

























HCM 6th Signalized Intersection Summary

3: University Ave & Towne Centre Dr

02/02/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	57	171	252	83	140	242	907	102	57	1692	57
Future Volume (veh/h)	48	57	171	252	83	140	242	907	102	57	1692	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	52	62	186	274	90	152	263	986	111	62	1839	62
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	87	465	207	317	702	313	307	3075	955	99	2768	859
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	52	62	186	274	90	152	263	986	111	62	1839	62
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	2.2	2.3	17.3	11.7	3.1	12.8	11.3	14.3	4.5	2.6	0.0	0.0
Cycle Q Clear(g_c), s	2.2	2.3	17.3	11.7	3.1	12.8	11.3	14.3	4.5	2.6	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	87	465	207	317	702	313	307	3075	955	99	2768	859
V/C Ratio(X)	0.60	0.13	0.90	0.86	0.13	0.49	0.86	0.32	0.12	0.63	0.66	0.07
Avail Cap(c_a), veh/h	346	877	391	346	877	391	415	3075	955	415	2768	859
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)	0.99	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00	0.90	0.90	0.90
Uniform Delay (d), s/veh	72.4	57.7	64.2	67.2	49.6	53.4	67.4	14.7	12.8	69.9	0.0	0.0
Incr Delay (d2), s/veh	2.4	0.0	5.4	17.4	0.0	0.4	10.0	0.3	0.2	2.2	1.2	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	1.0	1.1	7.4	6.0	1.4	5.2	5.4	5.6	1.7	1.2	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.8	57.7	69.6	84.6	49.6	53.9	77.4	15.0	13.0	72.1	1.2	0.1
LnGrp LOS	E	E	E	F	D	D	E	B	B	E	A	A
Approach Vol, veh/h	300				516				1360			
Approach Delay, s/veh	68.0				69.5				26.9			
Approach LOS	E				E				C			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.3	96.3	18.8	25.6	18.3	87.3	8.8	35.6				
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	4.6	16.3	13.7	19.3	13.3	2.0	4.2	14.8				
Green Ext Time (p_c), s	0.0	3.7	0.0	0.3	0.1	9.3	0.0	0.3				
Intersection Summary												
HCM 6th Ctrl Delay	24.0											
HCM 6th LOS	C											

Educational Use Only

HCM 6th Signalized Intersection Summary

5: Towne Centre Blvd & Towne Centre Dr

02/02/2023

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰↱	↱	↰	↱	↰↱	↰↱
Traffic Volume (veh/h)	224	148	22	191	92	22
Future Volume (veh/h)	224	148	22	191	92	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	243	0	24	0	100	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	2227		8		15	16
Arrive On Green	0.64	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	3456	1585	-112222	1585	3456	3647
Grp Volume(v), veh/h	243	0	24	0	100	24
Grp Sat Flow(s),veh/h/ln	1728	1585	1870	1585	1728	1777
Q Serve(g_s), s	0.6	0.0	0.1	0.0	0.1	0.1
Cycle Q Clear(g_c), s	0.6	0.0	0.1	0.0	0.1	0.1
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	2227		8		15	16
V/C Ratio(X)	0.11		2.89		6.51	1.52
Avail Cap(c_a), veh/h	2227		1372		768	4185
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	1.5	0.0	11.3	0.0	11.3	11.2
Incr Delay (d2), s/veh	0.1	0.0	875.0	0.0	2491.0	258.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	2.1	0.0	5.3	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	1.6	0.0	886.2	0.0	2502.2	269.3
LnGrp LOS	A		F		F	F
Approach Vol, veh/h	243		24			124
Approach Delay, s/veh	1.6		886.2			2070.0
Approach LOS	A		F			F
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	0.0	0.0			0.0	22.5
Change Period (Y+Rc), s	5.0	6.0			6.0	8.0
Max Green Setting (Gmax), s	5.0	16.5			26.5	14.5
Max Q Clear Time (g_c+I1), s	0.0	0.0			0.0	0.0
Green Ext Time (p_c), s	0.0	0.0			0.0	0.0

Intersection Summary

HCM 6th Ctrl Delay	711.9
HCM 6th LOS	F

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

02/02/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	17	92	60	25	29	54	988	43	48	1608	63
Future Volume (veh/h)	32	17	92	60	25	29	54	988	43	48	1608	63
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	35	18	100	65	27	32	59	1074	47	52	1748	68
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	105	143	121	128	54	69	270	3936	1222	487	3931	1220
Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.06	1.00	1.00	0.03	0.77	0.77
Sat Flow, veh/h	1344	1870	1585	1074	710	903	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	35	18	100	69	0	55	59	1074	47	52	1748	68
Grp Sat Flow(s),veh/h/ln	1344	1870	1585	1147	0	1540	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	3.8	1.3	9.3	7.9	0.0	5.1	1.0	0.0	0.0	0.9	18.0	1.5
Cycle Q Clear(g_c), s	8.9	1.3	9.3	9.2	0.0	5.1	1.0	0.0	0.0	0.9	18.0	1.5
Prop In Lane	1.00		1.00	0.94		0.59	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	105	143	121	134	0	118	270	3936	1222	487	3931	1220
V/C Ratio(X)	0.33	0.13	0.83	0.52	0.00	0.46	0.22	0.27	0.04	0.11	0.44	0.06
Avail Cap(c_a), veh/h	244	337	285	269	0	277	340	3936	1222	560	3931	1220
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	0.96	0.96	0.96	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.6	64.6	68.3	68.9	0.0	66.3	4.3	0.0	0.0	3.1	6.0	4.2
Incr Delay (d2), s/veh	0.7	0.1	5.3	1.1	0.0	1.1	0.1	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	1.4	0.7	4.0	2.7	0.0	2.1	0.3	0.1	0.0	0.3	5.9	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.3	64.8	73.6	70.1	0.0	67.4	4.5	0.2	0.1	3.1	6.4	4.2
LnGrp LOS	E	E	E	E	A	E	A	A	A	A	A	A
Approach Vol, veh/h	153			124			1180			1868		
Approach Delay, s/veh	72.0			68.9			0.4			6.2		
Approach LOS	E			E			A			A		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.9	121.6		19.5	9.1	121.5		19.5				
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	2.9	2.0		11.3	3.0	20.0		11.2				
Green Ext Time (p_c), s	0.0	3.6		0.1	0.0	7.4		0.2				
Intersection Summary												
HCM 6th Ctrl Delay	9.5											
HCM 6th LOS	A											

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