

HCM 7th AWSC  
1: George Hopper Rd & Chrysler Dr

Burlington Intersection LOS  
Existing (2024) Weekday PM Peak Hour

Intersection	
Intersection Delay, s/veh	10.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	15	1	70	5	160	3	60	145	250	40	0
Future Vol, veh/h	5	15	1	70	5	160	3	60	145	250	40	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
Heavy Vehicles, %	0	0	0	1	1	1	1	1	1	3	3	3
Mvmt Flow	5	16	1	76	5	174	3	65	158	272	43	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	8.9	10.6	9.6	12.2
HCM LOS	A	B	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %		1%	24%	30%
Vol Thru, %		29%	71%	2%
Vol Right, %		70%	5%	68%
Sign Control		Stop	Stop	Stop
Traffic Vol by Lane		208	21	235
LT Vol		3	5	70
Through Vol		60	15	5
RT Vol		145	1	160
Lane Flow Rate		226	23	255
Geometry Grp		1	1	1
Degree of Util (X)		0.289	0.036	0.346
Departure Headway (Hd)		4.596	5.709	4.873
Convergence, Y/N		Yes	Yes	Yes
Cap		771	631	731
Service Time		2.686	3.709	2.958
HCM Lane V/C Ratio		0.293	0.036	0.349
HCM Control Delay, s/veh		9.6	8.9	10.6
HCM Lane LOS		A	A	B
HCM 95th-tile Q		1.2	0.1	1.5

HCM 7th TWSC  
2: S Spruce St & E Rio Vista Ave

Burlington Intersection LOS  
Existing (2024) Weekday PM Peak Hour

Intersection												
Int Delay, s/veh	5.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	100	4	15	2	15	5	35	360	4	0	200	75
Future Vol, veh/h	100	4	15	2	15	5	35	360	4	0	200	75
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	3	3	3	0	0	0	2	2	2	2	2	2
Mvmt Flow	127	5	19	3	19	6	44	456	5	0	253	95

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	855	851	301	804	896	460	348	0	0	462	0	0
Stage 1	301	301	-	548	548	-	-	-	-	-	-	-
Stage 2	555	550	-	256	348	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.1	6.5	6.2	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.5	4	3.3	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	277	296	737	304	282	605	1211	-	-	1099	-	-
Stage 1	706	663	-	524	520	-	-	-	-	-	-	-
Stage 2	514	514	-	753	638	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	243	281	737	276	268	604	1211	-	-	1098	-	-
Mov Cap-2 Maneuver	243	281	-	276	268	-	-	-	-	-	-	-
Stage 1	706	663	-	498	494	-	-	-	-	-	-	-
Stage 2	465	488	-	728	638	-	-	-	-	-	-	-

Approach	EB		WB		NB			SB		
HCM Control Delay, s/v	34.73		17.87		0.71			0		
HCM LOS	D		C							

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	158	-	-	266	308	1098	-	-
HCM Lane V/C Ratio	0.037	-	-	0.565	0.091	-	-	-
HCM Control Delay (s/veh)	8.1	0	-	34.7	17.9	0	-	-
HCM Lane LOS	A	A	-	D	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	3.2	0.3	0	-	-

HCM 7th TWSC  
3: S Anacortes St & E Rio Vista Ave

Burlington Intersection LOS  
Existing (2024) Weekday PM Peak Hour

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	1	10	15	5	40	10	220	30	55	220	2
Future Vol, veh/h	1	1	10	15	5	40	10	220	30	55	220	2
Conflicting Peds, #/hr	0	0	0	0	0	0	3	0	2	2	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	1	1	1
Mvmt Flow	1	1	11	17	6	45	11	250	34	63	250	2

