

# HCM 6th Signalized Intersection Summary

## 407: Dixie Hwy & Lower Hunters Trace

11/02/2021



Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations							
Traffic Volume (veh/h)	273	244	202	1372	1753	351	
Future Volume (veh/h)	273	244	202	1372	1753	351	
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	297	265	220	1491	1905	382	
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	357	318	432	3804	2061	405	
Arrive On Green	0.20	0.20	0.24	0.75	0.96	0.94	
Sat Flow, veh/h	1781	1585	1781	5274	4450	841	
Grp Volume(v), veh/h	297	265	220	1491	1506	781	
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1702	1702	1719	
Q Serve(g_s), s	25.6	25.7	17.1	16.8	23.1	34.6	
Cycle Q Clear(g_c), s	25.6	25.7	17.1	16.8	23.1	34.6	
Prop In Lane	1.00	1.00	1.00			0.49	
Lane Grp Cap(c), veh/h	357	318	432	3804	1638	827	
V/C Ratio(X)	0.83	0.83	0.51	0.39	0.92	0.94	
Avail Cap(c_a), veh/h	423	376	432	3804	1638	827	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00	
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.68	0.68	
Uniform Delay (d), s/veh	61.4	61.4	52.4	7.3	2.0	2.9	
Incr Delay (d2), s/veh	12.5	14.1	1.4	0.3	7.1	15.4	
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	12.9	11.6	7.8	5.7	2.7	5.1	
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	73.9	75.5	53.7	7.6	9.1	18.3	
LnGrp LOS	E	E	D	A	A	B	
Approach Vol, veh/h				1711	2287		
Approach Delay, s/veh	74.6			13.6	12.2		
Approach LOS	E			B	B		
Timer - Assigned Phs		2			5	6	8
Phs Duration (G+Y+Rc), s		123.9			42.9	81.0	36.1
Change Period (Y+Rc), s		* 6.5			* 6.5	5.8	6.4
Max Green Setting (Gmax), s		* 1.1E2			* 31	75.2	35.6
Max Q Clear Time (g_c+I1), s		0.0			19.1	0.0	27.7
Green Ext Time (p_c), s		0.0			0.8	0.0	2.0
<b>Intersection Summary</b>							
HCM 6th Ctrl Delay			20.4				
HCM 6th LOS			C				
<b>Notes</b>							
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.							