

TECHNICAL MEMORANDUM #5 (DRAFT)

DATE: May 24, 2024

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SUBJECT: OR 42-US 101 Passing Lanes Study
Operational Analysis - Existing Conditions

DKS P#22129-004

INTRODUCTION

US 101 (Oregon Coast Highway; ODOT Highway #009) and OR 42 (Coos Bay-Roseburg Highway; ODOT Highway #035) are two highways in southwestern Oregon. US 101 travels north-south along the Oregon Coast, spanning the length of the state and traversing seven counties. It is an important corridor for tourism and inter-state traffic flows. OR 42 generally travels east-west and traverses the Coast Range mountains. It is a designated freight route per the Oregon Highway Plan. US 101 is only designated as such from Florence in Lane County to south of Coos Bay in Coos County. Both US 101 and OR 42 are largely two-lane highways, and predominantly in a rural context.

Portions of US 101 and OR 42, identified in **Figure 1**, were identified for a passing lane study. Segments in red are along OR 42, and segments in purple are along US 101. Results from this study will inform discussions around proposed sites for passing lanes along US 101 and OR 42 within the study area. This memorandum presents the results of the existing conditions operational analysis element of that study.

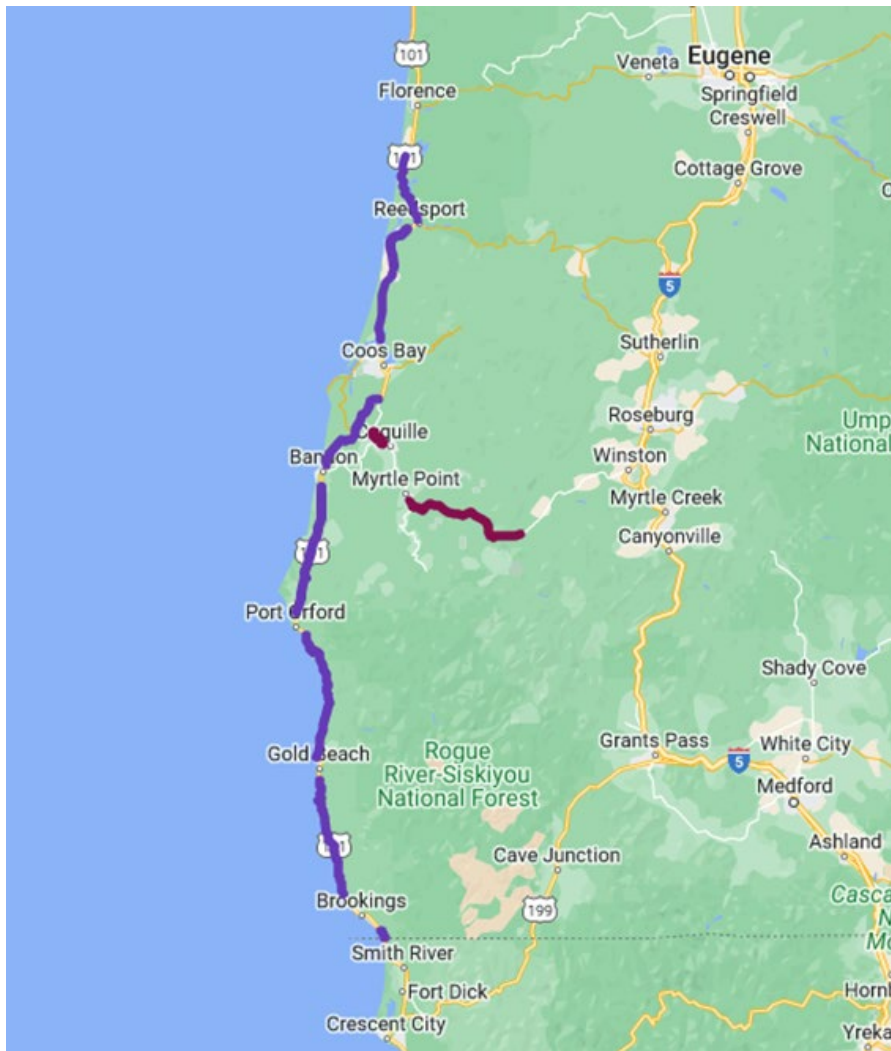


FIGURE 1: OR 42 AND US 101 STUDY CORRIDOR SEGMENTS

SEGMENTATION

Two-lane highway analysis methodology, as defined in the *Highway Capacity Manual, 7th Edition (HCM)*, is structured in a hierarchy that requires the definition of three levels of roadway: facility, segment, and sub-segment. Facilities are composed of consecutive segments which, in turn, are composed of sub-segments. Therefore, facilities are continuous sections of a single highway.

FACILITIES

The study area only includes rural and unincorporated sections of each highway and, therefore, does not include any sections within a city's Urban Growth Boundary (UGB). US 101 and OR 42 were each partitioned into the facilities shown in **Table 1**. While the extents of each facility were the same in each direction of the highway, each direction was analyzed individually, resulting in a total of 22 facilities that were analyzed in this analysis. It should be noted that the segmentation process often resulted in a different set of segments for each direction; however, both directions were identical at the facility level.

TABLE 1. DEFINED FACILITIES FOR OR 42 AND US 101

HIGHWAY	BEGINNING MILE POINT	ENDING MILE POINT	DESCRIPTION	ANALYSIS NAME
OR 42	7.10	9.38	Lampa Ln to Coquille west UGB	Facility 42-A (Eastbound and Westbound)
	22.09	23.44	Myrtle Point east UGB to OR 542 junction	Facility 42-B (Eastbound and Westbound)
	23.72	47.75	OR 542 junction to OR 42 couplet	Facility 42-C (Eastbound and Westbound)
US 101	198.59	211.07	Douglas County north county line to Reedsport north UGB	Facility 101-A (Northbound and Southbound)
	213.45	221.35	Reedsport south UGB to Lakeside north UGB	Facility 101-B (Northbound and Southbound)
	222.10	233.93	Lakeside south UGB to North Bend north UGB	Facility 101-C (Northbound and Southbound)
	245.00	260.63	US 101/OR 42 junction to Bandon north UGB	Facility 101-D (Northbound and Southbound)
	276.71	298.32	Bandon south UGB to Port Orford north UGB	Facility 101-E (Northbound and Southbound)
	303.30	326.21	Port Orford south UGB to Gold Beach north UGB	Facility 101-F (Northbound and Southbound)
	331.29	352.20	Gold Beach south UGB to Brookings north UGB	Facility 101-G (Northbound and Southbound)
	361.52	363.11	Brookings south UGB to California border	Facility 101-H (Northbound and Southbound)

SEGMENTS

A segment is a continuous section of a facility that exhibits consistent roadway and traffic characteristics. These characteristics are identified in the *HCM*, and include the following:

- Posted speed limit,
- Passing context (passing constrained, passing zone, or passing lane),
- Traffic volumes,
- Vertical classification, and
- Other roadway characteristics such as lane width, shoulder width, and access density

Vertical classification was determined using a matrix of vertical grade and segment length provided in Exhibit 15-11 of the *HCM*. Actual grades were taken from ODOT's Vertical Curve Reports and then converted into a representative grade for a segment that would maintain the vertical classification for the segment as a whole. For example, a vertical curve with a grade of 5% but of short length would have a vertical classification of 1 according to the *HCM* but applying that grade to the entire length of the segment would result in a higher classification. Therefore, a representative grade was assigned that maintained a vertical classification of 1 for the entire segment. Traffic volumes are represented by 30th highest hour design-hour volumes (DHV-30) for existing conditions.

SUB-SEGMENTS

Sub-segments are the most granular level of highway segmentation within the passing lane study methodology. Per the *HCM*, sub-segments are defined by changes in the horizontal curvature of a roadway. There are two classifications of horizontal geometry: tangents and curves. Tangents are characterized solely by their length, while curves are characterized by their length, curve radius, and superelevation. Per the *HCM*, each curve was assigned its own sub-segment, meaning each tangent was similarly assigned its own sub-segment.

Due to the specifications of segmentation, some sub-segments were split across segments. For example, a tangent of 2.00 miles in length may be split into multiple segments due to changes in the segment characteristics described above. Where the lengths of curve sub-segments were split between segments, their other characteristics (radius and superelevation) were maintained.

ANALYSIS INPUTS AND RESULTS

The existing conditions operational analysis was performed using HCS7 software, which implements methodologies described in the *HCM 6th Edition*. This was selected because Level-of-Service (LOS) results are provided, which more appropriately depicts driver experience than volume-to-capacity (V/C) ratios. As summarized in the Passing Lanes Study Methodology and Assumptions Memorandum (DKS and KAI, February 2024), the applicable mobility targets for the analysis corridors are a V/C ratio of 0.70 for segments designated as part of an *Oregon Highway Plan* Freight Route and a V/C ratio of 0.75 for those segments not part of a Freight Route.

