2022 Skagit County Road Segment & Intersection Concurrency

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.

While all road segments in Table 1 meet County LOS standards, the segments of Cook Road adjacent to the Sedro-Woolley city limits (milepost 4.6 – 5.62) show the potential to exceed the LOS D to LOS E threshold by year 2027. Skagit County Public Works will be paying close attention to these segments and traffic volumes in the coming years. Studies for these segments are included as Appendix E.

Table 1 – Road Segments

2022 Skagit County Roads with Over 7,000 ADT														
Road #	Road Name	FFC	Truck Rt	Beg MP	End MP	Length	2022 ADT	2023 ADT	2024 ADT	2025 ADT	2026 ADT	2027 ADT	2022 LOS	2027 LOS
63000	COOK ROAD	07	T2	1.750	1.800	0.050	18864	19241	19626	20019	20419	20827	These two segments are in WSDOT ROW	
63000	COOK ROAD	07	T2	1.800	1.860	0.060	18864	19241	19626	20019	20419	20827		
63000	COOK ROAD	07	T2	1.860	1.970	0.110	15464	15773	16089	16411	16739	17074	D	D
63000	COOK ROAD	07	T2	1.970	3.080	1.110	15464	15773	16089	16411	16739	17074		
63000	COOK ROAD	07	T2	3.080	3.360	0.280	15464	15773	16089	16411	16739	17074		
63000	COOK ROAD	07	T2	3.360	3.820	0.460	13885	14163	14446	14735	15030	15330	D	D
63000	COOK ROAD	07	T2	3.820	4.100	0.280	13885	14163	14446	14735	15030	15330		
63000	COOK ROAD	07	T2	4.100	4.320	0.220	13885	14163	14446	14735	15030	15330		
63000	COOK ROAD	07	T2	4.320	4.600	0.280	13885	14163	14446	14735	15030	15330		
63000	COOK ROAD	07	T2	4.600	5.000	0.400	13769	14044	14325	14612	14904	15202	D	E
63000	COOK ROAD	07	T2	5.000	5.260	0.260	13769	14044	14325	14612	14904	15202		
63000	COOK ROAD	07	T2	5.260	5.320	0.060	13769	14044	14325	14612	14904	15202		
63000	COOK ROAD	07	T2	5.320	5.390	0.070	13769	14044	14325	14612	14904	15202		
63000	COOK ROAD	16	T2	5.390	5.510	0.120	13769	14044	14325	14612	14904	15202		
63000	COOK ROAD	16	T2	5.510	5.620	0.110	13769	14044	14325	14612	14904	15202		
71500	SOUTH LAVENTURE ROAD	14	Non	0.000	0.063	0.063	7864	8021	8182	8345	8512	8682	C	C
71500	SOUTH LAVENTURE ROAD	14	Non	0.063	0.274	0.211	7864	8021	8182	8345	8512	8682		
71500	SOUTH LAVENTURE ROAD	14	Non	0.545	0.553	0.008	7877	8035	8195	8359	8526	8697	C	D
71500	SOUTH LAVENTURE ROAD	14	Non	0.553	0.701	0.148	7877	8035	8195	8359	8526	8697		
71500	SOUTH LAVENTURE ROAD	14	Non	0.701	0.715	0.014	7877	8035	8195	8359	8526	8697		
71500	SOUTH LAVENTURE ROAD	14	Non	0.715	0.730	0.015	7877	8035	8195	8359	8526	8697		
71500	SOUTH LAVENTURE ROAD	14	Non	0.730	0.773	0.043	7877	8035	8195	8359	8526	8697		
80090	PIONEER HIGHWAY	07	T3	0.000	0.883	0.883	8456	8625	8798	8974	9153	9336	C	C
80090	PIONEER HIGHWAY	07	T3	0.883	1.418	0.535	8456	8625	8798	8974	9153	9336		
80090	PIONEER HIGHWAY	07	T3	1.418	1.748	0.330	8456	8625	8798	8974	9153	9336		
80090	PIONEER HIGHWAY	07	T3	1.748	3.065	1.317	8456	8625	8798	8974	9153	9336		
80090	PIONEER HIGHWAY	07	T3	3.065	3.089	0.024	10699	10913	11131	11354	11581	11813	D	D

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. However, the overall LOS can be determined at signalized intersections like the one on which Skagit County is collecting data and studying.

