

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 2024 assessment 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.

All road segments in Table 1 are expected to meet County LOS standards in 2029. 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 C.

Table 1 – Road Segments

			202	4 Ska	ait Co	untv F	Roads v	vith Ov	er 7,000	ADT				
Road #	Road Name	FFC							2026 ADT		2028 ADT	2029 ADT	2024 LOS	2029 LOS
63000	COOK ROAD	07	T2	1.750	1.800	0.050	17005	17345	17692	18046	18407	18775	These two	segments
63000	COOK ROAD	07	T2	1.800	1.860	0.060	17005	17345	17692	18046	18407	18775	are in WS	
63000	COOK ROAD	07	T2	1.860	1.970	0.110	15022	15322	15629	15941	16260	16586		
63000	COOK ROAD	07	T2	1.970	3.080	1.110	15022	15322	15629	15941	16260	16586	С	С
63000	COOK ROAD	07	T2	3.080	3.360	0.280	15022	15322	15629	15941	16260	16586		
63000	COOK ROAD	07	T2	3.360	3.820	0.460	15107	15409	15717	16032	16352	16679		
63000	COOK ROAD	07	T2	3.820	4.100	0.280	15107	15409	15717	16032	16352	16679	D	D
63000	COOK ROAD	07	T2	4.100	4.320	0.220	15107	15409	15717	16032	16352	16679		D
63000	COOK ROAD	07	T2	4.320	4.600	0.280	15107	15409	15717	16032	16352	16679		
63000	COOK ROAD	07	T2	4.600	5.000	0.400	15205	15509	15819	16136	16458	16788		
63000	COOK ROAD	07	T2	5.000	5.260	0.260	15205	15509	15819	16136	16458	16788		
63000	COOK ROAD	07	T2	5.260	5.320	0.060	15205	15509	15819	16136	16458	16788	D	D
63000	COOK ROAD	07	T2	5.320	5.390	0.070	15205	15509	15819	16136	16458	16788		D
63000	COOK ROAD	16	T2	5.390	5.510	0.120	15205	15509	15819	16136	16458	16788		
63000	COOK ROAD	16	T2	5.510	5.620	0.110	15205	15509	15819	16136	16458	16788		
71500	SOUTH LAVENTURE ROAD	14	Non	0.000	0.063	0.063	9040	9221	9405	9593	9785	9981	С	С
71500	SOUTH LAVENTURE ROAD	14	Non	0.063	0.274	0.211	9040	9221	9405	9593	9785	9981	C	C
71500	SOUTH LAVENTURE ROAD	14	Non	0.545	0.553	0.008	9151	9334	9521	9711	9905	10103		
71500	SOUTH LAVENTURE ROAD	14	Non	0.553	0.701	0.148	9151	9334	9521	9711	9905	10103		
71500	SOUTH LAVENTURE ROAD	14	Non	0.701	0.715	0.014	9151	9334	9521	9711	9905	10103	С	С
71500	SOUTH LAVENTURE ROAD	14	Non	0.715	0.730	0.015	9151	9334	9521	9711	9905	10103		
71500	SOUTH LAVENTURE ROAD	14	Non	0.730	0.773	0.043	9151	9334	9521	9711	9905	10103		
80090	PIONEER HIGHWAY	07	T3	0.000	0.883	0.883	10015	10215	10420	10628	10841	11057		
80090	PIONEER HIGHWAY	07	T3	0.883	1.418	0.535	10047	10248	10453	10662	10875	11093	С	С
80090	PIONEER HIGHWAY	07	T3	1.418	1.748	0.330	9893	10091	10293	10499	10709	10923		
80090	PIONEER HIGHWAY	07	T3	1.748	3.065	1.317	9893	10091	10293	10499	10709	10923		
80090	PIONEER HIGHWAY	07	T3	3.065	3.089	0.024	12596	12848	13105	13367	13634	13907	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	NB Approach	SB Approach	EB Approach	WB Approach	Overall
intersection name	Туре	LOS	LOS	LOS	LOS	LOS
2024						
Cook Road / Old Hwy 99 N	Signalized	С	С	В	В	С
2029						
Cook Road / Old Hwy 99 N	Signalized	С	С	С	С	С

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. The turn movement study used for this assessment was conducted in June of 2023 and an additional 2% increase was used for the 2024 study year.

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.

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 is scheduled to be undertaken with Washington State Department of Transportation cooperation in 2027 and should significantly improve mobility and LOS at this location.

