	-	-	2.22	-	-
Pot Cap-1 Maneuver	29	17	389	28	17	386	468	-	-	481	-	-
Stage 1	148	202	-	145	203	-	-	-	-	-	-	-
Stage 2	390	197	-	380	202	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	27	16	389	24	16	386	468	-	-	481	-	-
Mov Cap-2 Maneuver	103	89	-	24	16	-	-	-	-	-	-	-
Stage 1	144	192	-	141	197	-	-	-	-	-	-	-
Stage 2	368	191	-	332	192	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	35.8		54.9		0.1		0.2	
HCM LOS	E		F					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	468	-	-	172	86	481	-	-
HCM Lane V/C Ratio	0.03	-	-	0.328	0.164	0.05	-	-
HCM Control Delay (s)	12.9	-	-	35.8	54.9	12.9	-	-
HCM Lane LOS	B	-	-	E	F	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.3	0.6	0.2	-	-

Intersection						
Int Delay, s/veh	4.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↕		↖	↕
Traffic Vol, veh/h	34	263	1072	99	212	1101
Future Vol, veh/h	34	263	1072	99	212	1101
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	125	0	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	2	0	0	1	2
Mvmt Flow	37	283	1153	106	228	1184

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	2254	630	0	0	1259
Stage 1	1206	-	-	-	-
Stage 2	1048	-	-	-	-
Critical Hdwy	6.8	6.94	-	-	4.12
Critical Hdwy Stg 1	5.8	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-
Follow-up Hdwy	3.5	3.32	-	-	2.21
Pot Cap-1 Maneuver	~ 36	424	-	-	554
Stage 1	250	-	-	-	-
Stage 2	303	-	-	-	-
Platoon blocked, %					
Mov Cap-1 Maneuver	~ 21	424	-	-	554
Mov Cap-2 Maneuver	104	-	-	-	-
Stage 1	250	-	-	-	-
Stage 2	178	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	32.2	0	2.6
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	104	424	554
HCM Lane V/C Ratio	-	-	0.352	0.667	0.411
HCM Control Delay (s)	-	-	57.3	28.9	16
HCM Lane LOS	-	-	F	D	C
HCM 95th %tile Q(veh)	-	-	1.4	4.7	2

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

HCM 6th TWSC
1: W Martintown Rd & Gregory Lake Rd

2040 No Improvements PM Peak Hour

Intersection						
Int Delay, s/veh	25.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	152	18	756	270	26	477
Future Vol, veh/h	152	18	756	270	26	477
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, %	4	9	0	2	0	1
Mvmt Flow	160	19	796	284	27	502

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1494	938	0	0	1080
Stage 1	938	-	-	-	-
Stage 2	556	-	-	-	-
Critical Hdwy	6.44	6.29	-	-	4.1
Critical Hdwy Stg 1	5.44	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-
Follow-up Hdwy	3.536	3.381	-	-	2.2
Pot Cap-1 Maneuver	~ 134	311	-	-	653
Stage 1	378	-	-	-	-
Stage 2	570	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	~ 126	311	-	-	653
Mov Cap-2 Maneuver	~ 126	-	-	-	-
Stage 1	378	-	-	-	-
Stage 2	538	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	255.1	0	0.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	134	653
HCM Lane V/C Ratio	-	-	1.335	0.042
HCM Control Delay (s)	-	-	255.1	10.8
HCM Lane LOS	-	-	F	B
HCM 95th %tile Q(veh)	-	-	11.5	0.1

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

HCM 6th TWSC
2: W Martintown Rd & Bergen Rd

2040 No Improvements PM Peak Hour

Intersection												
Int Delay, s/veh	351.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	0	0	0	247	0	31	0	1002	457	55	615	0
Future Vol, veh/h	0	0	0	247	0	31	0	1002	457	55	615	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	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	0	1	0	0	0
Mvmt Flow	0	0	0	281	0	35	0	1139	519	63	699	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1395	2483	350	1875	2224	829	699	0	0	1658	0	0
Stage 1	825	825	-	1399	1399	-	-	-	-	-	-	-
Stage 2	570	1658	-	476	825	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	103	30	652	~45	44	318	907	-	-	394	-	-
Stage 1	337	390	-	~151	209	-	-	-	-	-	-	-
Stage 2	479	156	-	544	390	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	80	25	652	~39	37	318	907	-	-	394	-	-
Mov Cap-2 Maneuver	80	25	-	~39	37	-	-	-	-	-	-	-
Stage 1	337	328	-	~151	209	-	-	-	-	-	-	-
Stage 2	426	156	-	457	328	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	\$ 3038.6	0	1.3
HCM LOS	A	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	907	-	-	-	43	394	-	-
HCM Lane V/C Ratio	-	-	-	-	7.347	0.159	-	-
HCM Control Delay (s)	0	-	-	\$ 3038.6	15.9	-	-	-
HCM Lane LOS	A	-	-	A	F	C	-	-
HCM 95th %tile Q(veh)	0	-	-	-	37.3	0.6	-	-

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

HCM 6th TWSC
 3: W Martintown Rd & I-20 WB Off Ramp

2040 No Improvements PM Peak Hour

Intersection						
Int Delay, s/veh	37.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑↑			↑↑
Traffic Vol, veh/h	146	129	1330	0	0	542
Future Vol, veh/h	146	129	1330	0	0	542
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	125	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	1	0	0	1
Mvmt Flow	157	139	1430	0	0	583

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1722	715	0	-	-	-
Stage 1	1430	-	-	-	-	-
Stage 2	292	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	-	-
Pot Cap-1 Maneuver	~ 82	378	-	0	0	-
Stage 1	190	-	-	0	0	-
Stage 2	738	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	~ 82	378	-	-	-	-
Mov Cap-2 Maneuver	~ 82	-	-	-	-	-
Stage 1	190	-	-	-	-	-
Stage 2	738	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	294.9	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBTWBLn1WBLn2	SBT
Capacity (veh/h)	- 82 378	-
HCM Lane V/C Ratio	- 1.915 0.367	-
HCM Control Delay (s)	- \$ 537.8 19.9	-
HCM Lane LOS	- F C	-
HCM 95th %tile Q(veh)	- 13.7 1.6	-

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

HCM 6th TWSC
4: W Martintown Rd & I-20 EB Off Ramp

2040 No Improvements PM Peak Hour

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑	↗	↘		↗		↑↑↑	↗	↘	↑↑	
Traffic Vol, veh/h	493	278	734	359	0	359	0	1393	333	98	519	0
Future Vol, veh/h	493	278	734	359	0	359	0	1393	333	98	519	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	-	-	Yield	-	-	None	-	-	None	-	-	None
Storage Length	100	-	500	0	-	0	-	-	250	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	92	95	92	92	92	95	95	92	92	95	95
Heavy Vehicles, %	1	2	0	2	2	2	0	0	2	2	1	0
Mvmt Flow	519	302	773	390	0	390	0	1466	362	107	546	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1346	2588	273	2104	-	733	-	0	0	1828	0	0
Stage 1	760	760	-	1466	-	-	-	-	-	-	-	-
Stage 2	586	1828	-	638	-	-	-	-	-	-	-	-
Critical Hdwy	6.97	6.54	6.9	6.99	-	7.14	-	-	-	5.34	-	-
Critical Hdwy Stg 1	6.52	5.54	-	7.34	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.72	5.54	-	6.54	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.66	4.02	3.3	3.67	-	3.92	-	-	-	3.12	-	-
Pot Cap-1 Maneuver	~ 133	~ 25	~ 731	~ 40	0	~ 312	0	-	-	153	-	0
Stage 1	~ 357	413	-	~ 95	0	-	0	-	-	-	-	0
Stage 2	~ 437	~ 126	-	419	0	-	0	-	-	-	-	0
Platoon blocked, %												
Mov Cap-1 Maneuver	-	~ 8	~ 731	-	-	~ 312	-	-	-	153	-	-
Mov Cap-2 Maneuver	-	~ 8	-	-	-	-	-	-	-	-	-	-
Stage 1	~ 357	~ 124	-	~ 95	-	-	-	-	-	-	-	-
Stage 2	-	~ 126	-	~ 10	-	-	-	-	-	-	-	-

Approach	EB		WB		NB			SB		
HCM Control Delay, s					0			11.4		
HCM LOS	-		-							

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	8	731	-	312	153	-
HCM Lane V/C Ratio	-	-	-37.772	1.057	-	1.251	0.696	-	-
HCM Control Delay (s)	-	-	\$ 17452.3	72.8	-	171.3	69.9	-	-
HCM Lane LOS	-	-	-	F	F	-	F	F	-
HCM 95th %tile Q(veh)	-	-	-	39.6	19.8	-	17.9	4.1	-

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

HCM 6th TWSC
5: W Martintown Rd & Frontage Rd

2040 No Improvements PM Peak Hour

Intersection												
Int Delay, s/veh	447.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↗	↗	↗	↗	↗
Traffic Vol, veh/h	72	0	47	9	0	25	147	1629	24	24	1549	39
Future Vol, veh/h	72	0	47	9	0	25	147	1629	24	24	1549	39
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	-	-	-	-	-	-	100	-	150	150	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	92	90	92	92	92	90	90	92	92	90	90
Heavy Vehicles, %	0	2	0	2	2	2	0	0	2	2	0	0
Mvmt Flow	80	0	52	10	0	27	163	1810	26	26	1721	43

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	3004	3935	861	3049	3952	905	1764	0	0	1836	0	0
Stage 1	1773	1773	-	2136	2136	-	-	-	-	-	-	-
Stage 2	1231	2162	-	913	1816	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.54	6.9	7.54	6.54	6.94	4.1	-	-	4.14	-	-
Critical Hdwy Stg 1	6.5	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.02	3.3	3.52	4.02	3.32	2.2	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 6	3	303	~ 5	3	279	359	-	-	328	-	-
Stage 1	88	134	-	50	88	-	-	-	-	-	-	-
Stage 2	191	85	-	294	128	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 3	2	303	~ 3	2	279	359	-	-	328	-	-
Mov Cap-2 Maneuver	~ 3	2	-	~ 3	2	-	-	-	-	-	-	-
Stage 1	~ 48	123	-	27	48	-	-	-	-	-	-	-
Stage 2	94	46	-	224	118	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay	\$ 2879.9		\$ 1744.5		1.9		0.2	
HCM LOS	F		F					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	359	-	-	5	11	328	-	-
HCM Lane V/C Ratio	0.455	-	-	26.444	3.36	0.08	-	-
HCM Control Delay (s)	23.1	-	-	\$ 12879.9	\$ 1744.5	16.9	-	-
HCM Lane LOS	C	-	-	F	F	C	-	-
HCM 95th %tile Q(veh)	2.3	-	-	18.6	5.7	0.3	-	-

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

Intersection												
Int Delay, s/veh	8.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑↑	↕	↕	↑↑	
Traffic Vol, veh/h	15	0	20	9	0	25	41	1733	24	24	1543	24
Future Vol, veh/h	15	0	20	9	0	25	41	1733	24	24	1543	24
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	-	-	-	-	-	-	175	-	150	150	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	92	94	92	92	92	94	94	92	92	94	94
Heavy Vehicles, %	0	2	5	2	2	2	0	0	2	2	1	0
Mvmt Flow	16	0	21	10	0	27	44	1844	26	26	1641	26

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2716	3664	834	2805	3651	922	1667	0	0	1870	0	0
Stage 1	1706	1706	-	1932	1932	-	-	-	-	-	-	-
Stage 2	1010	1958	-	873	1719	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.54	7	7.54	6.54	6.94	4.1	-	-	4.14	-	-
Critical Hdwy Stg 1	6.5	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.02	3.35	3.52	4.02	3.32	2.2	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 10	5	305	~ 8	5	272	391	-	-	318	-	-
Stage 1	97	145	-	68	112	-	-	-	-	-	-	-
Stage 2	261	108	-	311	143	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 8	4	305	~ 6	4	272	391	-	-	318	-	-
Mov Cap-2 Maneuver	56	44	-	~ 6	4	-	-	-	-	-	-	-
Stage 1	86	133	-	60	99	-	-	-	-	-	-	-
Stage 2	208	96	-	266	131	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	57	\$ 753.6	0.4	0.3
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	391	-	-	105	21	318	-	-
HCM Lane V/C Ratio	0.112	-	-	0.355	1.76	0.082	-	-
HCM Control Delay (s)	15.4	-	-	57	\$ 753.6	17.3	-	-
HCM Lane LOS	C	-	-	F	F	C	-	-
HCM 95th %tile Q(veh)	0.4	-	-	1.4	4.9	0.3	-	-

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

Intersection						
Int Delay, s/veh	6.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↕		↖	↕
Traffic Vol, veh/h	21	183	1615	25	246	1326
Future Vol, veh/h	21	183	1615	25	246	1326
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	125	0	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	1	1
Mvmt Flow	23	199	1755	27	267	1441

