



Memorandum

To: David Tedder, Jasper County
From: Jennifer T. Bihl, PE, PTOE, RSP2I
Date: March 4, 2022
Re: 95 Logistics Center – Sensitivity Analysis of $\frac{3}{4}$ Truck Access to Site Driveways

As requested by County staff, this memo provides a sensitivity analysis converting the two full access driveways to three-quarter ($\frac{3}{4}$) access driveways for trucks (left and right turns in, right out only), while remaining full access for vehicles at the proposed development of 95 Logistics Center.

This development was previously analyzed as full access driveways for trucks and vehicles in the *95 Logistics Center TIA* (Bihl Engineering, January 2022). More detailed information on the project can be found in that traffic study. The trip generation is not expected to change for the sensitivity analysis as the size of the project remains the same.

Trip Distribution and Traffic Assignment Sensitivity Analysis Update

With the conversion of the site access points to $\frac{3}{4}$ truck access, the project distribution was adjusted from the original analysis to reflect the new traffic flow characteristics and is reflected below.

- 20% to/from the north on I-95
- 3% to/from the north on US 17
- 34% to/from the south on I-95
- 16% to/from the south on US 17
- 27% to/from the east on US 278

With this implementation of this traffic flow change, four trucks were rerouted in the AM peak hour and ten trucks were rerouted in the PM peak hour to travel north on US 17 therefore removing all trucks travelling southbound on US 17 toward Savannah.

Figure 1 (Appendix) shows the updated traffic distribution reflecting the updated traffic flow for the site in the study area.

Future 2026 Background and 2026 Build Traffic

The 2026 total traffic volumes include the 2026 background traffic and the proposed development traffic at buildout. The 2026 AM and PM peak hour total traffic volumes (with $\frac{3}{4}$ truck access) are shown in **Figure 2 (Appendix)** and **Figure 3 (Appendix)**, respectively.



As in the previous traffic study, three 2026 Build conditions were studied: 2026 Build with no Improvements, 2026 Build with Improvements, and 2026 Build with improvements with the I-95 NB On-Ramp/Off-Ramp intersection signalized.

Intersection volume development worksheets are included in the [Appendix](#).

Sensitivity Analysis - Capacity Analysis

Capacity analyses were performed for the AM and PM peak hours in the Existing, 2026 No Build, and 2026 Build conditions (no improvements, improvements, improvements with signalization of US 278 at I-95 NB On-Ramp/Off Ramp) using the Synchro, Version 10, software to determine the operating characteristics of the adjacent roadway network and the impacts of the proposed project. The analyses were conducted with methodologies contained in the *Highway Capacity Manual, 6th Edition* (HCM 6) (Transportation Research Board, 2016). The Synchro analysis worksheets are provided in the [Appendix](#).

Capacity of an intersection is defined as the maximum number of vehicles that can pass through an intersection during a specified time, typically an hour. Capacity is described by level of service (LOS) for the operating characteristics of an intersection. LOS is a qualitative measure that describes operational conditions and motorist perceptions within a traffic stream. HCM 6 defines six levels of service, LOS A through LOS F, with A being the best and F being the worst.

LOS for signalized intersections is determined by the overall intersection operations and is reflected in average delay per vehicle. LOS D or better is typically considered acceptable for signalized intersections.

LOS for a two-way stop-controlled (TWSC) intersection is determined by the delay of the poorest performing minor approach, as LOS is not defined for TWSC intersections as a whole. It is typical for minor stop-controlled side streets and driveways on major streets to experience longer delays at LOS E and LOS F during peak hours while the majority of the traffic moving through the corridor typically experiences little or no delay.

Any heavy vehicle percentages (HV%) below 2.0% were adjusted to 2.0% in all conditions for the purposes of the analysis. Due to the industrial nature of the development, a HV% of 20% was applied to the site trips in the analysis. The HV% was adjusted in the 2026 Build conditions at the study area intersections to reflect the higher percentage of expected heavy vehicle traffic due to the projected site traffic.

Table 1 summarizes LOS and control delay (average seconds of delay per vehicle) for the projected Existing, 2026 No Build, 2026 Build, 2026 Build with Improvements, and 2026 Build with Improvements with Signalization of US 278 at I-95 NB On-Ramp/Off Ramp AM and PM peak hour conditions at the study area intersections for the sensitivity analysis.



Table 1:
Level of Service and Delay (average seconds per vehicle)
¾ Truck Access Sensitivity Analysis

Intersection	Traffic Control ¹	Existing Conditions		2026 No Build Conditions		2026 Build Conditions		2026 Build with Improvements Conditions		2026 Build with Improv. with I-95 NB Off-Ramp Signalized Conditions	
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
US 17 at US 278	U	B (11.8) – WB	B (10.4) – WB	B (14.2) – WB	B (11.6) – WB	D (32.8) – WB	B (13.4) – WB	Same as Build conditions	Same as Build conditions	Same as Build conditions	Same as Build conditions
US 278 at I-95 SB On-Ramp/Off-Ramp ^{2,3}	S	B (19.0)	C (21.9)	C (34.6)	D (50.7)	D (35.5)	E (63.6)	Same as Build conditions	Same as Build conditions	C (33.1)	D (52.0)
US 278 at I-95 NB On-Ramp/Off-Ramp ³	U	C (21.4) – NB	C (16.7) – NB	D (29.9) – NB	C (22.0) – NB	F (96.1) – NB	E (44.7) – NB	Same as Build conditions	Same as Build conditions	A (6.2)	A (5.4)
US 17 at John Smith Road ⁴	U	F (115.8) – WB	D (27.0) – WB	F (***) – WB	F (95.0) – WB	F (**) – WB	F (137.3) – WB	F (***) – WB	F (68.0) – WB	Same as Build conditions w/ Impr.	Same as Build conditions
US 17 at Site Driveway #1	U	N/A	N/A	N/A	N/A	B (12.9) – WB	B (13.0) – WB	Same as Build conditions	Same as Build conditions	Same as Build conditions	Same as Build conditions
US 17 at Site Driveway #2	U	N/A	N/A	N/A	N/A	B (12.3) – WB	B (11.7) – WB	Same as Build conditions	Same as Build conditions	Same as Build conditions	Same as Build conditions

N/A = Not Applicable

1. S = Signalized; U = Unsigned
2. AM and PM peak hour cycle lengths and splits were optimized in all scenarios to reflect free, fully actuated operation. Minimum cycle length of 120 seconds assumed.
3. In the 2026 Build with Improvements with I-95 NB Off-Ramp Signalized conditions, signalized intersections were coordinated, and cycle length was optimized
4. (**) indicates delay exceeds 300 seconds



As shown in **Table 1**, all study area intersections are projected to operate at the same LOS as shown in the previous traffic study. At the site driveways and US 17 at John Smith Road, the projected delay is shown to slightly decrease due to the reduction of the heavy vehicles as discussed.

Sensitivity Analysis Conclusion

As discussed in this memo and shown in **Table 1**, the conversion of the project driveways to $\frac{3}{4}$ truck access will have limited to no additional impact to projected operations of the study area intersections while also preventing truck traffic exiting the site to travel southbound on US 17. As the project moves forward, the project team should coordinate with Jasper County on the details on how the $\frac{3}{4}$ access will be accomplished for trucks while not preventing passenger vehicles from turning left out of the site.

Based on results of the sensitivity analysis, the following transportation related improvements as identified in the previous study are recommended.

- US 17 at US 278
 - Refresh all pavement markings and striping on all approaches of the intersection
- US 278 at I-95 SB On-Ramp/Off-Ramp
 - Optimize traffic signal timings
- US 278 at I-95 NB On-Ramp/Off Ramp
 - Monitor intersection traffic volumes and perform traffic signal warrant analysis yearly or at a schedule requested by Jasper County and/or SCDOT
 - Signalize intersection once traffic signal warrants are met and coordinate signal timings with the US 278 at I-95 SB On-Ramp/Off-Ramp intersection
- US 17 at John Smith Road
 - Installation of an exclusive northbound right-turn lane on US 17
- US 17 at Site Driveway #1
 - Installation of an exclusive southbound left-turn lane on US 17
 - Installation of exclusive left- and right-turn exiting lanes on Site Driveway #1 (trucks will be prohibited from making left-turns out of the site)
 - Location and design details to be coordinated with the SCDOT and Jasper County
- US 17 at Site Driveway #2
 - Installation of an exclusive southbound left-turn lane on US 17
 - Installation of exclusive left- and right-turn exiting lanes on Site Driveway #2 (trucks will be prohibited from making left-turns out of the site)
 - Location and design details to be coordinated with SCDOT and Jasper County

Results in this report are based solely on traffic studies and are considered input into final design considerations. The final design will be determined by the project engineer after other design elements (such as, but not limited to, utilities, stormwater, etc.) are taken into consideration.