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	655	688	254	667	672	269	255	0	0	286	0	0
Stage 1	379	379	-	292	292	-	-	-	-	-	-	-
Stage 2	276	309	-	376	380	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	382	372	789	375	380	774	1316	-	-	1282	-	-
Stage 1	647	618	-	721	675	-	-	-	-	-	-	-
Stage 2	735	663	-	650	617	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	330	345	787	343	353	773	1312	-	-	1279	-	-
Mov Cap-2 Maneuver	330	345	-	343	353	-	-	-	-	-	-	-
Stage 1	608	581	-	712	667	-	-	-	-	-	-	-
Stage 2	679	655	-	603	580	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s/v10.71			12.51		0.3		1.58	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	68	-	-	644	547	357	-	-
HCM Lane V/C Ratio	0.009	-	-	0.021	0.125	0.049	-	-
HCM Control Delay (s/veh)	7.8	0	-	10.7	12.5	8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.4	0.2	-	-

HCM 7th TWSC  
4: S Spruce St & Greenleaf Ave

Burlington Intersection LOS  
Existing (2024) Weekday PM Peak Hour

Intersection												
Int Delay, s/veh	4.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	3	1	125	1	25	4	250	220	30	135	0
Future Vol, veh/h	0	3	1	125	1	25	4	250	220	30	135	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	1	1	1	3	3	3	1	1	1
Mvmt Flow	0	3	1	142	1	28	5	284	250	34	153	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	515	765	153	641	640	409	153	0	0	534	0	0
Stage 1	222	222	-	418	418	-	-	-	-	-	-	-
Stage 2	294	543	-	223	222	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.11	6.51	6.21	4.13	-	-	4.11	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.509	4.009	3.309	2.227	-	-	2.209	-	-
Pot Cap-1 Maneuver	473	336	898	389	395	645	1421	-	-	1039	-	-
Stage 1	785	724	-	614	592	-	-	-	-	-	-	-
Stage 2	719	523	-	782	722	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	433	322	898	369	379	645	1421	-	-	1039	-	-
Mov Cap-2 Maneuver	433	322	-	369	379	-	-	-	-	-	-	-
Stage 1	757	698	-	611	589	-	-	-	-	-	-	-
Stage 2	683	520	-	749	696	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s/v	14.49		20.8		0.06		1.56	
HCM LOS	B		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	14	-	-	384	397	327	-	-
HCM Lane V/C Ratio	0.003	-	-	0.012	0.432	0.033	-	-
HCM Control Delay (s/veh)	7.5	0	-	14.5	20.8	8.6	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	2.1	0.1	-	-

HCM 7th TWSC  
5: E Whitmarsh Rd & Pease Rd/S Anacortes Rd

Burlington Intersection LOS  
Existing (2024) Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	5.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔		↔	↑	↔	↔
Traffic Vol, veh/h	335	15	160	215	15	195
Future Vol, veh/h	335	15	160	215	15	195
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	85	-	0	97
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	15	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	3	3	2	2	2	2
Mvmt Flow	376	17	180	242	17	219

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	394	0	987 386
Stage 1	-	-	-	-	386 -
Stage 2	-	-	-	-	601 -
Critical Hdwy	-	-	4.12	-	9.42 7.72
Critical Hdwy Stg 1	-	-	-	-	8.42 -
Critical Hdwy Stg 2	-	-	-	-	8.42 -
Follow-up Hdwy	-	-	2.218	-	3.518 3.318
Pot Cap-1 Maneuver	-	-	1164	-	121 564
Stage 1	-	-	-	-	498 -
Stage 2	-	-	-	-	332 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1163	-	102 563
Mov Cap-2 Maneuver	-	-	-	-	102 -
Stage 1	-	-	-	-	498 -
Stage 2	-	-	-	-	280 -

Approach	EB	WB	NB
HCM Control Delay, s/v	0	3.69	17.68
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	102	563	-	-	1163	-
HCM Lane V/C Ratio	0.166	0.389	-	-	0.155	-
HCM Control Delay (s/veh)	47.2	15.4	-	-	8.7	-
HCM Lane LOS	E	C	-	-	A	-
HCM 95th %tile Q(veh)	0.6	1.8	-	-	0.5	-