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	3024	891	0	0	1782
Stage 1	1769	-	-	-	-
Stage 2	1255	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.12
Critical Hdwy Stg 1	5.8	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.21
Pot Cap-1 Maneuver	~ 11	289	-	-	349
Stage 1	125	-	-	-	-
Stage 2	236	-	-	-	-
Platoon blocked, %					
Mov Cap-1 Maneuver	~ 3	289	-	-	349
Mov Cap-2 Maneuver	36	-	-	-	-
Stage 1	125	-	-	-	-
Stage 2	55	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	58.5	0	6.6
HCM LOS	F		



















Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	36	289	349
HCM Lane V/C Ratio	-	-	0.634	0.688	0.766
HCM Control Delay (s)	-	-	210.6	41	42.2
HCM Lane LOS	-	-	F	E	E
HCM 95th %tile Q(veh)	-	-	2.2	4.7	6.1

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

Appendix J – 2040 Build Synchro and Sim Traffic Reports



















HCM 6th Signalized Intersection Summary
2: W Martintown Rd & Bergen Rd

2040 AM Peak Hour with Improvements

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	441	0	61	0	457	153	30	822	0
Future Volume (veh/h)	0	0	0	441	0	61	0	457	153	30	822	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	1900	1900	1900	1900	1900	1900	1885	1841	1900	1900	1900
Adj Flow Rate, veh/h	0	0	0	485	0	67	0	502	0	33	903	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	1	4	0	0	0
Cap, veh/h	0	822	0	690	0	77	144	1173		342	1182	0
Arrive On Green	0.00	0.00	0.00	0.43	0.00	0.43	0.00	0.33	0.00	0.33	0.33	0.00
Sat Flow, veh/h	0	1900	0	1282	0	177	627	3676	0	911	3705	0
Grp Volume(v), veh/h	0	0	0	552	0	0	0	502	0	33	903	0
Grp Sat Flow(s),veh/h/ln	0	1900	0	1459	0	0	627	1791	0	911	1805	0
Q Serve(g_s), s	0.0	0.0	0.0	17.3	0.0	0.0	0.0	5.5	0.0	1.5	11.2	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	17.3	0.0	0.0	0.0	5.5	0.0	7.0	11.2	0.0
Prop In Lane	0.00		0.00	0.88		0.12	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	822	0	766	0	0	144	1173		342	1182	0
V/C Ratio(X)	0.00	0.00	0.00	0.72	0.00	0.00	0.00	0.43		0.10	0.76	0.00
Avail Cap(c_a), veh/h	0	1063	0	951	0	0	189	1431		408	1442	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(l)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	13.0	0.0	0.0	0.0	13.2	0.0	15.9	15.1	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.2	0.0	0.1	2.0	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	0.0	4.9	0.0	0.0	0.0	1.7	0.0	0.3	3.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	15.0	0.0	0.0	0.0	13.4	0.0	16.0	17.1	0.0
LnGrp LOS	A	A	A	B	A	A	A	B		B	B	A
Approach Vol, veh/h		0			552			502	A		936	
Approach Delay, s/veh		0.0			15.0			13.4			17.1	
Approach LOS					B			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.4		27.7		22.4		27.7				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		20.0		28.0		20.0		28.0				
Max Q Clear Time (g_c+I1), s		13.2		19.3		7.5		0.0				
Green Ext Time (p_c), s		3.2		2.4		2.4		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				15.6								
HCM 6th LOS				B								
Notes												
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.												

Lanes, Volumes, Timings
2: W Martintown Rd & Bergen Rd

2040 AM Peak Hour with Improvements

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	441	0	61	0	457	153	30	822	0
Future Volume (vph)	0	0	0	441	0	61	0	457	153	30	822	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		250
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			100			100		
Satd. Flow (prot)	0	1900	0	0	1791	0	1900	3413	0	1805	3610	0
Flt Permitted					0.751					0.338		
Satd. Flow (perm)	0	1900	0	0	1404	0	1900	3413	0	642	3610	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					55			82				
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		771			111			364			368	
Travel Time (s)		17.5			2.5			5.5			5.6	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	4%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	552	0	0	670	0	33	903	0
Turn Type				Perm	NA		Perm	NA		Perm	NA	
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		4	4		6	6		2	2	
Switch Phase												
Minimum Initial (s)	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	
Total Split (s)	34.0	34.0		34.0	34.0		26.0	26.0		26.0	26.0	
Total Split (%)	56.7%	56.7%		56.7%	56.7%		43.3%	43.3%		43.3%	43.3%	
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		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?												
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)					23.5			17.9		17.9	17.9	
Actuated g/C Ratio					0.44			0.33		0.33	0.33	
v/c Ratio					0.86			0.56		0.15	0.75	
Control Delay					28.1			15.6		16.3	21.3	
Queue Delay					0.0			0.0		0.0	0.0	
Total Delay					28.1			15.6		16.3	21.3	
LOS					C			B		B	C	
Approach Delay					28.1			15.6			21.1	
Approach LOS					C			B			C	
Queue Length 50th (ft)					144			88		8	149	
Queue Length 95th (ft)					#320			135		26	211	
Internal Link Dist (ft)		691			31			284			288	
Turn Bay Length (ft)										100		
Base Capacity (vph)					778			1358		246	1383	

Lanes, Volumes, Timings
2: W Martintown Rd & Bergen Rd

2040 AM Peak Hour with Improvements

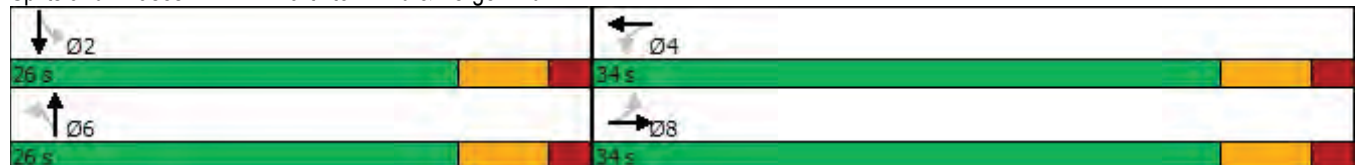


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn					0			0		0	0	
Spillback Cap Reductn					0			0		0	0	
Storage Cap Reductn					0			0		0	0	
Reduced v/c Ratio					0.71			0.49		0.13	0.65	

Intersection Summary






























Area Type: Other
 Cycle Length: 60
 Actuated Cycle Length: 53.8
 Natural Cycle: 55
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.86
 Intersection Signal Delay: 21.2
 Intersection LOS: C
 Intersection Capacity Utilization 63.1%
 ICU Level of Service B
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 2: W Martintown Rd & Bergen Rd



HCM 6th Signalized Intersection Summary
 4: W Martintown Rd & I-20 EB Off Ramp/Site Drive #1

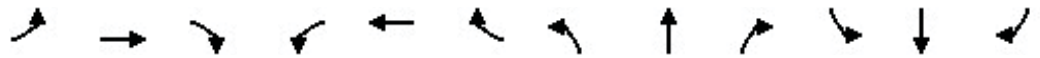
2040 AM Peak Hour with Improvements

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 		 	 				  			 	 
Traffic Volume (veh/h)	178	217	386	176	0	212	0	1144	267	85	746	0
Future Volume (veh/h)	178	217	386	176	0	212	0	1144	267	85	746	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	1841	1870	1870	1870	0	1870	0	1885	1870	1870	1885	0
Adj Flow Rate, veh/h	187	236	406	191	0	230	0	1204	290	92	785	0
Peak Hour Factor	0.95	0.92	0.95	0.92	0.92	0.92	0.95	0.95	0.92	0.92	0.95	0.95
Percent Heavy Veh, %	4	2	2	2	0	2	0	1	2	2	1	0
Cap, veh/h	1081	325	485	267	0	0	0	2122	776	323	1966	0
Arrive On Green	0.32	0.17	0.17	0.08	0.00	0.00	0.00	0.82	0.82	0.07	0.55	0.00
Sat Flow, veh/h	3401	1870	2790	3456	191		0	5316	1585	1781	3676	0
Grp Volume(v), veh/h	187	236	406	191	45.5		0	1204	290	92	785	0
Grp Sat Flow(s),veh/h/ln	1700	1870	1395	1728	D		0	1716	1585	1781	1791	0
Q Serve(g_s), s	3.6	10.7	12.7	4.9			0.0	6.9	4.0	2.4	11.4	0.0
Cycle Q Clear(g_c), s	3.6	10.7	12.7	4.9			0.0	6.9	4.0	2.4	11.4	0.0
Prop In Lane	1.00		1.00	1.00			0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	1081	325	485	267			0	2122	776	323	1966	0
V/C Ratio(X)	0.17	0.73	0.84	0.72			0.00	0.57	0.37	0.29	0.40	0.00
Avail Cap(c_a), veh/h	1247	374	558	346			0	2122	776	376	1966	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00			1.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00			0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.2	35.1	35.9	40.6			0.0	5.3	3.8	12.3	11.7	0.0
Incr Delay (d2), s/veh	0.1	5.9	9.6	4.9			0.0	1.1	1.4	0.5	0.6	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
%ile BackOfQ(50%),veh/ln	1.3	5.1	4.7	2.2			0.0	1.6	1.2	0.9	4.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.2	41.0	45.6	45.5			0.0	6.4	5.2	12.7	12.3	0.0
LnGrp LOS	C	D	D	D			A	A	A	B	B	A
Approach Vol, veh/h		829						1494			877	
Approach Delay, s/veh		39.0						6.1			12.4	
Approach LOS		D						A			B	
Timer - Assigned Phs	1	2	3	4		6	7					
Phs Duration (G+Y+Rc), s	12.3	43.1	12.9	21.7		55.4	34.6					
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0		6.0	6.0					
Max Green Setting (Gmax), s	9.0	30.0	9.0	18.0		45.0	33.0					
Max Q Clear Time (g_c+I1), s	4.4	8.9	6.9	14.7		13.4	5.6					
Green Ext Time (p_c), s	0.1	9.3	0.1	1.0		5.5	0.6					
Intersection Summary												
HCM 6th Ctrl Delay			18.0									
HCM 6th LOS			B									

Lanes, Volumes, Timings

2040 AM Peak Hour with Improvements

4: W Martintown Rd & I-20 EB Off Ramp/Site Drive #1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	178	217	386	176	0	212	0	1144	267	85	746	0
Future Volume (vph)	178	217	386	176	0	212	0	1144	267	85	746	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	350		350	350		0	300		250	0		0
Storage Lanes	2		2	1		1	1		1	1		0
Taper Length (ft)	100			100			100			100		
Satd. Flow (prot)	3367	1863	2787	3433	0	1583	0	5136	1583	1770	3574	0
Flt Permitted	0.950			0.950						0.119		
Satd. Flow (perm)	3367	1863	2787	3433	0	1583	0	5136	1583	222	3574	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			225			217			290			
Link Speed (mph)		45			25			45				45
Link Distance (ft)		2205			638			588				197
Travel Time (s)		33.4			17.4			8.9				3.0
Peak Hour Factor	0.95	0.92	0.95	0.92	0.92	0.92	0.95	0.95	0.92	0.92	0.95	0.95
Heavy Vehicles (%)	4%	2%	2%	2%	2%	2%	0%	1%	2%	2%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	187	236	406	191	0	230	0	1204	290	92	785	0
Turn Type	Prot	NA	Perm	Prot		pm+ov		NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3		1		2	3	1	6	
Permitted Phases			4			3			2	6		
Detector Phase	7	4	4	3		1		2	3	1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0		7.0		12.0	7.0	7.0	12.0	
Minimum Split (s)	15.0	24.0	24.0	15.0		15.0		24.0	15.0	15.0	24.0	
Total Split (s)	39.0	24.0	24.0	15.0		15.0		36.0	15.0	15.0	51.0	
Total Split (%)	43.3%	26.7%	26.7%	16.7%		16.7%		40.0%	16.7%	16.7%	56.7%	
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	0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0		6.0		6.0	6.0	6.0	6.0	
Lead/Lag		Lag	Lag	Lead		Lead		Lag	Lead	Lead		
Lead-Lag Optimize?		Yes	Yes	Yes		Yes		Yes	Yes	Yes		
Recall Mode	None	None	None	None		None		C-Min	None	None	C-Min	
Act Effct Green (s)	30.5	15.6	15.6	8.9		16.8		33.5	48.4	47.5	47.5	
Actuated g/C Ratio	0.34	0.17	0.17	0.10		0.19		0.37	0.54	0.53	0.53	
v/c Ratio	0.16	0.73	0.61	0.57		0.49		0.63	0.29	0.36	0.42	
Control Delay	20.5	48.5	18.6	45.6		6.5		16.8	1.0	15.7	14.2	
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0	
Total Delay	20.5	48.5	18.6	45.6		6.5		16.8	1.0	15.7	14.2	
LOS	C	D	B	D		A		B	A	B	B	
Approach Delay		27.5			24.3			13.7				14.4
Approach LOS		C			C			B				B
Queue Length 50th (ft)	36	125	51	53		3		189	3	26	144	
Queue Length 95th (ft)	59	202	100	89		36		182	2	52	189	
Internal Link Dist (ft)		2125			558			508			117	
Turn Bay Length (ft)	350		350	350					250			
Base Capacity (vph)	1236	372	737	350		488		1914	989	271	1887	