Appendix

Intersection							
Int Delay, s/veh	21.8						
Movement	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations	↑ ↗	↑ ↗	↑ ↗	↑ ↗	↑ ↗	↑ ↗	
Traffic Vol, veh/h	349	33	35	312	130	57	
Future Vol, veh/h	349	33	35	312	130	57	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Stop	Stop	Free	Free	Free	Free	
RT Channelized	-	None	-	Free	-	None	
Storage Length	0	0	-	125	160	-	
Veh in Median Storage, #	0	-	0	-	-	0	
Grade, %	0	-	0	-	-	0	
Peak Hour Factor	89	89	89	89	80	80	
Heavy Vehicles, %	16	10	10	12	7	9	
Mvmt Flow	392	37	39	351	163	71	
Major/Minor	Minor1	Major1	Major2				
Conflicting Flow All	436	39	0	-	39	0	
Stage 1	39	-	-	-	-	-	
Stage 2	397	-	-	-	-	-	
Critical Hdwy	6.56	6.3	-	-	4.17	-	
Critical Hdwy Stg 1	5.56	-	-	-	-	-	
Critical Hdwy Stg 2	5.56	-	-	-	-	-	
Follow-up Hdwy	3.644	3.39	-	-	2.263	-	
Pot Cap-1 Maneuver	552	1010	-	0	1539	-	
Stage 1	949	-	-	0	-	-	
Stage 2	650	-	-	0	-	-	
Platoon blocked, %	-	-	-	-	-	-	
Mov Cap-1 Maneuver	493	1010	-	-	1539	-	
Mov Cap-2 Maneuver	493	-	-	-	-	-	
Stage 1	949	-	-	-	-	-	
Stage 2	581	-	-	-	-	-	
Approach	WB	NB	SB				
HCM Control Delay, s	32.8	0	5.3				
HCM LOS	D						
Minor Lane Major Mvmt	N8	WB	LN1	WB	LN2	SBL	SBT
Capacity (veh/h)	-	493	1010	1539	-	-	-
HCM Lane V/C Ratio	-	0.795	0.037	0.106	-	-	-
HCM Control Delay (s)	-	35.1	8.7	7.6	-	-	-
HCM Lane LOS	-	E	A	A	-	-	-
HCM 95th %tile Q(veh)	-	7.4	0.1	0.4	-	-	-

HCM 6th Signalized Intersection Summary
5: I-95 SB On-Ramp/I-95 SB Off-Ramp & US 278

Build AM
2026 Build AM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑					↖	↑	↗
Traffic Volume (veh/h)	0	595	52	609	436	0	0	0	0	478	0	118
Future Volume (veh/h)	0	595	52	609	436	0	0	0	0	478	0	118
Initial Q (Q _b) veh	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
Parking Bus. Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach	No			No						No		
Adj Sat Flow, veh/h/in	0	1781	1618	1796	1737	0				1826	1826	1722
Adj Flow Rate, veh/h	0	717	0	692	495	0				520	0	0
Peak Hour Factor	0.83	0.83	0.83	0.88	0.88	0.88				0.92	0.92	0.92
Percent Heavy Veh, %	0	8	19	7	11	0				5	5	12
Cap, veh/h	0	849		737	2284	0				610	0	
Arrive On Green	0.00	0.25	0.00	0.37	0.69	0.00				0.18	0.00	0.00
Sat Flow, veh/h	0	3474	1372	1711	3387	0				3478	0	1459
Grp Volume(v), veh/h	0	717	0	692	495	0				520	0	0
Grp Sat Flow(s), veh/h/in	0	1692	1372	1711	1650	0				1739	0	1459
Q Serve(g_s), s	0.0	20.7	0.0	33.4	5.6	0.0				14.9	0.0	0.0
Cycle Q Clear(g_c), s	0.0	20.7	0.0	33.4	5.6	0.0				14.9	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	849		737	2284	0				610	0	
V/C Ratio(X)	0.00	0.84		0.94	0.22	0.00				0.85	0.00	
Avail Cap(c_a), veh/h	0	1003		882	2714	0				746	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(l)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	36.5	0.0	22.7	5.7	0.0				41.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	6.1	0.0	16.2	0.1	0.0				8.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%) veh/in	0.0	8.8	0.0	15.0	1.5	0.0				6.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	42.7	0.0	38.9	5.8	0.0				49.4	0.0	0.0
LnGrp LOS	A	D		D	A	A				D	A	
Approach Vol, veh/h		717	A		1187						520	A
Approach Delay, s/veh		42.7			25.1						49.4	
Approach LOS		D			C						D	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+R _c), s	45.3	32.3		25.0		77.6						
Change Period (Y+R _c), s	7.4	6.6		7.0		6.6						
Max Green Setting (G _{max}), s	46.6	30.4		22.0		84.4						
Max Q Clear Time (g _{c+l1}), s	35.4	22.7		16.9		7.6						
Green Ext Time (p _c), s	2.5	3.1		1.1		4.1						
Intersection Summary												
HCM 6th Ctrl Delay			35.5									
HCM 6th LOS			D									
Notes												
User approved volume balancing among the lanes for turning movement.												
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.												

HCM 6th TWSC
8: I-95 NB Off-Ramp/I-95 NB On-Ramp & US 278

Build AM
2026 Build AM

Intersection												
Int Delay, s/veh	3.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑ ↗	↑ ↗			↑ ↗	↗		↗				
Traffic Vol, veh/h	33	1064	0	0	926	277	94	1	1147	0	0	0
Future Vol, veh/h	33	1064	0	0	926	277	94	1	1147	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	Yield	-	-	Free	-	-	None
Storage Length	245	-	-	-	-	280	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	16965	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	82	82	82	92	92	92	92	92	92
Heavy Vehicles, %	12	5	5	5	6	5	18	6	6	2	2	2
Mvmt Flow	39	1252	0	0	1129	338	102	1	1247	0	0	0
Major/Minor												
Major1		Major2			Minor1							
Conflicting Flow All	1129	0	-	-	-	0	1895	2459	-			
Stage 1	-	-	-	-	-	-	1330	1330	-			
Stage 2	-	-	-	-	-	-	565	1129	-			
Critical Hdwy	4.34	-	-	-	-	-	7.16	6.62	-			
Critical Hdwy Stg 1	-	-	-	-	-	-	6.16	5.62	-			
Critical Hdwy Stg 2	-	-	-	-	-	-	6.16	5.62	-			
Follow-up Hdwy	2.32	-	-	-	-	-	3.68	4.06	-			
Pot Cap-1 Maneuver	560	-	0	0	-	-	~51	29	0			
Stage 1	-	-	0	0	-	-	184	215	0			
Stage 2	-	-	0	0	-	-	490	269	0			
Platoon blocked, %	-	-	-	-	-	-						
Mov Cap-1 Maneuver	560	-	-	-	-	-	~47	0	-			
Mov Cap-2 Maneuver	-	-	-	-	-	-	130	0	-			
Stage 1	-	-	-	-	-	-	171	0	-			
Stage 2	-	-	-	-	-	-	490	0	-			
Approach												
EB		WB			NB							
HCM Control Delay, s	0.4			0			96.1					
HCM LOS							F					
Minor Lane/Major Mvmt												
	NBLn1	NBLn2	EBL	EBT	WBT	WBR						
Capacity (veh/h)	130	-	560	-	-	-						
HCM Lane V/C Ratio	0.794	-	0.069	-	-	-						
HCM Control Delay (s)	96.1	0	11.9	-	-	-						
HCM Lane LOS	F	A	B	-	-	-						
HCM 95th %tile Q(veh)	4.8	-	0.2	-	-	-						
Notes												
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*	All major volume in platoon								

Intersection

Int Delay, s/veh 125.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	↑		↑	
Traffic Vol, veh/h	224	41	500	422	59	329
Future Vol, veh/h	224	41	500	422	59	329
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	63	63	93	93	87	87
Heavy Vehicles, %	8	8	7	6	7	6
Mvmt Flow	356	65	538	454	68	378

Major/Minor	Minor1	Major1	Major2	
Conflicting Flow All	1279	765	0	0
Stage 1	765	-	-	-
Stage 2	514	-	-	-
Critical Hdwy	6.48	6.28	-	4.17
Critical Hdwy Stg 1	5.48	-	-	-
Critical Hdwy Stg 2	5.48	-	-	-
Follow-up Hdwy	3.572	3.372	-	2.263
Pot Cap-1 Maneuver	- 178	394	-	678
Stage 1	449	-	-	-
Stage 2	588	-	-	-
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	- 155	394	-	678
Mov Cap-2 Maneuver	- 155	-	-	-
Stage 1	449	-	-	-
Stage 2	513	-	-	-

Approach	WB	NB	SB
HCM Control Delay, \$	551.1	0	1.7
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBln1	WBln2	SBL	SBT
Capacity (veh/h)	-	-	155	394	678	-
HCM Lane V/C Ratio	-	-	2.294	0.165	0.1	-
HCM Control Delay (s)	-	\$ 649.1	15.9	10.9	0	-
HCM Lane LOS	-	-	F	C	B	A
HCM 95th %tile Q(veh)	-	-	29.6	0.6	0.3	-

