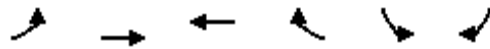


HCM 2010 Signalized Intersection Summary
 10: PCH & Channel Dr

Existing (2015) Plus Project
 AM Peak Hour



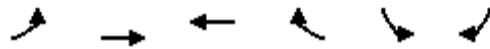
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Volume (veh/h)	17	1075	1361	120	78	74		
Number	1	6	2	12	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1569	1569	1569	1569	1412	1569		
Adj Flow Rate, veh/h	18	1156	1463	106	84	0		
Adj No. of Lanes	1	3	3	1	2	1		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	637	3679	1663	516	153	78		
Arrive On Green	0.43	0.86	0.78	0.78	0.06	0.00		
Sat Flow, veh/h	1494	4424	4424	1330	2608	1333		
Grp Volume(v), veh/h	18	1156	1463	106	84	0		
Grp Sat Flow(s),veh/h/ln	1494	1427	1427	1330	1304	1333		
Q Serve(g_s), s	0.9	6.8	31.3	2.8	4.1	0.0		
Cycle Q Clear(g_c), s	0.9	6.8	31.3	2.8	4.1	0.0		
Prop In Lane	1.00			1.00	1.00	1.00		
Lane Grp Cap(c), veh/h	637	3679	1663	516	153	78		
V/C Ratio(X)	0.03	0.31	0.88	0.21	0.55	0.00		
Avail Cap(c_a), veh/h	637	3679	2049	636	744	381		
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00		
Upstream Filter(I)	0.93	0.93	0.77	0.77	0.88	0.00		
Uniform Delay (d), s/veh	21.7	1.8	12.4	9.2	59.5	0.0		
Incr Delay (d2), s/veh	0.0	0.2	5.5	0.7	1.2	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	0.4	2.6	12.5	1.1	1.5	0.0		
LnGrp Delay(d),s/veh	21.7	2.0	17.9	9.9	60.8	0.0		
LnGrp LOS	C	A	B	A	E			
Approach Vol, veh/h		1174	1569		84			
Approach Delay, s/veh		2.3	17.4		60.8			
Approach LOS		A	B		E			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	61.2	56.3		12.5		117.5		
Change Period (Y+Rc), s	5.8	* 5.8		4.9		5.8		
Max Green Setting (Gmax), s	15.1	* 62		37.1		82.2		
Max Q Clear Time (g_c+I1), s	2.9	33.3		6.1		8.8		
Green Ext Time (p_c), s	7.4	17.2		0.1		16.2		

Intersection Summary

HCM 2010 Ctrl Delay	12.4
HCM 2010 LOS	B

Notes

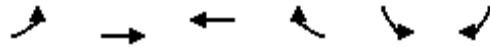
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations	↵	↑↑↑	↑↑↑	↵	↵↵	↵		
Volume (veh/h)	54	1842	1573	63	160	89		
Number	1	6	2	12	7	14		
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		
Adj Sat Flow, veh/h/ln	1569	1569	1569	1569	1412	1569		
Adj Flow Rate, veh/h	57	1939	1656	54	168	5		
Adj No. of Lanes	1	3	3	1	2	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	563	3583	1778	552	211	108		
Arrive On Green	0.38	0.84	0.83	0.83	0.08	0.08		
Sat Flow, veh/h	1494	4424	4424	1330	2608	1333		
Grp Volume(v), veh/h	57	1939	1656	54	168	5		
Grp Sat Flow(s),veh/h/ln	1494	1427	1427	1330	1304	1333		
Q Serve(g_s), s	3.2	17.6	37.6	1.0	8.2	0.4		
Cycle Q Clear(g_c), s	3.2	17.6	37.6	1.0	8.2	0.4		
Prop In Lane	1.00			1.00	1.00	1.00		
Lane Grp Cap(c), veh/h	563	3583	1778	552	211	108		
V/C Ratio(X)	0.10	0.54	0.93	0.10	0.79	0.05		
Avail Cap(c_a), veh/h	563	3583	1950	606	744	381		
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00		
Upstream Filter(I)	0.63	0.63	0.29	0.29	0.63	0.63		
Uniform Delay (d), s/veh	26.2	3.2	9.6	6.5	58.7	55.1		
Incr Delay (d2), s/veh	0.0	0.4	3.5	0.1	2.0	0.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	1.3	6.9	14.4	0.3	3.0	0.2		
LnGrp Delay(d),s/veh	26.3	3.5	13.2	6.6	60.7	55.2		
LnGrp LOS	C	A	B	A	E	E		
Approach Vol, veh/h		1996	1710		173			
Approach Delay, s/veh		4.2	13.0		60.5			
Approach LOS		A	B		E			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	54.8	59.8		15.4		114.6		
Change Period (Y+Rc), s	5.8	* 5.8		4.9		5.8		
Max Green Setting (Gmax), s	18.1	* 59		37.1		82.2		
Max Q Clear Time (g_c+I1), s	5.2	39.6		10.2		19.6		
Green Ext Time (p_c), s	11.1	14.4		0.3		37.2		
Intersection Summary								
HCM 2010 Ctrl Delay			10.6					
HCM 2010 LOS			B					
Notes								
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.								