Lanes, Volumes, Timings

2040 AM Peak Hour with Improvements

4: W Martintown Rd & I-20 EB Off Ramp/Site Drive #1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0		0		0	0	0	0	
Spillback Cap Reductn	0	0	0	0		0		0	0	0	0	
Storage Cap Reductn	0	0	0	0		0		0	0	0	0	
Reduced v/c Ratio	0.15	0.63	0.55	0.55		0.47		0.63	0.29	0.34	0.42	

Intersection Summary

Area Type:	Other
Cycle Length:	90
Actuated Cycle Length:	90
Offset:	14 (16%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle:	80
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.73
Intersection Signal Delay:	18.3
Intersection LOS:	B
Intersection Capacity Utilization	62.7%
ICU Level of Service	B
Analysis Period (min)	15

Splits and Phases: 4: W Martintown Rd & I-20 EB Off Ramp/Site Drive #1



HCM 6th TWSC
5: W Martintown Rd & Frontage Rd/Site Drive #2

2040 AM Peak Hour with Improvements

Intersection													
Int Delay, s/veh	1.8												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗		↘	↑↑	↗		↑↑	↗
Traffic Vol, veh/h	0	0	175	0	0	10	3	61	1401	22	0	1291	17
Future Vol, veh/h	0	0	175	0	0	10	3	61	1401	22	0	1291	17
Conflicting Peds, #/hr	0	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	Free
RT Channelized	-	-	None	-	-	None	-	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	300	-	150	-	-	200
Veh in Median Storage, #	-	0	-	-	0	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	-	0	-	-	0	-
Peak Hour Factor	90	92	90	92	92	92	92	90	90	92	92	90	90
Heavy Vehicles, %	0	2	0	2	2	2	2	0	1	2	2	0	0
Mvmt Flow	0	0	194	0	0	11	3	68	1557	24	0	1434	19

Major/Minor	Minor2	Minor1	Major1	Major2
Conflicting Flow All	-	-	717	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	-	6.9	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	-	3.3	-
Pot Cap-1 Maneuver	0	0	377	0
Stage 1	0	0	-	0
Stage 2	0	0	-	0
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	377	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	24.3	16	0.7	0
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	398	-	-	377	339	-	-
HCM Lane V/C Ratio	0.178	-	-	0.516	0.032	-	-
HCM Control Delay (s)	16	-	-	24.3	16	-	-
HCM Lane LOS	C	-	-	C	C	-	-
HCM 95th %tile Q(veh)	0.6	-	-	2.8	0.1	-	-

HCM 6th TWSC
6: W Martintown Rd & Plantation Dr/Site Drive #3

2040 AM Peak Hour with Improvements

Intersection												
Int Delay, s/veh	0.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗		↕↕	↗		↕↕	
Traffic Vol, veh/h	0	0	5	0	0	13	0	1478	44	0	1460	4
Future Vol, veh/h	0	0	5	0	0	13	0	1478	44	0	1460	4
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	-	-	Free
Storage Length	-	-	0	-	-	0	-	-	150	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	92	94	92	92	92	94	94	92	92	94	94
Heavy Vehicles, %	0	2	3	2	2	2	8	1	2	2	1	0
Mvmt Flow	0	0	5	0	0	14	0	1572	48	0	1553	4





















Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	777	-	-	786	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.96	-	-	6.94	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.33	-	-	3.32	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	337	0	0	335	0	-	-	0	-	0
Stage 1	0	0	-	0	0	-	0	-	-	0	-	0
Stage 2	0	0	-	0	0	-	0	-	-	0	-	0
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	337	-	-	335	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	15.9		16.2		0		0	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBT
Capacity (veh/h)	-	-	337	335	-
HCM Lane V/C Ratio	-	-	0.016	0.042	-
HCM Control Delay (s)	-	-	15.9	16.2	-
HCM Lane LOS	-	-	C	C	-
HCM 95th %tile Q(veh)	-	-	0	0.1	-

HCM 6th Signalized Intersection Summary
7: W Martintown Rd & Knobcone Ave





















2040 AM Peak Hour with Improvements

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	24	4	24	34	4	263	13	1059	99	176	212	1077
Future Volume (veh/h)	24	4	24	34	4	263	13	1059	99	176	212	1077
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	1900	1885	1900	1900	1900		1870	1885
Adj Flow Rate, veh/h	26	4	26	37	4	283	14	1139	106		228	1158
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
Percent Heavy Veh, %	0	0	0	0	0	1	0	0	0		2	1
Cap, veh/h	77	27	39	280	5	322	259	1327	592		795	2059
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.02	0.37	0.37		0.46	1.00
Sat Flow, veh/h	92	133	195	1401	22	1591	1810	3610	1610		3456	3676
Grp Volume(v), veh/h	56	0	0	37	0	287	14	1139	106		228	1158
Grp Sat Flow(s),veh/h/ln	419	0	0	1401	0	1614	1810	1805	1610		1728	1791
Q Serve(g_s), s	0.7	0.0	0.0	0.0	0.0	15.5	0.5	26.2	4.0		3.7	0.0
Cycle Q Clear(g_c), s	16.2	0.0	0.0	2.9	0.0	15.5	0.5	26.2	4.0		3.7	0.0
Prop In Lane	0.46		0.46	1.00		0.99	1.00		1.00		1.00	
Lane Grp Cap(c), veh/h	143	0	0	280	0	326	259	1327	592		795	2059
V/C Ratio(X)	0.39	0.00	0.00	0.13	0.00	0.88	0.05	0.86	0.18		0.29	0.56
Avail Cap(c_a), veh/h	155	0	0	293	0	341	398	1484	662		795	2059
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	30.9	0.0	0.0	29.8	0.0	34.8	20.8	26.3	19.3		19.7	0.0
Incr Delay (d2), s/veh	1.7	0.0	0.0	0.2	0.0	21.6	0.1	7.4	0.7		0.2	1.1
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	1.1	0.0	0.0	0.7	0.0	7.8	0.2	11.6	1.5		1.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.6	0.0	0.0	30.0	0.0	56.4	20.9	33.6	19.9		19.9	1.1
LnGrp LOS	C	A	A	C	A	E	C	C	B		B	A
Approach Vol, veh/h		56			324			1259				1386
Approach Delay, s/veh		32.6			53.4			32.4				4.2
Approach LOS		C			D			C				A
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	26.7	39.1		24.2	8.1	57.7		24.2				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	16.0	37.0		19.0	9.0	44.0		19.0				
Max Q Clear Time (g_c+I1), s	5.7	28.2		18.2	2.5	2.0		17.5				
Green Ext Time (p_c), s	0.5	4.9		0.0	0.0	9.8		0.3				
Intersection Summary												
HCM 6th Ctrl Delay				21.7								
HCM 6th LOS				C								
Notes												
User approved ignoring U-Turning movement.												

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	0
Future Volume (veh/h)	0
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	0
Adj Flow Rate, veh/h	0
Peak Hour Factor	0.93
Percent Heavy Veh, %	0
Cap, veh/h	0
Arrive On Green	0.00
Sat Flow, veh/h	0
Grp Volume(v), veh/h	0
Grp Sat Flow(s),veh/h/ln	0
Q Serve(g_s), s	0.0
Cycle Q Clear(g_c), s	0.0
Prop In Lane	0.00
Lane Grp Cap(c), veh/h	0
V/C Ratio(X)	0.00
Avail Cap(c_a), veh/h	0
HCM Platoon Ratio	1.00
Upstream Filter(l)	0.00
Uniform Delay (d), s/veh	0.0
Incr Delay (d2), s/veh	0.0
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	0.0
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	0.0
LnGrp LOS	A
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

Lanes, Volumes, Timings
7: W Martintown Rd & Knobcone Ave

2040 AM Peak Hour with Improvements

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	24	4	24	34	4	263	13	1059	99	176	212	1077
Future Volume (vph)	24	4	24	34	4	263	13	1059	99	176	212	1077
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	125		0	150		150		250	
Storage Lanes	0		0	1		0	1		1		2	
Taper Length (ft)	100			100			100				100	
Satd. Flow (prot)	0	1739	0	1805	1603	0	1805	3610	1615	0	3433	3574
Flt Permitted		0.429		0.720			0.126				0.950	
Satd. Flow (perm)	0	764	0	1368	1603	0	239	3610	1615	0	3433	3574
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)		26			110				109			
Link Speed (mph)		30			35			45				45
Link Distance (ft)		643			580			2776				520
Travel Time (s)		14.6			11.3			42.1				7.9
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%	0%	0%	0%	0%	1%	0%	0%	0%	2%	2%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	56	0	37	287	0	14	1139	106	0	417	1158
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	Prot	Prot	NA
Protected Phases		4			8		5	2		1	1	6
Permitted Phases	4			8			2		2			
Detector Phase	4	4		8	8		5	2	2	1	1	6
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	12.0	12.0	7.0	7.0	12.0
Minimum Split (s)	24.0	24.0		24.0	24.0		15.0	24.0	24.0	15.0	15.0	24.0
Total Split (s)	25.0	25.0		25.0	25.0		15.0	43.0	43.0	22.0	22.0	50.0
Total Split (%)	27.8%	27.8%		27.8%	27.8%		16.7%	47.8%	47.8%	24.4%	24.4%	55.6%
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)	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
Total Lost Time (s)		6.0		6.0	6.0		6.0	6.0	6.0		6.0	6.0
Lead/Lag							Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	None	C-Min
Act Effct Green (s)		14.8		14.8	14.8		42.3	42.3	42.3		14.8	60.6
Actuated g/C Ratio		0.16		0.16	0.16		0.47	0.47	0.47		0.16	0.67
v/c Ratio		0.38		0.16	0.81		0.06	0.67	0.13		0.74	0.48
Control Delay		27.3		31.9	39.1		15.9	22.1	3.7		37.2	6.9
Queue Delay		0.0		0.0	0.0		0.0	0.0	0.0		0.0	0.0
Total Delay		27.3		31.9	39.1		15.9	22.1	3.7		37.2	6.9
LOS		C		C	D		B	C	A		D	A
Approach Delay		27.3			38.2			20.5				14.9
Approach LOS		C			D			C				B
Queue Length 50th (ft)		15		18	96		4	266	0		90	94
Queue Length 95th (ft)		49		44	181		16	366	29		144	236
Internal Link Dist (ft)		563			500			2696				440
Turn Bay Length (ft)				125			150		150		250	
Base Capacity (vph)		181		288	425		268	1698	817		610	2404

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
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	0.93
Heavy Vehicles (%)	2%
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lanes, Volumes, Timings
7: W Martintown Rd & Knobcone Ave

2040 AM Peak Hour with Improvements

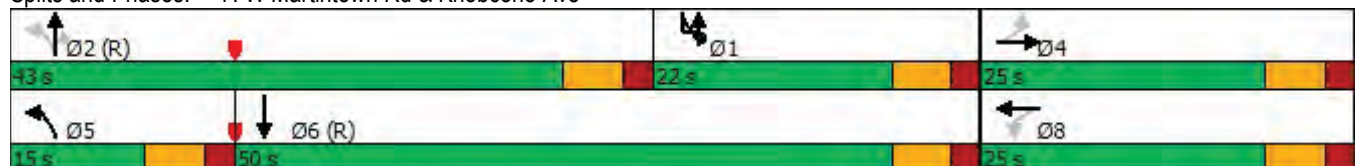


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Starvation Cap Reductn		0		0	0		0	0	0		0	0
Spillback Cap Reductn		0		0	0		0	0	0		0	0
Storage Cap Reductn		0		0	0		0	0	0		0	0
Reduced v/c Ratio		0.31		0.13	0.68		0.05	0.67	0.13		0.68	0.48

Intersection Summary

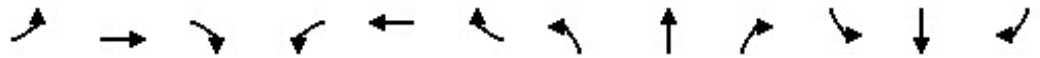
Area Type:	Other
Cycle Length:	90
Actuated Cycle Length:	90
Offset:	0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle:	70
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.81
Intersection Signal Delay:	19.7
Intersection LOS:	B
Intersection Capacity Utilization	79.9%
ICU Level of Service	D
Analysis Period (min)	15