The inputs required for the HCS evaluation and their respective sources used for this analysis are listed in **Table 2**.

TABLE 2. HCS7 INPUTS AND DATA SOURCES

VARIABLE	INPUT	DATA SOURCE
SEGMENT-LEVEL		
TYPE	Passing Context	Review of aerial photography; ODOT lane striping GIS shapefile
SPEED LIMIT, MI/H	Speed Limit	ODOT TransGIS
DIRECTIONAL VOLUME, VEH/H	DHV-30	ODOT OTMS
OPPOSING VOLUME, VEH/H	DHV-30	ODOT OTMS
PEAK HOUR FACTOR	Peak Hour Factor	ODOT ATR
HEAVY VEHICLE PERCENTAGE	Heavy Vehicle Percentage	ODOT ATR
LANE WIDTH, FT	12 ft	[Default value]
SHOULDER WIDTH (PAVED), FT	6 ft	[Default value]
GRADE, %	Representative Grade	ODOT Vertical Curve Reports
ACCESS POINT DENSITY, POINTS/MI	Access Points per Mile	ODOT Lane Reports
SUBSEGMENT-LEVEL		
TYPE	Tangent/Curve	ODOT Horizontal Curve Reports
LENGTH, FT	Length, ft	ODOT Horizontal Curve Reports
RADIUS, FT	Radius, ft	ODOT Horizontal Curve Reports ¹
SUPERELEVATION, %	Superelevation, %	ODOT Horizontal Curve Reports ²

Notes:

¹ Calculated using curve length and central angle

² Assumed 2% where not provided

Table 3 provides the results of the HCS7 analysis at the facility level. In addition, **Table 3** summarizes how many segments within each facility meet the applicable V/C ratio mobility targets. Detailed results at the segment level for each facility are provided in **Appendix A**.

TABLE 3. FACILITY PERFORMANCE – EXISTING CONDITIONS

HIGHWAY	FACILITY	DIRECTION	LOS	FOLLOWER DENSITY ¹	SEGMENTS NOT MEETING TARGET
OR 42	Lampa Ln to Coquille west UGB (42-A)	EB	C	7.8	0/1
		WB	D	10.3	0/1
	Myrtle Point east UGB to OR 542 junction (42-B)	EB	B	3.5	0/2
		WB	C	4.8	0/2
	OR 542 junction to OR 42 couplet (42-C)	EB	A	1.4	0/31
		WB	B	2.9	0/24
US 101	Douglas County north county line to Reedsport north UGB (101-A)	NB	C	4.5	0/18
		SB	C	5.5	0/18
	Reedsport south UGB to Lakeside north UGB (101-B)	NB	D	8.8	0/12
		SB	D	8.9	0/7
	Lakeside south UGB to North Bend north UGB (101-C)	NB	D	10.0	3/18
		SB	D	11.5	3/18
	US 101/OR 42 junction to Bandon north UGB (101-D)	NB	D	8.2	0/20
		SB	C	7.1	0/22
	Bandon south UGB to Port Orford north UGB (101-E)	NB	C	4.1	0/26
		SB	B	3.9	0/26
	Port Orford south UGB to Gold Beach north UGB (101-F)	NB	B	2.3	0/30
		SB	B	2.5	0/30
	Gold Beach south UGB to Brookings north UGB (101-G)	NB	B	2.7	0/24
		SB	B	3.8	0/20
	Brookings south UGB to California border (101-H)	NB	D	10.7	0/3
		SB	E	12.0	0/3

Notes:

¹ Followers/mile/lane

As shown, only one facility is shown to operate at worse than LOS D under 30th highest hour design-hour volumes: US 101 from Brookings' south UGB to the California border in the southbound direction. Only six segments were found to not meet their respective mobility targets. All six segments were on Facility 101-C between Lakeside's south UGB boundary and North Bend's north UGB boundary. These segments and their mile points are provided in **Table 4**; all are near the unincorporated communities of Shorewood and Glasgow.

TABLE 4. SEGMENTS EXCEEDING MOBILITY TARGETS

DIRECTION	ENDING MILE POINT	BEGINNING MILE POINT	PASSING CONTEXT	DEMAND/CAPACITY
NB	233.93	233.54	Passing Constrained	0.89
	233.54	233.17	Passing Constrained	0.89
	233.17	232.66	Passing Constrained	0.89
SB	230.48	231.15	Passing Lane	0.78
	232.81	233.27	Passing Lane	0.74
	233.27	233.93	Passing Constrained	0.74

SAFETY ANALYSIS

The project team conducted a comprehensive analysis of the existing safety performance of the Passing Lanes Study facilities. The results of the analysis can be found in **Appendix B**.

BICYCLE CONDITIONS

The project team analyzed the bicycle level of traffic stress (BLTS) for the study segments on US 101. BLTS considers factors such as posted speeds, traffic volumes, and physical separation to score roadways from 1 to 4 on the level of comfort experienced by categories of bicyclists. A roadway with a score of 1 should induce no stress among any rider, while a roadway with a score of 4 is likely to only be navigable in a comfortable manner by the most experienced bicyclists. Two sources of BLTS data were used: the Active Transportation Needs Index (ATNI) from ODOT's Oregon Transportation Safety Data Explorer (OTSDE), and the Oregon Coast Bike Route (OCBR) Plan. The ATNI data was directional; northbound and southbound facilities did not necessarily have the same BLTS. The OCBR data was direction-agnostic. The OCBR data only covered US 101, while the OTSDE data covered both US 101 and OR 42. Therefore, only OTSDE data is presented for OR 42.

Because the segmentation of each BLTS data source did not necessarily align with the segmentation described previously in this memorandum (or with the other BLTS data source), segments could have multiple BLTS scores. Therefore, the range of BLTS scores was determined

for each segment of US 101; the maximum of this range was then highlighted as a worst-case score. The number of BLTS scores of 4 in each facility along the OR 42 study area are presented in Table 5. The number of BLTS scores of 4 along each US 101 facility are presented in Table 6.

TABLE 5. BLTS OF OR 42 FACILITIES

FACILITY	DIRECTION	ODOT ATNI	
		BLTS RANGE	SEGMENTS WITH MAX BLTS OF 4
LAMPA LN TO COQUILLE WEST UGB (42-A)	EB	2 to 4	1/1
	WB	2 to 4	1/1
MYRTLE POINT EAST UGB TO OR 542 JUNCTION (42-B)	EB	2 to 4	1/2
	WB	2 to 4	1/2
OR 542 JUNCTION TO OR 42 COUPLET (42-C)	EB	2 to 4	1/31
	WB	2 to 4	1/24

TABLE 6. BLTS OF US 101 FACILITIES

FACILITY	DIRECTION	ODOT ATNI		OCBR	
		BLTS RANGE	SEGMENTS WITH MAX BLTS OF 4	BLTS RANGE	SEGMENTS WITH MAX BLTS OF 4
DOUGLAS COUNTY NORTH COUNTY LINE TO REEDSPORT NORTH UGB (101-A)	NB	2 to 4	8/18	2 to 4	3/18
	SB	2 to 4	3/18	2 to 4	3/18
REEDSPORT SOUTH UGB TO LAKESIDE NORTH UGB (101-B)	NB	2 to 4	6/12	2 to 4	1/12
	SB	2 to 4	1/7	2 to 4	1/7
LAKESIDE SOUTH UGB TO NORTH BEND NORTH UGB (101-C)	NB	2 to 4	7/18	2 to 4	6/18
	SB	2 to 4	6/18	2 to 4	5/18
US 101/OR 42 JUNCTION TO BANDON NORTH UGB (101-D)	NB	2 to 4	1/20	2 to 4	1/20
	SB	2 to 4	1/22	2 to 4	1/22
BANDON SOUTH UGB TO PORT ORFORD NORTH UGB (101-E)	NB	2 to 4	5/26	2 to 4	1/26
	SB	2 to 4	2/26	2 to 4	1/26
PORT ORFORD SOUTH UGB TO GOLD BEACH NORTH UGB (101-F)	NB	2 to 3	0/30	2 to 3	0/30
	SB	2 to 3	0/30	2 to 3	0/30
GOLD BEACH SOUTH UGB TO BROOKINGS NORTH UGB (101-G)	NB	2 to 4	14/24	2 to 3	0/24
	SB	2 to 4	5/24	2 to 3	0/24
BROOKINGS SOUTH UGB TO CALIFORNIA BORDER (101-H)	NB	2 to 4	3/3	2 to 4	1/3
	SB	2 to 4	1/3	2 to 4	1/3

As shown in Table 5, six of the 61 total analysis segments on OR 42 (eastbound and westbound) are characterized, at least in part, by a BLTS of 4. As shown in Table 6, 25 of the total 299 analysis segments on US 101 (northbound and southbound) are characterized, in whole or in part, by a BLTS of 4.