SUMMARY

As of December 31, 2024, 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 141416 **General Information Intersection Information** Skagit County Public Works Duration, h 1.000 Agency Analyst Given Kutz Analysis Date Jun 21, 2024 Area Type Other 15:45 - 16:45 PHF 1.00 Jurisdiction Time Period Urban Street Cook Road Analysis Year 2024 **Analysis Period** 1> 3:45 File Name 2024 Cook-Old99.xus Intersection Old Hwy 99 N **Project Description** 2024 Concurrency Report **Demand Information** EB **WB** NB SB Approach Movement R L R L R L R 46 475 98 Demand (v), veh/h 128 517 59 92 215 165 60 86 135 **Signal Information** Cycle, s 67.1 Reference Phase 2 7 Offset, s 0 Reference Point Begin Green 2.9 26.3 3.4 0.7 16.1 1.7 Uncoordinated Yes Simult. Gap E/W On Yellow 4.0 0.0 4.0 4.0 0.0 4.0 Force Mode Fixed Simult. Gap N/S 0.0 On Red 0.0 0.0 0.0 0.0 0.0 **Timer Results** FBI **EBT WBL WBT** NBL **NBT** SBL SBT **Assigned Phase** 5 2 6 3 8 4 1 7 Case Number 1.1 4.0 1.1 4.0 1.1 4.0 2.0 3.0 Phase Duration, s 8.6 32.0 6.9 30.3 8.1 20.8 7.4 20.1 Change Period, (Y+Rc), 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 4.9 25.3 3.0 21.2 4.7 15.6 4.4 5.9 Green Extension Time (g_e), s 0.2 2.4 0.0 2.5 0.1 1.1 0.1 1.1 Phase Call Probability 0.91 1.00 0.58 1.00 0.82 1.00 0.68 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 Max Out Probability SB **Movement Group Results** EΒ **WB** NB Approach Movement L Т R L Т R L Т R L Т R **Assigned Movement** 5 2 12 1 6 16 3 8 18 7 4 14 Adjusted Flow Rate (v), veh/h 128 573 46 576 92 358 60 86 102 1725 1537 1753 1807 1725 1690 1668 1752 1427 Adjusted Saturation Flow Rate (s), veh/h/ln 2.9 23.3 1.0 19.2 2.7 13.6 2.4 2.6 3.9 Queue Service Time (g_s), s Cycle Queue Clearance Time (q c), s 2.9 23.3 1.0 19.2 2.7 13.6 2.4 2.6 3.9 0.39 0.25 0.24 Green Ratio (g/C) 0.46 0.42 0.44 0.30 0.05 0.24 424 Capacity (c), veh/h 314 643 218 709 472 85 420 342 Volume-to-Capacity Ratio (X) 0.408 0.892 0.211 0.813 0.195 0.845 0.710 0.205 0.298 Back of Queue (Q), ft/ln (50 th percentile) 25.9 195 9.3 185.3 25.6 135.7 27.3 27.4 31.5 Back of Queue (Q), veh/ln (50 th percentile) 1.0 7.4 0.4 7.2 1.0 5.2 1.0 1.0 1.2 Queue Storage Ratio (RQ) (50 th percentile) 0.13 0.20 0.05 0.19 0.13 0.14 0.14 0.03 0.31 24.0 31.5 Uniform Delay (d 1), s/veh 13.8 18.2 15.4 18.3 17.4 20.5 21.0 Incremental Delay (d 2), s/veh 0.3 1.8 0.2 0.9 0.1 1.8 4.1 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 14.1 20.1 15.6 19.2 17.5 25.9 35.7 20.6 21.2 Level of Service (LOS) В С В В В С D С С 19.0 В 18.9 В 24.2 С 24.5 С Approach Delay, s/veh / LOS Intersection Delay, s/veh / LOS 20.8 С **Multimodal Results** ΕB WB NB SB Pedestrian LOS Score / LOS 2.12 В 2.31 В 2.11 2.11 В В Bicycle LOS Score / LOS 1.64 В 1.51 1.23 Α 0.90

HCS7 Signalized Intersection Results Summary APPENDIX B **General Information Intersection Information** Skagit County Public Works Duration, h 1.000 Agency Analyst Given Kutz Analysis Date Jun 21, 2024 Area Type Other 15:45 - 16:45 PHF 1.00 Jurisdiction Time Period Urban Street Cook Road Analysis Year 2029 **Analysis Period** 1> 3:45 File Name 2024 Cook-Old99.xus Intersection Old Hwy 99 N **Project Description** 2024 Concurrency Report **Demand Information** EB **WB** NB SB Approach Movement R L R L R L R 525 65 149 Demand (v), veh/h 141 108 51 571 101 238 186 66 95 **Signal Information** Cycle, s 84.2 Reference Phase 2 Offset, s 0 Reference Point Begin Green 3.5 35.4 4.3 0.9 21.7 2.3 Uncoordinated Yes Simult. Gap E/W On Yellow 4.0 0.0 4.0 4.0 0.0 4.0 Force Mode Fixed Simult. Gap N/S 0.0 On Red 0.0 0.0 0.0 0.0 0.0 **Timer Results EBL EBT WBL WBT** NBL **NBT** SBL SBT **Assigned Phase** 5 2 6 3 8 4 1 7 Case Number 1.1 4.0 1.1 4.0 1.1 4.0 2.0 3.0 Phase Duration, s 9.8 41.7 7.5 39.4 9.2 26.7 8.3 25.7 Change Period, (Y+Rc), 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 5.8 34.7 3.4 28.6 5.6 21.3 5.3 7.6 0.1 Green Extension Time (g_e), s 0.2 2.7 0.0 2.8 1.1 0.1 1.2 Phase Call Probability 0.96 1.00 0.70 1.00 0.91 1.00 0.79 1.00 0.00 0.01 0.00 0.00 0.00 0.00 0.00 0.00 Max Out Probability SB **Movement Group Results** EΒ **WB** NB Approach Movement L Т R L Т R L Т R L Т R **Assigned Movement** 5 2 12 1 6 16 3 8 18 7 4 14 Adjusted Flow Rate (v), veh/h 141 633 51 636 101 402 66 95 116 1725 1537 1753 1807 1725 1687 1668 1752 1427 Adjusted Saturation Flow Rate (s), veh/h/ln 3.8 32.7 1.4 26.6 3.6 3.3 3.6 5.6 Queue Service Time (g_s), s 19.3 Cycle Queue Clearance Time (q c), s 3.8 32.7 1.4 26.6 3.6 19.3 3.3 3.6 5.6 0.27 0.26 Green Ratio (g/C) 0.50 0.45 0.47 0.42 0.32 0.05 0.26 Capacity (c), veh/h 286 690 188 761 468 455 85 454 369 Volume-to-Capacity Ratio (X) 0.493 0.918 0.272 0.835 0.216 0.883 0.775 0.209 0.314 Back of Queue (Q), ft/ln (50 th percentile) 36.3 322.8 13.3 276.4 36.3 214.7 39.3 39.1 46.3 Back of Queue (Q), veh/ln (50 th percentile) 1.4 12.3 0.5 10.7 1.4 8.2 1.5 1.4 1.8 Queue Storage Ratio (RQ) (50 th percentile) 0.18 0.32 0.07 0.28 0.18 0.21 0.20 0.04 0.46 29.6 Uniform Delay (d 1), s/veh 17.1 21.9 19.2 21.9 20.8 39.7 24.6 25.3 Incremental Delay (d 2), s/veh 0.5 9.0 0.3 1.9 0.1 6.1 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 17.6 30.9 19.5 23.7 20.9 35.7 45.5 24.7 25.5 Level of Service (LOS) В С В С С D D С С 28.4 С 23.4 С 32.7 С 30.0 С Approach Delay, s/veh / LOS Intersection Delay, s/veh / LOS 28.1 С **Multimodal Results** ΕB WB NB SB Pedestrian LOS Score / LOS 2.12 В 2.31 В 2.11 2.11 В В Bicycle LOS Score / LOS 1.76 В 1.62 1.32 Α 0.94