Notes

-: Volume exceeds capacity \$: Delay exceeds 300s #: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	2.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	8	31	309	25	104	203
Future Vol, veh/h	8	31	309	25	104	203
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	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	89	89	85	85
Heavy Vehicles, %	2	25	9	20	20	9
Mvmt Flow	9	34	347	28	122	239
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	844	361	0	0	375	0
Stage 1	361	-	-	-	-	-
Stage 2	483	-	-	-	-	-
Critical Hdwy	6.42	6.45	-	-	4.3	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.525	-	-	2.38	-
Pot Cap-1 Maneuver	334	635	-	-	1091	-
Stage 1	705	-	-	-	-	-
Stage 2	620	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	297	635	-	-	1091	-
Mov Cap-2 Maneuver	297	-	-	-	-	-
Stage 1	705	-	-	-	-	-
Stage 2	551	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	12.3	0	3			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	297	635	1091	-
HCM Lane V/C Ratio	-	-	0.03	0.054	0.112	-
HCM Control Delay (s)	-	-	17.5	11	8.7	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.2	0.4	-

Intersection						
Int Delay, s/veh	1.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	8	31	314	26	104	301
Future Vol, veh/h	8	31	314	26	104	301
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	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	89	89	85	85
Heavy Vehicles, %	2	25	11	20	20	11
Mvmt Flow	9	34	353	29	122	354
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	966	368	0	0	382	0
Stage 1	368	-	-	-	-	-
Stage 2	598	-	-	-	-	-
Critical Hdwy	6.42	6.45	-	-	4.3	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.525	-	-	2.38	-
Pot Cap-1 Maneuver	282	629	-	-	1085	-
Stage 1	700	-	-	-	-	-
Stage 2	549	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	250	629	-	-	1085	-
Mov Cap-2 Maneuver	250	-	-	-	-	-
Stage 1	700	-	-	-	-	-
Stage 2	488	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	12.9	0	2.2			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	260	629	1085	-
HCM Lane V/C Ratio	-	-	0.036	0.055	0.113	-
HCM Control Delay (s)	-	-	19.9	11.1	8.7	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.2	0.4	-

Intersection						
Int Delay, s/veh	21.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	349	33	35	312	130	57
Future Vol, veh/h	349	33	35	312	130	57
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	0	-	125	160	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	80	80
Heavy Vehicles, %	16	10	10	12	7	9
Mvmt Flow	392	37	39	351	163	71
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	436	39	0	-	39	0
Stage 1	39	-	-	-	-	-
Stage 2	397	-	-	-	-	-
Critical Hdwy	6.56	6.3	-	-	4.17	-
Critical Hdwy Stg 1	5.56	-	-	-	-	-
Critical Hdwy Stg 2	5.56	-	-	-	-	-
Follow-up Hdwy	3.644	3.39	-	-	2.263	-
Pot Cap-1 Maneuver	552	1010	-	0	1539	-
Stage 1	949	-	-	0	-	-
Stage 2	650	-	-	0	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	493	1010	-	-	1539	-
Mov Cap-2 Maneuver	493	-	-	-	-	-
Stage 1	949	-	-	-	-	-
Stage 2	581	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	32.8	0	5.3			
HCM LOS	D					
Minor Lane	Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	493	1010	1539	-	-
HCM Lane V/C Ratio	-	0.795	0.037	0.106	-	-
HCM Control Delay (s)	-	35.1	8.7	7.6	-	-
HCM Lane LOS	-	E	A	A	-	-
HCM 95th %ile Q(veh)	-	7.4	0.1	0.4	-	-

HCM 6th Signalized Intersection Summary
5: I-95 SB On-Ramp/I-95 SB Off-Ramp & US 278

Build AM w Impr
2026 Build AM

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↑	↑	↑↑	↑↑				↑	↑	↑
Traffic Volume (veh/h)	0	595	52	609	436	0	0	0	0	478	0	118
Future Volume (veh/h)	0	595	52	609	436	0	0	0	0	478	0	118
Initial Q (Q _b) veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	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
Work Zone On Approach	No			No						No		
Adj Sat Flow, veh/h/in	0	1781	1618	1796	1737	0				1826	1826	1722
Adj Flow Rate, veh/h	0	717	0	692	495	0				520	0	0
Peak Hour Factor	0.83	0.83	0.83	0.88	0.88	0.88				0.92	0.92	0.92
Percent Heavy Veh, %	0	8	19	7	11	0				5	5	12
Cap, veh/h	0	849		737	2284	0				610	0	
Arrive On Green	0.00	0.25	0.00	0.37	0.69	0.00				0.18	0.00	0.00
Sat Flow, veh/h	0	3474	1372	1711	3387	0				3478	0	1459
Grp Volume(v), veh/h	0	717	0	692	495	0				520	0	0
Grp Sat Flow(s), veh/h/in	0	1692	1372	1711	1650	0				1739	0	1459
Q Serve(g_s), s	0.0	20.7	0.0	33.4	5.6	0.0				14.9	0.0	0.0
Cycle Q Clear(g_c), s	0.0	20.7	0.0	33.4	5.6	0.0				14.9	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	849		737	2284	0				610	0	
V/C Ratio(X)	0.00	0.84		0.94	0.22	0.00				0.85	0.00	
Avail Gap(c_a), veh/h	0	1003		882	2714	0				746	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter()	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	36.5	0.0	22.7	5.7	0.0				41.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	6.1	0.0	16.2	0.1	0.0				8.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%), veh/in	0.0	8.8	0.0	15.0	1.5	0.0				6.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	42.7	0.0	38.9	5.8	0.0				49.4	0.0	0.0
LnGrp LOS	A	D		D	A	A				D	A	
Approach Vol, veh/h	717	A		1187						520	A	
Approach Delay, s/veh	42.7			25.1						49.4		
Approach LOS	D			C						D		
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	45.3	32.3		25.0		77.6						
Change Period (Y+Rc), s	7.4	6.6		7.0		6.6						
Max Green Setting (Gmax), s	46.6	30.4		22.0		84.4						
Max Q Clear Time (g_c+l1), s	35.4	22.7		16.9		7.6						
Green Ext Time (p_c), s	2.5	3.1		1.1		4.1						
Intersection Summary												
HCM 6th Ctrl Delay			35.5									
HCM 6th LOS			D									
Notes												
User approved volume balancing among the lanes for turning movement.												
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.												

HCM 6th TWSC
8: I-95 NB Off-Ramp/I-95 NB On-Ramp & US 278

Build AM w Impr
2026 Build AM

Intersection

Int Delay, s/veh 3.6

Movement	EBL	EBT	EGR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑			↑↑	↑		↑	↑			
Traffic Vol, veh/h	33	1064	0	0	926	277	94	1	1147	0	0	0
Future Vol, veh/h	33	1064	0	0	926	277	94	1	1147	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	Yield	-	-	Free	-	-	None
Storage Length	245	-	-	-	-	280	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	16965	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	82	82	82	92	92	92	92	92	92
Heavy Vehicles, %	12	5	5	5	6	5	18	6	6	2	2	2
Mvmt Flow	39	1252	0	0	1129	338	102	1	1247	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	1129	0	-
Stage 1	-	-	1330 1330
Stage 2	-	-	565 1129
Critical Hdwy	4.34	-	7.16 6.62
Critical Hdwy Stg 1	-	-	6.16 5.62
Critical Hdwy Stg 2	-	-	6.16 5.62
Follow-up Hdwy	2.32	-	3.68 4.06
Pot Cap-1 Maneuver	560	- 0 0	- 51 29 0
Stage 1	-	0 0	184 215 0
Stage 2	-	0 0	490 269 0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	560	-	~ 47 0
Mov Cap-2 Maneuver	-	-	130 0
Stage 1	-	-	171 0
Stage 2	-	-	490 0

Approach	EB	WB	NB
HCM Control Delay, s	0.4	0	96.1
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	130	-	560	-	-	-
HCM Lane V/C Ratio	0.794	-	0.069	-	-	-
HCM Control Delay (s)	96.1	0	11.9	-	-	-
HCM Lane LOS	F	A	B	-	-	-
HCM 95th %tile Q(veh)	4.8	-	0.2	-	-	-

Notes

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

HCM 6th TWSC
18: US 17 & John Smith Road

Build AM w Impr
2026 Build AM

Intersection

Int Delay, s/veh 69.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	↑	↑	↓	
Traffic Vol, veh/h	224	41	500	422	59	329
Future Vol, veh/h	224	41	500	422	59	329
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	-	100	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	63	63	93	93	87	87
Heavy Vehicles, %	8	8	7	6	7	6
Mvmt Flow	356	65	538	454	68	378

Major/Minor	Minor1	Major1	Major2	
Conflicting Flow All	1052	538	0	0
Stage 1	538	-	-	-
Stage 2	514	-	-	-
Critical Hdwy	6.48	6.28	-	4.17
Critical Hdwy Stg 1	5.48	-	-	-
Critical Hdwy Stg 2	5.48	-	-	-
Follow-up Hdwy	3.572	3.372	-	2.263
Pot Cap-1 Maneuver	- 244	532	-	678
Stage 1	573	-	-	-
Stage 2	588	-	-	-
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	- 213	532	-	678
Mov Cap-2 Maneuver	- 213	-	-	-
Stage 1	573	-	-	-
Stage 2	513	-	-	-