APPENDIX

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APPENDIX A: HIGHWAY OPERATIONS REPORTS

APPENDIX B: CRASH DATA ANALYSIS

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APPENDIX A: HIGHWAY OPERATIONS REPORTS

HCS7 RESULTS

APPENDIX B: CRASH DATA ANALYSIS

HCS7 Two-Lane Highway Report

Project Information

Analyst		Date	4/27/2024
Agency		Analysis Year	2024
Jurisdiction		Time Analyzed	
Project Description	CA border to Brookings south UGB	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	5650
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	9.3

Demand and Capacity

Directional Demand Flow Rate, veh/h	845	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	23.90
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.50

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	58.1
Speed Slope Coefficient	4.79071	Speed Power Coefficient	0.47129
PF Slope Coefficient	-1.33928	PF Power Coefficient	0.75116
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	10.9
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5650	-	-	53.9

Vehicle Results

Average Speed, mi/h	53.9	Percent Followers, %	69.3
Segment Travel Time, minutes	1.19	Follower Density, followers/mi/ln	10.9
Vehicle LOS	D		

Segment 2

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	1267
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	833	Opposing Demand Flow Rate, veh/h	940
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Peak Hour Factor	0.93	Total Trucks, %	23.90
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.49

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.9
Speed Slope Coefficient	3.78023	Speed Power Coefficient	0.44089
PF Slope Coefficient	-1.36952	PF Power Coefficient	0.75929
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	9.9
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1267	-	-	58.6

Vehicle Results

Average Speed, mi/h	58.6	Percent Followers, %	69.7
Segment Travel Time, minutes	0.25	Follower Density, followers/mi/ln	9.9
Vehicle LOS	D		

Segment 3

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	1478
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	3.6

Demand and Capacity

Directional Demand Flow Rate, veh/h	833	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.93	Total Trucks, %	23.90
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.49

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	59.8
Speed Slope Coefficient	5.00194	Speed Power Coefficient	0.46539
PF Slope Coefficient	-1.46637	PF Power Coefficient	0.73624
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	10.9
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

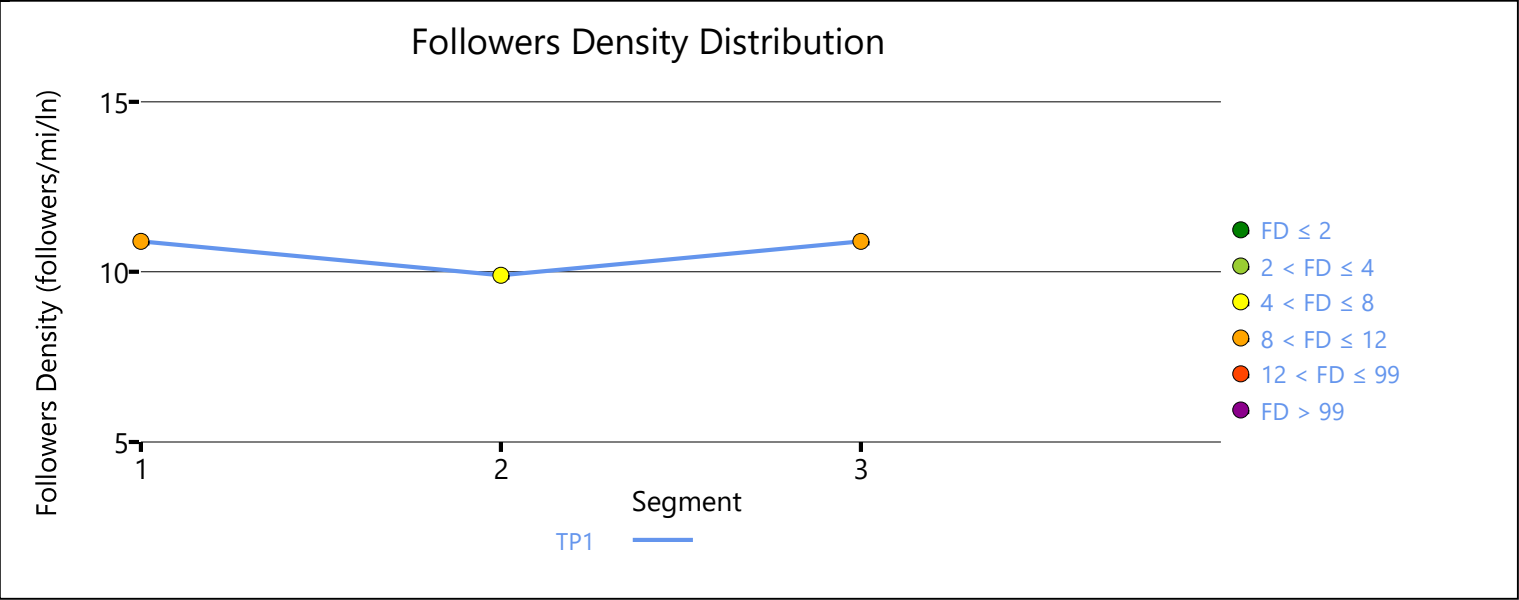
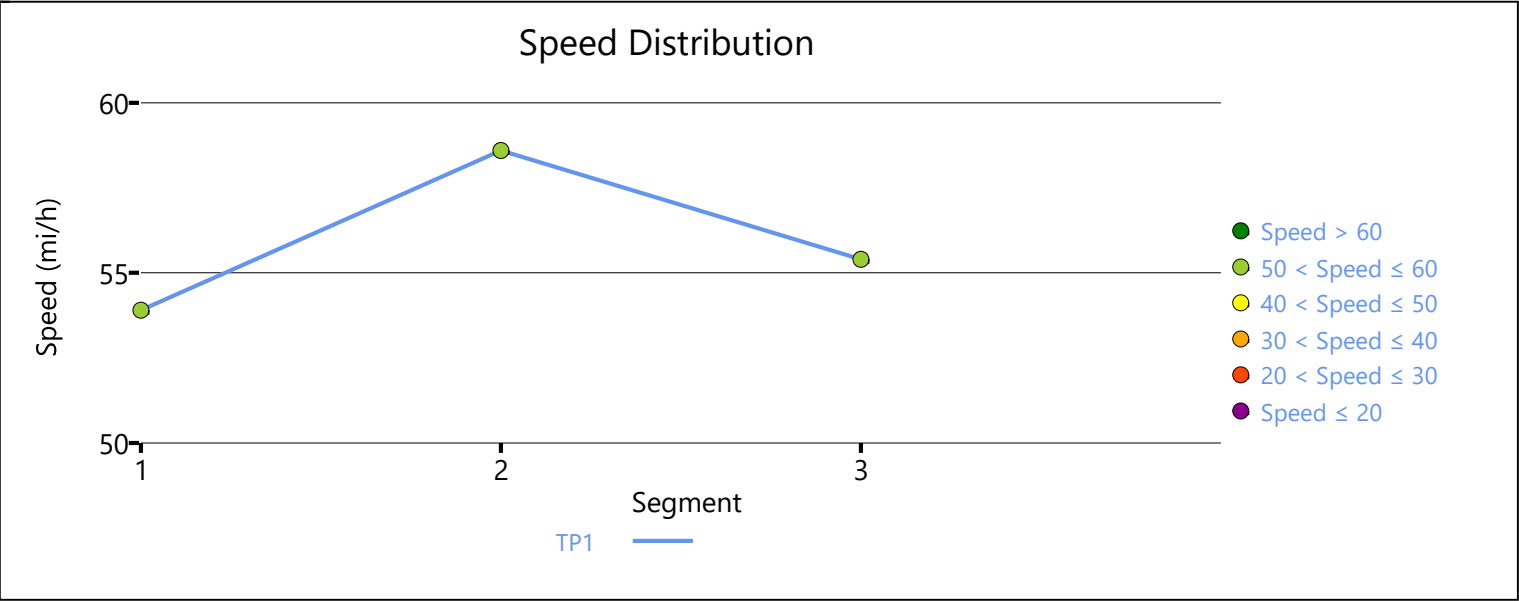
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1478	-	-	55.4

Vehicle Results

Average Speed, mi/h	55.4	Percent Followers, %	72.3
Segment Travel Time, minutes	0.30	Follower Density, followers/mi/ln	10.9
Vehicle LOS	D		

Facility Results

T	Follower Density, followers/mi/ln	LOS
1	10.7	D



HCS7 Two-Lane Highway Report

Project Information

Analyst		Date	4/14/2024
Agency		Analysis Year	2024
Jurisdiction		Time Analyzed	
Project Description	Gold Beach south UGB to Brookings north UGB	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Lanes	Length, ft	1267
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	440	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.26

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.0
Speed Slope Coefficient	3.88867	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.31981	PF Power Coefficient	0.76127
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	3.8
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1267	-	-	59.5

Vehicle Results

Average Speed, mi/h	59.5	Percent Followers, %	50.7
Segment Travel Time, minutes	0.24	Follower Density, followers/mi/ln	3.8
Vehicle LOS	B		

Segment 2

Vehicle Inputs

Segment Type	Passing Lanes	Length, ft	6232
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.7