		HCS7 Two-La	ane	Highway Re	eport B	EGIN APPENDIX C
Pro	ject Information					
Anal	yst	Given Kutz		Date		06/12/2025
Ager	ncy	Skagit County	Skagit County			2025
Juris	diction	County		Time Period Analy	zed	2024
Proje	ect Description	Cook Road E of Green		Unit		United States Customary
		Se	egn	nent 1		
Veł	nicle Inputs					
Segr	nent Type	Passing Zone		Length, ft		7920
Lane	Width, ft	12		Shoulder Width, f	t	6
Speed Limit, mi/h 50 Access Point De		Access Point Dens	sity, pts/mi	12.0		
Dei	mand and Capacity					
Directional Demand Flow Rate, veh/h 63		631		Opposing Deman	d Flow Rate, veh/h	552
Peak	Hour Factor	0.94		Total Trucks, %		8.50
Segr	nent Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.37
Into	ermediate Results					
Segr	nent Vertical Class	1		Free-Flow Speed, mi/h		53.7
Spee	ed Slope Coefficient	3.33686		Speed Power Coefficient		0.47545
PF S	ope Coefficient	-1.28897		PF Power Coefficient		0.76414
In Pa	ssing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		7.3
%lm	proved % Followers	0.0		% Improved Avg Speed		0.0
Suk	segment Data					
#	Segment Type	Length, ft	Rad	lius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	7920	-		-	51.2
Veł	nicle Results					
Aver	age Speed, mi/h	51.2		Percent Followers	, %	59.6
Segr	nent Travel Time, minutes	1.76		Followers Density, followers/mi/ln		7.3
Vehi	cle LOS	С				

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		HCS7 Two-L	ane	Highway Re	eport		
Pro	ject Information						
Anal	yst	Given Kutz		Date		06/12/2025	
Ageı	ncy	Skagit County		Analysis Year		2025	
Juris	diction	County		Time Period Analy	zed	2029	
Proje	ect Description	Cook Road E of Green	n	Unit		United States Customary	
		S	Segn	nent 1			
Veł	nicle Inputs						
Segr	ment Type	Passing Zone		Length, ft		7920	
Lane	e Width, ft	12		Shoulder Width, f	t	6	
Spee	ed Limit, mi/h	50		Access Point Dens	sity, pts/mi	12.0	
Dei	mand and Capacity	'					
Directional Demand Flow Rate, veh/h		697		Opposing Deman	d Flow Rate, veh/h	552	
Peak	Hour Factor	0.94		Total Trucks, %		8.50	
Segr	ment Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.41	
Int	ermediate Results						
Segr	ment Vertical Class	1		Free-Flow Speed, mi/h		53.7	
Spee	ed Slope Coefficient	3.33686	3.33686		fficient	0.47545	
PF S	lope Coefficient	-1.28897	-1.28897		ent	0.76414	
In Pa	assing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		8.5	
%lm	proved % Followers	0.0		% Improved Avg S	Speed	0.0	
Sul	osegment Data						
#	Segment Type	Length, ft	Rac	lius, ft	Superelevation, %	Average Speed, mi/h	
1	Tangent	7920	1-		-	51.1	
Veł	nicle Results						
Aver	rage Speed, mi/h	51.1		Percent Followers	, %	62.4	
Segr	ment Travel Time, minutes	1.76		Followers Density,	followers/mi/ln	8.5	
Vehi	cle LOS	С					

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		HCS7 Two-La	ne l	Highway Re	eport		
Pro	ject Information						
Anal	yst	Given Kutz		Date		06/12/2025	
Age	ncy	Skagit County		Analysis Year		2025	
Juris	diction	County		Time Period Analy	zed	2024	
Project Description Cook Road W of Collins		ıs	Unit		United States Customary		
		Se	egm	ent 1			
Vel	nicle Inputs						
Segr	ment Type	Passing Zone	П	Length, ft		6547	
Lane	e Width, ft	12		Shoulder Width, f	t	6	
Spe	peed Limit, mi/h 50 Access Point Density, pts/mi		12.0				
De	mand and Capacity						
Directional Demand Flow Rate, veh/h 865		Opposing Deman	d Flow Rate, veh/h	0			
Peak	Hour Factor	0.94		Total Trucks, %		7.60	
Segr	ment Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.51	
Int	ermediate Results						
Segr	ment Vertical Class	1		Free-Flow Speed, mi/h		53.7	
Spe	ed Slope Coefficient	3.08347	Speed Power Coeff		fficient	0.67576	
PF S	lope Coefficient	-1.10723		PF Power Coefficient		0.82583	
In Pa	assing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		10.6	
%lm	proved % Followers	0.0		% Improved Avg Speed		0.0	
Sul	osegment Data						
#	Segment Type	Length, ft	Radio	us, ft	Superelevation, %	Average Speed, mi/h	
1	Tangent	6547	-		-	51.2	
Vel	nicle Results	•					
Aver	rage Speed, mi/h	51.2	Percent Followers, %		%	62.5	
Segr	ment Travel Time, minutes	1.45		Followers Density, followers/mi/ln		10.6	
Vahi	cle LOS	D					