Table 2 shows the intersection on which Skagit County is collecting LOS data on a regular basis.

Table 2 – Intersections

Intersection Name	Intersection Type	NB Approach LOS	SB Approach LOS	EB Approach LOS	WB Approach LOS	Overall LOS
2022						
Cook Road / Old Hwy 99 N	Signalized	C	C	B	C	C
2027						
Cook Road / Old Hwy 99 N	Signalized	C	C	C	C	C

The full PM Peak Hour 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. Though not used for concurrency, the AM Peak Hour Highway Capacity reports are also included as Appendices C and D.

The turn movement study used for this assessment was conducted in June of 2023. The most recent study previously conducted was in June of 2020. This previous study showed traffic volumes that were reduced due to the COVID-19 Pandemic. As traffic levels had decreased during the Pandemic, it was determined to use a more recent study.

Please note that this intersection was studied during the Peak PM hour for the Highway Capacity report as per industry standards and Concurrency requirements. Per Highway Capacity Manual / Software, the PM Peak Hour currently meets LOS Standards. This is somewhat 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.

Also 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. Additionally, the AM Peak Hour is also regulated by train activity, that directly affect LOS during the morning commute.

Based on the traffic flows being regulated from both the west and east approaches the LOS of this intersection could have a lower LOS, 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 is in the Design phase 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

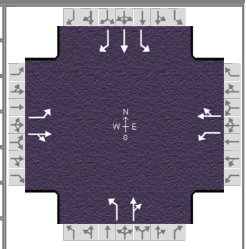
As of December 31, 2022, all Skagit County Road segments and signalized intersections meet the current LOS standards as adopted in the Comprehensive Plan of Skagit County. Therefore, all Skagit County Road segments and intersections are concurrent.

Skagit County Public Works has used the Highway Capacity Manual, Seventh Edition of 2022 and its associated software to determine all Level of Service calculations in this report.

HCS7 Signalized Intersection Results Summary

Appendix A

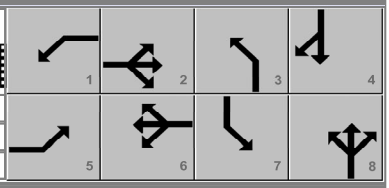
General Information				Intersection Information	
Agency	Skagit County Public Works			Duration, h	1.000
Analyst	Given Kutz	Analysis Date	Jun 6, 2023	Area Type	Other
Jurisdiction		Time Period	15:45 - 16:45	PHF	1.00
Urban Street	Cook Road	Analysis Year	2022	Analysis Period	1> 3:45
Intersection	Old Hwy 99 N	File Name	Cook-Old99.xus		
Project Description	2023				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	125	466	96	45	507	58	90	211	165	59	84	132

Signal Information			
Cycle, s	68.3	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	2.9	1.7	27.4	3.4	0.7	16.2	
Yellow	4.0	0.0	4.0	4.0	0.0	4.0	
Red	0.0	0.0	0.0	0.0	0.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	2.0	3.0
Phase Duration, s	8.6	33.1	6.9	31.4	8.1	20.9	7.4	20.2
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (*MAH*), s	3.1	3.1	3.1	3.1	3.1	3.2	3.1	3.2
Queue Clearance Time (g_s), s	4.8	24.7	3.0	24.8	4.7	15.7	4.4	5.9
Green Extension Time (g_e), s	0.1	2.4	0.0	2.4	0.1	1.0	0.1	1.1
Phase Call Probability	0.91	1.00	0.58	1.00	0.82	1.00	0.68	1.00
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

