






















































HCM 2010 Signalized Intersection Summary
3: Roswell Road & Dalrymple Road

Proposed Build AM Peak
04/21/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 			 			 	 		 	 	
Traffic Volume (veh/h)	276	242	109	87	106	31	49	533	84	323	1265	183
Future Volume (veh/h)	276	242	109	87	106	31	49	533	84	323	1265	183
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	300	263	118	95	115	34	53	579	91	351	1375	199
Adj No. of Lanes	2	1	0	1	1	0	1	2	0	1	2	0
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	341	276	124	143	243	72	67	1644	258	457	1706	245
Arrive On Green	0.10	0.23	0.23	0.05	0.18	0.18	0.04	0.54	0.54	0.05	0.55	0.55
Sat Flow, veh/h	3442	1219	547	1774	1382	409	1774	3067	481	1774	3108	446
Grp Volume(v), veh/h	300	0	381	95	0	149	53	333	337	351	777	797
Grp Sat Flow(s),veh/h/ln	1721	0	1766	1774	0	1791	1774	1770	1778	1774	1770	1784
Q Serve(g_s), s	15.5	0.0	38.3	7.9	0.0	13.5	5.3	19.4	19.5	9.1	63.6	65.5
Cycle Q Clear(g_c), s	15.5	0.0	38.3	7.9	0.0	13.5	5.3	19.4	19.5	9.1	63.6	65.5
Prop In Lane	1.00		0.31	1.00		0.23	1.00		0.27	1.00		0.25
Lane Grp Cap(c), veh/h	341	0	400	143	0	315	67	949	953	457	971	979
V/C Ratio(X)	0.88	0.00	0.95	0.66	0.00	0.47	0.79	0.35	0.35	0.77	0.80	0.81
Avail Cap(c_a), veh/h	453	0	423	143	0	315	139	949	953	457	971	979
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)	1.00	0.00	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	80.0	0.0	68.6	59.5	0.0	66.7	85.9	23.9	23.9	31.0	32.7	33.1
Incr Delay (d2), s/veh	12.0	0.0	30.4	8.8	0.0	0.4	7.3	1.0	1.0	7.0	6.9	7.4
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	7.9	0.0	22.1	4.2	0.0	6.7	2.8	9.7	9.8	11.1	33.0	34.3
LnGrp Delay(d),s/veh	92.1	0.0	99.0	68.3	0.0	67.1	93.2	24.9	24.9	38.0	39.6	40.5
LnGrp LOS	F		F	E		E	F	C	C	D	D	D
Approach Vol, veh/h		681			244			723			1925	
Approach Delay, s/veh		96.0			67.6			29.9			39.7	
Approach LOS		F			E			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.0	102.3	15.0	47.7	12.7	104.6	24.1	38.6				
Change Period (Y+Rc), s	5.9	* 5.8	5.9	* 6.9	5.9	* 5.8	* 6.3	* 6.9				
Max Green Setting (Gmax), s	9.1	* 94	9.1	* 43	14.1	* 89	* 24	* 28				
Max Q Clear Time (g_c+I1), s	11.1	21.5	9.9	40.3	7.3	67.5	17.5	15.5				
Green Ext Time (p_c), s	0.0	11.1	0.0	0.5	0.0	18.2	0.3	0.4				
Intersection Summary												
HCM 2010 Ctrl Delay			50.3									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary
3: Roswell Road & Dalrymple Road

Proposed Build PM Peak
04/21/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 			 	 		 	 		 	 	
Traffic Volume (veh/h)	299	89	15	135	325	46	66	1319	44	92	669	306
Future Volume (veh/h)	299	89	15	135	325	46	66	1319	44	92	669	306
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	325	97	16	147	353	50	72	1434	48	100	727	333
Adj No. of Lanes	2	1	0	1	1	0	1	2	0	1	2	0
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	361	304	50	361	267	38	89	1935	65	189	1274	583
Arrive On Green	0.10	0.20	0.20	0.08	0.17	0.17	0.05	0.55	0.55	0.04	0.54	0.54
Sat Flow, veh/h	3442	1560	257	1774	1597	226	1774	3495	117	1774	2361	1081
Grp Volume(v), veh/h	325	0	113	147	0	403	72	725	757	100	545	515
Grp Sat Flow(s),veh/h/ln	1721	0	1817	1774	0	1823	1774	1770	1842	1774	1770	1672
Q Serve(g_s), s	16.8	0.0	9.6	12.3	0.0	30.1	7.2	55.7	56.0	4.4	36.9	36.9
Cycle Q Clear(g_c), s	16.8	0.0	9.6	12.3	0.0	30.1	7.2	55.7	56.0	4.4	36.9	36.9
Prop In Lane	1.00		0.14	1.00		0.12	1.00		0.06	1.00		0.65
Lane Grp Cap(c), veh/h	361	0	354	361	0	305	89	980	1020	189	955	902
V/C Ratio(X)	0.90	0.00	0.32	0.41	0.00	1.32	0.81	0.74	0.74	0.53	0.57	0.57
Avail Cap(c_a), veh/h	377	0	354	369	0	305	149	980	1020	275	955	902
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)	1.00	0.00	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	79.6	0.0	62.2	55.8	0.0	75.0	84.6	30.4	30.4	28.2	27.6	27.6
Incr Delay (d2), s/veh	22.5	0.0	0.2	0.3	0.0	166.1	6.5	5.0	4.9	0.8	2.5	2.6
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	9.1	0.0	4.9	6.0	0.0	29.2	3.7	28.6	29.8	2.2	18.7	17.7
LnGrp Delay(d),s/veh	102.1	0.0	62.4	56.1	0.0	241.0	91.1	35.4	35.3	29.1	30.0	30.2
LnGrp LOS	F		E	E		F	F	D	D	C	C	C
Approach Vol, veh/h		438			550			1554			1160	
Approach Delay, s/veh		91.8			191.6			37.9			30.0	
Approach LOS		F			F			D			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.3	105.5	20.2	42.0	14.9	102.9	25.2	37.0				
Change Period (Y+Rc), s	5.9	* 5.8	5.9	* 6.9	5.9	* 5.8	* 6.3	* 6.9				
Max Green Setting (Gmax), s	15.1	* 90	15.1	* 35	15.1	* 90	* 20	* 30				
Max Q Clear Time (g_c+I1), s	6.4	58.0	14.3	11.6	9.2	38.9	18.8	32.1				
Green Ext Time (p_c), s	0.1	23.9	0.0	0.4	0.0	20.9	0.1	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			64.7									
HCM 2010 LOS			E									
Notes												