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		HCS7 Two-La	ne Highwa	y Report	
Pro	ject Information				
Anal	yst	Given Kutz	Date		06/12/2025
Ager	ncy	Skagit County	Analysis Year		2025
Juris	diction	County	Time Period	Analyzed	2029
Proje	ect Description	Cook Road W of Collin	s Unit		United States Customary
		Se	egment 1		
Veh	nicle Inputs				
Segn	nent Type	Passing Zone	Length, ft		6547
Lane	Width, ft	12	Shoulder Wi	dth, ft	6
Spee	d Limit, mi/h	50	Access Point	Density, pts/mi	12.0
Der	mand and Capacity		'		
Directional Demand Flow Rate, veh/h		955	Opposing De	emand Flow Rate, veh/h	0
Peak	Hour Factor	0.94	Total Trucks,	%	7.60
Segn	nent Capacity, veh/h	1700	Demand/Cap	pacity (D/C)	0.56
Inte	ermediate Results				
Segn	nent Vertical Class	1	Free-Flow Sp	peed, mi/h	53.7
Spee	d Slope Coefficient	3.08347	Speed Power	r Coefficient	0.67576
PF SI	ope Coefficient	-1.10723	PF Power Co	efficient	0.82583
In Pa	ssing Lane Effective Length?	No	Total Segme	nt Density, veh/mi/ln	12.3
%lm _l	proved % Followers	0.0	% Improved	Avg Speed	0.0
Sub	segment Data				
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	6547	-	-	51.0
Veh	nicle Results				
Aver	age Speed, mi/h	51.0	Percent Follo	owers, %	65.6
Segn	nent Travel Time, minutes	1.46	Followers De	ensity, followers/mi/ln	12.3
Vehic	cle LOS	D			

HCSTM Two-Lane Version 7.8.5 Cook Road City Limits.xuf

Given Kutz Skagit County County Cook Road Collins to Brickyard Creek	Date Analysis Year Time Period Ana Unit	llyzed	06/12/2025 2025 2024 United States Customary
Skagit County County Cook Road Collins to Brickyard Creek	Analysis Year Time Period Ana Unit	llyzed	2025 2024
County Cook Road Collins to Brickyard Creek	Time Period Ana Unit	lyzed	2024
Cook Road Collins to Brickyard Creek	Unit	lyzed	
Brickyard Creek			United States Customary
Se	egment 1		
Passing Zone	Length, ft		4800
12	Shoulder Width,	ft	6
35	Access Point De	nsity, pts/mi	18.0
731	Opposing Dema	nd Flow Rate, veh/h	0
0.94	Total Trucks, %		8.80
1700	Demand/Capaci	ty (D/C)	0.43
	·		
1	Free-Flow Speed	d, mi/h	35.1
2.05671	Speed Power Co	efficient	0.67576
-1.09431	PF Power Coeffic	cient	0.76342
No	Total Segment D	ensity, veh/mi/ln	12.6
0.0	% Improved Avo	Speed	0.0
Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
4800	-	-	33.6
		•	•
33.6	Percent Followe	rs, %	57.7
1.62	Followers Densit	ry, followers/mi/ln	12.6
D			
	12 35 731 0.94 1700 1 2.05671 -1.09431 No 0.0 Length, ft 4800 33.6 1.62 D eserved. HCS™ To	12 Shoulder Width, 35 Access Point Der 731 Opposing Dema 0.94 Total Trucks, % 1700 Demand/Capaci 1 Free-Flow Speed 2.05671 Speed Power Co -1.09431 PF Power Coeffic No Total Segment D 0.0 % Improved Avg Length, ft Radius, ft 4800 - 33.6 Percent Follower 1.62 Followers Densit	Shoulder Width, ft 35 Access Point Density, pts/mi 731 Opposing Demand Flow Rate, veh/h 0.94 Total Trucks, % 1700 Demand/Capacity (D/C) 1 Free-Flow Speed, mi/h 2.05671 Speed Power Coefficient -1.09431 PF Power Coefficient No Total Segment Density, veh/mi/ln 0.0 W Improved Avg Speed Length, ft Radius, ft Superelevation, % 4800 - 33.6 Percent Followers, % 1.62 Followers Density, followers/mi/ln D eserved. HCS™ Two-Lane Version 7.8.5

		HCS7 Two-La	ane Hig	nway R	eport		
Pro	ject Information						
Anal	yst	Given Kutz	Date			06/12/2025	
Ager	ncy	Skagit County	Analy	sis Year		2025	
Juris	diction	County	Time	Period Analy	/zed	2029	
Project Description Cook Road Collins to Brickyard Creek		Unit			United States Customary		
		S	egment	1			
Vel	nicle Inputs						
Segr	ment Type Passing Zone		Lengt	h, ft		4800	
Lane	Width, ft	12	Shoul	Shoulder Width, ft		6	
Spee	peed Limit, mi/h 35 Access Point Density, pts/mi		18.0				
Dei	mand and Capacity						
Dire	ctional Demand Flow Rate, veh/h	807	Орро	sing Deman	d Flow Rate, veh/h	0	
Peak	Hour Factor	0.94	Total	Frucks, %		8.80	
Segr	ment Capacity, veh/h	1700	Dema	nd/Capacity	/ (D/C)	0.47	
Inte	ermediate Results						
Segr	ment Vertical Class	1	Free-l	Free-Flow Speed, mi/h		35.1	
Spee	ed Slope Coefficient	2.05671	Speed	Speed Power Coefficient		0.67576	
PF SI	lope Coefficient	-1.09431	PF Po	PF Power Coefficient		0.76342	
In Pa	assing Lane Effective Length?	No	Total	Total Segment Density, veh/mi/ln		14.6	
%lm	proved % Followers	0.0	% lmį	% Improved Avg Speed		0.0	
Suk	osegment Data		·				
#	Segment Type	Length, ft	Radius, ft		Superelevation, %	Average Speed, mi/h	
1	Tangent	4800	-		-	33.5	
Vel	nicle Results		1				
Aver	age Speed, mi/h	33.5	Perce	nt Followers	, %	60.5	
Segr	ment Travel Time, minutes	1.63	Follov	vers Density	14.6		
Vobi	cle LOS	D					

