

2021 Skagit County Road Segment & Intersection Concurrency



07/08/22

INTRODUCTION

In conformance with Growth Management, RCW 36.70A, Skagit County Code 14.28.110 "Annual Concurrency Assessment" requires that the County Engineer annually produce this report to update the status of County Road concurrency. The following is produced to meet said requirement.

REQUIREMENTS

The concurrency assessment requires that *"The County Engineer must evaluate the high traffic County road segments (any County road segment on which there are at least 8,000 average daily trips) and high traffic County road intersections (any County road intersection into which the total approach volume is at least 7,000 average daily trips and the approach volume from all of the minor legs totals at least 1,000 average daily trips) using a Highway Capacity Manual type method (as selected by the County Engineer) to determine whether these road segments and intersections comply with the level of service standards adopted in the Comprehensive Plan."* The Levels of Service (LOS) are described as follows in Skagit County's Comprehensive Plan.

Policy 8A-2.1 Level of Service Standards – The Level of Service (LOS) standard for County roads is C. LOS D is acceptable for all road segments that:

- a) *Have Annualized Average Daily Traffic (AADT) greater than 7,000 vehicles;*
and
- b) *Are NOT federally functionally classified as a Local Access Road; and*
- c) *Are designated as a County Freight and Goods Transportation Systems Route (FGTS).*

The LOS standard for County Road intersections is LOS D.

LEVEL OF SERVICE DATA

Road Segments

The methodology used to acquire the LOS of County Road segments is outlined in Appendix C (Transportation Element Technical Appendix) of the Skagit County Comprehensive Plan.

"The Skagit County Public Works Traffic Engineering Unit has selected an LOS study volume unit threshold of 7,000 AADT. This threshold is an indicator that a road segment may be approaching the LOS C/D threshold and should be studied in depth."

Table 1 shows the current County roads that meet the criteria for further study and the current LOS as determined using the Transportation Research Board's Highway Capacity Manual and Highway Capacity Software developed for this use by the University of Florida. Also shown is the projected 5-year LOS. This projected LOS was determined using a 2 percent yearly growth factor for each road segment. Projects along these roadways that are scheduled to be completed within this 5-year period were not significant enough to include as separate items. As one can see from Table 1, all the criteria for LOS concurrency have been met.

Table 1 – Road Segments

Skagit County Roads with Over 7,000 ADT														
Road #	Road Name	FFC	Truck Rt	Beg MP	End MP	Length	2021 ADT	2022 ADT	2023 ADT	2024 ADT	2025 ADT	2026 ADT	2021 LOS	2026 LOS
63000	COOK ROAD	07	T2	1.750	1.800	0.050	19985	20385	20792	21208	21632	22065	These two segments are in WSDOT ROW	
63000	COOK ROAD	07	T2	1.800	1.860	0.060	19985	20385	20792	21208	21632	22065		
63000	COOK ROAD	07	T2	1.860	1.970	0.110	13817	14093	14375	14663	14956	15255	D	D
63000	COOK ROAD	07	T2	1.970	3.080	1.110	13817	14093	14375	14663	14956	15255		
63000	COOK ROAD	07	T2	3.080	3.360	0.280	13817	14093	14375	14663	14956	15255		
63000	COOK ROAD	07	T2	3.360	3.820	0.460	12585	12837	13093	13355	13622	13895		
63000	COOK ROAD	07	T2	3.820	4.100	0.280	12585	12837	13093	13355	13622	13895	D	D
63000	COOK ROAD	07	T2	4.100	4.320	0.220	12585	12837	13093	13355	13622	13895		
63000	COOK ROAD	07	T2	4.320	4.600	0.280	12585	12837	13093	13355	13622	13895		
63000	COOK ROAD	07	T2	4.600	5.000	0.400	12259	12504	12754	13009	13270	13535		
63000	COOK ROAD	07	T2	5.000	5.260	0.260	12259	12504	12754	13009	13270	13535		
63000	COOK ROAD	07	T2	5.260	5.320	0.060	12259	12504	12754	13009	13270	13535	D	D
63000	COOK ROAD	07	T2	5.320	5.390	0.070	12259	12504	12754	13009	13270	13535		
63000	COOK ROAD	16	T2	5.390	5.510	0.120	12259	12504	12754	13009	13270	13535		
63000	COOK ROAD	16	T2	5.510	5.620	0.110	12259	12504	12754	13009	13270	13535		
71500	SOUTH LAVENTURE	14	Non	0.000	0.063	0.063	7722	7876	8034	8195	8359	8526	C	C
71500	SOUTH LAVENTURE	14	Non	0.063	0.274	0.211	7722	7876	8034	8195	8359	8526		
71500	SOUTH LAVENTURE	14	Non	0.545	0.553	0.008	8319	8485	8655	8828	9005	9185		
71500	SOUTH LAVENTURE	14	Non	0.553	0.701	0.148	8319	8485	8655	8828	9005	9185		
71500	SOUTH LAVENTURE	14	Non	0.701	0.715	0.014	8319	8485	8655	8828	9005	9185	C	C
71500	SOUTH LAVENTURE	14	Non	0.715	0.730	0.015	8319	8485	8655	8828	9005	9185		
71500	SOUTH LAVENTURE	14	Non	0.730	0.773	0.043	8319	8485	8655	8828	9005	9185		
80090	PIONEER HIGHWAY	07	T3	0.000	0.883	0.883	9222	9406	9595	9786	9982	10182	C	C
80090	PIONEER HIGHWAY	07	T3	0.883	1.418	0.535	9503	9693	9887	10085	10286	10492	C	C
80090	PIONEER HIGHWAY	07	T3	1.418	1.748	0.330	9503	9693	9887	10085	10286	10492		
80090	PIONEER HIGHWAY	07	T3	1.748	3.065	1.317	9499	9689	9883	10080	10282	10488	C	C
80090	PIONEER HIGHWAY	07	T3	3.065	3.089	0.024	13360	13627	13900	14178	14461	14751	D	D