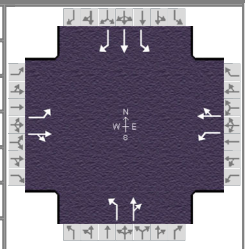
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	125	562		45	565		90	354		59	84	99
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1725	1537		1753	1581		1725	1688		1668	1752	1427
Queue Service Time (g_s), s	2.8	22.7		1.0	22.8		2.7	13.7		2.4	2.6	3.9
Cycle Queue Clearance Time (g_c), s	2.8	22.7		1.0	22.8		2.7	13.7		2.4	2.6	3.9
Green Ratio (*g/C*)	0.47	0.43		0.45	0.40		0.30	0.25		0.05	0.24	0.24
Capacity (*c*), veh/h	278	656		236	636		466	418		83	416	339
Volume-to-Capacity Ratio (*X*)	0.450	0.857		0.191	0.888		0.193	0.846		0.710	0.202	0.292
Back of Queue (*Q*), ft/ln (50 th percentile)	25.4	187.8		9.1	196.4		25.8	137.6		27.4	27.5	31.3
Back of Queue (*Q*), veh/ln (50 th percentile)	1.0	7.2		0.4	7.6		1.0	5.3		1.0	1.0	1.2
Queue Storage Ratio (*RQ*) (50 th percentile)	0.13	0.19		0.05	0.20		0.13	0.14		0.14	0.03	0.31
Uniform Delay (d_1), s/veh	14.9	17.8		14.9	19.1		17.9	24.6		32.1	21.0	21.5
Incremental Delay (d_2), s/veh	0.4	1.3		0.1	1.8		0.1	1.9		4.2	0.1	0.2
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Control Delay (*d*), s/veh	15.3	19.1		15.1	20.9		18.0	26.5		36.4	21.1	21.6
Level of Service (LOS)	B	B		B	C		B	C		D	C	C
Approach Delay, s/veh / LOS	18.4	B		20.4	C		24.7	C		25.0	C	
Intersection Delay, s/veh / LOS	21.3						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.12	B	2.30	B	2.11	B	2.11	B
Bicycle LOS Score / LOS	1.62	B	1.49	A	1.22	A	0.89	A

HCS7 Signalized Intersection Results Summary

Appendix B

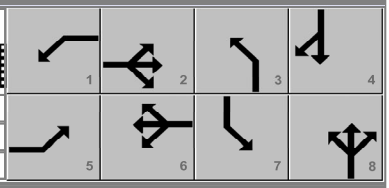
General Information				Intersection Information	
Agency	Skagit County Public Works			Duration, h	1.000
Analyst	Given Kutz	Analysis Date	Jun 6, 2023	Area Type	Other
Jurisdiction		Time Period	15:45 - 16:45	PHF	1.00
Urban Street	Cook Road	Analysis Year	2027	Analysis Period	1> 3:45
Intersection	Old Hwy 99 N	File Name	2027 Cook-Old99.xus		
Project Description	2023				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	138	515	106	50	560	64	99	233	182	65	93	146

Signal Information			
Cycle, s	85.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.5	2.2	36.7	4.3	0.9	21.5	
Yellow	4.0	0.0	4.0	4.0	0.0	4.0	
Red	0.0	0.0	0.0	0.0	0.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	2.0	3.0
Phase Duration, s	9.7	42.9	7.5	40.7	9.2	26.4	8.3	25.5
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (*MAH*), s	3.1	3.1	3.1	3.1	3.1	3.2	3.1	3.2
Queue Clearance Time (g_s), s	5.7	33.5	3.3	33.7	5.6	21.1	5.3	7.5
Green Extension Time (g_e), s	0.2	2.7	0.0	2.7	0.1	1.1	0.1	1.2
Phase Call Probability	0.96	1.00	0.70	1.00	0.90	1.00	0.79	1.00
Max Out Probability	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00