Splits and Phases: 7: W Martintown Rd & Knobcone Ave



HCM 6th Signalized Intersection Summary
2: W Martintown Rd & Bergen Rd

2040 PM Peak Hour with Improvements



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Volume (veh/h)	0	0	0	247	0	31	0	1002	457	55	615	0
Future Volume (veh/h)	0	0	0	247	0	31	0	1002	457	55	615	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	1900	1900	1900	1900	1900	1900	1900	1885	1900	1900	1900
Adj Flow Rate, veh/h	0	0	0	281	0	35	0	1139	0	62	699	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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	1	0	0	0
Cap, veh/h	0	501	0	489	0	43	156	1722		274	1722	0
Arrive On Green	0.00	0.00	0.00	0.26	0.00	0.26	0.00	0.48	0.00	0.48	0.48	0.00
Sat Flow, veh/h	0	1900	0	1296	0	161	759	3705	0	502	3705	0
Grp Volume(v), veh/h	0	0	0	316	0	0	0	1139	0	62	699	0
Grp Sat Flow(s),veh/h/ln	0	1900	0	1457	0	0	759	1805	0	502	1805	0
Q Serve(g_s), s	0.0	0.0	0.0	9.4	0.0	0.0	0.0	11.2	0.0	5.0	5.8	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	9.4	0.0	0.0	0.0	11.2	0.0	16.1	5.8	0.0
Prop In Lane	0.00		0.00	0.89		0.11	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	501	0	531	0	0	156	1722		274	1722	0
V/C Ratio(X)	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.66		0.23	0.41	0.00
Avail Cap(c_a), veh/h	0	739	0	714	0	0	285	2340		360	2340	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	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	16.0	0.0	0.0	0.0	9.2	0.0	15.4	7.8	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.4	0.0	0.4	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	0.0	0.0	0.0	2.8	0.0	0.0	0.0	2.8	0.0	0.5	1.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	17.1	0.0	0.0	0.0	9.7	0.0	15.8	8.0	0.0
LnGrp LOS	A	A	A	B	A	A	A	A		B	A	A
Approach Vol, veh/h		0			316			1139	A		761	
Approach Delay, s/veh		0.0			17.1			9.7			8.6	
Approach LOS					B			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		28.1		18.2		28.1		18.2				
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		18.1		11.4		13.2		0.0				
Green Ext Time (p_c), s		3.9		1.0		7.0		0.0				

Intersection Summary



















HCM 6th Ctrl Delay	10.4
HCM 6th LOS	B

Notes

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

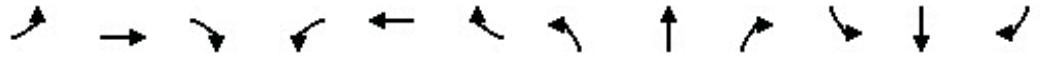
Lanes, Volumes, Timings
2: W Martintown Rd & Bergen Rd

2040 PM Peak Hour with Improvements

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	247	0	31	0	1002	457	55	615	0
Future Volume (vph)	0	0	0	247	0	31	0	1002	457	55	615	0
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		250
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			100			100		
Satd. Flow (prot)	0	1900	0	0	1791	0	1900	3430	0	1805	3610	0
Flt Permitted					0.749					0.134		
Satd. Flow (perm)	0	1900	0	0	1402	0	1900	3430	0	255	3610	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					55			176				
Link Speed (mph)		30			30			45				45
Link Distance (ft)		771			111			364				368
Travel Time (s)		17.5			2.5			5.5				5.6
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 (%)	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	316	0	0	1658	0	63	699	0
Turn Type				Perm	NA		Perm	NA		Perm	NA	
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Detector Phase	8	8		4	4		6	6		2	2	
Switch Phase												
Minimum Initial (s)	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	
Total Split (s)	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%		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	
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		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?												
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)					14.8			29.9		29.9	29.9	
Actuated g/C Ratio					0.26			0.53		0.53	0.53	
v/c Ratio					0.78			0.88		0.47	0.37	
Control Delay					30.7			18.7		25.7	9.1	
Queue Delay					0.0			0.0		0.0	0.0	
Total Delay					30.7			18.7		25.7	9.1	
LOS					C			B		C	A	
Approach Delay					30.7			18.7			10.5	
Approach LOS					C			B			B	
Queue Length 50th (ft)					81			230		13	71	
Queue Length 95th (ft)					#178			#397		#62	107	
Internal Link Dist (ft)		691			31			284			288	
Turn Bay Length (ft)										100		
Base Capacity (vph)					483			1902		135	1915	

Lanes, Volumes, Timings
 2: W Martintown Rd & Bergen Rd

2040 PM Peak Hour with Improvements

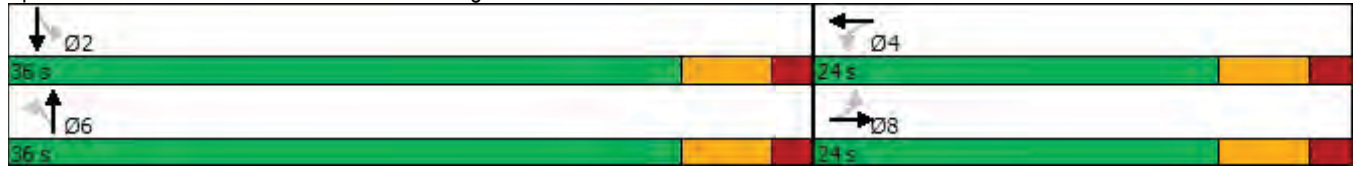


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn					0			0		0	0	
Spillback Cap Reductn					0			0		0	0	
Storage Cap Reductn					0			0		0	0	
Reduced v/c Ratio					0.65			0.87		0.47	0.37	

Intersection Summary






























Area Type: Other
 Cycle Length: 60
 Actuated Cycle Length: 56.8
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.88
 Intersection Signal Delay: 17.8 Intersection LOS: B
 Intersection Capacity Utilization 71.3% ICU Level of Service C
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 2: W Martintown Rd & Bergen Rd



HCM 6th Signalized Intersection Summary
 4: W Martintown Rd & I-20 EB Off Ramp/Site Drive #1

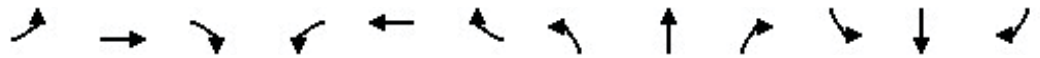
2040 PM Peak Hour with Improvements

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 		 	 				  			 	 
Traffic Volume (veh/h)	493	278	734	368	0	359	0	1393	333	122	495	0
Future Volume (veh/h)	493	278	734	368	0	359	0	1393	333	122	495	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	1885	1870	1900	1870	0	1870	0	1900	1870	1870	1885	0
Adj Flow Rate, veh/h	519	302	773	400	0	390	0	1466	362	133	521	0
Peak Hour Factor	0.95	0.92	0.95	0.92	0.92	0.92	0.95	0.95	0.92	0.92	0.95	0.95
Percent Heavy Veh, %	1	2	0	2	0	2	0	0	2	2	1	0
Cap, veh/h	1488	459	696	440	0	0	0	1568	681	263	1661	0
Arrive On Green	0.43	0.25	0.25	0.13	0.00	0.00	0.00	0.60	0.60	0.11	0.46	0.00
Sat Flow, veh/h	3483	1870	2834	3456	400		0	5358	1585	1781	3676	0
Grp Volume(v), veh/h	519	302	773	400	70.0		0	1466	362	133	521	0
Grp Sat Flow(s),veh/h/ln	1742	1870	1417	1728	E		0	1729	1585	1781	1791	0
Q Serve(g_s), s	11.0	16.0	27.0	12.6			0.0	28.3	0.0	3.1	10.0	0.0
Cycle Q Clear(g_c), s	11.0	16.0	27.0	12.6			0.0	28.3	0.0	3.1	10.0	0.0
Prop In Lane	1.00		1.00	1.00			0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	1488	459	696	440			0	1568	681	263	1661	0
V/C Ratio(X)	0.35	0.66	1.11	0.91			0.00	0.93	0.53	0.51	0.31	0.00
Avail Cap(c_a), veh/h	1488	459	696	440			0	1603	692	263	1661	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00			1.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00			0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	21.2	37.3	41.5	47.4			0.0	20.8	11.7	44.3	18.5	0.0
Incr Delay (d2), s/veh	0.1	3.4	68.9	22.7			0.0	11.8	3.0	1.6	0.5	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
%ile BackOfQ(50%),veh/ln	4.3	7.5	15.6	6.8			0.0	7.6	4.0	3.3	4.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.3	40.8	110.4	70.0			0.0	32.5	14.6	45.9	19.0	0.0
LnGrp LOS	C	D	F	E			A	C	B	D	B	A
Approach Vol, veh/h		1594						1828			654	
Approach Delay, s/veh		68.2						29.0			24.5	
Approach LOS		E						C			C	
Timer - Assigned Phs	1	2	3	4		6	7					
Phs Duration (G+Y+Rc), s	17.7	39.3	20.0	33.0		57.0	53.0					
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0		6.0	6.0					
Max Green Setting (Gmax), s	11.0	34.0	14.0	27.0		51.0	47.0					
Max Q Clear Time (g_c+I1), s	5.1	30.3	14.6	29.0		12.0	13.0					
Green Ext Time (p_c), s	0.1	3.0	0.0	0.0		3.4	1.9					
Intersection Summary												
HCM 6th Ctrl Delay			46.0									
HCM 6th LOS			D									

Lanes, Volumes, Timings

2040 PM Peak Hour with Improvements

4: W Martintown Rd & I-20 EB Off Ramp/Site Drive #1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	493	278	734	368	0	359	0	1393	333	122	495	0
Future Volume (vph)	493	278	734	368	0	359	0	1393	333	122	495	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	350		350	350		0	300		250	0		0
Storage Lanes	2		2	1		1	1		1	1		0
Taper Length (ft)	100			100			100			100		
Satd. Flow (prot)	3467	1863	2842	3433	0	1583	0	5187	1583	1770	3574	0
Flt Permitted	0.950			0.950						0.097		
Satd. Flow (perm)	3467	1863	2842	3433	0	1583	0	5187	1583	181	3574	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			345			100			245			
Link Speed (mph)		45			25			45				45
Link Distance (ft)		2205			638			588				197
Travel Time (s)		33.4			17.4			8.9				3.0
Peak Hour Factor	0.95	0.92	0.95	0.92	0.92	0.92	0.95	0.95	0.92	0.92	0.95	0.95
Heavy Vehicles (%)	1%	2%	0%	2%	2%	2%	0%	0%	2%	2%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	519	302	773	400	0	390	0	1466	362	133	521	0
Turn Type	Prot	NA	Perm	Prot		pm+ov		NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3		1		2	3	1	6	
Permitted Phases			4			3			2	6		
Detector Phase	7	4	4	3		1		2	3	1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0		7.0		12.0	7.0	7.0	12.0	
Minimum Split (s)	15.0	24.0	24.0	15.0		15.0		24.0	15.0	15.0	24.0	
Total Split (s)	53.0	33.0	33.0	20.0		17.0		40.0	20.0	17.0	57.0	
Total Split (%)	48.2%	30.0%	30.0%	18.2%		15.5%		36.4%	18.2%	15.5%	51.8%	
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	0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0		6.0		6.0	6.0	6.0	6.0	
Lead/Lag		Lead	Lead	Lag		Lag		Lead	Lag	Lag		
Lead-Lag Optimize?		Yes	Yes	Yes		Yes		Yes	Yes	Yes		
Recall Mode	None	None	None	None		None		C-Min	None	None	C-Min	
Act Effct Green (s)	45.0	24.1	24.1	14.9		26.6		35.3	56.2	53.0	53.0	
Actuated g/C Ratio	0.41	0.22	0.22	0.14		0.24		0.32	0.51	0.48	0.48	
v/c Ratio	0.37	0.74	0.87	0.86		0.85		0.88	0.39	0.52	0.30	
Control Delay	23.1	51.1	33.4	65.9		36.6		31.3	2.3	43.4	18.4	
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0	
Total Delay	23.1	51.1	33.4	65.9		36.6		31.3	2.3	43.4	18.4	
LOS	C	D	C	E		D		C	A	D	B	
Approach Delay		33.4			51.4			25.5			23.5	
Approach LOS		C			D			C			C	
Queue Length 50th (ft)	124	193	167	145		101		370	3	53	118	
Queue Length 95th (ft)	166	289	253	#235		#263		#417	m20	103	157	
Internal Link Dist (ft)		2125			558			508			117	
Turn Bay Length (ft)	350		350	350					250			
Base Capacity (vph)	1481	457	957	464		458		1665	928	255	1721	

4: W Martintown Rd & I-20 EB Off Ramp/Site Drive #1

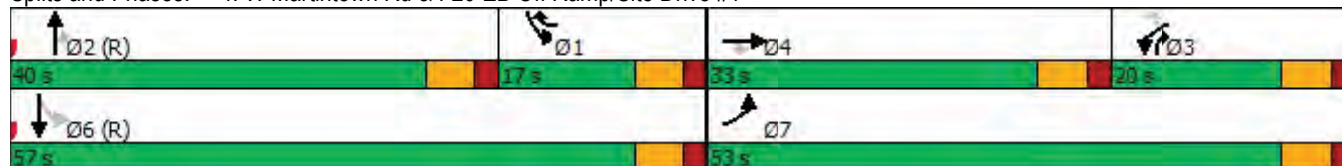


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0		0		0	0	0	0	
Spillback Cap Reductn	0	0	0	0		0		0	0	0	0	
Storage Cap Reductn	0	0	0	0		0		0	0	0	0	
Reduced v/c Ratio	0.35	0.66	0.81	0.86		0.85		0.88	0.39	0.52	0.30	