Due to the COVID-19 Pandemic that significantly reduced travel and road usage in 2020, Skagit County decided to not use 2020 traffic studies and counts and their lowered volumes to determine concurrency for the 2020 Annual Concurrency Report. Counts from 2019 were used. However, traffic volumes increased in 2021 close to pre-pandemic levels. As such, Skagit County once again used current year (2021) counts for the 2021 Annual Concurrency Report.

Road Intersections

As with Road Segment LOS, Intersection LOS methodology is outlined in the Transportation Element Technical Appendix (TETA) Appendix C of the Comprehensive Plan. Intersection LOS, according to the Highway Capacity Manual, cannot be determined at stop-controlled intersections. The individual stop-controlled leg LOS can be determined, but the overall intersection LOS cannot be determined. With regard to stop-controlled intersections, the TETA states that:

“Intersection LOS will be calculated using Traffic Signal Warrants in conjunction with LOS methods. The analysis will use real time data, which focuses on turn movements and volumes of the entire intersection. This type of analysis can be made on any intersection in the County Road System.”

Table 2 shows the intersection on which Skagit County is collecting LOS data on a regular basis. In recent years, other intersections have fallen off this list due to intersection improvement projects, namely roundabouts. These include the intersections at Best and McLean Roads in 2008 and Pioneer Hwy at Fir Island Road in 2014.

Table 2 – Intersections – PM Peak

Intersection Name	Intersection Type	NB Approach LOS	SB Approach LOS	EB Approach LOS	WB Approach LOS	Overall LOS
2020						
❖ Cook Road / Old Hwy 99 N	Signalized	B	B	B	A	B
2025						
❖ Cook Road / Old Hwy 99 N	Signalized	B	B	B	B	B

The full Highway Capacity Reports on the intersection of Cook Road and Old Hwy 99 N for the current year and 5-year estimate are included in this Assessment as Appendix A and Appendix B respectively. This 5-year projected LOS was determined using a 2 percent yearly growth factor for each approach volume. This is by far the busiest intersection under Skagit County jurisdiction.

The turn movement study used for this assessment was conducted in June of 2020. As such, the traffic volumes may be affected by the COVID-19 Pandemic. Turn movement studies in subsequent years may give a better long-term picture of LOS as traffic levels have decreased during the Pandemic.

❖ INTERSECTION NOTE:

Please note that this intersection was studied during the Peak PM hour for the Highway Capacity report as per industry standards and Concurrency requirements. We would also like to note that during the Peak AM hour the LOS from the Westbound (WB) and Eastbound (EB) approaches differ due to the prevailing traffic patterns for work-bound and home-bound trips.

As indicated above per Highway Capacity Manual / Software the PM Peak Hour currently meets LOS Standards. This is mostly due to traffic flows being regulated and limited by the I-5 Northbound Off Ramp restricting flows on the west approach and by train traffic on the east through lane, as there are two to three peak hour trains that travel through the at-grade rail crossing limiting eastbound through traffic. Secondly, the AM Peak Hour is also regulated by train activity, that directly affect LOS during the morning commute – though no AM Peak LOS has been measured.

Based on the traffic flows being regulated from both the west and east approaches the LOS of this intersection would be near or at LOS F, when considering the circumstances on the approaches. However, our current traffic modeling tools cannot take train activity into account.

Skagit County has recently secured a \$5.6 million grant to improve the Cook Road / Interstate 5 interchange and the adjacent Cook Road / Old Hwy 99 N intersection. This project will be undertaken with Washington State Department of Transportation cooperation in the next few years and should significantly improve mobility and LOS at this location.