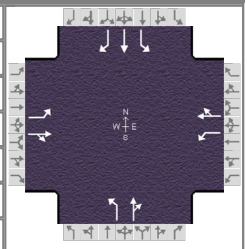
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	138	621		50	624		99	393		65	93	113
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1725	1537		1753	1581		1725	1687		1668	1752	1427
Queue Service Time (g_s), s	3.7	31.5		1.3	31.7		3.6	19.1		3.3	3.6	5.5
Cycle Queue Clearance Time (g_c), s	3.7	31.5		1.3	31.7		3.6	19.1		3.3	3.6	5.5
Green Ratio (*g/C*)	0.50	0.46		0.48	0.43		0.32	0.26		0.05	0.25	0.25
Capacity (*c*), veh/h	246	704		208	683		460	446		84	444	361
Volume-to-Capacity Ratio (*X*)	0.560	0.883		0.240	0.914		0.215	0.882		0.775	0.210	0.313
Back of Queue (*Q*), ft/ln (50 th percentile)	35.6	297.9		12.8	314.6		36.5	211.7		39.2	39.1	46.1
Back of Queue (*Q*), veh/ln (50 th percentile)	1.4	11.4		0.5	12.2		1.4	8.1		1.5	1.4	1.8
Queue Storage Ratio (*RQ*) (50 th percentile)	0.18	0.30		0.06	0.31		0.18	0.21		0.20	0.04	0.46
Uniform Delay (d_1), s/veh	18.8	21.1		18.4	22.8		21.4	30.2		40.2	25.2	25.9
Incremental Delay (d_2), s/veh	0.7	5.9		0.2	7.7		0.1	5.8		5.8	0.1	0.2
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Control Delay (*d*), s/veh	19.5	27.0		18.6	30.6		21.5	36.0		46.0	25.3	26.1
Level of Service (LOS)	B	C		B	C		C	D		D	C	C
Approach Delay, s/veh / LOS	25.7	C		29.7	C		33.1	C		30.6	C	
Intersection Delay, s/veh / LOS	29.2						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.12	B	2.31	B	2.11	B	2.12	B
Bicycle LOS Score / LOS	1.74	B	1.60	B	1.30	A	0.93	A

HCS7 Signalized Intersection Results Summary

Appendix C

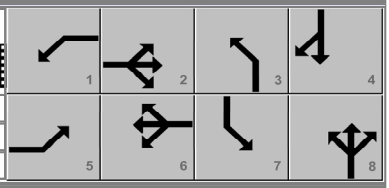
General Information				Intersection Information	
Agency	Skagit County Public Works			Duration, h	1.000
Analyst	Given Kutz	Analysis Date	Jun 6, 2023	Area Type	Other
Jurisdiction		Time Period	07:00 - 08:00	PHF	1.00
Urban Street	Cook Road	Analysis Year	2022	Analysis Period	1> 3:45
Intersection	Old Hwy 99 N	File Name	Cook-Old99 AM.xus		
Project Description	2023				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	68	355	112	91	557	34	107	58	54	58	111	153

Signal Information			
Cycle, s	56.2	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.3	0.5	23.9	3.0	1.5	8.0
Yellow	4.0	0.0	4.0	4.0	0.0	4.0
Red	0.0	0.0	0.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	2.0	3.0
Phase Duration, s	7.3	27.9	7.8	28.4	8.5	13.5	7.0	12.0
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (*MAH*), s	3.1	3.1	3.1	3.1	3.1	3.2	3.1	3.2
Queue Clearance Time (g_s), s	3.3	17.7	3.6	22.1	5.4	5.0	4.1	7.3
Green Extension Time (g_e), s	0.1	2.2	0.1	2.2	0.1	0.6	0.1	0.6
Phase Call Probability	0.66	1.00	0.76	1.00	0.81	1.00	0.60	1.00
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