		HCS7 Two-La	ne Highway R	eport	
Pro	ject Information				
Anal	yst	Given Kutz	Date		06/12/2025
Ager	ncy	Skagit County	Analysis Year		2025
Juris	diction	County	Time Period Anal	yzed	2024
Project Description Cook Road East near City Limits		ty Unit		United States Customary	
		Se	gment 1		
Veh	nicle Inputs				
Segn	nent Type	Passing Zone	Length, ft		670
Lane	Width, ft	12	Shoulder Width,	ft	4
Speed Limit, mi/h 35 Access Point Density, pts/r		sity, pts/mi	9.0		
Der	mand and Capacity				
Directional Demand Flow Rate, veh/h 731		731	Opposing Demar	nd Flow Rate, veh/h	0
Peak	Hour Factor	0.94	Total Trucks, %		8.80
Segn	nent Capacity, veh/h	1700	Demand/Capacit	y (D/C)	0.43
Inte	ermediate Results				
Segn	nent Vertical Class	1	Free-Flow Speed,	mi/h	36.0
Spee	ed Slope Coefficient	2.05612	Speed Power Coe	efficient	0.67576
PF SI	ope Coefficient	-1.17553	PF Power Coeffic	ent	0.73248
In Pa	ssing Lane Effective Length?	No	Total Segment De	ensity, veh/mi/ln	12.9
%lm	proved % Followers	0.0	% Improved Avg	Speed	0.0
Suk	segment Data				
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	670	-	-	34.5
Veh	nicle Results				
Aver	age Speed, mi/h	34.5	Percent Followers	5, %	60.7
	nent Travel Time, minutes	0.22	Followers Density, followers/mi/ln		12.9
Vohi	cle LOS	D			

		HCS7 Two-La	ne Highway R	Report		
Pro	ject Information					
Anal	yst	Given Kutz	Date		06/12/2025	
Ager	ncy	Skagit County	Analysis Year		2025	
Juris	diction	County	Time Period Ana	lyzed	2029	
Project Description Cook Road East near City Limits		ty Unit		United States Customary		
		Se	gment 1			
Veh	nicle Inputs					
Segn	nent Type	Type Passing Zone			670	
Lane	Width, ft	12	Shoulder Width,	ft	4	
Speed Limit, mi/h 35 Access Poir		Access Point Der	nsity, pts/mi	9.0		
Der	nand and Capacity					
Directional Demand Flow Rate, veh/h		807	Opposing Dema	nd Flow Rate, veh/h	0	
Peak	Hour Factor	0.94	Total Trucks, %		8.80	
Segn	nent Capacity, veh/h	1700	Demand/Capaci	ty (D/C)	0.47	
Inte	ermediate Results		<u> </u>			
Segn	nent Vertical Class	1	Free-Flow Speed	I, mi/h	36.0	
Spee	d Slope Coefficient	2.05612	Speed Power Co	efficient	0.67576	
PF SI	ope Coefficient	-1.17553	PF Power Coeffic	cient	0.73248	
In Pa	ssing Lane Effective Length?	No	Total Segment D	ensity, veh/mi/ln	14.9	
%lm _l	proved % Followers	0.0	% Improved Avg	Speed	0.0	
Sub	segment Data		<u> </u>			
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h	
1	Tangent	670	-	-	34.3	
Veh	icle Results					
Aver	age Speed, mi/h	34.3	Percent Follower	rs, %	63.4	
	nent Travel Time, minutes	0.22	Followers Densit	14.9		
Vohid	cle LOS	D				

		HCS7 Two-Lai	ne Highway F	Report		
Pro	ject Information					
Anal	yst	Given Kutz	Date		06/12/2025	
Ageı	ncy	Skagit County	Analysis Year		2025	
Juris	diction	County	Time Period Ana	alyzed	2024	
Project Description Pioneer Hwy County Line to Milltown		e Unit		United States Customary		
		Se	gment 1			
Veł	nicle Inputs					
Segr	ment Type	Passing Zone	Length, ft		4662	
Lane	Width, ft	12	Shoulder Width	, ft	6	
Speed Limit, mi/h 50 Acce		Access Point De	nsity, pts/mi	5.0		
Dei	mand and Capacity					
Directional Demand Flow Rate, veh/h		581	Opposing Dema	and Flow Rate, veh/h	451	
Peak	Hour Factor	0.94	Total Trucks, %		9.50	
Segr	ment Capacity, veh/h	1700	Demand/Capaci	ty (D/C)	0.34	
Int	ermediate Results					
Segr	ment Vertical Class	1	Free-Flow Speed	d, mi/h	55.4	
Spee	ed Slope Coefficient	3.37715	Speed Power Co	pefficient	0.48892	
PF S	lope Coefficient	-1.28032	PF Power Coeffi	cient	0.78370	
In Pa	assing Lane Effective Length?	No	Total Segment D	Density, veh/mi/ln	6.2	
%lm	proved % Followers	0.0	% Improved Avg	g Speed	0.0	
Sul	osegment Data	•				
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h	
1	Tangent	4662	-	-	53.1	
Veł	nicle Results					
Aver	age Speed, mi/h	53.1	Percent Followe	rs, %	56.7	
Segr	ment Travel Time, minutes	1.00	Followers Densi	ty, followers/mi/ln	6.2	
Vehi	cle LOS	С				

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		HCS7 Two-Lai	ne Highway I	Report	
Pro	ject Information				
Anal	yst	Given Kutz	Date		06/12/2025
Ager	าсу	Skagit County	Analysis Year		2025
Juris	diction	County	Time Period Ana	alyzed	2029
·		Pioneer Hwy County Lin to Milltown	e Unit		United States Customar
		Se	gment 1		
Vel	nicle Inputs				
Segr	ment Type	Passing Zone	Length, ft		4662
Lane	Width, ft	12	Shoulder Width	, ft	6
Spee	eed Limit, mi/h 50 Access Point Density, pts/mi		5.0		
Dei	mand and Capacity		·		
Directional Demand Flow Rate, veh/h 641		641	Opposing Dema	and Flow Rate, veh/h	498
Peak	Hour Factor	0.94	Total Trucks, %		9.50
Segr	ment Capacity, veh/h	1700	Demand/Capac	ity (D/C)	0.38
Inte	ermediate Results		·		
Segr	ment Vertical Class	1	Free-Flow Spee	d, mi/h	55.4
Spee	ed Slope Coefficient	3.38829	Speed Power Co	pefficient	0.48236
PF SI	lope Coefficient	-1.28626	PF Power Coeffi	cient	0.78159
In Pa	assing Lane Effective Length?	No	Total Segment I	Density, veh/mi/ln	7.2
%lm	proved % Followers	0.0	% Improved Av	g Speed	0.0
Suk	osegment Data		·		
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4662	-	-	52.9
Vel	nicle Results			,	
Aver	age Speed, mi/h	52.9	Percent Followe	ers, %	59.7
Segr	ment Travel Time, minutes	1.00	Followers Densi	ty, followers/mi/ln	7.2
Vohi	cle LOS	С			