SUMMARY






















As of December 31, 2021, all Skagit County Road segments and signalized intersections meet the current LOS standards as adopted in the Comprehensive Plan of Skagit County. Therefore, all Skagit County Road segments and intersections are concurrent.

Skagit County Public Works has used the Highway Capacity Manual, Sixth Edition of 2016 and its associated software to determine all Level of Service calculations in this report.

HCM 6th Signalized Intersection Summary

3:

06/15/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	526	60	57	395	47	94	156	168	44	68	102
Future Volume (veh/h)	98	526	60	57	395	47	94	156	168	44	68	102
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
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	107	572	65	62	429	51	102	170	183	48	74	111
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	440	795	90	331	791	94	486	243	262	282	552	468
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	915	1649	187	791	1640	195	1199	824	887	1028	1870	1585
Grp Volume(v), veh/h	107	0	637	62	0	480	102	0	353	48	74	111
Grp Sat Flow(s),veh/h/ln	915	0	1837	791	0	1835	1199	0	1711	1028	1870	1585
Q Serve(g_s), s	4.0	0.0	11.8	2.9	0.0	7.9	2.9	0.0	7.9	1.9	1.2	2.3
Cycle Q Clear(g_c), s	11.9	0.0	11.8	14.7	0.0	7.9	4.2	0.0	7.9	9.8	1.2	2.3
Prop In Lane	1.00		0.10	1.00		0.11	1.00		0.52	1.00		1.00
Lane Grp Cap(c), veh/h	440	0	885	331	0	884	486	0	505	282	552	468
V/C Ratio(X)	0.24	0.00	0.72	0.19	0.00	0.54	0.21	0.00	0.70	0.17	0.13	0.24
Avail Cap(c_a), veh/h	1156	0	2322	961	0	2345	871	0	1053	825	1538	1304
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	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.0	0.0	8.8	14.7	0.0	7.8	12.7	0.0	13.5	17.8	11.1	11.5
Incr Delay (d2), s/veh	0.3	0.0	1.1	0.3	0.0	0.5	0.2	0.0	1.8	0.3	0.1	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	0.7	0.0	3.5	0.5	0.0	2.3	0.7	0.0	2.7	0.4	0.4	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.3	0.0	10.0	15.0	0.0	8.3	12.9	0.0	15.2	18.1	11.2	11.8
LnGrp LOS	B	A	A	B	A	A	B	A	B	B	B	B
Approach Vol, veh/h		744			542			455			233	
Approach Delay, s/veh		10.3			9.1			14.7			12.9	
Approach LOS		B			A			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		17.3		25.7		17.3		25.7				
Change Period (Y+Rc), s		* 4.6		* 5		4.6		5.0				
Max Green Setting (Gmax), s		* 27		* 54		35.4		55.0				
Max Q Clear Time (g_c+I1), s		9.9		13.9		11.8		16.7				
Green Ext Time (p_c), s		2.4		5.9		0.9		4.0				

Intersection Summary

HCM 6th Ctrl Delay	11.3
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCS7 Two-Lane Highway Report

Project Information

Analyst	Given Kutz	Date	6/15/2020
Agency	Public Works	Analysis Year	2019
Jurisdiction	Skagit County	Time Period Analyzed	2019
Project Description	Annual Concurrency Assessment	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	7920
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	50	Access Point Density, pts/mi	16.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	917	Opposing Demand Flow Rate, veh/h	664
Peak Hour Factor	0.94	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.54

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	52.8
Speed Slope Coefficient	3.31248	Speed Power Coefficient	0.46317
PF Slope Coefficient	-1.30426	PF Power Coefficient	0.75657
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	13.0
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5280	-	-	49.8
2	Tangent	2640	-	-	49.8






















Vehicle Results

Average Speed, mi/h	49.8	Percent Followers, %	70.5
Segment Travel Time, minutes	1.81	Followers Density, followers/mi/ln	13.0
Vehicle LOS	D		

HCM 6th Signalized Intersection Summary

3:

06/15/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	581	66	63	436	52	104	172	185	49	75	113
Future Volume (veh/h)	108	581	66	63	436	52	104	172	185	49	75	113
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
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	117	632	72	68	474	57	113	187	201	53	82	123
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	406	839	96	287	833	100	463	255	274	243	579	491
Arrive On Green	0.51	0.51	0.51	0.51	0.51	0.51	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	873	1649	188	743	1638	197	1177	825	886	996	1870	1585
Grp Volume(v), veh/h	117	0	704	68	0	531	113	0	388	53	82	123
Grp Sat Flow(s),veh/h/ln	873	0	1837	743	0	1835	1177	0	1711	996	1870	1585
Q Serve(g_s), s	5.7	0.0	16.1	4.2	0.0	10.6	4.1	0.0	10.7	2.7	1.7	3.1
Cycle Q Clear(g_c), s	16.2	0.0	16.1	20.4	0.0	10.6	5.7	0.0	10.7	13.4	1.7	3.1
Prop In Lane	1.00		0.10	1.00		0.11	1.00		0.52	1.00		1.00
Lane Grp Cap(c), veh/h	406	0	934	287	0	934	463	0	530	243	579	491
V/C Ratio(X)	0.29	0.00	0.75	0.24	0.00	0.57	0.24	0.00	0.73	0.22	0.14	0.25
Avail Cap(c_a), veh/h	859	0	1889	682	0	1908	689	0	857	601	1252	1061
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	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.6	0.0	10.3	18.5	0.0	9.0	15.2	0.0	16.3	22.3	13.2	13.7
Incr Delay (d2), s/veh	0.4	0.0	1.3	0.4	0.0	0.5	0.3	0.0	2.0	0.4	0.1	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	1.0	0.0	5.3	0.7	0.0	3.4	1.0	0.0	3.9	0.6	0.6	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.0	0.0	11.6	18.9	0.0	9.5	15.5	0.0	18.3	22.7	13.3	13.9
LnGrp LOS	B	A	B	B	A	A	B	A	B	C	B	B
Approach Vol, veh/h		821			599			501			258	
Approach Delay, s/veh		12.1			10.6			17.7			15.5	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		21.0		31.9		21.0		31.9				
Change Period (Y+Rc), s		* 4.6		* 5		4.6		5.0				
Max Green Setting (Gmax), s		* 27		* 54		35.4		55.0				
Max Q Clear Time (g_c+I1), s		12.7		18.2		15.4		22.4				
Green Ext Time (p_c), s		2.5		6.8		1.0		4.5				

Intersection Summary

HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCS7 Two-Lane Highway Report

Project Information

Analyst	Given Kutz	Date	6/15/2020
Agency	Public Works	Analysis Year	2019
Jurisdiction	Skagit County	Time Period Analyzed	2019
Project Description	Annual Concurrency Assessment	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	7920
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	50	Access Point Density, pts/mi	16.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	1013	Opposing Demand Flow Rate, veh/h	733
Peak Hour Factor	0.94	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.60

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	52.8
Speed Slope Coefficient	3.32605	Speed Power Coefficient	0.45664
PF Slope Coefficient	-1.31036	PF Power Coefficient	0.75407
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	15.0
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5280	-	-	49.6
2	Tangent	2640	-	-	49.6

Vehicle Results

Average Speed, mi/h	49.6	Percent Followers, %	73.4
Segment Travel Time, minutes	1.81	Followers Density, followers/mi/ln	15.0
Vehicle LOS	D		

* Wednesday, September 23, 2020

Time	Total	Total	Total	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls
<--	AB	BA		1	2	3	4	5	6	7	8	9	10	11	12	13
0000	66	39	105	4	66	12	3	5	6	5	0	2	2	0	0	0
0100	45	52	97	1	67	14	3	5	2	4	0	0	0	0	0	1
0200	47	67	114	4	65	19	3	7	9	1	0	3	3	0	0	0
0300	47	92	139	4	77	22	0	12	13	3	0	4	0	0	0	4
0400	120	258	378	5	241	74	2	29	10	6	1	2	3	0	0	5
0500	202	519	721	12	442	148	8	85	11	4	0	3	4	0	0	4
0600	289	630	919	14	600	162	9	87	18	8	0	10	5	0	0	6
0700	524	733	1257	14	923	184	16	58	28	9	1	8	6	0	0	10
0800	448	561	1009	19	697	173	10	55	23	12	0	6	7	0	0	7
0900	408	560	968	18	655	156	12	62	26	19	0	5	7	0	0	8
1000	387	518	905	24	602	139	15	59	36	7	0	6	6	0	0	11
1100	408	531	939	20	647	156	10	54	25	12	0	5	4	0	0	6
1200	454	557	1011	19	688	180	7	71	17	11	0	8	3	0	0	7
1300	472	551	1023	17	714	172	18	52	23	12	0	4	5	0	0	6
1400	473	537	1010	13	752	165	9	38	11	6	0	6	2	0	0	8
1500	603	527	1130	9	858	163	6	47	18	13	0	0	9	0	0	7
1600	626	641	1267	11	969	204	8	49	11	7	0	3	2	0	0	3
1700	705	541	1246	15	988	181	8	34	5	11	1	2	0	0	0	1
1800	488	380	868	1	701	118	0	27	7	5	0	4	1	0	0	4
1900	332	237	569	5	430	87	2	27	5	5	1	4	1	0	0	2
2000	215	203	418	9	314	63	0	17	9	4	0	1	1	0	0	0
2100	168	136	304	4	220	42	1	12	13	4	0	7	1	0	0	0
2200	124	83	207	5	157	20	1	6	12	3	0	1	1	0	0	1
2300	76	63	139	2	106	17	0	5	3	1	1	3	1	0	0	0
00-00	7727	9016	16743	249	11979	2671	151	903	341	172	5	97	74	0	0	101