Approach	WB	NB	SB
HCM Control Delay, ss	306.8	0	1.7
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WB Ln1	WB Ln2	SBL	SBT
Capacity, (veh/h)	-	-	213	532	678	-
HCM Lane V/C Ratio	-	-	1.669	0.122	0.1	-
HCM Control Delay (s)	-	-	\$ 360.6	12.7	10.9	0
HCM Lane LOS	-	-	F	B	B	A
HCM 95th %ile Q(veh)	-	-	23.5	0.4	0.3	-

Notes

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

Intersection						
Int Delay, s/veh	2.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	8	31	309	25	104	203
Future Vol, veh/h	8	31	309	25	104	203
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	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	89	89	85	85
Heavy Vehicles, %	2	25	9	20	20	9
Mvmt Flow	9	34	347	28	122	239
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	844	361	0	0	375	0
Stage 1	361	-	-	-	-	-
Stage 2	483	-	-	-	-	-
Critical Hdwy	6.42	6.45	-	-	4.3	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.525	-	-	2.38	-
Pot Cap-1 Maneuver	334	635	-	-	1091	-
Stage 1	705	-	-	-	-	-
Stage 2	620	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	297	635	-	-	1091	-
Mov Cap-2 Maneuver	297	-	-	-	-	-
Stage 1	705	-	-	-	-	-
Stage 2	551	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	12.3	0	3			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	297	635	1091	-
HCM Lane V/C Ratio	-	-	0.03	0.054	0.112	-
HCM Control Delay (s)	-	-	17.5	11	8.7	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.2	0.4	-

Intersection

Int Delay, s/veh 1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	8	31	314	26	104	301
Future Vol, veh/h	8	31	314	26	104	301
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	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	89	89	85	85
Heavy Vehicles, %	2	25	11	20	20	9
Mvmt Flow	9	34	353	29	122	354

Major/Minor Minor1 Major1 Major2

Conflicting Flow All	966	368	0	0	382	0
Stage 1	368	-	-	-	-	-
Stage 2	598	-	-	-	-	-
Critical Hdwy	6.42	6.45	-	-	4.3	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.525	-	-	2.38	-
Pot Cap-1 Maneuver	282	629	-	-	1085	-
Stage 1	700	-	-	-	-	-
Stage 2	549	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	250	629	-	-	1085	-
Mov Cap-2 Maneuver	250	-	-	-	-	-
Stage 1	700	-	-	-	-	-
Stage 2	488	-	-	-	-	-

Approach WB NB SB

HCM Control Delay, s	12.9	0	2.2
HCM LOS	B		

Minor Lane\Major Mvmt	NBT	NBR	WB _{ln1}	WB _{ln2}	SBL	SBT
Capacity(veh/h)	-	-	250	629	1085	-
HCM Lane V/C Ratio	-	-	0.036	0.055	0.113	-
HCM Control Delay (s)	-	-	19.9	11.1	8.7	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.2	0.4	-

Intersection						
Int Delay, s/veh	21.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	349	33	35	312	130	57
Future Vol, veh/h	349	33	35	312	130	57
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	0	-	125	160	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	16	10	10	12	7	9
Mvmt Flow	392	37	39	351	163	71
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	436	39	0	-	39	0
Stage 1	39	-	-	-	-	-
Stage 2	397	-	-	-	-	-
Critical Hdwy	6.56	6.3	-	-	4.17	-
Critical Hdwy Stg 1	5.56	-	-	-	-	-
Critical Hdwy Stg 2	5.56	-	-	-	-	-
Follow-up Hdwy	3.644	3.39	-	-	2.263	-
Pot Cap-1 Maneuver	552	1010	-	0	1539	-
Stage 1	949	-	-	0	-	-
Stage 2	650	-	-	0	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	493	1010	-	-	1539	-
Mov Cap-2 Maneuver	493	-	-	-	-	-
Stage 1	949	-	-	-	-	-
Stage 2	581	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	32.8	0	5.3			
HCM LOS	D	-				
Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT	
Capacity (veh/h)	-	493	1010	1539	-	
HCM Lane V/C Ratio	-	0.795	0.037	0.106	-	
HCM Control Delay (s)	-	35.1	8.7	7.6	-	
HCM Lane LOS	-	E	A	A	-	
HCM 95th %tile Q(veh)	-	7.4	0.1	0.4	-	

HCM 6th Signalized Intersection Summary
5: I-95 SB On-Ramp/I-95 SB Off-Ramp & US 278

Build AM w Impr w 95 NB signal

Movement	SBL	EBT	EGR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑	↑
Traffic Volume (veh/h)	0	595	52	609	436	0	0	0	0	478	0	118
Future Volume (veh/h)	0	595	52	609	436	0	0	0	0	478	0	118
Initial Q (Q _b) veh	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
Parking Bus. Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach	No			No						No		
Adj Sat Flow, veh/h/in	0	1781	1618	1796	1737	0				1826	1826	1722
Adj Flow Rate, veh/h	0	717	0	692	495	0				520	0	0
Peak Hour Factor	0.89	0.83	0.83	0.88	0.88	0.88				0.92	0.92	0.92
Percent Heavy Veh, %	0	8	19	7	11	0				5	5	12
Cap, veh/h	0	1149		717	2371	0				585	0	
Arrive On Green	0.00	0.34	0.00	0.53	1.00	0.00				0.17	0.00	0.00
Sat Flow, veh/h	0	3474	1372	1711	3387	0				3478	0	1459
Grp Volume(v), veh/h	0	717	0	692	495	0				520	0	0
Grp Sat Flow(s), veh/h/in	0	1692	1372	1711	1650	0				1739	0	1459
Q Serve(g_s), s	0.0	21.3	0.0	33.6	0.0	0.0				17.5	0.0	0.0
Cycle Q Clear(g_c), s	0.0	21.3	0.0	39.6	0.0	0.0				17.5	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1149		717	2371	0				585	0	
V/C Ratio(X)	0.00	0.62		0.96	0.21	0.00				0.89	0.00	
Avail Cap(c_a), veh/h	0	1149		889	2371	0				638	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(l)	0.00	1.00	0.00	0.87	0.87	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	33.2	0.0	11.8	0.0	0.0				48.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.6	0.0	19.8	0.0	0.0				14.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%), veh/in	0.0	8.8	0.0	8.8	0.0	0.0				8.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	35.8	0.0	31.6	0.0	0.0				62.9	0.0	0.0
LnGrp LOS	A	D		C	A	A				E	A	
Approach Vol, veh/h		717	A		1187					520		A
Approach Delay, s/veh		35.8			18.4					62.9		
Approach LOS		D		B						E		
Timer - Assigned Phs	1	2		4		5						
Phs Duration (G+Y+Rc), s	45.5	47.3		27.2		92.8						
Change Period (Y+Rc), s	7.4	6.6		7.0		6.6						
Max Green Setting (Gmax), s	46.6	30.4		22.0		84.4						
Max Q Clear Time (g_c+l1), s	35.6	23.3		19.5		2.0						
Green Ext Time (p_c), s	2.5	2.9		0.6		4.1						
Intersection Summary												
HCM 6th Ctrl Delay			39.1									
HCM 6th LOS			C									
Notes												
User approved volume balancing among the lanes for turning movement.												
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.												

HCM 6th Signalized Intersection Summary
8: I-95 NB Off-Ramp/I-95 NB On-Ramp & US 278

Build AM w Impr w 95 NB signal



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑		↑↑	↑↑	↑↑	↑	↑	↑↑	↑	↑	
Traffic Volume (veh/h)	33	1064	0	0	926	277	94	1	1147	0	0	0
Future Volume (veh/h)	33	1064	0	0	926	277	94	1	1147	0	0	0
Initial Q (Q _b), 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	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											
Adj Sat Flow, veh/h/in	1722	1826	0	0	1811	1826	1638	1811	1811			
Adj Flow Rate, veh/h	39	1252	0	0	1129	0	102	1	0			
Peak Hour Factor	0.85	0.85	0.85	0.82	0.82	0.82	0.92	0.92	0.92			
Percent Heavy Veh, %	12	5	0	0	6	5	18	6	6			
Cap, veh/h	303	2371	0	0	2351		370	4				
Arrive On Green	1.00	1.00	0.00	0.00	0.68	0.00	0.22	0.22	0.00			
Sat Flow, veh/h	459	3561	0	0	3532	1547	1709	17	1535			
Grp Volume(v), veh/h	39	1252	0	0	1129	0	103	0	0			
Grp Sat Flow(s), veh/h/in	459	1735	0	0	1721	1547	1726	0	1535			
Q Serve(g_s), s	2.6	0.0	0.0	0.0	18.6	0.0	6.0	0.0	0.0			
Cycle Q Clear(g_c), s	21.2	0.0	0.0	0.0	18.6	0.0	6.0	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.99		1.00			
Lane Grp Cap(c), veh/h	303	2371	0	0	2351		374	0				
V/C Ratio(X)	0.13	0.53	0.00	0.00	0.48		0.28	0.00				
Avail Cap(c_a), veh/h	303	2371	0	0	2351		374	0				
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.46	0.46	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	2.4	0.0	0.0	0.0	9.0	0.0	39.2	0.0	0.0			
Incr Delay (d2), s/veh	0.4	0.4	0.0	0.0	0.7	0.0	1.8	0.0	0.0			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%), veh/in	0.1	0.0	0.0	6.1	0.0	2.7	0.0	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	2.8	0.4	0.0	0.0	9.7	0.0	41.0	0.0	0.0			
LnGrp LOS	A	A	A	A	A		D	A				
Approach Vol, veh/h		1291			1129	A		103	A			
Approach Delay, s/veh		0.5			9.7		41.0					
Approach LOS	A				A		D					
Timer - Assigned Phs		2			6		8					
Phs Duration (G+Y+Rc), s		88.0			88.0		32.0					
Change Period (Y+Rc), s		6.0			6.0		6.0					
Max Green Setting (Gmax), s		82.0			82.0		26.0					
Max Q Clear Time (g_c+11), s		23.2			20.6		8.0					
Green Ext Time (p_c), s		12.7			9.9		0.4					