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		HCS7 Two-L	ane	Highway Re	eport	
Pro	ject Information					
Analy	yst	Given Kutz		Date		06/12/2025
Ager	ncy	Skagit County		Analysis Year		2025
Juriso	diction	County		Time Period Analy	/zed	2024
Proje	ect Description	Pioneer Hwy Milltown Fisher	n to	Unit		United States Customary
		S	Segn	nent 1		
Veh	icle Inputs					
Segn	nent Type	Passing Zone		Length, ft		2825
Lane	Width, ft	12		Shoulder Width, f	t	6
Spee	d Limit, mi/h	50		Access Point Dens	sity, pts/mi	5.0
Der	mand and Capacity					
Direc	tional Demand Flow Rate, veh/h	590		Opposing Demand Flow Rate, veh/h		446
Peak	Hour Factor	0.94		Total Trucks, %		9.50
Segn	nent Capacity, veh/h	1700		Demand/Capacity	/ (D/C)	0.35
Inte	ermediate Results					
Segn	nent Vertical Class	1		Free-Flow Speed, mi/h		55.4
Spee	d Slope Coefficient	3.35442		Speed Power Coefficient		0.48971
PF SI	ope Coefficient	-1.31106		PF Power Coefficient		0.77762
In Pa	ssing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		6.5
%lm _l	proved % Followers	0.0		% Improved Avg Speed		0.0
Sub	segment Data					
#	Segment Type	Length, ft	Rad	ius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2825	-		-	53.1
Veh	icle Results	·				•
Avera	age Speed, mi/h	53.1	3.1 Percent Followers		ent Followers, % 58.1	
Segn	nent Travel Time, minutes	0.60		Followers Density, followers/mi/ln		6.5
Vehic	cle LOS	С				

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		HCS7 Two-La	ne Highway	Report	
Project Info	rmation				
Analyst		Given Kutz	Date		06/12/2025
Agency		Skagit County	Analysis Year		2025
Jurisdiction		County	Time Period Ar	nalyzed	2029
Project Descripti	on	Pioneer Hwy Milltown t Fisher	to Unit		United States Customary
		Se	gment 1		
Vehicle Inpu	ıts				
Segment Type		Passing Zone	Length, ft		2825
Lane Width, ft		12	Shoulder Widtl	h, ft	6
Speed Limit, mi/	h	50	Access Point D	ensity, pts/mi	5.0
Demand an	d Capacity				
Directional Dem	and Flow Rate, veh/h	652	Opposing Dem	nand Flow Rate, veh/h	493
Peak Hour Facto	r	0.94	Total Trucks, %		9.50
Segment Capaci	ty, veh/h	1700	Demand/Capa	city (D/C)	0.38
Intermediat	e Results		·		•
Segment Vertica	l Class	1	Free-Flow Spee	ed, mi/h	55.4
Speed Slope Coe	efficient	3.36563	Speed Power C	Coefficient	0.48307
PF Slope Coeffic	ient	-1.31725	PF Power Coeff	ficient	0.77559
In Passing Lane I	Effective Length?	No	Total Segment	Density, veh/mi/ln	7.5
%Improved % Fo	ollowers	0.0	% Improved Av	/g Speed	0.0
Subsegmen	t Data				
# Segment T	ype	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1 Tangent		2825	-	-	52.9
Vehicle Resi	ults				
Average Speed,	mi/h	52.9	Percent Follow	ers, %	61.2
Segment Travel	Time, minutes	0.61	Followers Dens	sity, followers/mi/ln	7.5
Vehicle LOS		С			

HCSTM Two-Lane Version 7.8.5 Pioneer Hwy N of County Line.xuf

		HCS7 Two-La	ane Highwa	y Report	
Pro	ject Information				
Anal	yst	Given Kutz	Date		06/12/2025
Ager	ncy	Skagit County	Analysis Yea	ır	2025
Juris	diction	County	Time Period	Analyzed	2024
Proje	ect Description	Pioneer Hwy Fisher to Roundabout	Unit		United States Customary
		S	egment 1		
Veh	nicle Inputs				
Segn	nent Type	Passing Zone	Length, ft		8696
Lane	Width, ft	12	Shoulder W	idth, ft	6
Spee	ed Limit, mi/h	50	Access Poin	t Density, pts/mi	5.0
Der	mand and Capacity				
Dire	ctional Demand Flow Rate, veh/h	586	Opposing D	emand Flow Rate, veh/	h 410
Peak	Hour Factor	0.94	Total Trucks	, %	7.00
Segn	nent Capacity, veh/h	1700	Demand/Ca	pacity (D/C)	0.34
Inte	ermediate Results		·		·
Segn	nent Vertical Class	1	Free-Flow S	peed, mi/h	55.5
Spee	ed Slope Coefficient	3.40666	Speed Powe	er Coefficient	0.49528
PF SI	ope Coefficient	-1.26622	PF Power Co	pefficient	0.77100
In Pa	ssing Lane Effective Length?	No	Total Segme	ent Density, veh/mi/ln	6.3
%lm	proved % Followers	0.0	% Improved	l Avg Speed	0.0
Suk	segment Data		·		
#	Segment Type	Length, ft	Radius, ft	Superelevation,	% Average Speed, mi/h
1	Tangent	8696	-	-	53.1
Veh	nicle Results	·			
Aver	age Speed, mi/h	53.1	Percent Foll	owers, %	56.8
Segn	nent Travel Time, minutes	1.86		ensity, followers/mi/ln	6.3
Vehic	cle LOS	С			