Peak step 16:00 (1267) AM Peak step 7:00 (1257) PM Peak step 16:00 (1267)

Vehicles = 16743

Posted speed limit = 35 mph, Exceeding = 233 (1.392%), Mean Exceeding = 37.01 mph

Maximum = 46.4 mph, Minimum = 6.3 mph, Mean = 22.5 mph

85% Speed = 28.74 mph, 95% Speed = 31.99 mph, Median = 22.93 mph

10 mph Pace = 19 - 29, Number in Pace = 9452 (56.45%)

Variance = 36.17, Standard Deviation = 6.01 mph

* Thursday, September 24, 2020

Time	Total	Total	Total	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls
<--	AB	BA		1	2	3	4	5	6	7	8	9	10	11	12	13
0000	60	58	118	2	80	19	0	6	5	2	0	3	1	0	0	0
0100	40	44	84	1	60	10	1	2	0	2	0	3	2	0	0	3
0200	60	73	133	6	73	13	5	9	12	5	1	3	3	0	0	3
0300	46	100	146	5	85	25	0	7	14	0	0	5	3	0	0	2
0400	100	257	357	3	222	73	4	38	11	2	0	3	0	0	0	1
0500	186	490	676	5	434	149	8	53	15	3	0	6	2	0	0	1
0600	329	674	1003	12	687	171	9	82	18	8	0	8	3	0	0	5
0700	491	668	1159	8	893	149	5	46	28	12	1	4	4	0	0	9
0800	448	609	1057	15	754	153	17	51	30	10	2	12	1	0	0	12
0900	392	535	927	9	603	182	11	61	30	11	0	3	11	0	0	6
1000	410	483	893	14	607	156	7	55	24	7	0	6	7	0	0	10
1100	458	531	989	13	718	139	14	54	20	10	0	6	7	0	0	8
1200	506	564	1070	26	775	147	9	42	27	13	1	2	11	0	0	17
1300	449	527	976	18	666	162	14	63	22	10	0	2	9	0	0	10
1400	556	564	1120	14	840	156	14	50	13	20	1	3	5	0	0	4
1500	626	562	1188	13	952	152	6	39	13	3	0	1	2	0	0	7
1600	697	636	1333	11	1064	181	7	44	8	11	0	3	3	0	0	1
1700	697	506	1203	11	955	164	3	41	10	12	1	2	2	0	0	2
1800	469	429	898	8	694	133	2	41	8	6	1	3	0	0	0	2
1900	347	277	624	4	474	97	3	21	9	6	0	1	7	0	0	2
2000	257	197	454	6	352	67	3	18	2	4	0	1	1	0	0	0
2100	201	157	358	6	278	47	2	10	7	4	0	3	1	0	0	0
2200	138	109	247	5	181	40	3	3	7	3	1	3	0	0	0	1
2300	88	69	157	2	123	17	0	4	5	1	0	3	0	0	0	2
00-00	8051	9119	17170	217	12570	2602	147	840	338	165	9	89	85	0	0	108

Peak step 16:00 (1333) AM Peak step 7:00 (1159) PM Peak step 16:00 (1333)

Vehicles = 17170

Posted speed limit = 35 mph, Exceeding = 272 (1.584%), Mean Exceeding = 39.02 mph

Maximum = 82.0 mph, Minimum = 6.3 mph, Mean = 22.7 mph

85% Speed = 28.86 mph, 95% Speed = 32.21 mph, Median = 23.04 mph

10 mph Pace = 19 - 29, Number in Pace = 9784 (56.98%)

Variance = 37.66, Standard Deviation = 6.14 mph

MetroCount Traffic Executive SCOG Report

CustomList-466 -- English (ENU)

Datasets:

Site: [630000181] Cook Rd W of Old 99 North <35 mph>
Attribute: County
Direction: 8 - East bound A>B, West bound B>A. Lane: 0
Survey Duration: 0:00 Wednesday, September 23, 2020 => 20:20 Monday, September 28, 2020,
Zone:
File: 630000181 0 2020-10-05 0750.EC0 (Plus)
Identifier: Q2572EBD MC56-L4 [MC55] (c)Microcom 19Sep03
Algorithm: Factory default axle (v5.06)
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 0:00 Wednesday, September 23, 2020 => 0:00 Monday, September 28, 2020 (5)
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Speed range: 6 - 99 mph.
Direction: North, East, South, West (bound), P = East, Lane = 0-16
Separation: Headway > 0 sec, Span 0 - 328.084 ft
Name: Default Profile
Scheme: Vehicle classification (Scheme F3)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