Intersection Summary

HCM 6th Ctrl Delay	6.2
HCM 6th LOS	A

Notes

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

HCM 6th TWSC
18: US 17 & John Smith Road

Build AM w Impr w 95 NB signal

Intersection

Int Delay, s/veh 68.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	224	41	500	422	59	325
Future Vol, veh/h	224	41	500	422	59	325
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	-	100	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	63	63	93	93	87	87
Heavy Vehicles, %	8	8	7	6	7	6
Mvmt Flow	356	65	538	454	68	374

Major/Minor	Minor1	Major1	Major2	
Conflicting Flow All	1048	538	0	0
Stage 1	538	-	-	-
Stage 2	510	-	-	-
Critical Hdwy	6.48	6.28	-	4.17
Critical Hdwy Stg 1	5.48	-	-	-
Critical Hdwy Stg 2	5.48	-	-	-
Follow-up Hdwy	3.572	3.372	-	2.263
Pot Cap-1 Maneuver	~ 246	532	-	678
Stage 1	573	-	-	-
Stage 2	591	-	-	-
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	~ 215	532	-	678
Mov Cap-2 Maneuver	~ 215	-	-	-
Stage 1	573	-	-	-
Stage 2	516	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	\$ 300.8	0	1.7
HCM LOS	F		

Minor Lane	Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity(veh/h)	-	-	215	532	678	-	-
HCM Lane V/C Ratio	-	-	1.654	0.122	0.1	-	-
HCM Control Delay (s)	-	-	\$ 353.5	12.7	10.9	0	-
HCM Lane LOS	-	-	F	B	B	A	-
HCM 95th %tile Q(veh)	-	-	23.3	0.4	0.3	-	-

Notes

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

HCM 6th TWSC
24: US 17 & Site Driveway #2

Build AM w Impr w 95 NB signal

Intersection						
Int Delay, s/veh	2.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	8	31	309	25	104	203
Future Vol, veh/h	8	31	309	25	104	203
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	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	89	89	85	85
Heavy Vehicles, %	2	25	9	20	20	9
Mvmt Flow	9	34	347	28	122	239
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	844	361	0	0	375	0
Stage 1	361	-	-	-	-	-
Stage 2	483	-	-	-	-	-
Critical Hdwy	6.42	6.45	-	-	4.3	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.525	-	-	2.38	-
Pot Cap-1 Maneuver	334	635	-	-	1091	-
Stage 1	705	-	-	-	-	-
Stage 2	620	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	297	635	-	-	1091	-
Mov Cap-2 Maneuver	297	-	-	-	-	-
Stage 1	705	-	-	-	-	-
Stage 2	551	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	12.3	-	0	-	3	-
HCM LOS	B	-	-	-	-	-
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	297	635	1091	-
HCM Lane V/C Ratio	-	-	0.03	0.054	0.112	-
HCM Control Delay (s)	-	-	17.5	11	8.7	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.2	0.4	-

HCM 6th TWSC
26: US 17 & Site Driveway #1

Build AM w Impr w 95 NB signal

Intersection

Int Delay, s/veh 1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	8	31	314	26	104	301
Future Vol, veh/h	8	31	314	26	104	301
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	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	89	89	85	85
Heavy Vehicles, %	2	25	11	20	20	13
Mvmt Flow	9	34	353	29	122	354

Major/Minor Minor1 Major1 Major2

Conflicting Flow All	966	368	0	0	382	0
Stage 1	368	-	-	-	-	-
Stage 2	598	-	-	-	-	-
Critical Hdwy	6.42	6.45	-	-	4.3	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.525	-	-	2.38	-
Pot Cap-1 Maneuver	282	629	-	-	1085	-
Stage 1	700	-	-	-	-	-
Stage 2	549	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	250	629	-	-	1085	-
Mov Cap-2 Maneuver	250	-	-	-	-	-
Stage 1	700	-	-	-	-	-
Stage 2	488	-	-	-	-	-

Approach WB NB SB

HCM Control Delay, s	12.9	0	2.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	250	629	1085	-
HCM Lane V/C Ratio	-	-	0.036	0.055	0.113	-
HCM Control Delay (s)	-	-	19.9	11.1	8.7	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.2	0.4	-

Intersection						
Int Delay, s/veh	9.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	274	132	84	330	57	37
Future Vol, veh/h	274	132	84	330	57	37
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	0	-	125	160	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	81	81	80	80
Heavy Vehicles, %	7	5	4	15	15	15
Mvmt Flow	308	148	104	407	71	46
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	292	104	0	-	104	0
Stage 1	104	-	-	-	-	-
Stage 2	188	-	-	-	-	-
Critical Hdwy	6.47	6.25	-	-	4.26	-
Critical Hdwy Stg 1	5.47	-	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-	-
Follow-up Hdwy	3.563	3.345	-	-	2.335	-
Pot Cap-1 Maneuver	688	943	-	0	1410	-
Stage 1	908	-	-	0	-	-
Stage 2	832	-	-	0	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	654	943	-	-	1410	-
Mov Cap-2 Maneuver	654	-	-	-	-	-
Stage 1	908	-	-	-	-	-
Stage 2	790	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	13.4	0	4.7			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT	
Capacity (veh/h)	-	654	943	1410	-	
HCM Lane V/C Ratio	-	0.471	0.157	0.051	-	
HCM Control Delay (s)	-	15.3	9.5	7.7	-	
HCM Lane LOS	-	C	A	A	-	
HCM 95th %tile Q(veh)	-	2.5	0.6	0.2	-	

HCM 6th Signalized Intersection Summary
5: I-95 SB On-Ramp/I-95 SB Off-Ramp & US 278

Build PM
2026 Build PM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑	↑
Traffic Volume (veh/h)	0	318	136	1076	431	0	0	0	0	310	4	76
Future Volume (veh/h)	0	318	136	1076	431	0	0	0	0	310	4	76
Initial Q (Q _b) veh	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
Parking Bus. Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No					No		
Adj Sat Flow, veh/h/h	0	1737	1604	1826	1796	0				1841	1841	1781
Adj Flow Rate, veh/h	0	361	0	1223	490	0				377	0	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88				0.83	0.83	0.83
Percent Heavy Veh, %	0	11	20	5	7	0				4	4	8
Cap, veh/h	0	401		1148	2716	0				398	0	
Arrive On Green	0.00	0.12	0.00	0.62	0.80	0.00				0.11	0.00	0.00
Sat Flow, veh/h	0	3387	1359	1739	3503	0				3506	0	1510
Grp Volume(v), veh/h	0	361	0	1223	490	0				377	0	0
Grp Sat Flow(s), veh/h/h/in	0	1650	1359	1739	1706	0				1753	0	1510
Q Serve(g_s), s	0.0	16.2	0.0	93.6	5.1	0.0				16.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	16.2	0.0	93.6	5.1	0.0				16.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	401		1148	2716	0				398	0	
V/C Ratio(X)	0.00	0.90		1.07	0.18	0.00				0.95	0.00	
Avail Cap(c_a), veh/h	0	405		1148	2720	0				398	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(l)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay(d), s/veh	0.0	64.9	0.0	23.6	3.6	0.0				66.0	0.0	0.0
Incr.Delay(d2), s/veh	0.0	22.5	0.0	45.8	0.0	0.0				38.7	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%), veh/in	0.0	7.9	0.0	47.8	1.4	0.0				8.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	87.3	0.0	69.4	3.7	0.0				99.7	0.0	0.0
LnGrp LOS	A	F		F	A	A				F	A	
Approach Vol, veh/h		361	A		1713					377		A
Approach Delay, s/veh		87.3			50.6					99.7		
Approach LOS		F			D					F		
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	101.0	24.8		24.0		125.8						
Change Period (Y+Rc), s	7.4	6.6		7.0		6.6						
Max Green Setting (Gmax), s	93.6	18.4		17.0		119.4						
Max Q Clear Time (g_c+l1), s	95.6	18.2		18.0		7.1						
Green Ext Time (p_c), s	0.0	0.1		0.0		4.1						
Intersection Summary												
HCM 6th Ctrl Delay			63.6									
HCM 6th LOS			E									

Notes

User approved volume balancing among the lanes for turning movement.