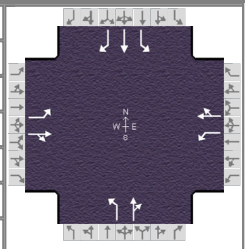
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	68	467		91	591		107	90		58	111	120
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1626	1432		1682	1530		1499	1479		1513	1589	1212
Queue Service Time (g_s), s	1.3	15.7		1.6	20.1		3.4	3.0		2.1	3.6	5.3
Cycle Queue Clearance Time (g_c), s	1.3	15.7		1.6	20.1		3.4	3.0		2.1	3.6	5.3
Green Ratio (*g/C*)	0.49	0.43		0.50	0.43		0.22	0.17		0.05	0.14	0.14
Capacity (*c*), veh/h	257	610		373	666		333	250		81	226	172
Volume-to-Capacity Ratio (*X*)	0.265	0.765		0.244	0.887		0.321	0.360		0.715	0.492	0.698
Back of Queue (*Q*), ft/ln (50 th percentile)	10	116.7		12.7	156.6		31.2	28.7		23.6	37.2	42.8
Back of Queue (*Q*), veh/ln (50 th percentile)	0.4	4.2		0.5	5.8		1.1	1.0		0.8	1.3	1.5
Queue Storage Ratio (*RQ*) (50 th percentile)	0.05	0.12		0.06	0.16		0.16	0.03		0.12	0.04	0.43
Uniform Delay (d_1), s/veh	12.3	13.8		10.0	14.7		18.5	20.8		26.3	22.4	23.1
Incremental Delay (d_2), s/veh	0.2	0.8		0.1	1.7		0.2	0.3		4.4	0.6	1.9
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Control Delay (*d*), s/veh	12.5	14.6		10.2	16.4		18.7	21.1		30.7	23.0	25.0
Level of Service (LOS)	B	B		B	B		B	C		C	C	C
Approach Delay, s/veh / LOS	14.3	B		15.5	B		19.8	B		25.4	C	
Intersection Delay, s/veh / LOS	17.3						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.11	B	2.29	B	2.11	B	2.11	B
Bicycle LOS Score / LOS	1.37	A	1.61	B	0.81	A	0.96	A

HCS7 Signalized Intersection Results Summary

Appendix D

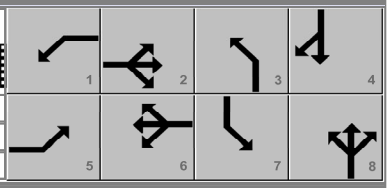
General Information				Intersection Information	
Agency	Skagit County Public Works			Duration, h	1.000
Analyst	Given Kutz	Analysis Date	Jun 6, 2023	Area Type	Other
Jurisdiction		Time Period	07:00 - 08:00	PHF	1.00
Urban Street	Cook Road	Analysis Year	2027	Analysis Period	1> 3:45
Intersection	Old Hwy 99 N	File Name	2027 Cook-Old99 AM.xus		
Project Description	2023				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	75	392	124	100	615	38	118	64	60	64	123	169

Signal Information			
Cycle, s	66.8	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.8	0.5	30.8	3.5	2.3	10.0
Yellow	4.0	0.0	4.0	4.0	0.0	4.0
Red	0.0	0.0	0.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	2.0	3.0
Phase Duration, s	7.8	34.8	8.2	35.3	9.8	16.3	7.5	14.0
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (*MAH*), s	3.1	3.1	3.1	3.1	3.1	3.2	3.1	3.2
Queue Clearance Time (g_s), s	3.6	22.4	4.0	28.6	6.4	6.1	4.8	9.2
Green Extension Time (g_e), s	0.1	2.5	0.1	2.5	0.1	0.7	0.1	0.7
Phase Call Probability	0.75	1.00	0.85	1.00	0.89	1.00	0.70	1.00
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	75	516		100	653		118	102		64	123	136
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1626	1432		1682	1530		1499	1475		1513	1589	1212
Queue Service Time (g_s), s	1.6	20.4		2.0	26.6		4.4	4.1		2.8	4.8	7.2
Cycle Queue Clearance Time (g_c), s	1.6	20.4		2.0	26.6		4.4	4.1		2.8	4.8	7.2
Green Ratio (*g/C*)	0.52	0.46		0.53	0.47		0.24	0.18		0.05	0.15	0.15
Capacity (*c*), veh/h	230	661		348	717		322	272		79	237	181
Volume-to-Capacity Ratio (*X*)	0.326	0.780		0.288	0.911		0.367	0.376		0.805	0.518	0.751
Back of Queue (*Q*), ft/ln (50 th percentile)	13.2	158.2		16.7	223.6		42.1	39.8		33.2	50.9	60.6
Back of Queue (*Q*), veh/ln (50 th percentile)	0.5	5.7		0.6	8.3		1.4	1.4		1.1	1.7	2.1
Queue Storage Ratio (*RQ*) (50 th percentile)	0.07	0.16		0.08	0.22		0.21	0.04		0.17	0.05	0.61
Uniform Delay (d_1), s/veh	14.7	15.2		11.5	16.5		21.2	24.0		31.5	26.3	27.4
Incremental Delay (d_2), s/veh	0.3	0.8		0.2	3.0		0.3	0.3		7.4	0.7	2.4
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Control Delay (*d*), s/veh	15.0	16.0		11.7	19.5		21.4	24.3		38.8	27.0	29.8
Level of Service (LOS)	B	B		B	B		C	C		D	C	C
Approach Delay, s/veh / LOS	15.9	B		18.5	B		22.8	C		30.5	C	
Intersection Delay, s/veh / LOS	20.2						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.11	B	2.29	B	2.11	B	2.12	B
Bicycle LOS Score / LOS	1.46	A	1.73	B	0.85	A	1.02	A