Column Legend:

0 [Time]	24-hour time (0000 - 2359)
1 [Total]	Number in time step (AB)
2 [Total]	Number in time step (BA)
3 [Total]	Number in time step
4 [Cls]	Class totals

* Sunday, September 27, 2020

Time	Total	Total	Total	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls
<--	AB	BA		1	2	3	4	5	6	7	8	9	10	11	12	13
0000	79	56	135	2	102	20	0	4	5	1	0	1	0	0	0	0
0100	60	39	99	2	75	15	1	5	0	1	0	0	0	0	0	0
0200	42	31	73	0	55	10	0	3	3	1	0	1	0	0	0	0
0300	29	34	63	1	48	9	1	1	1	2	0	0	0	0	0	0
0400	40	43	83	0	59	17	1	4	0	1	0	1	0	0	0	0
0500	79	86	165	1	113	37	0	7	2	3	0	2	0	0	0	0
0600	133	145	278	4	211	42	0	11	3	2	1	1	1	0	0	2
0700	225	193	418	4	319	73	1	11	5	4	0	0	1	0	0	0
0800	290	296	586	8	426	103	4	36	3	5	0	0	1	0	0	0
0900	360	439	799	13	592	129	0	49	7	4	0	2	0	0	0	3
1000	454	472	926	17	698	136	3	47	7	15	0	1	1	0	0	1
1100	459	555	1014	16	779	164	5	38	2	4	0	4	0	0	0	2
1200	565	590	1155	18	880	180	10	43	9	11	0	3	1	0	0	0
1300	433	559	992	28	759	146	2	41	5	7	0	0	2	0	0	2
1400	440	573	1013	30	755	154	3	43	4	15	0	0	6	0	0	3
1500	419	550	969	22	749	141	5	35	6	9	0	1	1	0	0	0
1600	395	516	911	26	686	144	1	36	3	10	0	1	2	0	0	2
1700	421	571	992	12	760	154	2	45	5	11	0	0	2	0	0	1
1800	389	503	892	19	677	139	4	29	7	12	0	3	2	0	0	0
1900	352	417	769	15	607	104	2	27	7	2	0	1	3	0	0	1
2000	225	274	499	4	385	72	1	26	4	5	0	1	0	0	0	1
2100	173	183	356	4	286	44	1	13	2	1	0	1	2	0	0	2
2200	106	104	210	0	160	33	0	10	2	1	0	1	0	0	0	3
2300	81	78	159	3	124	17	0	4	6	2	0	2	0	0	0	1
00-00	6249	7307	13556	249	10305	2083	47	568	98	129	1	27	25	0	0	24

Peak step 12:00 (1155) AM Peak step 11:00 (1014) PM Peak step 12:00 (1155)

Vehicles = 13556

Posted speed limit = 35 mph, Exceeding = 381 (2.811%), Mean Exceeding = 37.52 mph

Maximum = 68.5 mph, Minimum = 6.3 mph, Mean = 24.1 mph

85% Speed = 30.31 mph, 95% Speed = 33.67 mph, Median = 24.49 mph

10 mph Pace = 20 - 30, Number in Pace = 7885 (58.17%)

Variance = 37.00, Standard Deviation = 6.08 mph

* Virtual Day (5)

Time	Total	Total	Total	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls
<--	AB	BA		1	2	3	4	5	6	7	8	9	10	11	12	13
0000	65	51	116	2	83	17	1	4	4	2	0	2	1	0	0	0
0100	48	48	96	2	67	12	2	5	2	2	0	1	1	0	0	2
0200	54	53	108	4	66	13	3	5	8	2	0	2	2	0	0	1
0300	40	74	114	3	70	17	1	7	9	1	0	3	1	0	0	2
0400	82	168	250	2	162	49	2	21	6	3	0	2	1	0	0	2
0500	148	328	476	6	307	98	4	41	10	3	0	3	2	0	0	1
0600	229	452	681	9	466	115	5	54	12	6	0	6	3	0	0	5
0700	385	510	895	8	671	133	7	36	16	8	0	5	4	0	0	5
0800	376	489	865	11	607	149	9	51	17	8	1	5	3	0	0	6
0900	391	531	922	14	637	156	9	55	23	11	0	6	5	0	0	5
1000	433	504	937	17	664	154	8	52	19	9	0	4	3	0	0	6
1100	469	554	1023	17	750	161	9	50	16	7	0	5	3	0	0	5
1200	521	558	1079	17	795	174	9	44	14	10	0	4	4	0	0	6
1300	489	552	1042	17	756	170	10	54	15	9	0	2	3	0	0	5
1400	525	556	1081	18	811	163	7	47	10	13	0	4	4	0	0	4
1500	556	569	1125	12	877	156	7	47	10	8	0	1	3	0	0	4
1600	577	588	1165	14	915	167	4	46	6	9	0	2	2	0	0	1
1700	584	532	1117	10	881	158	4	42	8	9	0	1	1	0	0	2
1800	464	418	882	9	688	128	2	33	8	9	0	3	1	0	0	1
1900	352	312	665	7	510	98	2	29	6	6	0	2	2	0	0	1
2000	255	234	489	6	377	71	1	23	5	4	0	1	0	0	0	1
2100	194	165	359	4	280	47	1	14	5	4	0	3	1	0	0	0
2200	135	113	248	4	189	33	1	9	6	2	0	2	0	0	0	1
2300	97	81	178	3	136	24	0	5	5	3	0	3	0	0	0	1
00-00	7471	8440	15911	217	11764	2464	109	773	241	150	4	70	51	0	0	67