HCM 7th AWSC  
6: N Skagit St /S Skagit St & E Fairhaven Ave

Burlington Intersection LOS  
Existing (2024) Weekday PM Peak Hour

Intersection	
Intersection Delay, s/veh	10
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	225	30	20	145	5	30	10	75	20	10	15
Future Vol, veh/h	20	225	30	20	145	5	30	10	75	20	10	15
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	3	3	3	0	0	0	0	0	0
Mvmt Flow	24	268	36	24	173	6	36	12	89	24	12	18
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	10.9	9.7	9	8.7
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	26%	7%	12%	44%
Vol Thru, %	9%	82%	85%	22%
Vol Right, %	65%	11%	3%	33%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	115	275	170	45
LT Vol	30	20	20	20
Through Vol	10	225	145	10
RT Vol	75	30	5	15
Lane Flow Rate	137	327	202	54
Geometry Grp	1	1	1	1
Degree of Util (X)	0.185	0.418	0.27	0.077
Departure Headway (Hd)	4.856	4.594	4.803	5.207
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	734	779	743	681
Service Time	2.923	2.646	2.863	3.288
HCM Lane V/C Ratio	0.187	0.42	0.272	0.079
HCM Control Delay, s/veh	9	10.9	9.7	8.7
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	0.7	2.1	1.1	0.2

# HCM 7th Signalized Intersection Summary

## 7: S Burlington Blvd & Pease Rd/Fashion Way

Burlington Intersection LOS  
Existing (2024) Weekday PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	10	50	90	10	100	70	970	85	60	905	25
Future Volume (veh/h)	35	10	50	90	10	100	70	970	85	60	905	25
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	1900	1900	1900	1885	1885	1885	1900	1900	1900	1885	1885	1885
Adj Flow Rate, veh/h	37	11	0	95	11	105	74	1021	89	63	953	26
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	1	1	1	0	0	0	1	1	1
Cap, veh/h	48	80		116	151	128	449	2415	210	392	2552	70
Arrive On Green	0.03	0.04	0.00	0.06	0.08	0.08	0.02	0.72	0.72	0.02	0.72	0.72
Sat Flow, veh/h	1810	1900	1610	1795	1885	1598	1810	3359	293	1795	3561	97
Grp Volume(v), veh/h	37	11	0	95	11	105	74	548	562	63	479	500
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1795	1885	1598	1810	1805	1847	1795	1791	1867
Q Serve(g_s), s	3.0	0.8	0.0	7.8	0.8	9.6	1.6	18.3	18.3	1.4	15.4	15.4
Cycle Q Clear(g_c), s	3.0	0.8	0.0	7.8	0.8	9.6	1.6	18.3	18.3	1.4	15.4	15.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.16	1.00		0.05
Lane Grp Cap(c), veh/h	48	80		116	151	128	449	1298	1328	392	1284	1338
V/C Ratio(X)	0.77	0.14		0.82	0.07	0.82	0.16	0.42	0.42	0.16	0.37	0.37
Avail Cap(c_a), veh/h	176	358		175	356	301	522	1298	1328	468	1284	1338
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.1	68.8	0.0	68.8	63.4	67.5	6.2	8.5	8.5	6.5	8.2	8.2
Incr Delay (d2), s/veh	17.2	0.8	0.0	13.8	0.2	12.1	0.1	1.0	1.0	0.1	0.8	0.8
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	1.6	0.4	0.0	4.0	0.4	4.4	0.6	7.3	7.4	0.5	6.1	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	89.3	69.6	0.0	82.6	63.6	79.6	6.3	9.5	9.4	6.6	9.0	9.0
LnGrp LOS	F	E		F	E	E	A	A	A	A	A	A
Approach Vol, veh/h	48			211			1184			1042		
Approach Delay, s/veh	84.8			80.1			9.3			8.8		
Approach LOS	F			F			A			A		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.0	112.7	9.5	17.8	8.7	113.0	15.1	12.1				
Change Period (Y+Rc), s	5.5	5.9	5.5	5.9	5.5	5.9	5.5	5.9				
Max Green Setting (Gmax), s	9.5	74.1	14.5	28.1	9.5	74.1	14.5	28.1				
Max Q Clear Time (g_c+I), s	13.6	17.4	5.0	11.6	3.4	20.3	9.8	2.8				
Green Ext Time (p_c), s	0.0	12.5	0.0	0.3	0.0	15.3	0.1	0.0				