		HCS7 Two-La	ane High	way R	eport	
Pro	ject Information					
Anal	yst	Given Kutz	Date			06/12/2025
Ager	ncy	Skagit County	Analysis	Year		2025
Juris	diction	County	Time Pe	riod Analy	/zed	2029
Proje	ect Description	Pioneer Hwy Fisher to Roundabout	Unit			United States Customary
		S	egment 1			
Veł	nicle Inputs					
Segr	nent Type	Passing Zone	Length,	ft		8696
Lane	Width, ft	12	Shoulde	er Width, f	t	6
Spee	ed Limit, mi/h	50	Access	Point Dens	sity, pts/mi	5.0
Dei	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	647	Opposii	Opposing Demand Flow Rate, veh/h		452
Peak	Hour Factor	0.94	Total Tru	Total Trucks, %		7.00
Segr	nent Capacity, veh/h	1700	Demand	d/Capacity	' (D/C)	0.38
Into	ermediate Results					
Segr	nent Vertical Class	1	Free-Flo	w Speed,	mi/h	55.5
Spee	ed Slope Coefficient	3.41729	Speed F	Speed Power Coefficient		0.48877
PF S	ope Coefficient	-1.27207	PF Powe	PF Power Coefficient		0.76893
In Pa	ssing Lane Effective Length?	No	Total Se	Total Segment Density, veh/mi/ln		7.3
%lm	proved % Followers	0.0	% Impro	% Improved Avg Speed		0.0
Suk	segment Data	•				
#	Segment Type	Length, ft	Radius, ft		Superelevation, %	Average Speed, mi/h
1	Tangent	8696	-		-	53.0
Veł	nicle Results	•				
Aver	age Speed, mi/h	53.0	Percent	Followers	, %	59.7
Segr	nent Travel Time, minutes	1.87	Followe	Followers Density, followers/mi/ln		7.3
	cle LOS	С				

		HCS7 Two-Lar	ne Highway F	Report	
Pro	ject Information				
Anal	yst	Given Kutz	Date		06/12/2025
Ager	ncy	Skagit County	Analysis Year		2025
Juris	diction	County	Time Period Ana	lyzed	2024
Proje	ect Description	Pioneer Hwy Roundabou to I-5	ut Unit		United States Customary
		Se	gment 1		
Veh	nicle Inputs				
Segn	nent Type	Passing Zone	Length, ft		127
Lane	Width, ft	12	Shoulder Width,	. ft	6
Spee	ed Limit, mi/h	35	Access Point De	nsity, pts/mi	0.0
Der	mand and Capacity				
Dire	ctional Demand Flow Rate, veh/h	641	Opposing Dema	and Flow Rate, veh/h	556
Peak	Hour Factor	0.94	Total Trucks, %		7.30
Segn	nent Capacity, veh/h	1700	Demand/Capaci	ty (D/C)	0.38
Inte	ermediate Results				
Segn	nent Vertical Class	1	Free-Flow Speed	d, mi/h	39.7
Spee	ed Slope Coefficient	2.50116	Speed Power Co	pefficient	0.47494
PF SI	ope Coefficient	-1.40929	PF Power Coeffic	cient	0.70015
In Pa	ssing Lane Effective Length?	No	Total Segment D	Density, veh/mi/ln	10.9
%lm	proved % Followers	0.0	% Improved Avo	g Speed	0.0
Suk	segment Data				
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	127	-	-	37.8
Veh	nicle Results				
Aver	age Speed, mi/h	37.8	Percent Followe	rs, %	64.4
Segn	nent Travel Time, minutes	0.04	Followers Densit	ty, followers/mi/ln	10.9
\/ahi	cle LOS	D			

		HCS7 Two-Lar	ne Highway F	Report	
Pro	ject Information				
Anal	yst	Given Kutz	Date		06/12/2025
Ager	ncy	Skagit County	Analysis Year		2025
Juris	diction	County	Time Period Ana	lyzed	2029
Proje	ect Description	Pioneer Hwy Roundabou to I-5	ut Unit		United States Customary
		Se	gment 1		
Vel	nicle Inputs				
Segr	ment Type	Passing Zone	Length, ft		127
Lane	Width, ft	12	Shoulder Width,	ft	6
Spee	ed Limit, mi/h	35	Access Point De	nsity, pts/mi	0.0
Dei	mand and Capacity				
Dire	ctional Demand Flow Rate, veh/h	709	Opposing Dema	nd Flow Rate, veh/h	614
Peak	Hour Factor	0.94	Total Trucks, %		7.30
Segr	nent Capacity, veh/h	1700	Demand/Capaci	ty (D/C)	0.42
Inte	ermediate Results				
Segr	ment Vertical Class	1	Free-Flow Speed	d, mi/h	39.7
Spee	ed Slope Coefficient	2.51348	Speed Power Co	efficient	0.46837
PF SI	lope Coefficient	-1.41832	PF Power Coeffic	cient	0.69827
In Pa	ssing Lane Effective Length?	No	Total Segment D	ensity, veh/mi/ln	12.6
%lm	proved % Followers	0.0	% Improved Avg	speed	0.0
Suk	segment Data				
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	127	-	-	37.7
Vel	nicle Results			•	
Aver	age Speed, mi/h	37.7	Percent Follower	rs, %	67.2
Segr	ment Travel Time, minutes	0.04	_	ry, followers/mi/ln	12.6
Vehi	cle LOS	D			

		HCS7 Two-	Lane	Highway R	eport	
Pro	ject Information					
Analy	yst	Given Kutz		Date		06/12/2025
Agen	ncy	Skagit County		Analysis Year		2025
Juriso	diction	County		Time Period Analy	yzed	2024
Proje	ect Description	S Laventure Rd S of Blackburn	-	Unit		United States Customary
			Segn	nent 1		
Veh	icle Inputs					
Segn	nent Type	Passing Zone		Length, ft		1447
Lane	Width, ft	12		Shoulder Width, f	t	6
Spee	d Limit, mi/h	35		Access Point Den	sity, pts/mi	0.0
Der	mand and Capacity					
Direc	tional Demand Flow Rate, veh/h	539		Opposing Demand Flow Rate, veh/h		267
Peak	Hour Factor	0.94	794 Total Trucks, %			7.00
Segn	nent Capacity, veh/h	1700		Demand/Capacity	/ (D/C)	0.32
Inte	ermediate Results					
Segn	nent Vertical Class	1		Free-Flow Speed,	mi/h	39.7
Spee	d Slope Coefficient	2.42900		Speed Power Coefficient		0.52235
PF SI	ope Coefficient	-1.34216		PF Power Coefficient		0.71481
In Pa	ssing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		8.2
%lmp	proved % Followers	0.0		% Improved Avg Speed		0.0
Sub	segment Data					
#	Segment Type	Length, ft	Rad	lius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1447	-		-	38.1
Veh	icle Results	,				
Avera	age Speed, mi/h	38.1		Percent Followers, %		57.8
	nent Travel Time, minutes	0.43			Followers Density, followers/mi/ln	
\/obje	cle LOS	С				