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

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑			↑↑	↑↑		↑↑	↑↑			
Traffic Vol, veh/h	93	539	0	0	1455	437	32	2	743	0	0	0
Future Vol, veh/h	93	539	0	0	1455	437	32	2	743	0	0	0
Conflicting Peds, #/hr	2	0	2	2	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
R/T Channelized	-	-	None	-	-	Yield	-	-	Free	-	-	None
Storage Length	245	-	-	-	-	280	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	16965	-	-
Grade, %	-	0	-	-	0	-	-	0	-	0	-	-
Peak Hour Factor	80	80	80	92	92	92	89	89	89	92	92	92
Heavy Vehicles, %	13	6	4	3	3	3	18	2	2	2	2	2
Mvmt Flow	116	674	0	0	1582	475	36	2	835	0	0	0
Major/Minor												
Major1		Major2			Minor1							
Conflicting Flow All	1584	0	-	-	-	0	1697	2490	-	-	-	-
Stage 1	-	-	-	-	-	-	906	906	-	-	-	-
Stage 2	-	-	-	-	-	-	791	1584	-	-	-	-
Critical Hdwy	4.36	-	-	-	-	-	7.16	6.54	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	6.16	5.54	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.16	5.54	-	-	-	-
Follow-up Hdwy	2.33	-	-	-	-	-	3.68	4.02	-	-	-	-
Pot Cap-1 Maneuver	363	-	0	0	-	-	70	29	0	-	-	-
Stage 1	-	-	0	0	-	-	318	353	0	-	-	-
Stage 2	-	-	0	0	-	-	369	167	0	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	363	-	-	-	-	-	48	0	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	128	0	-	-	-	-
Stage 1	-	-	-	-	-	-	216	0	-	-	-	-
Stage 2	-	-	-	-	-	-	369	0	-	-	-	-
Approach												
EB			WB			NB						
HCM Control Delay, s	2.9			0		44.7						
HCM LOS						E						
Minor Lane/Major Mvmt												
NBLn1		NBLn2	EBL		EBT	WBT	WBR					
Capacity (veh/h)	128	-	363	-	-	-	-					
HCM Lane V/C Ratio	0.298	-	0.32	-	-	-	-					
HCM Control Delay (s)	44.7	0	19.5	-	-	-	-					
HCM Lane LOS	E	A	C	-	-	-	-					
HCM 95th %tile Q(veh)	1.2	-	1.4	-	-	-	-					

Intersection						
Int Delay, s/veh	36.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	333	10	273	240	4	368
Future Vol, veh/h	333	10	273	240	4	368
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	83	83	90	90
Heavy Vehicles, %	3	3	5	4	8	7
Mvmt Flow	362	11	329	289	4	409
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	891	474	0	0	618	0
Stage 1	474	-	-	-	-	-
Stage 2	417	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.18	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.272	-
Pot Cap-1 Maneuver	~ 310	588	-	-	934	-
Stage 1	624	-	-	-	-	-
Stage 2	663	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	~ 310	588	-	-	934	-
Mov Cap-2 Maneuver	~ 310	-	-	-	-	-
Stage 1	624	-	-	-	-	-
Stage 2	659	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	137.3	0	0.1			
HCM LOS	F					
Minor Lane Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	310	588	934	-
HCM Lane V/C Ratio	-	-	1.168	0.018	0.005	-
HCM Control Delay (s)	-	-	141.1	11.2	8.9	0
HCM Lane LOS	-	-	F	B	A	A
HCM 95th %tile Q (veh)	-	-	15.3	0.1	0	-
Notes						
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon			

Intersection						
Int Delay, s/veh	2.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	→	↑	↑	↑
Traffic Vol, veh/h	25	99	225	9	37	261
Future Vol, veh/h	25	99	225	9	37	261
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	0	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	80	80	94	94
Heavy Vehicles, %	2	24	3	20	20	8
Mvmt Flow	28	110	281	11	39	278
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	643	287	0	0	292	0
Stage 1	287	-	-	-	-	-
Stage 2	356	-	-	-	-	-
Critical Hdwy	6.42	6.44	-	-	4.3	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.516	-	-	2.38	-
Pot Cap-1 Maneuver	438	703	-	-	1174	-
Stage 1	762	-	-	-	-	-
Stage 2	709	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	424	703	-	-	1174	-
Mov Cap-2 Maneuver	424	-	-	-	-	-
Stage 1	762	-	-	-	-	-
Stage 2	686	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	11.7	0	1			
HCM LOS	B					
Minor Lane Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	424	703	1174	-
HCM Lane V/C Ratio	-	-	0.066	0.156	0.034	-
HCM Control Delay (s)	-	-	14.1	11.1	8.2	-
HCM Lane LOS	-	-	B	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0.6	0.1	-

Intersection

Int Delay, s/veh 2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	25	99	315	9	37	273
Future Vol, veh/h	25	99	315	9	37	273
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	0	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	80	80	94	94
Heavy Vehicles, %	2	24	11	20	20	9
Mvmt Flow	28	110	394	11	39	290

Major/Minor	Minor1	Major1	Major2	
Conflicting Flow All	768	400	0	0 405 0
Stage 1	400	-	-	-
Stage 2	368	-	-	-
Critical Hdwy	6.42	6.44	-	4.3 -
Critical Hdwy Stg 1	5.42	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-
Follow-up Hdwy	3.518	3.516	-	2.38 -
Pot Cap-1 Maneuver	370	605	-	1063 -
Stage 1	677	-	-	-
Stage 2	700	-	-	-
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	356	605	-	1063 -
Mov Cap-2 Maneuver	356	-	-	-
Stage 1	677	-	-	-
Stage 2	674	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13	0	1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WB	Ln1	WB	Ln2	SBL	SBT
Capacity (veh/h)	-	-	356	605	1063	-	-	-
HCM Lane V/C Ratio	-	-	0.078	0.182	0.037	-	-	-
HCM Control Delay (s)	-	-	16	12.3	8.5	-	-	-
HCM Lane LOS	-	-	C	B	A	-	-	-
HCM 98th %tile Q(veh)	-	-	0.3	0.7	0.1	-	-	-

Intersection							
Int Delay, s/veh	9.8						
Movement	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations	↑	↑	↑	↑	↑	↑	
Traffic Vol, veh/h	274	132	84	330	57	37	
Future Vol, veh/h	274	132	84	330	57	37	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Stop	Stop	Free	Free	Free	Free	
RT Channelized	-	None	-	Free	-	None	
Storage Length	0	0	-	125	160	-	
Veh in Median Storage, #	0	-	0	-	-	0	
Grade, %	0	-	0	-	-	0	
Peak Hour Factor	89	89	81	81	80	80	
Heavy Vehicles, %	7	5	4	15	15	15	
Mvmt Flow	308	148	104	407	71	46	
Major/Minor	Minor1	Major1	Major2				
Conflicting Flow All	292	104	0	-	104	0	
Stage 1	104	-	-	-	-	-	
Stage 2	188	-	-	-	-	-	
Critical Hdwy	6.47	6.25	-	-	4.25	-	
Critical Hdwy Stg 1	5.47	-	-	-	-	-	
Critical Hdwy Stg 2	5.47	-	-	-	-	-	
Follow-up Hdwy	3.563	3.345	-	-	2.335	-	
Pot Cap-1 Maneuver	688	943	-	0	1410	-	
Stage 1	908	-	-	0	-	-	
Stage 2	832	-	-	0	-	-	
Platoon blocked, %	-	-	-	-	-	-	
Mov Cap-1 Maneuver	654	943	-	-	1410	-	
Mov Cap-2 Maneuver	654	-	-	-	-	-	
Stage 1	908	-	-	-	-	-	
Stage 2	790	-	-	-	-	-	
Approach	WB	NB	SB				
HCM Control Delay, s	13.4	0	4.7				
HCM LOS	B						
Minor Lane/Major Mvmt	NBT	WBL	Ln1	WBL	Ln2	SBL	SBT
Capacity (veh/h)	-	654	943	1410	-	-	-
HCM Lane V/C Ratio	-	0.471	0.157	0.051	-	-	-
HCM Control Delay (s)	-	15.3	9.5	7.7	-	-	-
HCM Lane LOS	-	C	A	A	-	-	-
HCM 95th %tile Q(veh)	-	2.5	0.6	0.2	-	-	-

HCM 6th Signalized Intersection Summary
5: I-95 SB On-Ramp/I-95 SB Off-Ramp & US 278