### Intersection Summary

HCM 7th Control Delay, s/veh	16.6
HCM 7th LOS	B

### Notes

- User approved pedestrian interval to be less than phase max green.
- Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

HCM 7th Signalized Intersection Summary

Burlington Intersection LOS

8: S Burlington Blvd /S Burlington Blvd & George Hopper Rd/E George Hopper Rd Friday PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑	↗	↖	↗		↖	↑↑		↖	↑↑	↗
Traffic Volume (veh/h)	320	215	195	100	175	20	215	770	50	15	810	210
Future Volume (veh/h)	320	215	195	100	175	20	215	770	50	15	810	210
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		0.99
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	1811	1811	1811	1856	1856	1856	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	327	219	199	102	179	20	219	786	51	15	827	214
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	6	6	6	3	3	3	1	1	1	1	1	1
Cap, veh/h	435	343	447	132	219	24	361	1519	99	302	1292	781
Arrive On Green	0.13	0.19	0.19	0.07	0.13	0.13	0.10	0.44	0.44	0.02	0.36	0.36
Sat Flow, veh/h	3346	1811	1532	1767	1639	183	1795	3414	221	1795	3582	1589
Grp Volume(v), veh/h	327	219	199	102	0	199	219	412	425	15	827	214
Grp Sat Flow(s),veh/h/ln	1673	1811	1532	1767	0	1822	1795	1791	1844	1795	1791	1589
Q Serve(g_s), s	7.9	9.3	8.8	4.7	0.0	8.8	6.2	13.8	13.8	0.4	16.0	6.6
Cycle Q Clear(g_c), s	7.9	9.3	8.8	4.7	0.0	8.8	6.2	13.8	13.8	0.4	16.0	6.6
Prop In Lane	1.00		1.00	1.00		0.10	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	435	343	447	132	0	244	361	797	820	302	1292	781
V/C Ratio(X)	0.75	0.64	0.45	0.78	0.00	0.82	0.61	0.52	0.52	0.05	0.64	0.27
Avail Cap(c_a), veh/h	984	343	447	308	0	308	491	1163	1197	475	2325	1239
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.9	31.1	24.1	37.9	0.0	35.1	16.3	16.7	16.7	13.3	22.1	12.5
Incr Delay (d2), s/veh	2.6	3.9	0.7	9.3	0.0	12.7	1.6	0.7	0.7	0.1	0.8	0.3
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	8.3	4.3	3.2	2.3	0.0	4.7	2.5	5.5	5.7	0.1	6.5	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.6	35.1	24.7	47.2	0.0	47.7	17.9	17.4	17.4	13.4	22.9	12.8
LnGrp LOS	D	D	C	D		D	B	B	B	B	C	B
Approach Vol, veh/h		745			301			1056			1056	
Approach Delay, s/veh		33.4			47.6			17.5			20.7	
Approach LOS		C			D			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	4.0	36.0	16.3	17.0	7.0	43.0	11.7	21.7				
Change Period (Y+Rc), s	5.5	5.9	5.5	5.9	5.5	5.9	5.5	5.9				
Max Green Setting (Gmax), s	14.5	54.1	24.5	14.1	9.5	54.1	14.5	14.1				
Max Q Clear Time (g_c+1), s	10.2	18.0	9.9	10.8	2.4	15.8	6.7	11.3				
Green Ext Time (p_c), s	0.3	11.6	1.0	0.3	0.0	9.3	0.1	0.6				

Intersection Summary												
HCM 7th Control Delay, s/veh				25.2								
HCM 7th LOS				C								

Notes  
User approved pedestrian interval to be less than phase max green.