Begin Appendix E

HCS7 Two-Lane Highway Report

Project Information

Analyst	Given Kutz	Date	06/14/2023
Agency	SCPW	Analysis Year	2022
Jurisdiction	County	Time Period Analyzed	2022
Project Description	2022 Cook Road - MP 1.86 - 3.36	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	856	Opposing Demand Flow Rate, veh/h	588
Peak Hour Factor	0.94	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.50

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	52.8
Speed Slope Coefficient	3.29683	Speed Power Coefficient	0.47121
PF Slope Coefficient	-1.29670	PF Power Coefficient	0.75949
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	11.7
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	7920	-	-	49.9

Vehicle Results

Average Speed, mi/h	49.9	Percent Followers, %	68.4
Segment Travel Time, minutes	1.80	Followers Density, followers/mi/ln	11.7
Vehicle LOS	D		

HCS7 Two-Lane Highway Report

Project Information

Analyst	Given Kutz	Date	06/14/2023
Agency	SCPW	Analysis Year	2022
Jurisdiction	County	Time Period Analyzed	2027
Project Description	2027 Cook Road - MP 1.86 - 3.36	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	946	Opposing Demand Flow Rate, veh/h	650
Peak Hour Factor	0.94	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.56

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	52.8
Speed Slope Coefficient	3.30968	Speed Power Coefficient	0.46456
PF Slope Coefficient	-1.30295	PF Power Coefficient	0.75709
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	13.6
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	7920	-	-	49.8

Vehicle Results

Average Speed, mi/h	49.8	Percent Followers, %	71.3
Segment Travel Time, minutes	1.81	Followers Density, followers/mi/ln	13.6
Vehicle LOS	D		

HCS7 Two-Lane Highway Report

Project Information

Analyst	Given Kutz	Date	06/14/2023
Agency	SCPW	Analysis Year	2022
Jurisdiction	County	Time Period Analyzed	2022
Project Description	2022 Cook Road - MP 3.36 - 4.60	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	6547
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	50	Access Point Density, pts/mi	12.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	871	Opposing Demand Flow Rate, veh/h	641
Peak Hour Factor	0.94	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.51

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	53.8
Speed Slope Coefficient	3.35070	Speed Power Coefficient	0.46544
PF Slope Coefficient	-1.29792	PF Power Coefficient	0.76686
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	11.8
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	6547	-	-	50.9

Vehicle Results

Average Speed, mi/h	50.9	Percent Followers, %	68.9
Segment Travel Time, minutes	1.46	Followers Density, followers/mi/ln	11.8
Vehicle LOS	D		

HCS7 Two-Lane Highway Report

Project Information

Analyst	Given Kutz	Date	06/14/2023
Agency	SCPW	Analysis Year	2022
Jurisdiction	County	Time Period Analyzed	2027
Project Description	2027 Cook Road - MP 3.36 - 4.60	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	6547
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	50	Access Point Density, pts/mi	12.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	962	Opposing Demand Flow Rate, veh/h	709
Peak Hour Factor	0.94	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.57

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	53.8
Speed Slope Coefficient	3.36408	Speed Power Coefficient	0.45887
PF Slope Coefficient	-1.30389	PF Power Coefficient	0.76438
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	13.6
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	6547	-	-	50.7

