

























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)	369	304	54	38	315	263	80	67	54	305	54	446
Future Volume (veh/h)	369	304	54	38	315	263	80	67	54	305	54	446
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	410	338	60	42	350	0	89	74	60	339	60	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	456	762	646	123	412		152	171	145	408	440	
Arrive On Green	0.26	0.41	0.41	0.07	0.22	0.00	0.09	0.09	0.09	0.23	0.24	0.00
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	410	338	60	42	350	0	89	74	60	339	60	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	21.9	12.9	2.3	2.2	17.7	0.0	4.7	3.7	3.5	17.8	2.5	0.0
Cycle Q Clear(g_c), s	21.9	12.9	2.3	2.2	17.7	0.0	4.7	3.7	3.5	17.8	2.5	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	456	762	646	123	412		152	171	145	408	440	
V/C Ratio(X)	0.90	0.44	0.09	0.34	0.85		0.59	0.43	0.41	0.83	0.14	
Avail Cap(c_a), veh/h	456	762	646	163	414		163	209	177	579	646	
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	35.4	21.1	18.0	43.7	36.8	0.0	43.4	42.3	42.2	36.1	29.7	0.0
Incr Delay (d2), s/veh	19.9	1.9	0.3	1.6	15.2	0.0	4.7	1.7	1.9	6.9	0.1	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	11.7	5.8	0.8	1.0	9.6	0.0	2.2	1.7	1.4	8.1	1.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.3	23.0	18.2	45.4	52.0	0.0	48.1	44.0	44.1	43.1	29.8	0.0
LnGrp LOS	E	C	B	D	D		D	D	D	D	C	
Approach Vol, veh/h	808			392			223			399		
Approach Delay, s/veh	39.0			51.3			45.7			41.1		
Approach LOS	D			D			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.8	45.1	13.4	28.2	30.2	26.7	27.6	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	7.0	36.0	7.0	32.0	23.2	19.8	30.0	9.0				
Max Q Clear Time (g_c+I1), s	4.2	14.9	6.7	4.5	23.9	19.7	19.8	5.7				
Green Ext Time (p_c), s	0.0	2.1	0.0	0.1	0.0	0.0	0.7	0.1				

Intersection Summary

HCM 7th Control Delay, s/veh	42.9
HCM 7th LOS	D

Notes

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