

























HCM 7th Signalized Intersection Summary

3: NC 96 Bypass/Cedar Creek Road & E Main Street/Tarboro Road

06/10/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	219	113	61	70	572	278	73	36	18	188	96	775
Future Volume (veh/h)	219	113	61	70	572	278	73	36	18	188	96	775
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	243	126	68	78	636	0	81	40	20	209	107	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	305	878	744	147	713		148	169	143	278	306	
Arrive On Green	0.17	0.47	0.47	0.08	0.38	0.00	0.08	0.09	0.09	0.16	0.16	0.00
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	243	126	68	78	636	0	81	40	20	209	107	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	13.0	3.8	2.4	4.2	31.7	0.0	4.3	2.0	1.2	11.1	5.0	0.0
Cycle Q Clear(g_c), s	13.0	3.8	2.4	4.2	31.7	0.0	4.3	2.0	1.2	11.1	5.0	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	305	878	744	147	713		148	169	143	278	306	
V/C Ratio(X)	0.80	0.14	0.09	0.53	0.89		0.55	0.24	0.14	0.75	0.35	
Avail Cap(c_a), veh/h	305	878	744	233	790		161	809	686	502	1167	
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	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.5	15.0	14.6	43.8	28.9	0.0	43.8	42.0	41.6	40.1	36.9	0.0
Incr Delay (d2), s/veh	12.8	0.3	0.2	3.0	11.7	0.0	3.2	0.7	0.4	4.1	0.3	0.0
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	6.6	1.6	0.8	1.9	15.8	0.0	2.0	0.9	0.5	5.0	2.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	52.4	15.3	14.9	46.7	40.6	0.0	47.0	42.7	42.1	44.1	37.1	0.0
LnGrp LOS	D	B	B	D	D		D	D	D	D	D	
Approach Vol, veh/h	437			714			141			316		
Approach Delay, s/veh	35.9			41.3			45.1			41.8		
Approach LOS	D			D			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.2	51.7	13.3	21.3	22.0	42.9	20.5	14.0				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	11.0	44.0	7.0	60.0	15.0	40.0	26.0	41.0				
Max Q Clear Time (g_c+I1), s	6.2	5.8	6.3	7.0	15.0	33.7	13.1	4.0				
Green Ext Time (p_c), s	0.1	0.9	0.0	0.3	0.0	2.2	0.4	0.2				

Intersection Summary

HCM 7th Control Delay, s/veh	40.2
HCM 7th LOS	D

Notes

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