Demand and Capacity

Directional Demand Flow Rate, veh/h	440	Opposing Demand Flow Rate, veh/h	-
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Peak Hour Factor		0.87	Total Trucks, %		22.00
Segment Capacity, veh/h		1100	Demand/Capacity (D/C)		0.40
Intermediate Results					
Segment Vertical Class		5	Free-Flow Speed, mi/h		55.4
Speed Slope Coefficient		17.00975	Speed Power Coefficient		1.12201
PF Slope Coefficient		-0.93548	PF Power Coefficient		0.95436
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		3.0
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2482	-	-	50.3
2	Horizontal Curve	792	1042	2	50.3
3	Tangent	53	-	-	50.3
4	Horizontal Curve	845	996	2	50.3
5	Tangent	53	-	-	50.3
6	Horizontal Curve	898	1042	2	50.3
7	Tangent	53	-	-	50.3
8	Horizontal Curve	950	955	2	50.3
9	Tangent	106	-	-	50.3
Passing Lane Results					
		Faster Lane		Slower Lane	
Flow Rate, veh/h		258		182	
Percentage of Heavy Vehicles (HV%), %		8.80		40.77	
Initial Average Speed (Sint), mi/h		57.9		48.5	
Average Speed at Midpoint (SPLmid), mi/h		59.8		46.6	
Percent Followers at Midpoint (PFPLmid), %		24.4		9.6	
Vehicle Results					
Average Speed, mi/h		50.3	Percent Followers, %		34.8
Segment Travel Time, minutes		1.41	Follower Density, followers/mi/ln		3.0
Vehicle LOS		B			
Segment 3					
Vehicle Inputs					
Segment Type		Passing Lanes	Length, ft		2165
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		2.4
Demand and Capacity					
Directional Demand Flow Rate, veh/h		440	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.87	Total Trucks, %		22.00

Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.26
Intermediate Results					
Segment Vertical Class		4	Free-Flow Speed, mi/h		54.9
Speed Slope Coefficient		10.00261	Speed Power Coefficient		0.62812
PF Slope Coefficient		-1.56591	PF Power Coefficient		0.71551
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		5.3
%Improved % Followers		21.2	% Improved Avg Speed		2.5
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	581	955	2	49.8
2	Tangent	53	-	-	49.8
3	Horizontal Curve	1056	716	2	46.0
4	Tangent	53	-	-	49.8
5	Horizontal Curve	422	955	2	49.8
Vehicle Results					
Average Speed, mi/h		49.1	Percent Followers, %		58.1
Segment Travel Time, minutes		0.50	Follower Density, followers/mi/ln		4.1
Vehicle LOS		C			
Segment 4					
Vehicle Inputs					
Segment Type		Passing Lanes	Length, ft		1267
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		440	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.87	Total Trucks, %		22.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.26
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.0
Speed Slope Coefficient		3.88867	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.31981	PF Power Coefficient		0.76127
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		3.8
%Improved % Followers		20.0	% Improved Avg Speed		2.3
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1267	-	-	59.5
Vehicle Results					

Average Speed, mi/h	60.8	Percent Followers, %	50.7
Segment Travel Time, minutes	0.24	Follower Density, followers/mi/ln	2.9
Vehicle LOS	B		

Segment 5

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	6128
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	440	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.26

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.6
Speed Slope Coefficient	3.90644	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.27693	PF Power Coefficient	0.76604
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	3.9
%Improved % Followers	15.7	% Improved Avg Speed	1.4

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	264	-	-	59.1
2	Horizontal Curve	1531	1273	2	58.8
3	Tangent	264	-	-	59.1
4	Horizontal Curve	1214	955	2	52.6
5	Tangent	53	-	-	59.1
6	Horizontal Curve	1693	1042	2	52.6
7	Tangent	1109	-	-	59.1

Vehicle Results

Average Speed, mi/h	56.7	Percent Followers, %	49.4
Segment Travel Time, minutes	1.23	Follower Density, followers/mi/ln	3.2
Vehicle LOS	B		

Segment 6

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	9187
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.1

Demand and Capacity

Directional Demand Flow Rate, veh/h		447	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.91	Total Trucks, %		22.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.26
Intermediate Results					
Segment Vertical Class		5	Free-Flow Speed, mi/h		48.9
Speed Slope Coefficient		14.87794	Speed Power Coefficient		0.38460
PF Slope Coefficient		-2.07860	PF Power Coefficient		0.85487
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		7.4
%Improved % Followers		11.6	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1373	-	-	39.0
2	Horizontal Curve	1795	881	2	39.0
3	Tangent	528	-	-	39.0
4	Horizontal Curve	634	1146	2	39.0
5	Tangent	53	-	-	39.0
6	Horizontal Curve	792	881	2	39.0
7	Tangent	686	-	-	39.0
8	Horizontal Curve	1109	955	2	39.0
9	Tangent	264	-	-	39.0
10	Horizontal Curve	1214	1042	2	39.0
11	Tangent	739	-	-	39.0
Vehicle Results					
Average Speed, mi/h		39.0	Percent Followers, %		64.8
Segment Travel Time, minutes		2.67	Follower Density, followers/mi/ln		6.6
Vehicle LOS		C			
Segment 7					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		8501
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		1.9
Demand and Capacity					
Directional Demand Flow Rate, veh/h		447	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.91	Total Trucks, %		22.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.26
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.5
Speed Slope Coefficient		3.92073	Speed Power Coefficient		0.41674

PF Slope Coefficient	-1.27854	PF Power Coefficient	0.75451
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	4.0
%Improved % Followers	9.0	% Improved Avg Speed	0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	950	-	-	59.0
2	Horizontal Curve	1109	955	2	52.6
3	Tangent	53	-	-	59.0
4	Horizontal Curve	1637	955	2	52.6
5	Tangent	370	-	-	59.0
6	Horizontal Curve	1267	955	2	52.6
7	Tangent	158	-	-	59.0
8	Horizontal Curve	1056	1910	2	58.8
9	Tangent	1901	-	-	59.0

Vehicle Results			
Average Speed, mi/h	55.9	Percent Followers, %	50.2
Segment Travel Time, minutes	1.73	Follower Density, followers/mi/ln	3.7
Vehicle LOS	B		

Segment 8

Vehicle Inputs			
Segment Type	Passing Zone	Length, ft	6494
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	398	Opposing Demand Flow Rate, veh/h	339
Peak Hour Factor	0.95	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.23

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	61.8
Speed Slope Coefficient	3.70855	Speed Power Coefficient	0.50752
PF Slope Coefficient	-1.22120	PF Power Coefficient	0.80613
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	2.9
%Improved % Followers	8.0	% Improved Avg Speed	0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	6494	-	-	59.8

Vehicle Results			
Average Speed, mi/h	59.8	Percent Followers, %	44.1

Segment Travel Time, minutes	1.23	Follower Density, followers/mi/ln	2.7
Vehicle LOS	B		

Segment 9

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	5438
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	398	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.95	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.23

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.7
Speed Slope Coefficient	3.90678	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.27916	PF Power Coefficient	0.76791
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	3.1
%Improved % Followers	6.8	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5438	-	-	59.4

Vehicle Results

Average Speed, mi/h	59.4	Percent Followers, %	46.8
Segment Travel Time, minutes	1.04	Follower Density, followers/mi/ln	2.9
Vehicle LOS	B		

Segment 10

Vehicle Inputs

Segment Type	Passing Lanes	Length, ft	4593
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	398	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.95	Total Trucks, %	22.00
Segment Capacity, veh/h	1100	Demand/Capacity (D/C)	0.36

Intermediate Results

Segment Vertical Class	5	Free-Flow Speed, mi/h	56.0
Speed Slope Coefficient	16.36392	Speed Power Coefficient	1.11192
PF Slope Coefficient	-0.98186	PF Power Coefficient	0.88989

In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.7
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3326	-	-	51.7
2	Horizontal Curve	1267	1910	2	51.7

Passing Lane Results

	Faster Lane	Slower Lane
Flow Rate, veh/h	237	161
Percentage of Heavy Vehicles (HV%), %	8.80	41.39
Initial Average Speed (Sint), mi/h	58.6	49.4
Average Speed at Midpoint (SPLmid), mi/h	60.5	47.5
Percent Followers at Midpoint (PFPLmid), %	25.0	10.8

Vehicle Results

Average Speed, mi/h	51.7	Percent Followers, %	35.1
Segment Travel Time, minutes	1.01	Follower Density, followers/mi/ln	2.7
Vehicle LOS	B		

Segment 11

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	3537
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	4.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	398	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.95	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.23

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	60.8
Speed Slope Coefficient	3.83915	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.30913	PF Power Coefficient	0.76387
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	3.2
%Improved % Followers	20.4	% Improved Avg Speed	2.1

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	950	1910	2	58.5
2	Tangent	2587	-	-	58.5