HCM 2010 Signalized Intersection Summary
10: PCH & Channel Dr

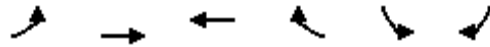
Cumulative (2035) Plus Project Conditions
AM Peak Hour



Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Volume (veh/h)	20	1183	1471	131	88	90		
Number	1	6	2	12	7	14		
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		
Adj Sat Flow, veh/h/ln	1569	1569	1569	1569	1412	1569		
Adj Flow Rate, veh/h	21	1245	1548	116	93	17		
Adj No. of Lanes	1	3	3	1	2	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	612	3671	1727	536	157	81		
Arrive On Green	0.41	0.86	0.81	0.81	0.06	0.06		
Sat Flow, veh/h	1494	4424	4424	1330	2608	1333		
Grp Volume(v), veh/h	21	1245	1548	116	93	17		
Grp Sat Flow(s),veh/h/ln	1494	1427	1427	1330	1304	1333		
Q Serve(g_s), s	1.1	7.6	32.8	2.7	4.5	1.6		
Cycle Q Clear(g_c), s	1.1	7.6	32.8	2.7	4.5	1.6		
Prop In Lane	1.00			1.00	1.00	1.00		
Lane Grp Cap(c), veh/h	612	3671	1727	536	157	81		
V/C Ratio(X)	0.03	0.34	0.90	0.22	0.59	0.21		
Avail Cap(c_a), veh/h	612	3671	2049	636	744	381		
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00		
Upstream Filter(I)	0.90	0.90	0.66	0.66	0.85	0.85		
Uniform Delay (d), s/veh	23.0	1.9	10.7	7.8	59.5	58.1		
Incr Delay (d2), s/veh	0.0	0.2	5.4	0.6	1.4	0.5		
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	3.0	12.9	1.1	1.7	0.6		
LnGrp Delay(d),s/veh	23.0	2.1	16.0	8.4	60.9	58.6		
LnGrp LOS	C	A	B	A	E	E		
Approach Vol, veh/h		1266	1664		110			
Approach Delay, s/veh		2.4	15.5		60.5			
Approach LOS		A	B		E			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	59.0	58.2		12.7		117.3		
Change Period (Y+Rc), s	5.8	* 5.8		4.9		5.8		
Max Green Setting (Gmax), s	15.1	* 62		37.1		82.2		
Max Q Clear Time (g_c+I1), s	3.1	34.8		6.5		9.6		
Green Ext Time (p_c), s	7.8	17.6		0.2		18.4		
Intersection Summary								
HCM 2010 Ctrl Delay			11.7					
HCM 2010 LOS			B					
Notes								
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.								

HCM 2010 Signalized Intersection Summary
 10: PCH & Channel Dr

Cumulative (2035) Plus Project Conditions
 PM Peak Hour



Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Volume (veh/h)	60	2007	1718	70	176	100		
Number	1	6	2	12	7	14		
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		
Adj Sat Flow, veh/h/ln	1569	1569	1569	1569	1412	1569		
Adj Flow Rate, veh/h	63	2113	1808	62	185	16		
Adj No. of Lanes	1	3	3	1	2	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	519	3553	1875	583	229	117		
Arrive On Green	0.35	0.83	0.88	0.88	0.09	0.09		
Sat Flow, veh/h	1494	4424	4424	1330	2608	1333		
Grp Volume(v), veh/h	63	2113	1808	62	185	16		
Grp Sat Flow(s),veh/h/ln	1494	1427	1427	1330	1304	1333		
Q Serve(g_s), s	3.7	21.6	43.8	0.8	9.1	1.4		
Cycle Q Clear(g_c), s	3.7	21.6	43.8	0.8	9.1	1.4		
Prop In Lane	1.00			1.00	1.00	1.00		
Lane Grp Cap(c), veh/h	519	3553	1875	583	229	117		
V/C Ratio(X)	0.12	0.59	0.96	0.11	0.81	0.14		
Avail Cap(c_a), veh/h	519	3553	1950	606	744	381		
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00		
Upstream Filter(I)	0.36	0.36	0.09	0.09	0.55	0.55		
Uniform Delay (d), s/veh	28.9	3.7	7.3	4.6	58.2	54.7		
Incr Delay (d2), s/veh	0.0	0.3	2.1	0.0	1.7	0.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	1.5	8.3	15.7	0.3	3.3	0.5		
LnGrp Delay(d),s/veh	28.9	4.0	9.3	4.6	60.0	54.9		
LnGrp LOS	C	A	A	A	E	D		
Approach Vol, veh/h		2176	1870		201			
Approach Delay, s/veh		4.7	9.2		59.5			
Approach LOS		A	A		E			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	50.9	62.7		16.3		113.7		
Change Period (Y+Rc), s	5.8	* 5.8		4.9		5.8		
Max Green Setting (Gmax), s	18.1	* 59		37.1		82.2		
Max Q Clear Time (g_c+I1), s	5.7	45.8		11.1		23.6		
Green Ext Time (p_c), s	11.1	11.2		0.4		40.3		
Intersection Summary								
HCM 2010 Ctrl Delay			9.3					
HCM 2010 LOS			A					
Notes								
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.								