HCSTM Two-Lane Version 7.8.5 Cook Road E of Green.xuf

		HCS7 Two-La	ane Highwa	y Report	
Pro	ject Information				
Anal	yst	Given Kutz	Date		06/12/2025
Ager	ncy	Skagit County	Analysis Yea	r	2025
Juris	diction	County	Time Period	Analyzed	2029
Proje	ect Description	S Laventure Rd S of Blackburn	Unit		United States Customar
		S	egment 1		
Veh	nicle Inputs				
Segn	ment Type	Passing Zone	Length, ft		1447
Lane	Width, ft	12	Shoulder W	dth, ft	6
Spee	ed Limit, mi/h	35	Access Point	t Density, pts/mi	0.0
Der	mand and Capacity				
Direc	ctional Demand Flow Rate, veh/h	596	Opposing D	emand Flow Rate, veh/h	295
Peak	Hour Factor	0.94	Total Trucks,	%	7.00
Segn	ment Capacity, veh/h	1700	Demand/Ca	pacity (D/C)	0.35
Inte	ermediate Results		·		
Segn	ment Vertical Class	1	Free-Flow S	peed, mi/h	39.7
Spee	ed Slope Coefficient	2.43756	Speed Powe	r Coefficient	0.51631
PF SI	lope Coefficient	-1.34932	PF Power Co	pefficient	0.71336
In Pa	ssing Lane Effective Length?	No	Total Segme	nt Density, veh/mi/ln	9.5
%lm _l	proved % Followers	0.0	% Improved	Avg Speed	0.0
Sub	segment Data		·		
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1447	-	-	38.0
Veh	nicle Results				,
Aver	age Speed, mi/h	38.0	Percent Follo	owers, %	60.6
Segn	ment Travel Time, minutes	0.43			9.5
Vohid	cle LOS	С			

HCSTM Two-Lane Version 7.8.5 Cook Road E of Green.xuf

		HCS7 Two-	Lane	Highway Re	eport	
Pro	ject Information					
Anal	yst	Given Kutz		Date		06/12/2025
Ager	าсу	Skagit County		Analysis Year		2025
Juris	diction	County		Time Period Analy	/zed	2024
Proje	ect Description	S Laventure Rd E of Blodgett		Unit		United States Customary
			Segn	nent 1		
Vel	nicle Inputs					
Segr	ment Type	Passing Zone		Length, ft		1203
Lane	Width, ft	12		Shoulder Width, f	t	6
Spee	ed Limit, mi/h	35		Access Point Dens	sity, pts/mi	1.0
Dei	mand and Capacity					·
Dire	ctional Demand Flow Rate, veh/h	524	524		d Flow Rate, veh/h	272
Peak	Hour Factor	0.94		Total Trucks, %		7.00
Segr	ment Capacity, veh/h	1700		Demand/Capacity	' (D/C)	0.31
Inte	ermediate Results					
Segr	ment Vertical Class	1		Free-Flow Speed, mi/h		39.4
Spee	ed Slope Coefficient	2.41471		Speed Power Coefficient		0.52116
PF SI	lope Coefficient	-1.35006		PF Power Coefficient		0.71089
In Pa	assing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		7.9
%lm	proved % Followers	0.0		% Improved Avg Speed		0.0
Suk	segment Data					·
#	Segment Type	Length, ft	Rac	dius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1203	-		-	37.9
Vel	nicle Results					•
Aver	age Speed, mi/h	37.9		Percent Followers	, %	57.4
Segr	ment Travel Time, minutes	0.36			, followers/mi/ln	7.9
Vahi	cle LOS	С				

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		HCS7 Two-La	ane Highway	Report	
Proj	ject Information				
Analy	/st	Given Kutz	Date		06/12/2025
Agen	су	Skagit County	Analysis Year		2025
Jurisc	diction	County	Time Period A	nalyzed	2029
Proje	ct Description	S Laventure Rd E of Blodgett	Unit		United States Customary
		S	egment 1		
Veh	icle Inputs				
Segm	nent Type	Passing Zone	Length, ft		1203
Lane	Width, ft	12	Shoulder Wid	th, ft	6
Spee	d Limit, mi/h	35	Access Point I	Density, pts/mi	1.0
Den	nand and Capacity		·		
Direc	tional Demand Flow Rate, veh/h	579	Opposing De	mand Flow Rate, veh/h	301
Peak	Hour Factor	0.94	Total Trucks, 9	%	7.00
Segm	nent Capacity, veh/h	1700	Demand/Cap	acity (D/C)	0.34
Inte	ermediate Results		·		
Segm	nent Vertical Class	1	Free-Flow Spe	eed, mi/h	39.4
Spee	d Slope Coefficient	2.42351	Speed Power	Coefficient	0.51498
PF Slo	ope Coefficient	-1.35746	PF Power Coe	fficient	0.70942
In Pas	ssing Lane Effective Length?	No	Total Segmen	t Density, veh/mi/ln	9.2
%lmp	proved % Followers	0.0	% Improved A	Avg Speed	0.0
Sub	segment Data		·		
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1203	-	-	37.8
Veh	icle Results	·			
Avera	age Speed, mi/h	37.8	Percent Follow	wers, %	60.2
Segm	nent Travel Time, minutes	0.36		nsity, followers/mi/ln	9.2
Vehic	:le LOS	С			

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