HCM 7th Signalized Intersection Summary  
 9: N Burlington Blvd & Avon Ave

Burlington Intersection LOS  
 Existing (2024) Weekday PM Peak Hour



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙↘		↑	↗	↘	↙↘
Traffic Volume (veh/h)	350	165	460	575	235	320
Future Volume (veh/h)	350	165	460	575	235	320
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	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	
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	1856	1856	1885	1885	1856	1856
Adj Flow Rate, veh/h	269	275	479	0	245	333
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	1	1	3	3
Cap, veh/h	329	379	633		447	1970
Arrive On Green	0.19	0.24	0.34	0.00	0.12	0.56
Sat Flow, veh/h	1767	1572	1885	1598	1767	3618
Grp Volume(v), veh/h	269	275	479	0	245	333
Grp Sat Flow(s),veh/h/ln	1767	1572	1885	1598	1767	3618
Q Serve(g_s), s	8.0	8.8	12.4	0.0	4.5	2.5
Cycle Q Clear(g_c), s	8.0	8.8	12.4	0.0	4.5	2.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	329	379	633		447	1970
V/C Ratio(X)	0.82	0.73	0.76		0.55	0.17
Avail Cap(c_a), veh/h	853	845	1528		859	2216
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	21.4	19.2	16.2	0.0	10.7	5.9
Incr Delay (d2), s/veh	5.9	3.2	2.3	0.0	0.8	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	8.6	7.7	5.0	0.0	1.5	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	27.4	22.4	18.5	0.0	11.5	6.0
LnGrp LOS	C	C	B		B	A
Approach Vol, veh/h	544		479			578
Approach Delay, s/veh	24.8		18.5			8.3
Approach LOS	C		B			A
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		36.2		18.7	12.2	23.9
Change Period (Y+Rc), s		5.5		5.5	5.5	5.5
Max Green Setting (Gmax), s		34.5		29.5	19.5	44.5
Max Q Clear Time (g_c+I1), s		4.5		11.0	6.5	14.4
Green Ext Time (p_c), s		2.7		2.2	0.4	4.0

Intersection Summary

HCM 7th Control Delay, s/veh	17.0
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.  
 Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	785	5	35	515	2	2	0	80	1	0	2
Future Vol, veh/h	3	785	5	35	515	2	2	0	80	1	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	0	0	0
Mvmt Flow	3	835	5	37	548	2	2	0	85	1	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	550	0	0	840	0	0	1466	1469	838	1465	1470	549
Stage 1	-	-	-	-	-	-	844	844	-	623	623	-
Stage 2	-	-	-	-	-	-	622	624	-	841	847	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	1020	-	-	795	-	-	106	127	366	107	128	539
Stage 1	-	-	-	-	-	-	358	379	-	477	481	-
Stage 2	-	-	-	-	-	-	474	478	-	362	381	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1020	-	-	795	-	-	98	118	366	76	119	539
Mov Cap-2 Maneuver	-	-	-	-	-	-	98	118	-	76	119	-
Stage 1	-	-	-	-	-	-	356	377	-	445	449	-
Stage 2	-	-	-	-	-	-	440	445	-	276	379	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.03			0.62			19.03			25.53		
HCM LOS							C			D		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	343	7	-	-	114	-	-	179
HCM Lane V/C Ratio	0.254	0.003	-	-	0.047	-	-	0.018
HCM Control Delay (s/veh)	19	8.5	0	-	9.8	0	-	25.5
HCM Lane LOS	C	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	1	0	-	-	0.1	-	-	0.1