Intersection Summary

Area Type: Other
 Cycle Length: 110
 Actuated Cycle Length: 110
 Offset: 26 (24%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.88
 Intersection Signal Delay: 32.0 Intersection LOS: C
 Intersection Capacity Utilization 78.2% ICU Level of Service D
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: W Martintown Rd & I-20 EB Off Ramp/Site Drive #1



HCM 6th TWSC
5: W Martintown Rd & Frontage Rd/Site Drive #2

2040 PM Peak Hour with Improvements

Intersection													
Int Delay, s/veh	2.5												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗		↘	↕	↗		↕	↗
Traffic Vol, veh/h	0	0	119	0	0	25	9	147	1701	24	0	1558	39
Future Vol, veh/h	0	0	119	0	0	25	9	147	1701	24	0	1558	39
Conflicting Peds, #/hr	0	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	Free
RT Channelized	-	-	None	-	-	None	-	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	300	-	150	-	-	200
Veh in Median Storage, #	-	0	-	-	0	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	-	0	-	-	0	-
Peak Hour Factor	90	92	90	92	92	92	92	90	90	92	92	90	90
Heavy Vehicles, %	0	2	0	2	2	2	2	0	0	2	2	0	0
Mvmt Flow	0	0	132	0	0	27	10	163	1890	26	0	1731	43

Major/Minor	Minor2		Minor1		Major1			Major2					
Conflicting Flow All	-	-	866	-	-	945	1731	1774	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.9	-	-	6.94	6.44	4.1	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.3	-	-	3.32	2.52	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	301	0	0	263	111	355	-	-	0	-	-
Stage 1	0	0	-	0	0	-	-	-	-	-	0	-	-
Stage 2	0	0	-	0	0	-	-	-	-	-	0	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	301	-	-	263	286	286	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	26		20.3		2.9		0	
HCM LOS	D		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	286	-	-	301	263	-	-
HCM Lane V/C Ratio	0.605	-	-	0.439	0.103	-	-
HCM Control Delay (s)	35.2	-	-	26	20.3	-	-
HCM Lane LOS	E	-	-	D	C	-	-
HCM 95th %tile Q(veh)	3.7	-	-	2.1	0.3	-	-

HCM 6th TWSC
6: W Martintown Rd & Plantation Dr/Site Drive #3

2040 PM Peak Hour with Improvements

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗		↕↕	↗		↕↕	
Traffic Vol, veh/h	0	0	5	0	0	34	0	1820	48	0	1648	24
Future Vol, veh/h	0	0	5	0	0	34	0	1820	48	0	1648	24
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	-	-	Free
Storage Length	-	-	0	-	-	0	-	-	150	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	92	94	92	92	92	94	94	92	92	94	94
Heavy Vehicles, %	0	2	5	2	2	2	0	0	2	2	1	0
Mvmt Flow	0	0	5	0	0	37	0	1936	52	0	1753	26

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	877	-	-	968	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7	-	-	6.94	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.35	-	-	3.32	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	286	0	0	254	0	-	-	0	-	0
Stage 1	0	0	-	0	0	-	0	-	-	0	-	0
Stage 2	0	0	-	0	0	-	0	-	-	0	-	0
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	286	-	-	254	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	17.8		21.6		0		0	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBT	NBR	EBLn1WBLn1	SBT
Capacity (veh/h)	-	-	286	254
HCM Lane V/C Ratio	-	-	0.019	0.145
HCM Control Delay (s)	-	-	17.8	21.6
HCM Lane LOS	-	-	C	C
HCM 95th %tile Q(veh)	-	-	0.1	0.5

HCM 6th Signalized Intersection Summary

2040 PM Peak Hour with Improvements

7: W Martintown Rd & Plantation Dr Connector/Knobcone Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations		↔		↔	↔		↔	↑↑	↔		↔	↑↑
Traffic Volume (veh/h)	15	4	15	21	4	183	41	1574	25	96	246	1311
Future Volume (veh/h)	15	4	15	21	4	183	41	1574	25	96	246	1311
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	1870	1870	1870	1900	1870	1900	1870	1900	1900		1885	1885
Adj Flow Rate, veh/h	16	4	16	23	4	199	45	1711	27		267	1425
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, %	2	2	2	0	2	0	2	0	0		1	1
Cap, veh/h	60	25	30	211	5	228	306	1863	831		608	2303
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.05	0.52	0.52		0.35	1.00
Sat Flow, veh/h	89	171	208	1414	31	1559	1781	3610	1610		3483	3676
Grp Volume(v), veh/h	36	0	0	23	0	203	45	1711	27		267	1425
Grp Sat Flow(s),veh/h/ln	468	0	0	1414	0	1590	1781	1805	1610		1742	1791
Q Serve(g_s), s	0.3	0.0	0.0	0.0	0.0	13.8	1.5	48.0	0.9		6.5	0.0
Cycle Q Clear(g_c), s	14.0	0.0	0.0	2.4	0.0	13.8	1.5	48.0	0.9		6.5	0.0
Prop In Lane	0.44		0.44	1.00		0.98	1.00		1.00		1.00	
Lane Grp Cap(c), veh/h	116	0	0	211	0	232	306	1863	831		608	2303
V/C Ratio(X)	0.31	0.00	0.00	0.11	0.00	0.87	0.15	0.92	0.03		0.44	0.62
Avail Cap(c_a), veh/h	140	0	0	236	0	260	367	1936	864		608	2303
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	41.6	0.0	0.0	41.1	0.0	46.0	15.3	24.5	13.1		31.7	0.0
Incr Delay (d2), s/veh	1.5	0.0	0.0	0.2	0.0	24.7	0.2	8.8	0.1		0.5	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
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.0	0.6	0.0	6.9	0.6	20.5	0.3		2.5	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.1	0.0	0.0	41.3	0.0	70.7	15.5	33.3	13.2		32.2	1.3
LnGrp LOS	D	A	A	D	A	E	B	C	B		C	A
Approach Vol, veh/h		36			226			1783				1692
Approach Delay, s/veh		43.1			67.7			32.5				6.1
Approach LOS		D			E			C				A
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	25.2	62.8		22.1	11.2	76.7		22.1				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	15.0	59.0		18.0	9.0	65.0		18.0				
Max Q Clear Time (g_c+I1), s	8.5	50.0		16.0	3.5	2.0		15.8				
Green Ext Time (p_c), s	0.5	6.8		0.0	0.0	14.7		0.3				

Intersection Summary

HCM 6th Ctrl Delay	22.8
HCM 6th LOS	C

Notes

User approved ignoring U-Turning movement.



Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	0
Future Volume (veh/h)	0
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	0
Adj Flow Rate, veh/h	0
Peak Hour Factor	0.92
Percent Heavy Veh, %	0
Cap, veh/h	0
Arrive On Green	0.00
Sat Flow, veh/h	0
Grp Volume(v), veh/h	0
Grp Sat Flow(s),veh/h/ln	0
Q Serve(g_s), s	0.0
Cycle Q Clear(g_c), s	0.0
Prop In Lane	0.00
Lane Grp Cap(c), veh/h	0
V/C Ratio(X)	0.00
Avail Cap(c_a), veh/h	0
HCM Platoon Ratio	1.00
Upstream Filter(l)	0.00
Uniform Delay (d), s/veh	0.0
Incr Delay (d2), s/veh	0.0
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	0.0
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	0.0
LnGrp LOS	A
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

Lanes, Volumes, Timings

2040 PM Peak Hour with Improvements

7: W Martintown Rd & Plantation Dr Connector/Knobcone Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations		↔		↔	↔		↔	↑↑	↔		↔	↑↑
Traffic Volume (vph)	15	4	15	21	4	183	41	1574	25	96	246	1311
Future Volume (vph)	15	4	15	21	4	183	41	1574	25	96	246	1311
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	125		0	150		150		250	
Storage Lanes	0		0	1		0	1		1		2	
Taper Length (ft)	100			100			100				100	
Satd. Flow (prot)	0	1712	0	1805	1620	0	1770	3610	1615	0	3457	3574
Flt Permitted		0.478		0.734			0.102				0.950	
Satd. Flow (perm)	0	837	0	1395	1620	0	190	3610	1615	0	3457	3574
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)		16			101				89			
Link Speed (mph)		30			35			45				45
Link Distance (ft)		643			580			2776				520
Travel Time (s)		14.6			11.3			42.1				7.9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	0%	2%	0%	2%	0%	0%	2%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	36	0	23	203	0	45	1711	27	0	371	1425
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	Prot	Prot	NA
Protected Phases		4			8		5	2		1	1	6
Permitted Phases	4			8			2		2			
Detector Phase	4	4		8	8		5	2	2	1	1	6
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	12.0	12.0	7.0	7.0	12.0
Minimum Split (s)	24.0	24.0		24.0	24.0		15.0	24.0	24.0	15.0	15.0	24.0
Total Split (s)	24.0	24.0		24.0	24.0		15.0	65.0	65.0	21.0	21.0	71.0
Total Split (%)	21.8%	21.8%		21.8%	21.8%		13.6%	59.1%	59.1%	19.1%	19.1%	64.5%
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)	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
Total Lost Time (s)		6.0		6.0	6.0		6.0	6.0	6.0		6.0	6.0
Lead/Lag							Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	None	C-Min
Act Effct Green (s)		12.6		12.6	12.6		64.7	64.7	64.7		14.7	74.7
Actuated g/C Ratio		0.11		0.11	0.11		0.59	0.59	0.59		0.13	0.68
v/c Ratio		0.33		0.14	0.74		0.21	0.81	0.03		0.80	0.59
Control Delay		35.1		43.5	39.2		13.3	22.6	0.0		49.9	7.1
Queue Delay		0.0		0.0	0.0		0.0	0.0	0.0		0.0	0.0
Total Delay		35.1		43.5	39.2		13.3	22.6	0.0		49.9	7.1
LOS		D		D	D		B	C	A		D	A
Approach Delay		35.1			39.6			22.0				15.9
Approach LOS		D			D			C				B
Queue Length 50th (ft)		13		15	69		13	472	0		119	120
Queue Length 95th (ft)		m42		38	143		32	653	0		m163	228
Internal Link Dist (ft)		563			500			2696				440
Turn Bay Length (ft)				125			150		150		250	
Base Capacity (vph)		150		228	349		241	2124	987		474	2426

7: W Martintown Rd & Plantation Dr Connector/Knobcone Ave



Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
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 (%)	2%
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

7: W Martintown Rd & Plantation Dr Connector/Knobcone Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
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		0.24		0.10	0.58		0.19	0.81	0.03		0.78	0.59

Intersection Summary

Area Type: Other
 Cycle Length: 110
 Actuated Cycle Length: 110
 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: 0.81
 Intersection Signal Delay: 20.3 Intersection LOS: C
 Intersection Capacity Utilization 83.7% ICU Level of Service E
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: W Martintown Rd & Plantation Dr Connector/Knobcone Ave



Summary of All Intervals

Start Time	7:05
End Time	8:15
Total Time (min)	70
Time Recorded (min)	60
# of Intervals	2
# of Recorded Intervals	1
Vehs Entered	5169
Vehs Exited	5115
Starting Vehs	166
Ending Vehs	220
Travel Distance (mi)	5043
Travel Time (hr)	209.7
Total Delay (hr)	77.6
Total Stops	6377
Fuel Used (gal)	194.3

Interval #0 Information Seeding

Start Time	7:05
End Time	7:15
Total Time (min)	10
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:15
End Time	8:15
Total Time (min)	60
Volumes adjusted by PHF, Growth Factors.	
Vehs Entered	5169
Vehs Exited	5115
Starting Vehs	166
Ending Vehs	220
Travel Distance (mi)	5043
Travel Time (hr)	209.7
Total Delay (hr)	77.6
Total Stops	6377
Fuel Used (gal)	194.3

Intersection: 1: W Martintown Rd & Gregory Lake Rd

Movement	WB	NB	SB
Directions Served	LR	T	LT
Maximum Queue (ft)	68	72	269
Average Queue (ft)	36	2	95
95th Queue (ft)	61	24	238
Link Distance (ft)	1489	1364	790
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: W Martintown Rd & Bergen Rd

Movement	WB	B12	NB	NB	SB	SB	SB
Directions Served	LTR	T	T	TR	L	T	TR
Maximum Queue (ft)	103	221	229	272	69	318	372
Average Queue (ft)	100	67	98	127	27	153	259
95th Queue (ft)	114	161	174	223	56	338	398
Link Distance (ft)	39	402	299	299		319	319
Upstream Blk Time (%)	36					1	10
Queuing Penalty (veh)	0					2	45
Storage Bay Dist (ft)					100		
Storage Blk Time (%)			6			4	
Queuing Penalty (veh)			0			1	