Build PM w Impr
2026 Build PM

Movement	EBL	EBT	ESR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	318	136	1076	431	0	0	0	0	310	4	76
Future Volume (veh/h)	0	318	136	1076	431	0	0	0	0	310	4	76
Initial Q (Q _b), veh	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
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach	No			No						No		
Adj Sat Flow, veh/h/in	0	1737	1604	1826	1796	0				1841	1841	1781
Adj Flow Rate, veh/h	0	361	0	1223	490	0				377	0	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88				0.83	0.83	0.83
Percent Heavy Veh, %	0	11	20	5	7	0				4	4	8
Cap, veh/h	0	401		1148	2716	0				398	0	
Arrive On Green	0.00	0.12	0.00	0.62	0.80	0.00				0.11	0.00	0.00
Sat Flow, veh/h	0	3387	1359	1739	3503	0				3506	0	1510
Grp Volume(v), veh/h	0	361	0	1223	490	0				377	0	0
Grp Sat Flow(s), veh/h/in	0	1650	1359	1739	1706	0				1753	0	1510
Q Serve(g_s), s	0.0	16.2	0.0	93.6	5.1	0.0				16.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	16.2	0.0	93.6	5.1	0.0				16.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	401		1148	2716	0				398	0	
V/C Ratio(X)	0.00	0.90		1.07	0.18	0.00				0.95	0.00	
Avail Cap(c_a), veh/h	0	405		1148	2720	0				398	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(l)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	64.9	0.0	23.6	3.6	0.0				66.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	22.5	0.0	45.8	0.0	0.0				33.7	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%), veh/in	0.0	7.9	0.0	47.8	1.4	0.0				8.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	87.3	0.0	69.4	3.7	0.0				99.7	0.0	0.0
LnGrp LOS	A	F		F	A	A				F	A	
Approach Vol, veh/h		361	A		1713						377	A
Approach Delay, s/veh		87.3			50.6						99.7	
Approach LOS		F			D						F	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+R _c), s	101.0	24.8		24.0		125.8						
Change Period (Y+R _c), s	7.4	6.6		7.0		6.6						
Max Green Setting (G _{max}), s	93.6	18.4		17.0		119.4						
Max Q Clear Time (g _{c+l1}), s	95.6	18.2		18.0		7.1						
Green Ext Time (p _c), s	0.0	0.1		0.0		4.1						

Intersection Summary

HCM 6th Ctrl Delay

HCM 6th LOS

Notes

User approved volume balancing among the lanes for turning movement.

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

HCM 6th TWSC
8: I-95 NB Off-Ramp/I-95 NB On-Ramp & US 278

Build PM w Impr
2026 Build PM

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑			↑↑	↑		↑	↑			
Traffic Vol, veh/h	93	539	0	0	1455	437	32	2	743	0	0	0
Future Vol, veh/h	93	539	0	0	1455	437	32	2	743	0	0	0
Conflicting Peds, #/hr	2	0	2	2	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	Yield	-	-	Free	-	-	None
Storage Length	245	-	-	-	-	280	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	16965	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	92	92	92	89	89	89	92	92	92
Heavy Vehicles, %	13	6	4	3	3	3	18	2	2	2	2	2
Mvmt Flow	116	674	0	0	1582	475	36	2	835	0	0	0
Major/Minor												
Major1		Major2			Minor1							
Conflicting Flow All	1584	0	-	-	-	0	1697	2490	-			
Stage 1	-	-	-	-	-	-	906	906	-			
Stage 2	-	-	-	-	-	-	791	1584	-			
Critical Hdwy	4.36	-	-	-	-	-	7.16	6.54	-			
Critical Hdwy Stg 1	-	-	-	-	-	-	6.16	5.54	-			
Critical Hdwy Stg 2	-	-	-	-	-	-	6.16	5.54	-			
Follow-up Hdwy	2.33	-	-	-	-	-	3.68	4.02	-			
Pot Cap-1 Maneuver	363	-	0	0	-	-	70	29	0			
Stage 1	-	-	0	0	-	-	318	353	0			
Stage 2	-	-	0	0	-	-	369	167	0			
Platoon blocked, %	-	-	-	-	-	-						
Mov Cap-1 Maneuver	363	-	-	-	-	-	48	0	-			
Mov Cap-2 Maneuver	-	-	-	-	-	-	128	0	-			
Stage 1	-	-	-	-	-	-	216	0	-			
Stage 2	-	-	-	-	-	-	369	0	-			
Approach												
EB		WB			NB							
HCM Control Delay, s	2.9	-	0	-	44.7							
HCM LOS					E							
Minor Lane/Major Mvmt												
	NBLn1	NBLn2	EBL	EBT	WBT	WBR						
Capacity (veh/h)	128	-	363	-	-	-						
HCM Lane V/C Ratio	0.298	-	0.32	-	-	-						
HCM Control Delay (s)	44.7	0	19.5	-	-	-						
HCM Lane LOS	E	A	C	-	-	-						
HCM 95th %tile Q(veh)	1.2	-	1.4	-	-	-						

Intersection						
Int Delay, s/veh	18.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	↑	↑	↓	↓
Traffic Vol, veh/h	333	10	273	240	4	368
Future Vol, veh/h	333	10	273	240	4	368
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	-	100	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	83	83	90	90
Heavy Vehicles, %	3	3	5	4	8	7
Mvmt Flow	362	11	329	289	4	409
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	746	329	0	0	618	0
Stage 1	329	-	-	-	-	-
Stage 2	417	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.18	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.272	-
Pot Cap-1 Maneuver	380	710	-	-	934	-
Stage 1	727	-	-	-	-	-
Stage 2	663	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	378	710	-	-	934	-
Mov Cap-2 Maneuver	378	-	-	-	-	-
Stage 1	727	-	-	-	-	-
Stage 2	659	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	68	0	0.1			
HCM LOS	F					
Minor Lane/ Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	378	710	934	-
HCM Lane V/C Ratio	-	-	0.958	0.015	0.005	-
HCM Control Delay (s)	-	-	69.7	10.1	8.9	0
HCM Lane LOS	-	-	F	B	A	A
HCM 95th %tile Q(veh)	-	-	10.7	0	0	-

Intersection						
Int Delay, s/veh	2.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	→	↑	↑	↑
Traffic Vol, veh/h	25	99	225	9	37	261
Future Vol, veh/h	25	99	225	9	37	261
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	0	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	80	80	94	94
Heavy Vehicles, %	2	24	3	20	20	8
Mvmt Flow	28	110	281	11	39	278
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	643	287	0	0	292	0
Stage 1	287	-	-	-	-	-
Stage 2	356	-	-	-	-	-
Critical Hdwy	6.42	6.44	-	-	4.3	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.516	-	-	2.38	-
Pot Cap-1 Maneuver	438	703	-	-	1174	-
Stage 1	762	-	-	-	-	-
Stage 2	709	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	424	703	-	-	1174	-
Mov Cap-2 Maneuver	424	-	-	-	-	-
Stage 1	762	-	-	-	-	-
Stage 2	686	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	11.7	0	1			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	424	703	1174	-
HCM Lane V/C Ratio	-	-	0.066	0.156	0.034	-
HCM Control Delay (s)	-	-	14.1	11.1	8.2	-
HCM Lane LOS	-	-	B	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0.6	0.1	-

Intersection						
Int Delay, s/veh	2.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	25	99	315	9	37	273
Future Vol, veh/h	25	99	315	9	37	273
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	0	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	80	80	94	94
Heavy Vehicles, %	2	24	11	20	20	9
Mvmt Flow	28	110	394	11	39	290
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	768	400	0	0	405	0
Stage 1	400	-	-	-	-	-
Stage 2	368	-	-	-	-	-
Critical Hdwy	6.42	6.44	-	-	4.3	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.516	-	-	2.38	-
Pot Cap-1 Maneuver	370	605	-	-	1063	-
Stage 1	677	-	-	-	-	-
Stage 2	700	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	366	605	-	-	1063	-
Mov Cap-2 Maneuver	356	-	-	-	-	-
Stage 1	677	-	-	-	-	-
Stage 2	674	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	13	0	1			
HCM LOS	B					
Minor Lane\Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	356	605	1063	-
HCM Lane V/C Ratio	-	-	0.078	0.182	0.037	-
HCM Control Delay (s)	-	-	16	12.3	8.5	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.7	0.1	-

Intersection

Int Delay, s/veh 9.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	274	132	84	330	57	37
Future Vol, veh/h	274	132	84	330	57	37
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	0	-	125	160	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	81	81	80	80
Heavy Vehicles, %	7	5	4	15	15	15
Mvmt Flow	308	148	104	407	71	46

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	292	104	0
Stage 1	104	-	-
Stage 2	188	-	-
Critical Hdwy	6.47	6.25	-
Critical Hdwy Stg 1	5.47	-	-
Critical Hdwy Stg 2	5.47	-	-
Follow-up Hdwy	3.563	3.345	-
Pot Cap-1 Maneuver	688	943	-
Stage 1	908	-	0
Stage 2	832	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	654	943	-
Mov Cap-2 Maneuver	654	-	-
Stage 1	908	-	-
Stage 2	790	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.4	0	4.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	WB1	N1WB	LN2	SBL	SBT
Capacity (veh/h)	-	654	943	1410	-	-
HCM Lane V/C Ratio	-	0.471	0.157	0.051	-	-
HCM Control Delay (s)	-	15.3	9.5	7.7	-	-
HCM Lane LOS	-	C	A	A	-	-
HCM 95th %tile Q(veh)	-	2.5	0.6	0.2	-	-

HCM 6th Signalized Intersection Summary
5: I-95 SB On-Ramp/I-95 SB Off-Ramp & US 278