Vehicle Results

Average Speed, mi/h	59.8	Percent Followers, %	47.7
Segment Travel Time, minutes	0.67	Follower Density, followers/mi/ln	2.5
Vehicle LOS	B		

Segment 12

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	2323
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.3

Demand and Capacity

Directional Demand Flow Rate, veh/h	398	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.95	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.23

Intermediate Results

Segment Vertical Class	3	Free-Flow Speed, mi/h	58.0
Speed Slope Coefficient	8.42234	Speed Power Coefficient	0.61640
PF Slope Coefficient	-1.37014	PF Power Coefficient	0.76390
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	3.6
%Improved % Followers	18.2	% Improved Avg Speed	1.8

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	2112	1432	2	54.0
2	Tangent	211	-	-	54.0

Vehicle Results

Average Speed, mi/h	54.9	Percent Followers, %	49.2
Segment Travel Time, minutes	0.48	Follower Density, followers/mi/ln	2.9
Vehicle LOS	B		

Segment 13

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	1373
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	398	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.95	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.23

Intermediate Results

Segment Vertical Class	3	Free-Flow Speed, mi/h	58.5
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Speed Slope Coefficient	8.19723	Speed Power Coefficient	0.61142
PF Slope Coefficient	-1.43155	PF Power Coefficient	0.75838
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	3.8
%Improved % Followers	17.2	% Improved Avg Speed	1.5

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	1267	1042	2	52.6
2	Tangent	106	-	-	54.6

Vehicle Results

Average Speed, mi/h	53.6	Percent Followers, %	50.9
Segment Travel Time, minutes	0.29	Follower Density, followers/mi/ln	3.1
Vehicle LOS	B		

Segment 14

Vehicle Inputs

Segment Type	Passing Lanes	Length, ft	2851
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	3.7

Demand and Capacity

Directional Demand Flow Rate, veh/h	416	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.96	Total Trucks, %	22.00
Segment Capacity, veh/h	1200	Demand/Capacity (D/C)	0.35

Intermediate Results

Segment Vertical Class	4	Free-Flow Speed, mi/h	57.2
Speed Slope Coefficient	11.08813	Speed Power Coefficient	1.08475
PF Slope Coefficient	-1.08740	PF Power Coefficient	0.87947
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	3.0
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	1267	1273	2	54.1
2	Tangent	53	-	-	54.1
3	Horizontal Curve	1003	1273	2	54.1
4	Tangent	528	-	-	54.1

Passing Lane Results

	Faster Lane	Slower Lane
Flow Rate, veh/h	246	170
Percentage of Heavy Vehicles (HV%), %	8.80	41.12
Initial Average Speed (Sint), mi/h	58.7	52.8

Average Speed at Midpoint (SPLmid), mi/h	60.7	50.9
Percent Followers at Midpoint (PFPLmid), %	28.6	13.2

Vehicle Results

Average Speed, mi/h	54.1	Percent Followers, %	39.5
Segment Travel Time, minutes	0.60	Follower Density, followers/mi/ln	3.0
Vehicle LOS	B		

Segment 15

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	3010
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.8

Demand and Capacity

Directional Demand Flow Rate, veh/h	416	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.96	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.24

Intermediate Results

Segment Vertical Class	4	Free-Flow Speed, mi/h	55.0
Speed Slope Coefficient	10.19061	Speed Power Coefficient	0.61972
PF Slope Coefficient	-1.57717	PF Power Coefficient	0.72811
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	4.7
%Improved % Followers	21.9	% Improved Avg Speed	2.5

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	2006	1910	2	50.0
2	Tangent	106	-	-	50.0
3	Horizontal Curve	898	1042	0	50.0

Vehicle Results

Average Speed, mi/h	51.3	Percent Followers, %	56.5
Segment Travel Time, minutes	0.67	Follower Density, followers/mi/ln	3.6
Vehicle LOS	B		

Segment 16

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	9875
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.6

Demand and Capacity

Directional Demand Flow Rate, veh/h	416	Opposing Demand Flow Rate, veh/h	-
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Peak Hour Factor	0.96	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.24

Intermediate Results

Segment Vertical Class	4	Free-Flow Speed, mi/h	54.8
Speed Slope Coefficient	11.33982	Speed Power Coefficient	0.44931
PF Slope Coefficient	-1.86542	PF Power Coefficient	0.77738
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	5.3
%Improved % Followers	13.2	% Improved Avg Speed	1.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	1426	1042	0	48.1
2	Tangent	317	-	-	48.1
3	Horizontal Curve	2006	1273	2	48.1
4	Tangent	53	-	-	48.1
5	Horizontal Curve	898	1146	2	48.1
6	Tangent	739	-	-	48.1
7	Horizontal Curve	1056	1637	2	48.1
8	Tangent	264	-	-	48.1
9	Horizontal Curve	1426	955	2	48.1
10	Tangent	1690	-	-	48.1

Vehicle Results

Average Speed, mi/h	48.6	Percent Followers, %	61.0
Segment Travel Time, minutes	2.31	Follower Density, followers/mi/ln	4.5
Vehicle LOS	C		

Segment 17

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	1742
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	416	Opposing Demand Flow Rate, veh/h	354
Peak Hour Factor	0.96	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.24

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.0
Speed Slope Coefficient	3.66862	Speed Power Coefficient	0.50471
PF Slope Coefficient	-1.29900	PF Power Coefficient	0.78907
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	3.3

%Improved % Followers		12.3	% Improved Avg Speed		0.8
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1742	-	-	59.9
Vehicle Results					
Average Speed, mi/h		60.4	Percent Followers, %		47.8
Segment Travel Time, minutes		0.33	Follower Density, followers/mi/ln		2.9
Vehicle LOS		B			
Segment 18					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		15206
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		1.4
Demand and Capacity					
Directional Demand Flow Rate, veh/h		416	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.96	Total Trucks, %		22.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.24
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.6
Speed Slope Coefficient		3.97156	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.34056	PF Power Coefficient		0.69492
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		3.9
%Improved % Followers		6.8	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	1637	2547	2	59.2
2	Tangent	317	-	-	59.2
3	Horizontal Curve	1267	955	2	52.6
4	Tangent	317	-	-	59.2
5	Horizontal Curve	898	955	2	52.6
6	Tangent	106	-	-	59.2
7	Horizontal Curve	1003	716	2	46.0
8	Tangent	106	-	-	59.2
9	Horizontal Curve	739	716	2	46.0
10	Tangent	264	-	-	59.2
11	Horizontal Curve	1162	955	2	52.6
12	Tangent	422	-	-	59.2
13	Horizontal Curve	1478	1146	2	52.6

14	Tangent	686	-	-	59.2
15	Horizontal Curve	2323	1910	2	58.8
16	Tangent	53	-	-	59.2
17	Horizontal Curve	1214	1273	2	58.8
18	Tangent	1214	-	-	59.2

Vehicle Results

Average Speed, mi/h	55.5	Percent Followers, %	51.7
Segment Travel Time, minutes	3.11	Follower Density, followers/mi/ln	3.6
Vehicle LOS	B		

Segment 19

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	2481
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.1

Demand and Capacity

Directional Demand Flow Rate, veh/h	457	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.93	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.27

Intermediate Results

Segment Vertical Class	3	Free-Flow Speed, mi/h	58.0
Speed Slope Coefficient	8.50328	Speed Power Coefficient	0.61856
PF Slope Coefficient	-1.36320	PF Power Coefficient	0.76477
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	4.5
%Improved % Followers	5.8	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	1478	1273	2	53.5
2	Tangent	1003	-	-	53.5

Vehicle Results

Average Speed, mi/h	53.5	Percent Followers, %	52.7
Segment Travel Time, minutes	0.53	Follower Density, followers/mi/ln	4.2
Vehicle LOS	C		

Segment 20

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	4805
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	4.4

Demand and Capacity							
Directional Demand Flow Rate, veh/h		457		Opposing Demand Flow Rate, veh/h		-	
Peak Hour Factor		0.93		Total Trucks, %		22.00	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.27	
Intermediate Results							
Segment Vertical Class		1		Free-Flow Speed, mi/h		60.9	
Speed Slope Coefficient		3.85445		Speed Power Coefficient		0.41674	
PF Slope Coefficient		-1.29156		PF Power Coefficient		0.76622	
In Passing Lane Effective Length?		Yes		Total Segment Density, veh/mi/ln		4.1	
%Improved % Followers		4.7		% Improved Avg Speed		0.0	
Subsegment Data							
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h		
1	Horizontal Curve	1901	1432	2	58.4		
2	Tangent	211	-	-	58.4		
3	Horizontal Curve	1426	1432	2	58.4		
4	Tangent	211	-	-	58.4		
5	Horizontal Curve	1056	955	2	52.5		
Vehicle Results							
Average Speed, mi/h		57.1		Percent Followers, %		50.8	
Segment Travel Time, minutes		0.96		Follower Density, followers/mi/ln		3.9	
Vehicle LOS		B					
Segment 21							
Vehicle Inputs							
Segment Type		Passing Lanes		Length, ft		5704	
Lane Width, ft		12		Shoulder Width, ft		6	
Speed Limit, mi/h		55		Access Point Density, pts/mi		4.6	
Demand and Capacity							
Directional Demand Flow Rate, veh/h		457		Opposing Demand Flow Rate, veh/h		-	
Peak Hour Factor		0.93		Total Trucks, %		22.00	
Segment Capacity, veh/h		1100		Demand/Capacity (D/C)		0.42	
Intermediate Results							
Segment Vertical Class		5		Free-Flow Speed, mi/h		54.7	
Speed Slope Coefficient		16.22209		Speed Power Coefficient		1.12350	
PF Slope Coefficient		-0.94419		PF Power Coefficient		0.92925	
In Passing Lane Effective Length?		No		Total Segment Density, veh/mi/ln		3.4	
%Improved % Followers		0.0		% Improved Avg Speed		0.0	
Subsegment Data							