HCM 7th TWSC  
 11: N Cherry St /N Cherry St & Avon Ave

Burlington Intersection LOS  
 Existing (2024) Weekday PM Peak Hour

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	890	3	3	490	2	3	0	3	4	0	5
Future Vol, veh/h	5	890	3	3	490	2	3	0	3	4	0	5
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	3	3	3	0	0	0	0	0	0
Mvmt Flow	5	957	3	3	527	2	3	0	3	4	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	530	0	0	960	0	0	1503	1506	959	1503	1506	529
Stage 1	-	-	-	-	-	-	969	969	-	535	535	-
Stage 2	-	-	-	-	-	-	533	536	-	968	971	-
Critical Hdwy	4.11	-	-	4.13	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.209	-	-	2.227	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1042	-	-	713	-	-	101	122	315	101	122	554
Stage 1	-	-	-	-	-	-	307	334	-	533	527	-
Stage 2	-	-	-	-	-	-	534	526	-	308	334	-
Platoon blocked, %		-	-	-	-	-						
Mov Cap-1 Maneuver	1041	-	-	713	-	-	98	120	315	98	120	553
Mov Cap-2 Maneuver	-	-	-	-	-	-	98	120	-	98	120	-
Stage 1	-	-	-	-	-	-	304	331	-	529	523	-
Stage 2	-	-	-	-	-	-	525	523	-	301	330	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.05			0.06			30.11			26.05		
HCM LOS							D			D		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	150	10	-	-	11	-	-	181
HCM Lane V/C Ratio	0.043	0.005	-	-	0.005	-	-	0.054
HCM Control Delay (s/veh)	30.1	8.5	0	-	10.1	0	-	26.1
HCM Lane LOS	D	A	A	-	B	A	-	D
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.2

HCM 7th TWSC  
12: N Regent St & Cascade Hwy

Burlington Intersection LOS  
Existing (2024) Weekday PM Peak Hour

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕			↕			↕	
Traffic Vol, veh/h	2	1040	10	15	690	0	1	0	20	1	0	4
Future Vol, veh/h	2	1040	10	15	690	0	1	0	20	1	0	4
Conflicting Peds, #/hr	1	0	3	3	0	1	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	176	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	3	3	3	0	0	0	0	0	0
Mvmt Flow	2	1118	11	16	742	0	1	0	22	1	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	743	0	0	1132	0	0	1906	1906	1127	1898	1912	744
Stage 1	-	-	-	-	-	-	1131	1131	-	775	775	-
Stage 2	-	-	-	-	-	-	775	775	-	1123	1136	-
Critical Hdwy	4.12	-	-	4.13	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.227	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	864	-	-	613	-	-	53	69	251	53	69	418
Stage 1	-	-	-	-	-	-	250	281	-	394	411	-
Stage 2	-	-	-	-	-	-	394	411	-	252	279	-
Platoon blocked, %		-	-	-	-	-						
Mov Cap-1 Maneuver	864	-	-	612	-	-	50	67	251	47	66	417
Mov Cap-2 Maneuver	-	-	-	-	-	-	50	67	-	47	66	-
Stage 1	-	-	-	-	-	-	247	278	-	383	400	-
Stage 2	-	-	-	-	-	-	379	400	-	229	277	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.02			0.23			24.14			27.93		
HCM LOS							C			D		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	211	3	-	-	612	-	-	162
HCM Lane V/C Ratio	0.107	0.002	-	-	0.026	-	-	0.033
HCM Control Delay (s/veh)	24.1	9.2	0	-	11	-	-	27.9
HCM Lane LOS	C	A	A	-	B	-	-	D
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-	0.1

HCM 7th TWSC  
 13: N Skagit St /N Skagit St & Cascade Hwy

Burlington Intersection LOS  
 Existing (2024) Weekday PM Peak Hour

Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↗		↘	↗			↕			↗	↘
Traffic Vol, veh/h	45	1010	0	0	675	25	0	0	0	10	0	30
Future Vol, veh/h	45	1010	0	0	675	25	0	0	0	10	0	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	189	-	-	116	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	2	2	2	0	0	0	8	8	8
Mvmt Flow	48	1074	0	0	718	27	0	0	0	11	0	32