Vehicle Results

Average Speed, mi/h	50.7	Percent Followers, %	71.8
Segment Travel Time, minutes	1.47	Followers Density, followers/mi/ln	13.6
Vehicle LOS	D		

HCS7 Two-Lane Highway Report

Project Information

Analyst	Given Kutz	Date	06/14/2023
Agency	SCPW	Analysis Year	2022
Jurisdiction	County	Time Period Analyzed	2022
Project Description	2022 Cook Road - MP 4.60 - 5.62	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	5386
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	50	Access Point Density, pts/mi	12.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	947	Opposing Demand Flow Rate, veh/h	651
Peak Hour Factor	0.94	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.56

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	53.8
Speed Slope Coefficient	3.34200	Speed Power Coefficient	0.46445
PF Slope Coefficient	-1.30378	PF Power Coefficient	0.76958
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	13.3
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5386	-	-	50.7

Vehicle Results

Average Speed, mi/h	50.7	Percent Followers, %	71.4
Segment Travel Time, minutes	1.21	Followers Density, followers/mi/ln	13.3
Vehicle LOS	D		

HCS7 Two-Lane Highway Report

Project Information

Analyst	Given Kutz	Date	06/14/2023
Agency	SCPW	Analysis Year	2022
Jurisdiction	County	Time Period Analyzed	2027
Project Description	2027 Cook Road - MP 4.60 - 5.62	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	5386
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	50	Access Point Density, pts/mi	24.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	1046	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.94	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.62

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	50.8
Speed Slope Coefficient	3.31637	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.36160	PF Power Coefficient	0.73557
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	16.6
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5386	-	-	47.6

Vehicle Results

Average Speed, mi/h	47.6	Percent Followers, %	75.5
Segment Travel Time, minutes	1.29	Followers Density, followers/mi/ln	16.6
Vehicle LOS	E		

HCS7 Two-Lane Highway Report

Project Information

Analyst	Given Kutz	Date	06/16/2023
Agency	SCPW	Analysis Year	2022
Jurisdiction	County	Time Period Analyzed	2022
Project Description	Pioneer Hwy County Line to Fir Island Rd	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	16183
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	50	Access Point Density, pts/mi	4.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	556	Opposing Demand Flow Rate, veh/h	421
Peak Hour Factor	0.94	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.33

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	56.0
Speed Slope Coefficient	3.44928	Speed Power Coefficient	0.49343
PF Slope Coefficient	-1.27742	PF Power Coefficient	0.75688
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	5.8
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	16183	-	-	53.7

Vehicle Results

Average Speed, mi/h	53.7	Percent Followers, %	55.9
Segment Travel Time, minutes	3.43	Followers Density, followers/mi/ln	5.8
Vehicle LOS	C		

HCS7 Two-Lane Highway Report

Project Information

Analyst	Given Kutz	Date	06/16/2023
Agency	SCPW	Analysis Year	2022
Jurisdiction	County	Time Period Analyzed	2027
Project Description	Pioneer Hwy County Line to Fir Island Rd	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	16183
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	50	Access Point Density, pts/mi	4.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	614	Opposing Demand Flow Rate, veh/h	465
Peak Hour Factor	0.94	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.36

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	56.0
Speed Slope Coefficient	3.46003	Speed Power Coefficient	0.48692
PF Slope Coefficient	-1.28325	PF Power Coefficient	0.75482
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	6.8
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	16183	-	-	53.5

Vehicle Results

Average Speed, mi/h	53.5	Percent Followers, %	58.8
Segment Travel Time, minutes	3.44	Followers Density, followers/mi/ln	6.8
Vehicle LOS	C		

HCS7 Two-Lane Highway Report

Project Information

Analyst	Given Kutz	Date	06/16/2023
Agency	SCPW	Analysis Year	2022
Jurisdiction	County	Time Period Analyzed	2022
Project Description	Pioneer Hwy - Fir Island Rd to I-5	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	739
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	35	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	620	Opposing Demand Flow Rate, veh/h	532
Peak Hour Factor	0.94	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.36