Intersection: 3: W Martintown Rd & I-20 WB Off Ramp

Movement	WB	NB	SB	SB
Directions Served	LR	T	T	T
Maximum Queue (ft)	184	31	50	128
Average Queue (ft)	53	2	9	8
95th Queue (ft)	110	14	34	52
Link Distance (ft)	1668	232	50	50
Upstream Blk Time (%)			0	1
Queuing Penalty (veh)			0	4
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: W Martintown Rd & I-20 EB Off Ramp/Site Drive #1

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	R	R	L	L	R	T	T	T	R
Maximum Queue (ft)	48	110	204	144	56	121	163	162	244	305	310	335
Average Queue (ft)	13	51	125	41	3	45	69	65	66	138	197	57
95th Queue (ft)	39	104	190	105	24	91	132	116	149	241	297	150
Link Distance (ft)			2147				562	562		487	487	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	350	350		350	350	350			300			250
Storage Blk Time (%)										0	3	
Queuing Penalty (veh)										0	8	

Intersection: 4: W Martintown Rd & I-20 EB Off Ramp/Site Drive #1

Movement	SB	SB	SB
Directions Served	L	T	T
Maximum Queue (ft)	91	252	133
Average Queue (ft)	42	136	101
95th Queue (ft)	73	222	131
Link Distance (ft)	112	112	112
Upstream Blk Time (%)		6	2
Queuing Penalty (veh)		18	7
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: W Martintown Rd & Frontage Rd/Site Drive #2

Movement	EB	WB	NB
Directions Served	R	R	UL
Maximum Queue (ft)	156	22	116
Average Queue (ft)	65	5	36
95th Queue (ft)	126	19	78
Link Distance (ft)	486	329	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			300
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: W Martintown Rd & Plantation Dr/Site Drive #3

Movement	EB	WB	SB
Directions Served	R	R	TR
Maximum Queue (ft)	28	22	14
Average Queue (ft)	2	7	0
95th Queue (ft)	13	23	5
Link Distance (ft)	625	458	574
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: W Martintown Rd & Knobcone Ave

Movement	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LTR	L	TR	L	T	T	R	UL	L	T	T
Maximum Queue (ft)	67	99	183	48	277	298	250	278	318	210	198
Average Queue (ft)	28	31	94	10	176	207	65	140	109	90	107
95th Queue (ft)	56	65	154	33	263	293	201	220	194	170	167
Link Distance (ft)	539		494		2731	2731				453	453
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)		125		150			150	250	250		
Storage Blk Time (%)			5		13	17		1			
Queuing Penalty (veh)			2		2	18		4			

Zone Summary

Zone wide Queuing Penalty: 113

Summary of All Intervals

Start Time	4:50
End Time	6:00
Total Time (min)	70
Time Recorded (min)	60
# of Intervals	2
# of Recorded Intervals	1
Vehs Entered	6627
Vehs Exited	6583
Starting Vehs	268
Ending Vehs	312
Travel Distance (mi)	6393
Travel Time (hr)	304.7
Total Delay (hr)	137.0
Total Stops	8387
Fuel Used (gal)	251.7

Interval #0 Information Seeding

Start Time	4:50
End Time	5:00
Total Time (min)	10
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	5:00
End Time	6:00
Total Time (min)	60
Volumes adjusted by PHF, Growth Factors.	
Vehs Entered	6627
Vehs Exited	6583
Starting Vehs	268
Ending Vehs	312
Travel Distance (mi)	6393
Travel Time (hr)	304.7
Total Delay (hr)	137.0
Total Stops	8387
Fuel Used (gal)	251.7

Intersection: 1: W Martintown Rd & Gregory Lake Rd

Movement	WB	NB	SB
Directions Served	LR	T	LT
Maximum Queue (ft)	88	119	57
Average Queue (ft)	30	11	28
95th Queue (ft)	65	54	62
Link Distance (ft)	1489	1364	790
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: W Martintown Rd & Bergen Rd

Movement	WB	B12	NB	NB	SB	SB	SB
Directions Served	LTR	T	T	TR	L	T	TR
Maximum Queue (ft)	103	106	344	371	128	150	138
Average Queue (ft)	90	29	173	204	66	39	81
95th Queue (ft)	120	77	305	334	124	87	141
Link Distance (ft)	39	402	299	299		319	319
Upstream Blk Time (%)	38		1	1			
Queuing Penalty (veh)	0		5	11			
Storage Bay Dist (ft)					100		
Storage Blk Time (%)			19		12		
Queuing Penalty (veh)			0		43		

Intersection: 3: W Martintown Rd & I-20 WB Off Ramp

Movement	WB	NB	NB	SB
Directions Served	LR	T	T	T
Maximum Queue (ft)	216	93	68	68
Average Queue (ft)	115	25	4	8
95th Queue (ft)	193	75	27	37
Link Distance (ft)	1668	232	232	50
Upstream Blk Time (%)				0
Queuing Penalty (veh)				0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: W Martintown Rd & I-20 EB Off Ramp/Site Drive #1

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	R	R	L	L	R	T	T	T	R
Maximum Queue (ft)	196	217	331	231	191	366	400	291	386	414	404	350
Average Queue (ft)	95	145	170	124	80	206	256	131	228	271	284	153
95th Queue (ft)	172	214	260	196	171	311	359	237	324	374	387	351
Link Distance (ft)			2147				562	562		487	487	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	350	350		350	350	350			300			250
Storage Blk Time (%)			0			0	0		0	3	15	
Queuing Penalty (veh)			0			0	1		0	17	55	

Intersection: 4: W Martintown Rd & I-20 EB Off Ramp/Site Drive #1

Movement	SB	SB	SB
Directions Served	L	T	T
Maximum Queue (ft)	212	196	115
Average Queue (ft)	93	101	88
95th Queue (ft)	154	158	124
Link Distance (ft)	112	112	112
Upstream Blk Time (%)	7	2	2
Queuing Penalty (veh)	14	5	4
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: W Martintown Rd & Frontage Rd/Site Drive #2

Movement	EB	WB	NB	NB	NB	SB
Directions Served	R	R	UL	T	T	R
Maximum Queue (ft)	132	43	387	455	486	51
Average Queue (ft)	70	16	228	128	30	2
95th Queue (ft)	122	38	377	411	215	19
Link Distance (ft)	486	329		574	574	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			300			200
Storage Blk Time (%)			22	1		
Queuing Penalty (veh)			212	2		

Intersection: 6: W Martintown Rd & Plantation Dr/Site Drive #3

Movement	EB	WB	NB
Directions Served	R	R	T
Maximum Queue (ft)	30	86	29
Average Queue (ft)	1	22	1
95th Queue (ft)	10	55	10
Link Distance (ft)	625	458	453
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: W Martintown Rd & Plantation Dr Connector/Knobcone Ave

Movement	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LTR	L	TR	L	T	T	R	UL	L	T	T
Maximum Queue (ft)	89	224	263	249	386	412	250	216	243	190	225
Average Queue (ft)	24	28	108	37	254	259	27	134	133	109	126
95th Queue (ft)	66	97	184	134	366	362	128	206	212	190	200
Link Distance (ft)	539		494		2731	2731				453	453
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)		125		150			150	250	250		
Storage Blk Time (%)			7		19	21				0	
Queuing Penalty (veh)			2		9	6				0	

Zone Summary

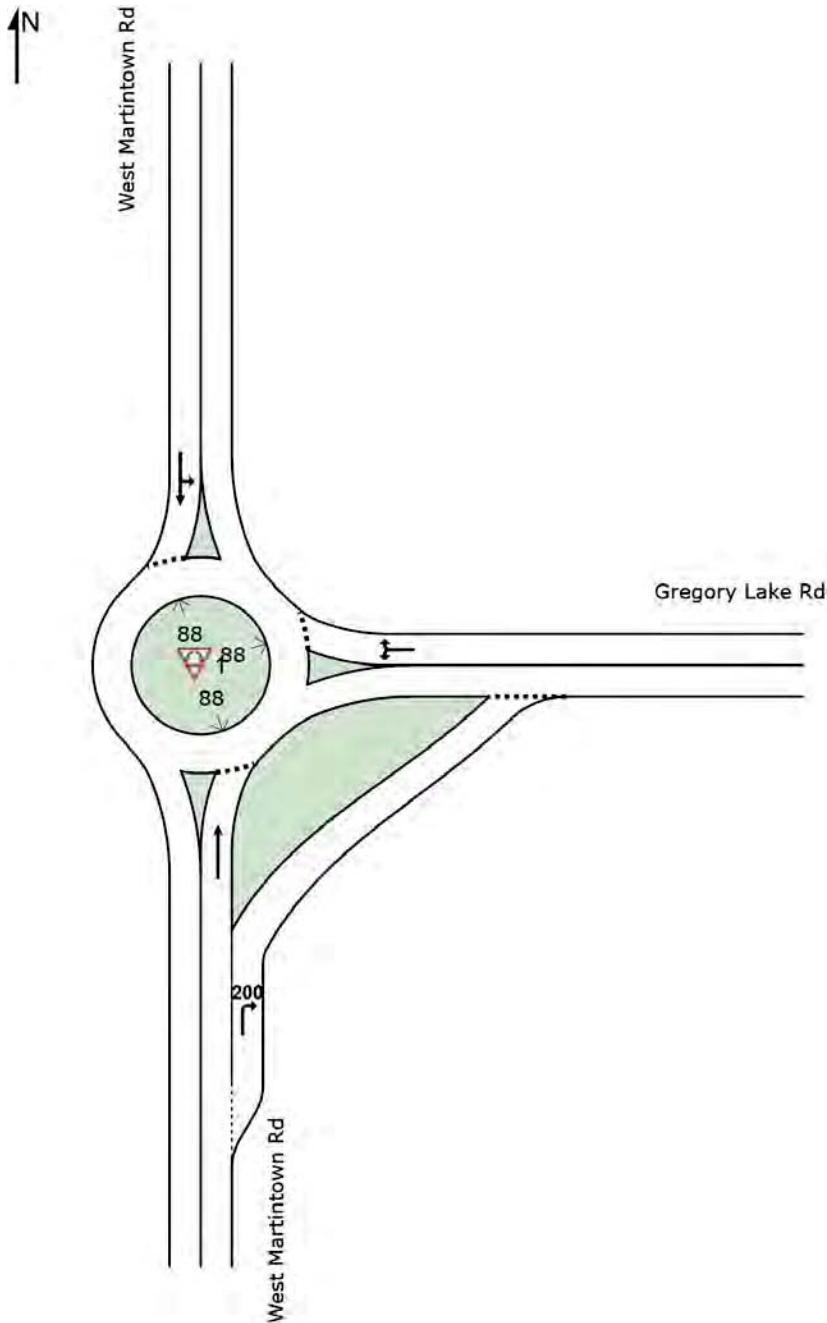
Zone wide Queuing Penalty: 387

Appendix K – 2040 Build SIDRA Reports

SITE LAYOUT

 **Site: 1 [2040 Build AM Peak Hour]**

2040 Build AM Peak
Site Category: (None)
Roundabout



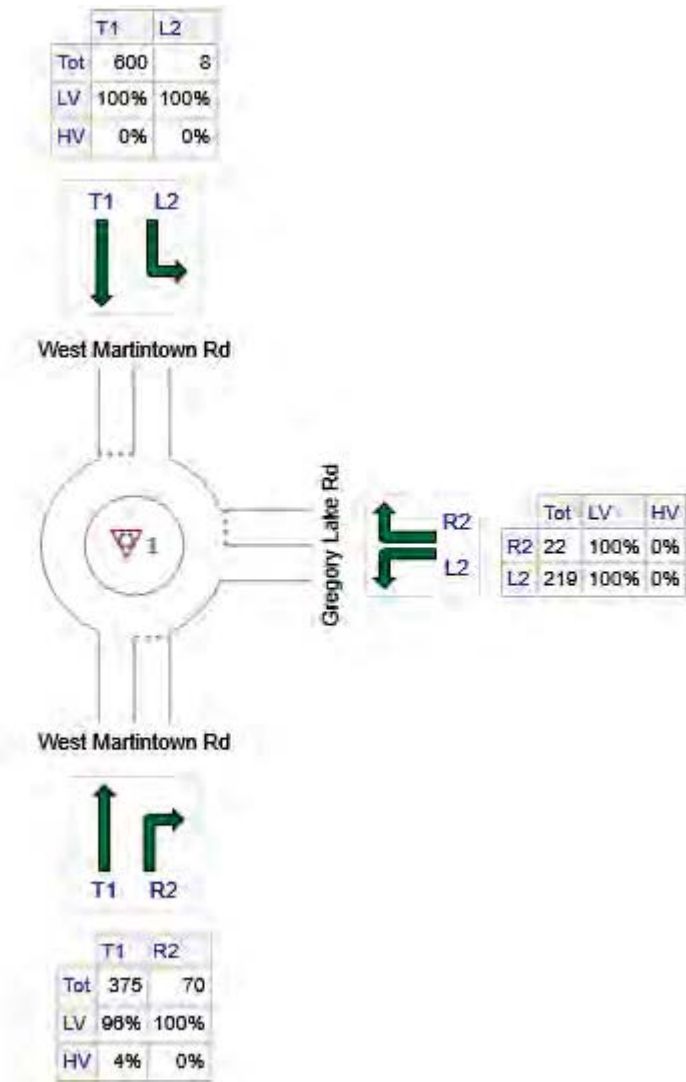
INPUT VOLUMES

Vehicles and pedestrians per 60 minutes

 Site: 1 [2040 Build AM Peak Hour]