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	745	0	-	1074	0	0	1888	1915	1074	1902	1902	731
Stage 1	-	-	-	-	-	-	1170	1170	-	731	731	-
Stage 2	-	-	-	-	-	-	718	745	-	1170	1170	-
Critical Hdwy	4.11	-	-	4.12	-	-	7.1	6.5	6.2	7.18	6.58	6.28
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.18	5.58	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.18	5.58	-
Follow-up Hdwy	2.209	-	-	2.218	-	-	3.5	4	3.3	3.572	4.072	3.372
Pot Cap-1 Maneuver	868	-	0	649	-	-	54	68	270	51	67	412
Stage 1	-	-	0	-	-	-	237	269	-	404	418	-
Stage 2	-	-	0	-	-	-	423	424	-	229	260	-
Platoon blocked, %		-			-							
Mov Cap-1 Maneuver	868	-	-	649	-	-	47	65	270	48	63	412
Mov Cap-2 Maneuver	-	-	-	-	-	-	47	65	-	48	63	-
Stage 1	-	-	-	-	-	-	224	254	-	404	418	-
Stage 2	-	-	-	-	-	-	390	424	-	216	246	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.4	0	0	36.08
HCM LOS			A	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	868	-	649	-	-	48	412
HCM Lane V/C Ratio	-	0.055	-	-	-	-	0.223	0.078
HCM Control Delay (s/veh)	0	9.4	-	0	-	-	100.9	14.5
HCM Lane LOS		A	A	-	A	-	F	B
HCM 95th %tile Q(veh)	-	0.2	-	0	-	-	0.7	0.3

HCM 7th TWSC  
 14: N Section St/Peakcock Ln & Cascade Hwy

Burlington Intersection LOS  
 Existing (2024) Weekday PM Peak Hour

Intersection												
Int Delay, s/veh	4.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↗		↘	↗			↕			↗	↘
Traffic Vol, veh/h	25	975	20	50	675	5	5	4	115	1	1	20
Future Vol, veh/h	25	975	20	50	675	5	5	4	115	1	1	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	104	-	-	116	-	-	-	-	-	-	-	82
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	3	3	3	1	1	1	4	4	4
Mvmt Flow	27	1048	22	54	726	5	5	4	124	1	1	22

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	731	0	0	1070	0	0	1947	1952	1059	1940	1960	728
Stage 1	-	-	-	-	-	-	1113	1113	-	836	836	-
Stage 2	-	-	-	-	-	-	834	839	-	1104	1124	-
Critical Hdwy	4.11	-	-	4.13	-	-	7.11	6.51	6.21	7.14	6.54	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.14	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.14	5.54	-
Follow-up Hdwy	2.209	-	-	2.227	-	-	3.509	4.009	3.309	3.536	4.036	3.336
Pot Cap-1 Maneuver	878	-	-	648	-	-	49	65	274	49	63	420
Stage 1	-	-	-	-	-	-	254	285	-	359	380	-
Stage 2	-	-	-	-	-	-	364	383	-	254	278	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	878	-	-	648	-	-	41	57	274	22	56	420
Mov Cap-2 Maneuver	-	-	-	-	-	-	41	57	-	22	56	-
Stage 1	-	-	-	-	-	-	246	276	-	329	348	-
Stage 2	-	-	-	-	-	-	316	351	-	133	270	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.23			0.76			51.7			24.3		
HCM LOS							F			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	202	878	-	-	648	-	-	32	420
HCM Lane V/C Ratio	0.659	0.031	-	-	0.083	-	-	0.068	0.051
HCM Control Delay (s/veh)	51.7	9.2	-	-	11.1	-	-	126.9	14
HCM Lane LOS	F	A	-	-	B	-	-	F	B
HCM 95th %tile Q(veh)	4	0.1	-	-	0.3	-	-	0.2	0.2