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	106	-	-	49.6
2	Horizontal Curve	1320	1432	2	49.6
3	Tangent	53	-	-	49.6
4	Horizontal Curve	1162	955	2	49.6
5	Tangent	370	-	-	49.6
6	Horizontal Curve	1162	1432	2	49.6
7	Tangent	1531	-	-	49.6

Passing Lane Results

	Faster Lane	Slower Lane
Flow Rate, veh/h	267	190
Percentage of Heavy Vehicles (HV%), %	8.80	40.54
Initial Average Speed (Sint), mi/h	57.2	48.0
Average Speed at Midpoint (SPLmid), mi/h	59.1	46.0
Percent Followers at Midpoint (PFPLmid), %	25.7	11.0

Vehicle Results

Average Speed, mi/h	49.6	Percent Followers, %	36.6
Segment Travel Time, minutes	1.31	Follower Density, followers/mi/ln	3.4
Vehicle LOS	B		

Segment 22

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	5228
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	3.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	457	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.93	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.27

Intermediate Results

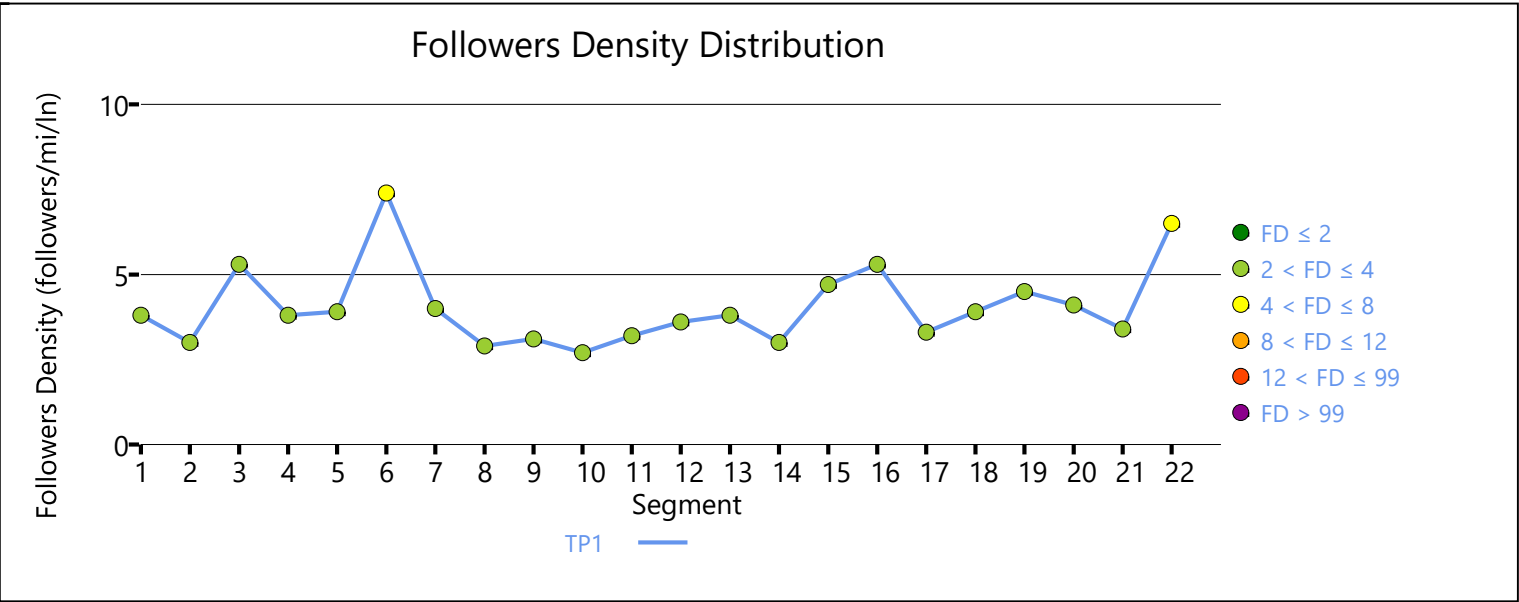
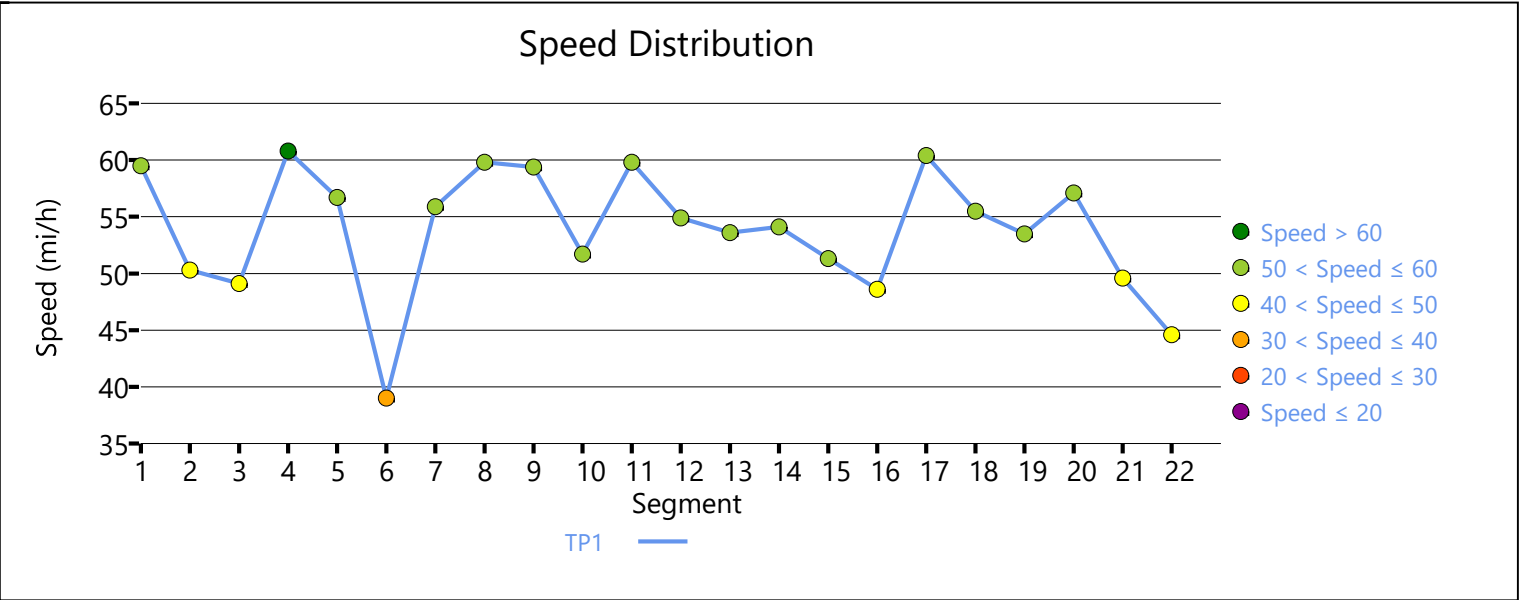
Segment Vertical Class	5	Free-Flow Speed, mi/h	51.9
Speed Slope Coefficient	14.88471	Speed Power Coefficient	0.58231
PF Slope Coefficient	-1.87122	PF Power Coefficient	0.84644
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	6.5
%Improved % Followers	18.4	% Improved Avg Speed	1.9

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2112	-	-	43.8
2	Horizontal Curve	1426	1910	2	43.8

3	Tangent	1690	-	-	43.8
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Vehicle Results			
Average Speed, mi/h		44.6	Percent Followers, %
Segment Travel Time, minutes		1.33	Follower Density, followers/mi/ln
Vehicle LOS		C	
Facility Results			
T	Follower Density, followers/mi/ln		LOS
1	3.8		B



HCS7 Two-Lane Highway Report

Project Information

Analyst		Date	4/27/2024
Agency		Analysis Year	2024
Jurisdiction		Time Analyzed	
Project Description	Brookings north UGB to Gold Beach south UGB	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Lanes	Length, ft	5809
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	389	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.93	Total Trucks, %	22.00
Segment Capacity, veh/h	1100	Demand/Capacity (D/C)	0.35