2040 Build AM Peak
 Site Category: (None)
 Roundabout

Volume Display Method: Total and %



	All MCs	Light Vehicles (LV)	Heavy Vehicles (HV)
S: West Martintown Rd	445	430	15
E: Gregory Lake Rd	241	241	0
N: West Martintown Rd	608	608	0
Total	1294	1279	15

MOVEMENT SUMMARY

 Site: 1 [2040 Build AM Peak Hour]

2040 Build AM Peak
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: West Martintown Rd												
8	T1	431	4.0	0.289	4.8	LOS A	2.2	57.0	0.09	0.02	0.09	37.2
18	R2	80	0.0	0.052	2.7	LOS A	0.3	7.8	0.07	0.01	0.07	38.1
Approach		511	3.4	0.289	4.5	LOS A	2.2	57.0	0.09	0.02	0.09	37.3
East: Gregory Lake Rd												
1	L2	252	0.0	0.298	7.0	LOS A	1.8	43.8	0.61	0.50	0.61	33.7
16	R2	25	0.0	0.298	7.0	LOS A	1.8	43.8	0.61	0.50	0.61	33.0
Approach		277	0.0	0.298	7.0	LOS A	1.8	43.8	0.61	0.50	0.61	33.7
North: West Martintown Rd												
7	L2	9	0.0	0.666	13.3	LOS B	9.2	229.9	0.77	0.68	0.96	32.9
4	T1	690	0.0	0.666	13.3	LOS B	9.2	229.9	0.77	0.68	0.96	33.0
Approach		699	0.0	0.666	13.3	LOS B	9.2	229.9	0.77	0.68	0.96	33.0
All Vehicles		1487	1.2	0.666	9.1	LOS A	9.2	229.9	0.51	0.42	0.60	34.5

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Signalised Intersections.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: SIDRA Standard.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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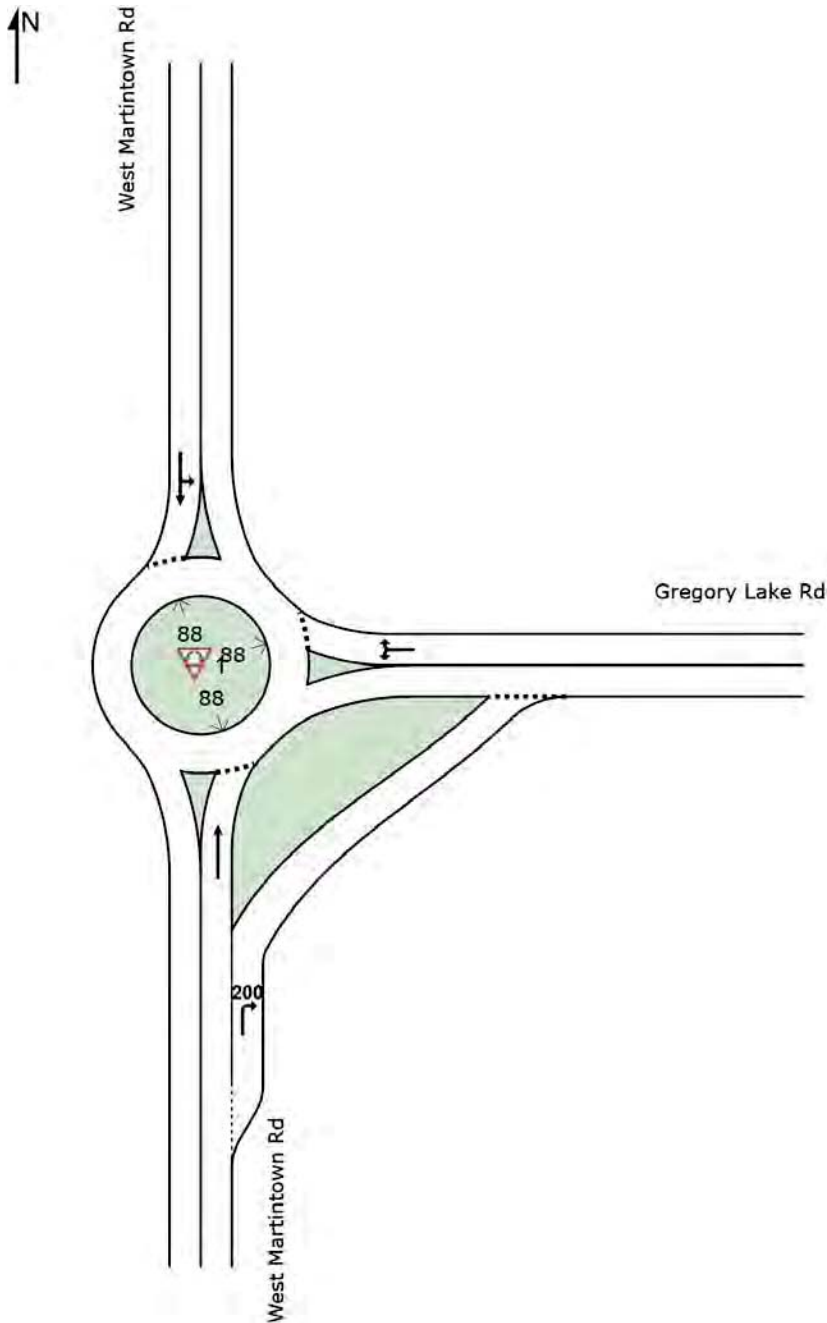
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SITE LAYOUT

 Site: 1 [2040 Build PM Peak Hour]

2040 Build PM Peak
Site Category: (None)
Roundabout



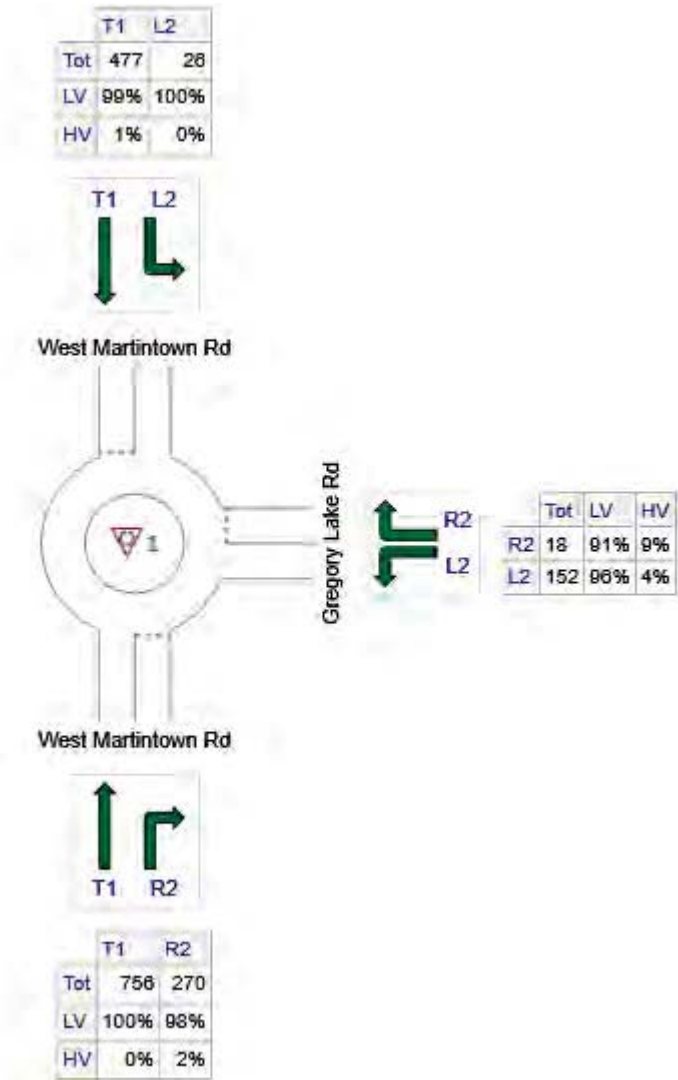
INPUT VOLUMES

Vehicles and pedestrians per 60 minutes

Site: 1 [2040 Build PM Peak Hour]

2040 Build PM Peak
 Site Category: (None)
 Roundabout

Volume Display Method: Total and %



	All MCs	Light Vehicles (LV)	Heavy Vehicles (HV)
S: West Martintown Rd	1026	1021	5
E: Gregory Lake Rd	170	162	8
N: West Martintown Rd	503	498	5
Total	1699	1681	18

MOVEMENT SUMMARY

 Site: 1 [2040 Build PM Peak Hour]

2040 Build PM Peak
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: West Martintown Rd												
8	T1	796	0.0	0.522	7.5	LOS A	5.1	127.6	0.22	0.07	0.22	36.2
18	R2	284	2.0	0.190	3.9	LOS A	1.2	30.7	0.14	0.04	0.14	37.0
Approach		1080	0.5	0.522	6.6	LOS A	5.1	127.6	0.20	0.06	0.20	36.4
East: Gregory Lake Rd												
1	L2	160	4.0	0.279	9.1	LOS A	1.7	44.6	0.78	0.74	0.78	32.2
16	R2	19	9.0	0.279	9.6	LOS A	1.7	44.6	0.78	0.74	0.78	31.0
Approach		179	4.5	0.279	9.2	LOS A	1.7	44.6	0.78	0.74	0.78	32.1
North: West Martintown Rd												
7	L2	27	0.0	0.478	8.5	LOS A	4.0	100.0	0.55	0.36	0.55	35.3
4	T1	502	1.0	0.478	8.6	LOS A	4.0	100.0	0.55	0.36	0.55	35.3
Approach		529	0.9	0.478	8.6	LOS A	4.0	100.0	0.55	0.36	0.55	35.3
All Vehicles		1788	1.1	0.522	7.4	LOS A	5.1	127.6	0.36	0.22	0.36	35.5

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Signalised Intersections.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: SIDRA Standard.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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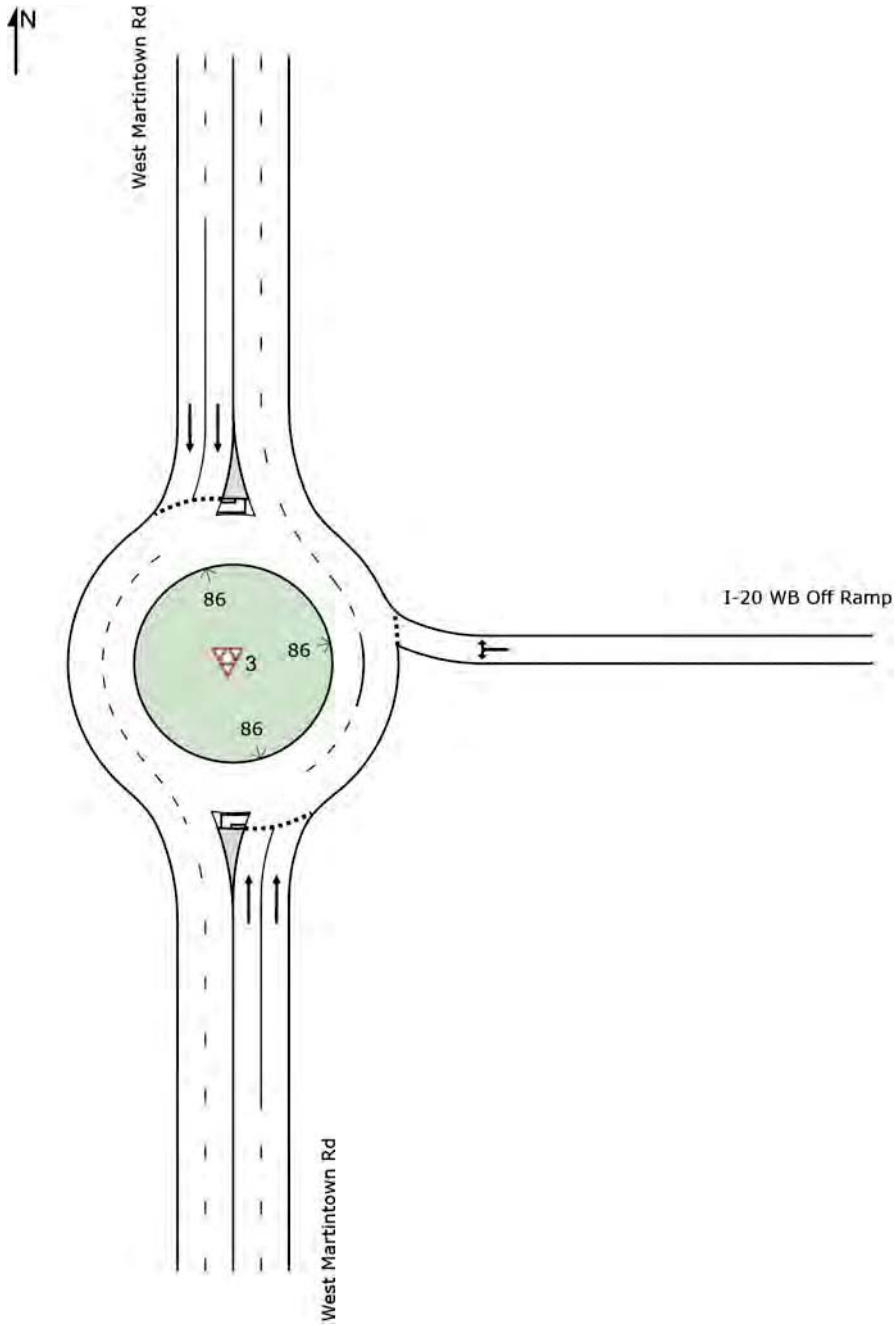
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SITE LAYOUT