Vehicles = 79554

Posted speed limit = 35 mph, Exceeding = 1478 (1.858%), Mean Exceeding = 37.75 mph

Maximum = 82.0 mph, Minimum = 6.2 mph, Mean = 23.1 mph

85% Speed = 29.30 mph, 95% Speed = 32.55 mph, Median = 23.49 mph

10 mph Pace = 20 - 30, Number in Pace = 45434 (57.11%)

Variance = 37.08, Standard Deviation = 6.09 mph

In profile: Vehicles = 79554 / 98254 (80.97%)

* Friday, September 25, 2020

Time	Total	Total	Total	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls
<--	AB	BA		1	2	3	4	5	6	7	8	9	10	11	12	13
0000	54	38	92	1	71	11	1	2	2	0	0	3	1	0	0	0
0100	39	70	109	3	68	14	3	5	4	2	0	4	2	0	0	4
0200	62	52	114	8	66	11	3	7	13	3	0	1	2	0	0	0
0300	43	100	143	5	82	20	2	8	11	2	0	6	2	0	0	5
0400	90	204	294	3	196	58	3	23	6	1	0	1	1	0	0	2
0500	176	407	583	7	384	108	6	46	19	6	0	4	2	0	0	1
0600	271	595	866	10	600	134	8	69	14	7	1	5	6	0	0	12
0700	479	672	1151	12	876	167	4	39	18	10	0	10	10	0	0	5
0800	428	577	1005	9	716	166	12	60	23	5	0	4	4	0	0	6
0900	433	584	1017	23	680	160	16	56	42	13	1	12	6	0	0	8
1000	441	500	941	22	668	159	11	46	18	7	0	5	0	0	0	5
1100	486	569	1055	24	753	175	12	53	23	3	0	5	2	0	0	5
1200	543	534	1077	12	806	176	15	31	14	11	0	3	2	0	0	7
1300	531	548	1079	15	764	190	8	64	16	10	0	4	1	0	0	7
1400	594	594	1188	21	880	182	5	66	11	6	0	10	4	0	0	3
1500	675	668	1343	13	1063	168	13	64	8	8	0	1	1	0	0	4
1600	665	638	1303	12	1050	166	3	53	4	11	0	0	4	0	0	0
1700	644	578	1222	10	984	154	3	43	14	8	0	1	2	0	0	3
1800	560	403	963	8	756	137	1	37	11	10	0	1	1	0	0	1
1900	427	316	743	9	581	103	3	32	5	8	0	2	0	0	0	0
2000	309	249	558	5	433	81	2	28	3	5	0	1	0	0	0	0
2100	234	173	407	4	331	45	3	11	5	7	0	1	0	0	0	0
2200	157	118	275	5	216	30	1	9	7	1	1	3	1	0	0	1
2300	118	84	202	3	151	24	1	7	4	7	0	4	1	0	0	0
00-00	8459	9271	17730	244	13175	2639	139	859	295	151	3	91	55	0	0	79

Peak step 15:00 (1343) AM Peak step 7:00 (1151) PM Peak step 15:00 (1343)

Vehicles = 17730

Posted speed limit = 35 mph, Exceeding = 238 (1.342%), Mean Exceeding = 37.22 mph

Maximum = 45.4 mph, Minimum = 6.2 mph, Mean = 22.8 mph

85% Speed = 28.97 mph, 95% Speed = 32.10 mph, Median = 23.26 mph

10 mph Pace = 19 - 29, Number in Pace = 10087 (56.89%)