Intermediate Results

Segment Vertical Class	5	Free-Flow Speed, mi/h	55.9
Speed Slope Coefficient	17.10441	Speed Power Coefficient	1.11767
PF Slope Coefficient	-0.94737	PF Power Coefficient	0.94070
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.4
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1690	-	-	51.6
2	Horizontal Curve	1426	1910	2	51.6
3	Tangent	2693	-	-	51.6

Passing Lane Results

	Faster Lane	Slower Lane
Flow Rate, veh/h	232	157
Percentage of Heavy Vehicles (HV%), %	8.80	41.52
Initial Average Speed (S _{int}), mi/h	58.6	49.1
Average Speed at Midpoint (S _{PLmid}), mi/h	60.5	47.2
Percent Followers at Midpoint (PF _{PLmid}), %	22.9	8.5

Vehicle Results

Average Speed, mi/h	51.6	Percent Followers, %	32.3
Segment Travel Time, minutes	1.28	Follower Density, followers/mi/ln	2.4

Vehicle LOS		B				
Segment 2						
Vehicle Inputs						
Segment Type		Passing Constrained		Length, ft		5123
Lane Width, ft		12		Shoulder Width, ft		6
Speed Limit, mi/h		55		Access Point Density, pts/mi		0.0
Demand and Capacity						
Directional Demand Flow Rate, veh/h		389		Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.93		Total Trucks, %		22.00
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.23
Intermediate Results						
Segment Vertical Class		5		Free-Flow Speed, mi/h		52.8
Speed Slope Coefficient		15.39723		Speed Power Coefficient		0.58755
PF Slope Coefficient		-1.86522		PF Power Coefficient		0.84774
In Passing Lane Effective Length?		Yes		Total Segment Density, veh/mi/ln		4.9
%Improved % Followers		17.3		% Improved Avg Speed		0.5
Subsegment Data						
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h	
1	Tangent	950	-	-	45.3	
2	Horizontal Curve	1162	1432	2	45.3	
3	Tangent	370	-	-	45.3	
4	Horizontal Curve	1162	955	2	45.3	
5	Tangent	53	-	-	45.3	
6	Horizontal Curve	1320	1432	2	45.3	
7	Tangent	106	-	-	45.3	
Vehicle Results						
Average Speed, mi/h		45.6		Percent Followers, %		56.8
Segment Travel Time, minutes		1.28		Follower Density, followers/mi/ln		4.0
Vehicle LOS		C				
Segment 3						
Vehicle Inputs						
Segment Type		Passing Constrained		Length, ft		4330
Lane Width, ft		12		Shoulder Width, ft		6
Speed Limit, mi/h		55		Access Point Density, pts/mi		10.3
Demand and Capacity						
Directional Demand Flow Rate, veh/h		389		Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.93		Total Trucks, %		22.00

Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.23
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		59.4
Speed Slope Coefficient		3.76952	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.30935	PF Power Coefficient		0.76214
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		3.3
%Improved % Followers		14.4	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	1056	955	2	52.6
2	Tangent	211	-	-	57.1
3	Horizontal Curve	1426	1432	2	57.1
4	Tangent	211	-	-	57.1
5	Horizontal Curve	1426	1432	2	57.1
Vehicle Results					
Average Speed, mi/h		56.0	Percent Followers, %		47.2
Segment Travel Time, minutes		0.88	Follower Density, followers/mi/ln		2.8
Vehicle LOS		B			
Segment 4					
Vehicle Inputs					
Segment Type		Passing Lanes	Length, ft		1478
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		22.2
Demand and Capacity					
Directional Demand Flow Rate, veh/h		389	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.93	Total Trucks, %		22.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.23
Intermediate Results					
Segment Vertical Class		3	Free-Flow Speed, mi/h		53.0
Speed Slope Coefficient		6.57060	Speed Power Coefficient		0.57420
PF Slope Coefficient		-1.38904	PF Power Coefficient		0.74769
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		3.9
%Improved % Followers		13.6	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	475	1432	2	49.8
2	Tangent	1003	-	-	49.8

Vehicle Results			
Average Speed, mi/h	49.8	Percent Followers, %	49.6
Segment Travel Time, minutes	0.34	Follower Density, followers/mi/ln	3.4
Vehicle LOS	B		

Segment 5

Vehicle Inputs			
Segment Type	Passing Lanes	Length, ft	2692
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	389	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.93	Total Trucks, %	22.00
Segment Capacity, veh/h	1200	Demand/Capacity (D/C)	0.32

Intermediate Results			
Segment Vertical Class	4	Free-Flow Speed, mi/h	58.2
Speed Slope Coefficient	11.60796	Speed Power Coefficient	1.07320
PF Slope Coefficient	-1.10063	PF Power Coefficient	0.87959
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.7
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	1478	1273	2	55.1
2	Tangent	1214	-	-	55.1

Passing Lane Results		
	Faster Lane	Slower Lane
Flow Rate, veh/h	232	157
Percentage of Heavy Vehicles (HV%), %	8.80	41.52
Initial Average Speed (Sint), mi/h	59.7	53.8
Average Speed at Midpoint (SPLmid), mi/h	61.6	51.9
Percent Followers at Midpoint (PFPLmid), %	27.7	12.2

Vehicle Results			
Average Speed, mi/h	55.1	Percent Followers, %	38.1
Segment Travel Time, minutes	0.56	Follower Density, followers/mi/ln	2.7
Vehicle LOS	B		

Segment 6

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	13147

Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		2.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		354	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.96	Total Trucks, %		22.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.21
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.5
Speed Slope Coefficient		3.95118	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.31541	PF Power Coefficient		0.71583
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		3.0
%Improved % Followers		13.5	% Improved Avg Speed		1.2
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	1214	1273	2	59.0
2	Tangent	53	-	-	59.2
3	Horizontal Curve	2323	1910	2	59.0
4	Tangent	686	-	-	59.2
5	Horizontal Curve	1478	1146	2	52.7
6	Tangent	422	-	-	59.2
7	Horizontal Curve	1162	955	2	52.7
8	Tangent	264	-	-	59.2
9	Horizontal Curve	739	716	2	46.1
10	Tangent	106	-	-	59.2
11	Horizontal Curve	1003	716	2	46.1
12	Tangent	106	-	-	59.2
13	Horizontal Curve	898	955	2	52.7
14	Tangent	317	-	-	59.2
15	Horizontal Curve	1267	955	2	52.7
16	Tangent	317	-	-	59.2
17	Horizontal Curve	792	2547	2	59.2
Vehicle Results					
Average Speed, mi/h		55.7	Percent Followers, %		46.5
Segment Travel Time, minutes		2.68	Follower Density, followers/mi/ln		2.6
Vehicle LOS		B			
Segment 7					
Vehicle Inputs					
Segment Type		Passing Zone	Length, ft		1690
Lane Width, ft		12	Shoulder Width, ft		6

Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		354	Opposing Demand Flow Rate, veh/h		416
Peak Hour Factor		0.96	Total Trucks, %		22.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.21
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.0
Speed Slope Coefficient		3.68398	Speed Power Coefficient		0.49432
PF Slope Coefficient		-1.31017	PF Power Coefficient		0.78522
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		2.6
%Improved % Followers		12.6	% Improved Avg Speed		0.9
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	845	2547	2	60.1
2	Tangent	845	-	-	60.1
Vehicle Results					
Average Speed, mi/h		60.6	Percent Followers, %		44.0
Segment Travel Time, minutes		0.32	Follower Density, followers/mi/ln		2.2
Vehicle LOS		B			
Segment 8					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		9346
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		1.6
Demand and Capacity					
Directional Demand Flow Rate, veh/h		354	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.96	Total Trucks, %		22.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.21
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.6
Speed Slope Coefficient		3.93113	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.28164	PF Power Coefficient		0.74900
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		2.7
%Improved % Followers		8.8	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2587	-	-	59.3

2	Horizontal Curve	1426	955	2	52.7
3	Tangent	264	-	-	59.3
4	Horizontal Curve	1056	1637	2	59.0
5	Tangent	739	-	-	59.3
6	Horizontal Curve	898	1146	2	52.7
7	Tangent	53	-	-	59.3
8	Horizontal Curve	2006	1273	2	59.0
9	Tangent	317	-	-	59.3

Vehicle Results

Average Speed, mi/h	57.6	Percent Followers, %	44.5
Segment Travel Time, minutes	1.84	Follower Density, followers/mi/ln	2.5
Vehicle LOS	B		

Segment 9

Vehicle Inputs

Segment Type	Passing Lanes	Length, ft	2323
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.8

Demand and Capacity

Directional Demand Flow Rate, veh/h	354	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.96	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.21