 Site: 3 [2040 Build AM Peak Hour]

2040 Build AM Peak
Site Category: (None)
Roundabout



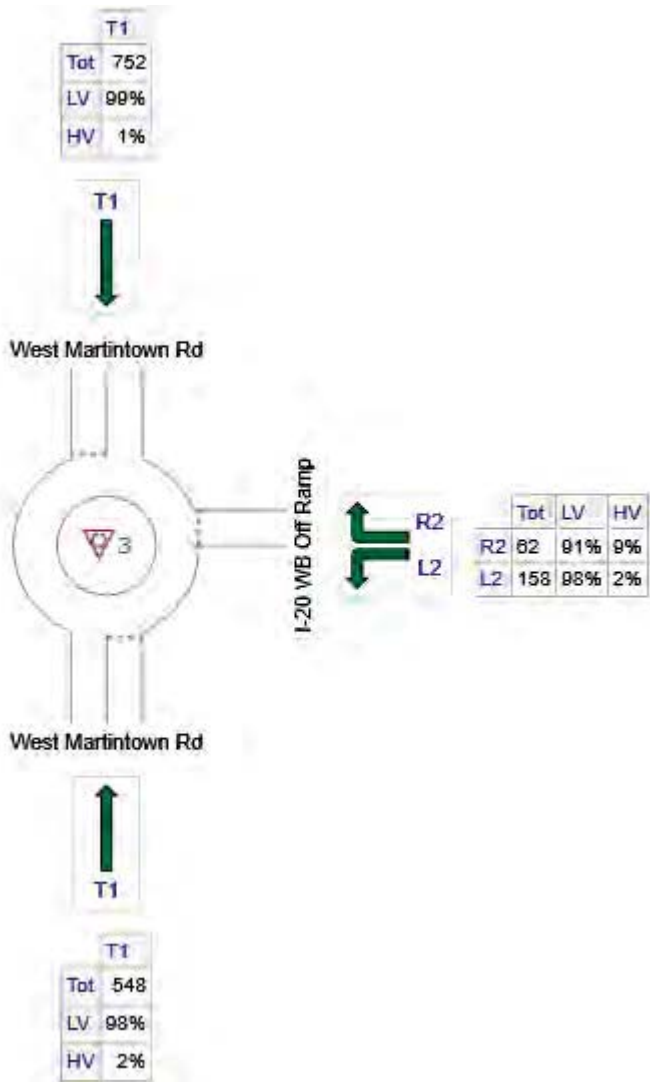
INPUT VOLUMES

Vehicles and pedestrians per 60 minutes

 Site: 3 [2040 Build AM Peak Hour]

2040 Build AM Peak
 Site Category: (None)
 Roundabout

Volume Display Method: Total and %



	All MCs	Light Vehicles (LV)	Heavy Vehicles (HV)
S: West Martintown Rd	548	537	11
E: I-20 WB Off Ramp	220	211	9
N: West Martintown Rd	752	744	8
Total	1520	1493	27

MOVEMENT SUMMARY

 **Site: 3 [2040 Build AM Peak Hour]**

2040 Build AM Peak
 Site Category: (None)
 Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: West Martintown Rd												
8	T1	602	2.0	0.204	4.1	LOS A	0.0	0.0	0.00	0.00	0.00	40.6
Approach		602	2.0	0.204	4.1	LOS A	0.0	0.0	0.00	0.00	0.00	40.6
East: I-20 WB Off Ramp												
1	L2	174	2.0	0.299	7.7	LOS A	1.2	31.0	0.54	0.53	0.54	33.5
16	R2	68	9.0	0.299	8.1	LOS A	1.2	31.0	0.54	0.53	0.54	32.1
Approach		242	4.0	0.299	7.8	LOS A	1.2	31.0	0.54	0.53	0.54	33.1
North: West Martintown Rd												
4	T1	826	1.0	0.326	5.9	LOS A	2.3	57.2	0.44	0.27	0.44	36.9
Approach		826	1.0	0.326	5.9	LOS A	2.3	57.2	0.44	0.27	0.44	36.9
All Vehicles		1670	1.8	0.326	5.5	LOS A	2.3	57.2	0.30	0.21	0.30	37.5

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Signalised Intersections.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: SIDRA Standard.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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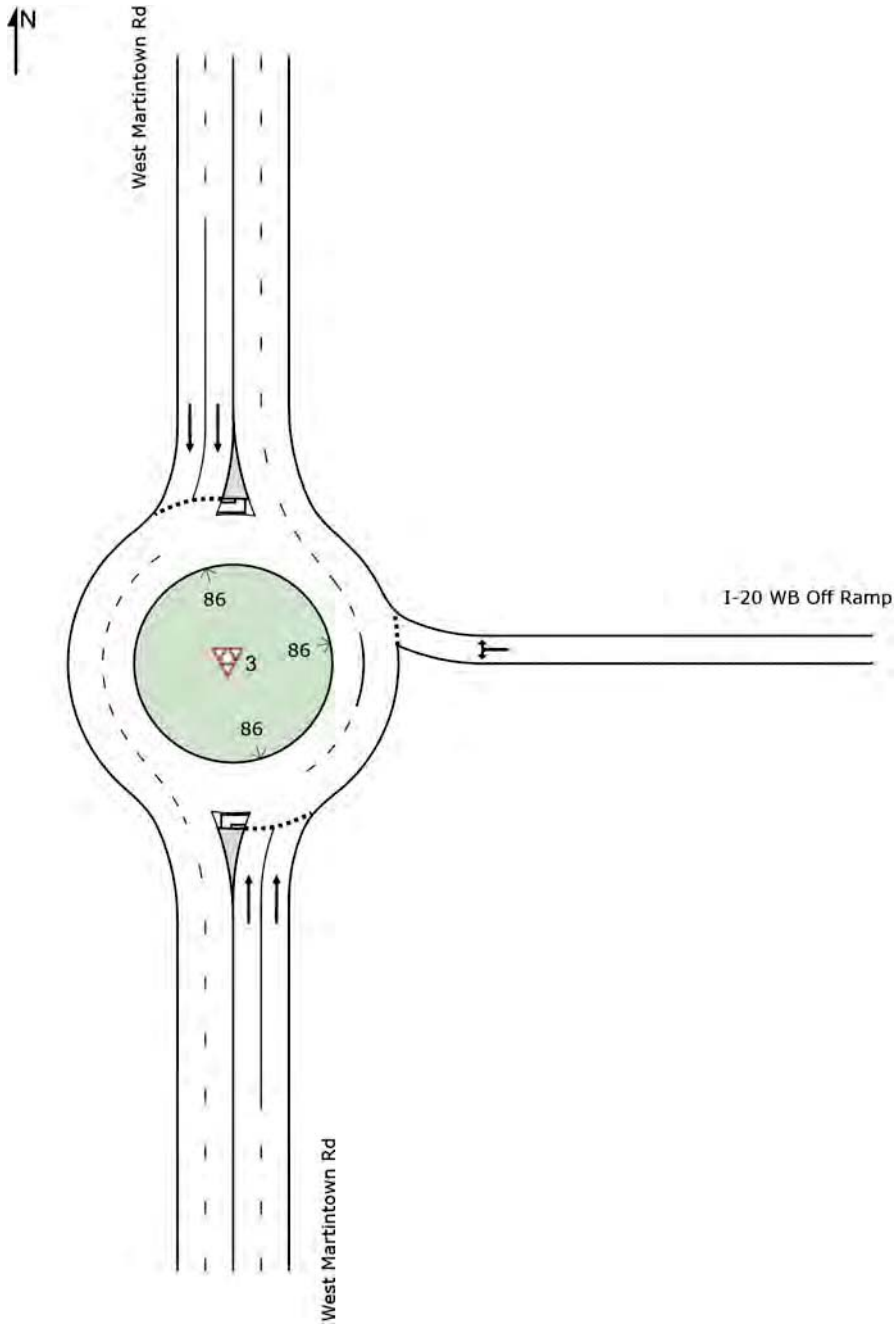
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SITE LAYOUT

 **Site: 3 [2040 Build PM Peak Hour]**

2040 Build PM Peak
Site Category: (None)
Roundabout



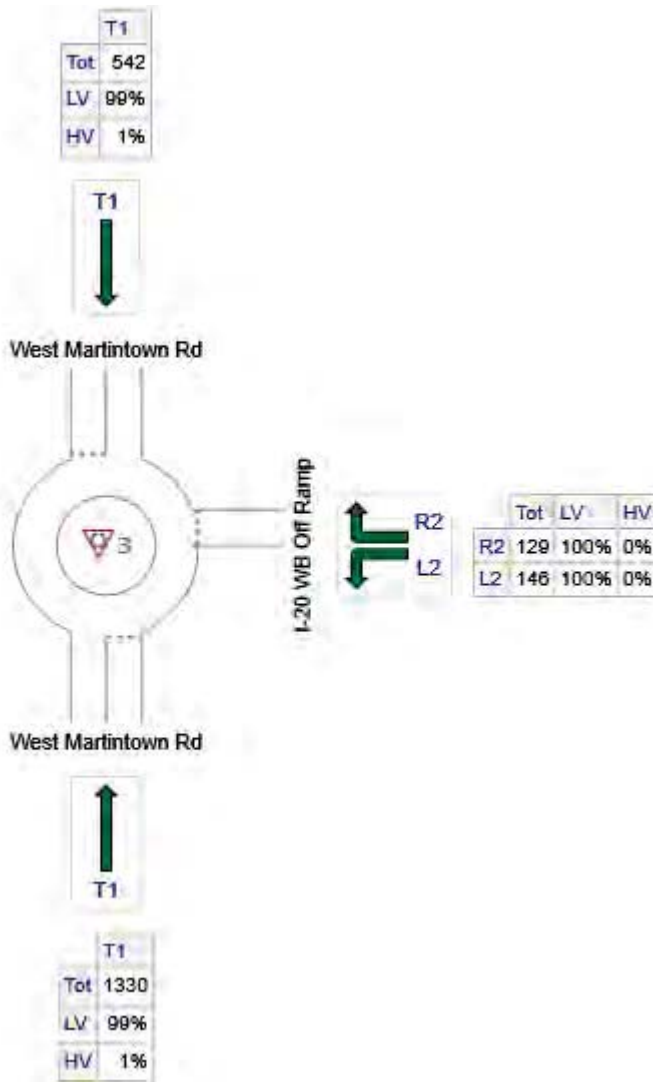
INPUT VOLUMES

Vehicles and pedestrians per 60 minutes

 Site: 3 [2040 Build PM Peak Hour]

2040 Build PM Peak
 Site Category: (None)
 Roundabout

Volume Display Method: Total and %



	All MCs	Light Vehicles (LV)	Heavy Vehicles (HV)
S: West Martintown Rd	1330	1317	13
E: I-20 WB Off Ramp	275	275	0
N: West Martintown Rd	542	537	5
Total	2147	2128	19

MOVEMENT SUMMARY

 **Site: 3 [2040 Build PM Peak Hour]**

2040 Build PM Peak
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: West Martintown Rd												
8	T1	1430	1.0	0.480	7.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.8
Approach		1430	1.0	0.480	7.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.8
East: I-20 WB Off Ramp												
1	L2	157	0.0	0.457	12.4	LOS B	2.4	59.8	0.71	0.80	1.02	32.1
16	R2	139	0.0	0.457	12.4	LOS B	2.4	59.8	0.71	0.80	1.02	31.5
Approach		296	0.0	0.457	12.4	LOS B	2.4	59.8	0.71	0.80	1.02	31.8
North: West Martintown Rd												
4	T1	583	1.0	0.227	4.8	LOS A	1.5	38.1	0.40	0.23	0.40	37.6
Approach		583	1.0	0.227	4.8	LOS A	1.5	38.1	0.40	0.23	0.40	37.6
All Vehicles		2309	0.9	0.480	7.2	LOS A	2.4	59.8	0.19	0.16	0.23	38.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Signalised Intersections.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: SIDRA Standard.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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