Build PM w Impr w 95 NB signalized

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑	↑↑				↑	↑	↑
Traffic Volume (veh/h)	0	318	136	1076	431	0	0	0	0	310	4	76
Future Volume (veh/h)	0	318	136	1076	431	0	0	0	0	310	4	76
Initial Q (Q _b), veh	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
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No		No						No		
Adj Sat Flow, veh/h/in	0	1737	1604	1826	1796	0				1841	1841	1781
Adj Flow Rate, veh/h	0	361	0	1223	490	0				377	0	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88				0.83	0.83	0.83
Percent Heavy Veh, %	0	11	20	5	7	0				4	4	8
Cap, veh/h	0	405		1148	2717	0				397	0	
Arrive On Green	0.00	0.12	0.00	1.00	1.00	0.00				0.11	0.00	0.00
Sat Flow, veh/h	0	3387	1359	1739	3503	0				3506	0	1510
Grp Volume(v), veh/h	0	361	0	1223	490	0				377	0	0
Grp Sat Flow(s), veh/h/in	0	1650	1359	1739	1706	0				1753	0	1510
Q Serve(g_s), s	0.0	16.2	0.0	93.6	0.0	0.0				16.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	16.2	0.0	93.6	0.0	0.0				16.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	405		1148	2717	0				397	0	
V/C Ratio(X)	0.00	0.89		1.07	0.18	0.00				0.95	0.00	
Avail Cap(c_a), veh/h	0	405		1148	2717	0				397	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(l)	0.00	1.00	0.00	0.80	0.80	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	64.8	0.0	3.7	0.0	0.0				66.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	24.4	0.0	43.3	0.0	0.0				38.9	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOf(Q(50%)), veh/in	0.0	8.1	0.0	16.4	0.0	0.0				8.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	89.2	0.0	47.0	0.0	0.0				100.0	0.0	0.0
LnGrp LOS	A	F		F	A	A				F	A	
Approach Vol, veh/h		361	A		1713					377		A
Approach Delay, s/veh		89.2			33.5					100.0		
Approach LOS		F			C					F		
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+R _c), s	101.0	25.0		24.0		126.0						
Change Period (Y+R _c), s	7.4	6.6		7.0		6.6						
Max Green Setting (G _{max}), s	93.6	18.4		17.0		119.4						
Max Q Clear Time (g _{c+l1}), s	95.6	18.2		18.0		2.0						
Green Ext Time (p _c), s	0.0	0.1		0.0		4.1						

Intersection Summary

HCM 6th Ctrl Delay 52.0

HCM 6th LOS D

Notes

User approved volume balancing among the lanes for turning movement.

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

HCM 6th Signalized Intersection Summary
8: I-95 NB Off-Ramp/I-95 NB On-Ramp & US 278

Build PM w Impr w 95 NB signalized



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑		↑↑	↑			↑	↑			
Traffic Volume (veh/h)	93	539	0	0	1455	437	32	2	743	0	0	0
Future Volume (veh/h)	93	539	0	0	1455	437	32	2	743	0	0	0
Initial Q (Q _b) veh	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			
Work Zone On Approach	No			No			No					
Adj Sat Flow, veh/h/in	1707	1811	0	0	1856	1856	1633	1870	1870			
Adj Flow Rate, veh/h	116	674	0	0	1582	0	36	2	0			
Peak Hour Factor	0.80	0.80	0.80	0.92	0.92	0.92	0.89	0.89	0.89			
Percent Heavy Veh, %	13	6	0	0	3	3	18	2	2			
Cap, veh/h	236	2753	0	0	2820		203	11				
Arrive On Green	1.00	1.00	0.00	0.00	0.80	0.00	0.12	0.12	0.00			
Sat Flow, veh/h	295	3532	0	0	3618	1572	1692	94	1585			
Grp Volume(v), veh/h	116	674	0	0	1582	0	38	0	0			
Grp Sat Flow(s), veh/h/in	295	1721	0	0	1763	1572	1786	0	1585			
Q Serve(g_s), s	23.6	0.0	0.0	0.0	24.4	0.0	2.9	0.0	0.0			
Cycle Q Clear(g_c), s	48.0	0.0	0.0	0.0	24.4	0.0	2.9	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.95		1.00			
Lane Grp Cap(c) veh/h	236	2753	0	0	2820		214	0				
V/C Ratio(X)	0.49	0.24	0.00	0.00	0.56		0.18	0.00				
Avail Cap(c_a), veh/h	236	2753	0	0	2820		214	0				
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(l)	0.21	0.21	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	4.9	0.0	0.0	0.0	5.4	0.0	59.3	0.0	0.0			
Incr Delay (d2), s/veh	1.5	0.0	0.0	0.0	0.8	0.0	1.8	0.0	0.0			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%), veh/hr	1.0	0.0	0.0	0.0	7.2	0.0	1.4	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	6.4	0.0	0.0	0.0	6.3	0.0	61.1	0.0	0.0			
LnGrp LOS	A	A	A	A	A		E	A				
Approach Vol, veh/h	790			1582	A		38	Ä				
Approach Delay, s/veh	1.0			6.3			61.1					
Approach LOS	A			A			E					
Timer - Assigned Phs	2			6			8					
Phs Duration (G+Y+Rc), s	126.0			126.0			24.0					
Change Period (Y+Rc), s	6.0			6.0			6.0					
Max Green Setting (Gmax), s	120.0			120.0			18.0					
Max Q Clear Time (g_c+l1), s	50.0			26.4			4.9					
Green Ext Time (p_c), s	9.3			18.8			0.1					
Intersection Summary												
HCM 6th Ctrl Delay			5.4									
HCM 6th LOS			A									
Notes												
Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.												

Intersection						
Int Delay, s/veh	18.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	333	10	273	240	4	368
Future Vol, veh/h	333	10	273	240	4	368
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	-	100	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	83	83	90	90
Heavy Vehicles, %	3	3	5	4	8	7
Mvmt Flow	362	11	329	289	4	409
Major/Minor						
Minor1		Major1	Major2			
Conflicting Flow All	746	329	0	0	618	0
Stage 1	329	-	-	-	-	-
Stage 2	417	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.18	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.272	-
Pot Cap-1 Maneuver	380	710	-	-	934	-
Stage 1	727	-	-	-	-	-
Stage 2	663	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	378	710	-	-	934	-
Mov Cap-2 Maneuver	378	-	-	-	-	-
Stage 1	727	-	-	-	-	-
Stage 2	659	-	-	-	-	-
Approach						
WB		NB	SB			
HCM Control Delay, s	68	0	0.1			
HCM LOS	F					
Minor Lane/Major Mvmt						
NBT		NBR	WBL	Ln1	WBLn2	SBL
Capacity (veh/h)	-	-	378	710	934	-
HCM Lane V/C Ratio	-	-	0.958	0.015	0.005	-
HCM Control Delay (s)	-	-	69.7	10.1	8.9	0
HCM Lane LOS	-	-	F	B	A	A
HCM 95th %ile Q(veh)	-	-	10.7	0	0	-

Intersection

Int Delay, s/veh 2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	25	99	225	9	37	261
Future Vol, veh/h	25	99	225	9	37	261
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	0	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	80	80	94	94
Heavy Vehicles, %	2	24	3	20	20	8
Mvmt Flow	28	110	281	11	39	278

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	643	287	0
Stage 1	287	-	-
Stage 2	356	-	-
Critical Hdwy	6.42	6.44	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.516	-
Pot Cap-1 Maneuver	438	703	-
Stage 1	762	-	-
Stage 2	709	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	424	703	-
Mov Cap-2 Maneuver	424	-	-
Stage 1	762	-	-
Stage 2	686	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.7	0	1
HCM LOS	B		

Minor Lane Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	424	703	1174	-
HCM Lane V/C Ratio	-	-	0.066	0.156	0.034	-
HCM Control Delay (s)	-	-	14.1	11.1	8.2	-
HCM Lane LOS	-	-	B	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0.6	0.1	-

HCM 6th TWSC
27: US 17 & Site Driveway #1

Build PM w Impr w 95 NB signalized

Intersection

Int Delay, s/veh 2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
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Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	25	99	320	9	37	273
Future Vol, veh/h	25	99	320	9	37	273
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	0	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	80	80	94	94
Heavy Vehicles, %	2	24	11	20	20	9
Mvmt Flow	28	110	400	11	39	290

Major/Minor	Minor1	Major1	Major2
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Conflicting Flow All	774	406	0	0	411	0
Stage 1	406	-	-	-	-	-
Stage 2	368	-	-	-	-	-
Critical Hdwy	6.42	6.44	-	-	4.3	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.516	-	-	2.38	-
Pot Cap-1 Maneuver	367	600	-	-	1057	-
Stage 1	673	-	-	-	-	-
Stage 2	700	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	353	600	-	-	1057	-
Mov Cap-2 Maneuver	353	-	-	-	-	-
Stage 1	673	-	-	-	-	-
Stage 2	674	-	-	-	-	-

Approach	WB	NB	SB
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HCM Control Delay, s	13.1	0	1
HCM LOS	B	-	-

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
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Capacity (veh/h)	-	-	353	600	1057	-
HCM Lane V/C Ratio	-	-	0.079	0.183	0.037	-
HCM Control Delay (s)	-	-	16.1	12.3	8.5	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.7	0.1	-