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	39.9
Speed Slope Coefficient	2.50890	Speed Power Coefficient	0.47794
PF Slope Coefficient	-1.40682	PF Power Coefficient	0.70099
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	10.3
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	739	-	-	38.1

Vehicle Results

Average Speed, mi/h	38.1	Percent Followers, %	63.5
Segment Travel Time, minutes	0.22	Followers Density, followers/mi/ln	10.3
Vehicle LOS	D		

HCS7 Two-Lane Highway Report

Project Information

Analyst	Given Kutz	Date	06/16/2023
Agency	SCPW	Analysis Year	2022
Jurisdiction	County	Time Period Analyzed	2027
Project Description	Pioneer Hwy - Fir Island Rd to I-5	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	739
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	35	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	685	Opposing Demand Flow Rate, veh/h	587
Peak Hour Factor	0.94	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.40

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	39.9
Speed Slope Coefficient	2.52103	Speed Power Coefficient	0.47133
PF Slope Coefficient	-1.41580	PF Power Coefficient	0.69913
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	12.0
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	739	-	-	37.9

Vehicle Results

Average Speed, mi/h	37.9	Percent Followers, %	66.3
Segment Travel Time, minutes	0.22	Followers Density, followers/mi/ln	12.0
Vehicle LOS	D		

HCS7 Two-Lane Highway Report

Project Information

Analyst	Given Kutz	Date	06/16/2023
Agency	SCPW	Analysis Year	2022
Jurisdiction	County	Time Period Analyzed	2022
Project Description	South Laventure Rd S of E Blackburn	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	1204
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	35	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	485	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.94	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.29

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	39.9
Speed Slope Coefficient	2.67130	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.50541	PF Power Coefficient	0.67645
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	7.7
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1204	-	-	38.1

Vehicle Results

Average Speed, mi/h	38.1	Percent Followers, %	60.3
Segment Travel Time, minutes	0.36	Followers Density, followers/mi/ln	7.7
Vehicle LOS	C		

HCS7 Two-Lane Highway Report

Project Information

Analyst	Given Kutz	Date	06/16/2023
Agency	SCPW	Analysis Year	2022
Jurisdiction	County	Time Period Analyzed	2027
Project Description	South Laventure Rd S of E Blackburn	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	1204
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	35	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	535	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.94	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.31

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	39.9
Speed Slope Coefficient	2.67130	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.50541	PF Power Coefficient	0.67645
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	8.8
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1204	-	-	38.0

Vehicle Results

Average Speed, mi/h	38.0	Percent Followers, %	62.7
Segment Travel Time, minutes	0.36	Followers Density, followers/mi/ln	8.8
Vehicle LOS	C		

HCS7 Two-Lane Highway Report

Project Information

Analyst	Given Kutz	Date	06/16/2023
Agency	SCPW	Analysis Year	2022
Jurisdiction	County	Time Period Analyzed	2022
Project Description	South Laventure Rd E of Blodgett Rd	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	1447
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	35	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	539	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.94	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.32

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	39.9
Speed Slope Coefficient	2.67372	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.49696	PF Power Coefficient	0.67858
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	8.9
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1447	-	-	38.0

Vehicle Results

Average Speed, mi/h	38.0	Percent Followers, %	62.6
Segment Travel Time, minutes	0.43	Followers Density, followers/mi/ln	8.9
Vehicle LOS	C		

HCS7 Two-Lane Highway Report

Project Information

Analyst	Given Kutz	Date	06/16/2023
Agency	SCPW	Analysis Year	2022
Jurisdiction	County	Time Period Analyzed	2027
Project Description	South Laventure Rd E of Blodgett Rd	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	1447
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	35	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	598	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.94	Total Trucks, %	0.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.35

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	39.9
Speed Slope Coefficient	2.67372	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.49696	PF Power Coefficient	0.67858
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	10.3
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1447	-	-	37.9

Vehicle Results

Average Speed, mi/h	37.9	Percent Followers, %	65.2
Segment Travel Time, minutes	0.43	Followers Density, followers/mi/ln	10.3
Vehicle LOS	D		