

























HCM 6th Signalized Intersection Summary

3: University Ave & Towne Centre Dr

04/01/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	58	174	257	86	145	249	943	104	61	1751	65
Future Volume (veh/h)	49	58	174	257	86	145	249	943	104	61	1751	65
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	53	63	189	279	93	158	271	1025	113	66	1903	71
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	88	472	210	322	712	318	315	3051	947	104	2739	850
Arrive On Green	0.03	0.13	0.13	0.09	0.20	0.20	0.09	0.60	0.60	0.06	1.00	1.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	53	63	189	279	93	158	271	1025	113	66	1903	71
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	2.3	2.3	17.6	11.9	3.2	13.3	11.6	15.2	4.6	2.8	0.0	0.0
Cycle Q Clear(g_c), s	2.3	2.3	17.6	11.9	3.2	13.3	11.6	15.2	4.6	2.8	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	88	472	210	322	712	318	315	3051	947	104	2739	850
V/C Ratio(X)	0.60	0.13	0.90	0.87	0.13	0.50	0.86	0.34	0.12	0.64	0.69	0.08
Avail Cap(c_a), veh/h	346	877	391	346	877	391	415	3051	947	415	2739	850
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	2.00
Upstream Filter(I)	0.93	0.93	0.93	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.3	57.4	64.1	67.1	49.2	53.3	67.2	15.2	13.1	69.7	0.0	0.0
Incr Delay (d2), s/veh	2.3	0.0	5.1	18.1	0.0	0.4	11.0	0.3	0.3	2.4	1.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	1.1	7.5	6.1	1.5	5.4	5.6	5.9	1.8	1.2	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.6	57.5	69.1	85.2	49.3	53.7	78.2	15.5	13.3	72.1	1.5	0.2
LnGrp LOS	E	E	E	F	D	D	E	B	B	E	A	A
Approach Vol, veh/h	305			530			1409			2040		
Approach Delay, s/veh	67.7			69.5			27.4			3.7		
Approach LOS	E			E			C			A		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	95.6	19.0	25.9	18.7	86.5	8.8	36.1				
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	18.0	58.0	15.0	37.0	18.0	58.0	15.0	37.0				
Max Q Clear Time (g_c+I1), s	4.8	17.2	13.9	19.6	13.6	2.0	4.3	15.3				
Green Ext Time (p_c), s	0.0	3.9	0.0	0.3	0.1	10.0	0.0	0.4				
Intersection Summary												
HCM 6th Ctrl Delay	24.2											
HCM 6th LOS	C											

Educational Use Only

HCM 6th Signalized Intersection Summary

5: Towne Centre Blvd & Towne Centre Dr

04/01/2023



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰↰	↱	↱	↱	↰↰	↱↱
Traffic Volume (veh/h)	235	195	27	195	94	22
Future Volume (veh/h)	235	195	27	195	94	22
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	255	0	29	0	102	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	607		112		336	1183
Arrive On Green	0.18	0.00	0.06	0.00	0.10	0.33
Sat Flow, veh/h	3456	1585	1870	1585	3456	3647
Grp Volume(v), veh/h	255	0	29	0	102	24
Grp Sat Flow(s),veh/h/ln	1728	1585	1870	1585	1728	1777
Q Serve(g_s), s	1.9	0.0	0.4	0.0	0.8	0.1
Cycle Q Clear(g_c), s	1.9	0.0	0.4	0.0	0.8	0.1
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	607		112		336	1183
V/C Ratio(X)	0.42		0.26		0.30	0.02
Avail Cap(c_a), veh/h	2669		1576		2427	2995
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	10.5	0.0	12.8	0.0	12.0	6.4
Incr Delay (d2), s/veh	0.2	0.0	0.4	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.2	0.0	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.6	0.0	13.2	0.0	12.1	6.4
LnGrp LOS	B		B		B	A
Approach Vol, veh/h	255		29			126
Approach Delay, s/veh	10.6		13.2			11.0
Approach LOS	B		B			B
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	7.8	7.7		13.0		15.5
Change Period (Y+Rc), s	5.0	6.0		8.0		6.0
Max Green Setting (Gmax), s	20.0	24.0		22.0		24.0
Max Q Clear Time (g_c+I1), s	2.8	2.4		3.9		2.1
Green Ext Time (p_c), s	0.1	0.1		0.4		0.0

Intersection Summary

HCM 6th Ctrl Delay	10.9
HCM 6th LOS	B

Notes
























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

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HCM 6th Signalized Intersection Summary

6: University Ave & 1200 S

04/01/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	17	107	61	26	30	55	1006	44	49	1640	64
Future Volume (veh/h)	63	17	107	61	26	30	55	1006	44	49	1640	64
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	68	18	116	66	28	33	60	1093	48	53	1783	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	134	185	156	155	72	88	255	3821	1186	469	3816	1185
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.06	1.00	1.00	0.03	0.75	0.75
Sat Flow, veh/h	1341	1870	1585	1101	730	890	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	68	18	116	70	0	57	60	1093	48	53	1783	70
Grp Sat Flow(s),veh/h/ln	1341	1870	1585	1180	0	1542	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	7.5	1.3	10.7	7.7	0.0	5.2	1.2	0.0	0.0	1.0	20.3	1.8
Cycle Q Clear(g_c), s	12.7	1.3	10.7	9.0	0.0	5.2	1.2	0.0	0.0	1.0	20.3	1.8
Prop In Lane	1.00		1.00	0.95		0.58	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	134	185	156	163	0	152	255	3821	1186	469	3816	1185
V/C Ratio(X)	0.51	0.10	0.74	0.43	0.00	0.38	0.24	0.29	0.04	0.11	0.47	0.06
Avail Cap(c_a), veh/h	243	337	285	267	0	278	325	3821	1186	541	3816	1185
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	69.2	61.5	65.7	65.5	0.0	63.3	5.4	0.0	0.0	3.8	7.4	5.0
Incr Delay (d2), s/veh	1.1	0.1	2.6	0.7	0.0	0.6	0.2	0.2	0.1	0.0	0.4	0.1
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	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.6	4.5	2.6	0.0	2.1	0.4	0.1	0.0	0.3	6.9	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.3	61.6	68.3	66.2	0.0	63.8	5.6	0.2	0.1	3.9	7.8	5.1
LnGrp LOS	E	E	E	E	A	E	A	A	A	A	A	A
Approach Vol, veh/h	202			127			1201			1906		
Approach Delay, s/veh	68.4			65.1			0.5			7.6		
Approach LOS	E			E			A			A		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	118.2		22.8	9.1	118.1		22.8				
Change Period (Y+Rc), s	4.5	6.0		8.0	4.5	6.0		8.0				
Max Green Setting (Gmax), s	10.5	94.0		27.0	10.5	94.0		27.0				
Max Q Clear Time (g_c+I1), s	3.0	2.0		14.7	3.2	22.3		11.0				
Green Ext Time (p_c), s	0.0	3.7		0.1	0.0	7.6		0.2				
Intersection Summary												
HCM 6th Ctrl Delay	10.8											
HCM 6th LOS	B											

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