Variance = 35.99, Standard Deviation = 6.00 mph

* Saturday, September 26, 2020

Time	Total	Total	Total	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls
<--	AB	BA		1	2	3	4	5	6	7	8	9	10	11	12	13
0000	65	64	129	3	95	23	1	2	3	0	0	1	1	0	0	0
0100	58	33	91	1	67	9	2	6	3	2	0	0	1	0	0	0
0200	60	44	104	4	71	14	2	1	5	1	0	1	2	0	0	3
0300	34	46	80	2	58	10	1	5	4	0	0	0	0	0	0	0
0400	59	80	139	1	92	25	2	9	3	3	0	3	1	0	0	0
0500	95	138	233	3	163	46	0	15	2	1	0	2	0	0	0	1
0600	122	218	340	5	231	64	0	23	8	5	0	4	0	0	0	0
0700	208	282	490	3	344	94	7	28	2	6	0	5	1	0	0	0
0800	266	400	666	3	441	148	1	51	4	7	1	4	2	0	0	4
0900	364	537	901	7	657	154	6	48	12	6	0	8	1	0	0	2
1000	473	545	1018	8	745	182	5	51	12	9	1	1	2	0	0	2
1100	535	582	1117	14	852	170	6	53	8	8	0	3	1	0	0	2
1200	535	545	1080	12	826	189	5	33	5	5	1	2	1	0	0	1
1300	562	576	1138	7	878	179	7	50	8	7	0	1	0	0	0	1
1400	561	511	1072	10	826	157	6	40	11	17	0	2	1	0	0	2
1500	457	536	993	1	763	156	5	50	7	8	0	2	1	0	0	0
1600	501	511	1012	8	804	142	2	46	4	4	0	1	0	0	0	1
1700	455	465	920	4	716	138	2	48	6	5	0	0	0	0	0	1
1800	415	374	789	10	614	112	1	29	8	13	0	2	0	0	0	0
1900	304	314	618	4	460	101	1	40	2	9	0	1	0	0	0	0
2000	271	247	518	4	402	73	1	27	5	3	0	1	0	0	0	2
2100	195	177	372	3	284	55	0	22	0	6	0	1	1	0	0	0
2200	148	152	300	4	230	42	0	15	4	4	0	0	0	0	0	1
2300	124	111	235	5	174	43	0	3	6	3	0	1	0	0	0	0
00-00	6867	7488	14355	126	10793	2326	63	695	132	132	3	46	16	0	0	23

Peak step 13:00 (1138) AM Peak step 11:00 (1117) PM Peak step 13:00 (1138)

Vehicles = 14355

Posted speed limit = 35 mph, Exceeding = 354 (2.466%), Mean Exceeding = 37.86 mph

Maximum = 71.9 mph, Minimum = 6.3 mph, Mean = 23.7 mph

85% Speed = 29.64 mph, 95% Speed = 33.11 mph, Median = 24.16 mph

10 mph Pace = 20 - 30, Number in Pace = 8392 (58.46%)

Variance = 36.85, Standard Deviation = 6.07 mph

Road Segment:

Reference Information

Road Number: Road Name:

From Milepost: To Milepost:

From: To:

Classification: Structure: Needs Analysis: Area: GIS:

* Data source for ADT / Percentages or Counts:
 Manual Entry Traffic Study Report (Milepost: 1.810) Evl Date: 10/29/2019

* ADT

Volume: APRAVAL:

Source: Accidents per Million Vehicle Miles for most recent 36 months

Year:

* Percentages or Counts

Numbers are:

Truck:

Bus:

RV:

ADT:

Speed:

Speed Limit Ordinance #:

Road List

File On | Filter Off

- 0.000 AVON ALLEN ROAD
- 0.125 ALLEN ELEMENTARY SCHOOL
- 0.440 STATE ROUTE 11
- 0.575 FULLER ROAD
- 1.595 S SOUTHBOUND RAMP
- 1.800 S NORTHBOUND RAMP
- 1.800 S CROSS RD / WAVE CRO
- 1.800 S OLD HWY 59 NORTH
- 1.800 BURLINGTON NORTHER FOR
- 1.975 GREEN ROAD
- 2.225 GARDNER ROAD
- 3.955 DISTRICT LINE ROAD
- 4.245 S.V. GRANGE HALL
- 4.470 COLLINS ROAD
- 5.280 GLENWOOD ACRES ROAD
- 5.345 JORDAN LANE
- 5.440 PROSPECT STREET
- 5.511 WINTER LANE
- 5.528 SEDRO WOOLLEY CITY LIMITS
- 5.140 STATE ROUTE 20

Select Features

- Road Log
- Reference Points
- Approaches
- Bridges
- Bus Stop
- Cable Guards
- CLAS
- Clear Zone Segment
- Cones
- Culverts
- Curb Ramps
- Curve - Horizontal
- Curve - Vertical
- Guardrails
- Planned Projects
- Projects
- Railroad Crossings
- Right of Way Documents
- Signs