Intermediate Results

Segment Vertical Class	4	Free-Flow Speed, mi/h	55.3
Speed Slope Coefficient	10.25557	Speed Power Coefficient	0.63025
PF Slope Coefficient	-1.56477	PF Power Coefficient	0.71652
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	3.6
%Improved % Followers	8.1	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	2323	1042	0	50.9

Vehicle Results

Average Speed, mi/h	50.9	Percent Followers, %	52.5
Segment Travel Time, minutes	0.52	Follower Density, followers/mi/ln	3.4
Vehicle LOS	B		

Segment 10

Vehicle Inputs

Segment Type	Passing Lanes	Length, ft	2112
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Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	354	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.96	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.21

Intermediate Results

Segment Vertical Class	3	Free-Flow Speed, mi/h	58.5
Speed Slope Coefficient	8.77159	Speed Power Coefficient	0.62509
PF Slope Coefficient	-1.35444	PF Power Coefficient	0.76708
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	3.0
%Improved % Followers	7.5	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	106	-	-	54.8
2	Horizontal Curve	2006	1910	2	54.8

Vehicle Results

Average Speed, mi/h	54.8	Percent Followers, %	45.7
Segment Travel Time, minutes	0.44	Follower Density, followers/mi/ln	2.7
Vehicle LOS	B		

Segment 11

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	4435
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.9

Demand and Capacity

Directional Demand Flow Rate, veh/h	354	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.96	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.21

Intermediate Results

Segment Vertical Class	5	Free-Flow Speed, mi/h	53.2
Speed Slope Coefficient	15.09084	Speed Power Coefficient	0.62191
PF Slope Coefficient	-1.83412	PF Power Coefficient	0.83425
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	4.1
%Improved % Followers	6.3	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
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1	Tangent	528	-	-	46.7
2	Horizontal Curve	1003	1273	2	46.7
3	Tangent	53	-	-	46.7
4	Horizontal Curve	1267	1273	2	46.7
5	Tangent	106	-	-	46.7
6	Horizontal Curve	1267	1042	2	46.7
7	Tangent	211	-	-	46.7

Vehicle Results

Average Speed, mi/h	46.7	Percent Followers, %	53.8
Segment Travel Time, minutes	1.08	Follower Density, followers/mi/ln	3.8
Vehicle LOS	B		

Segment 12

Vehicle Inputs

Segment Type	Passing Lanes	Length, ft	3326
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.9

Demand and Capacity

Directional Demand Flow Rate, veh/h	339	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.95	Total Trucks, %	22.00
Segment Capacity, veh/h	1200	Demand/Capacity (D/C)	0.28

Intermediate Results

Segment Vertical Class	4	Free-Flow Speed, mi/h	57.4
Speed Slope Coefficient	11.24989	Speed Power Coefficient	1.09561
PF Slope Coefficient	-1.06349	PF Power Coefficient	0.90257
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.0
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	2112	1432	2	55.1
2	Tangent	1214	-	-	55.1

Passing Lane Results

	Faster Lane	Slower Lane
Flow Rate, veh/h	206	133
Percentage of Heavy Vehicles (HV%), %	8.80	42.38
Initial Average Speed (Sint), mi/h	59.3	53.0
Average Speed at Midpoint (SPLmid), mi/h	61.2	51.1
Percent Followers at Midpoint (PFPLmid), %	24.2	9.1

Vehicle Results

Average Speed, mi/h	55.1	Percent Followers, %	33.0
Segment Travel Time, minutes	0.69	Follower Density, followers/mi/ln	2.0
Vehicle LOS	B		

Segment 13

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	3591
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.6

Demand and Capacity

Directional Demand Flow Rate, veh/h	339	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.95	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.20

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.6
Speed Slope Coefficient	3.87909	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.30170	PF Power Coefficient	0.76590
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	2.5
%Improved % Followers	22.0	% Improved Avg Speed	3.1

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1373	-	-	59.4
2	Horizontal Curve	2218	1910	2	59.0

Vehicle Results

Average Speed, mi/h	61.0	Percent Followers, %	43.4
Segment Travel Time, minutes	0.67	Follower Density, followers/mi/ln	1.9
Vehicle LOS	A		

Segment 14

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	3432
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	339	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.95	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.20

Intermediate Results

Segment Vertical Class	4	Free-Flow Speed, mi/h	55.4
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Speed Slope Coefficient	10.58564	Speed Power Coefficient	0.61163
PF Slope Coefficient	-1.58995	PF Power Coefficient	0.74089
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	3.4
%Improved % Followers	18.5	% Improved Avg Speed	2.6

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3432	-	-	51.0

Vehicle Results

Average Speed, mi/h	52.4	Percent Followers, %	51.0
Segment Travel Time, minutes	0.74	Follower Density, followers/mi/ln	2.7
Vehicle LOS	B		

Segment 15

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	4435
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	50.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	339	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.95	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.20

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	52.0
Speed Slope Coefficient	3.36821	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.36210	PF Power Coefficient	0.74195
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	3.1
%Improved % Followers	15.4	% Improved Avg Speed	1.9

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4435	-	-	50.1

Vehicle Results

Average Speed, mi/h	51.1	Percent Followers, %	45.7
Segment Travel Time, minutes	0.99	Follower Density, followers/mi/ln	2.6
Vehicle LOS	B		

Segment 16

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	6389
Lane Width, ft	12	Shoulder Width, ft	6

Speed Limit, mi/h		55		Access Point Density, pts/mi		2.3	
Demand and Capacity							
Directional Demand Flow Rate, veh/h		354		Opposing Demand Flow Rate, veh/h		415	
Peak Hour Factor		0.91		Total Trucks, %		22.00	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.21	
Intermediate Results							
Segment Vertical Class		1		Free-Flow Speed, mi/h		61.4	
Speed Slope Coefficient		3.70773		Speed Power Coefficient		0.49436	
PF Slope Coefficient		-1.23401		PF Power Coefficient		0.80128	
In Passing Lane Effective Length?		Yes		Total Segment Density, veh/mi/ln		2.5	
%Improved % Followers		12.1		% Improved Avg Speed		0.9	
Subsegment Data							
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h		
1	Tangent	6389	-	-	59.5		
Vehicle Results							
Average Speed, mi/h		60.0		Percent Followers, %		41.5	
Segment Travel Time, minutes		1.21		Follower Density, followers/mi/ln		2.2	
Vehicle LOS		B					
Segment 17							
Vehicle Inputs							
Segment Type		Passing Constrained		Length, ft		9610	
Lane Width, ft		12		Shoulder Width, ft		6	
Speed Limit, mi/h		55		Access Point Density, pts/mi		1.7	
Demand and Capacity							
Directional Demand Flow Rate, veh/h		381		Opposing Demand Flow Rate, veh/h		-	
Peak Hour Factor		0.91		Total Trucks, %		22.00	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.22	
Intermediate Results							
Segment Vertical Class		1		Free-Flow Speed, mi/h		61.5	
Speed Slope Coefficient		3.93169		Speed Power Coefficient		0.41674	
PF Slope Coefficient		-1.28334		PF Power Coefficient		0.74701	
In Passing Lane Effective Length?		Yes		Total Segment Density, veh/mi/ln		3.1	
%Improved % Followers		8.5		% Improved Avg Speed		0.0	
Subsegment Data							
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h		
1	Tangent	2904	-	-	59.2		
2	Horizontal Curve	1056	1910	2	58.9		

3	Tangent	158	-	-	59.2
4	Horizontal Curve	1267	955	2	52.6
5	Tangent	370	-	-	59.2
6	Horizontal Curve	1637	955	2	52.6
7	Tangent	53	-	-	59.2
8	Horizontal Curve	1109	955	2	52.6
9	Tangent	1056	-	-	59.2

Vehicle Results

Average Speed, mi/h	56.4	Percent Followers, %	46.4
Segment Travel Time, minutes	1.93	Follower Density, followers/mi/ln	2.9
Vehicle LOS	B		

Segment 18

Vehicle Inputs

Segment Type	Passing Lanes	Length, ft	7482
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	399	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	22.00
Segment Capacity, veh/h	1100	Demand/Capacity (D/C)	0.36

Intermediate Results

Segment Vertical Class	5	Free-Flow Speed, mi/h	55.5
Speed Slope Coefficient	17.67194	Speed Power Coefficient	1.12697
PF Slope Coefficient	-0.91272	PF Power Coefficient	0.99960
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.4
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	634	-	-	50.9
2	Horizontal Curve	1214	1042	2	50.9
3	Tangent	264	-	-	50.9
4	Horizontal Curve	1109	955	2	50.9
5	Tangent	686	-	-	50.9
6	Horizontal Curve	792	881	2	50.9
7	Tangent	53	-	-	50.9
8	Horizontal Curve	634	1146	2	50.9
9	Tangent	528	-	-	50.9
10	Horizontal Curve	195	881	2	50.9
11	Tangent	1373	-	-	50.9

Passing Lane Results					
		Faster Lane		Slower Lane	
Flow Rate, veh/h		237		162	
Percentage of Heavy Vehicles (HV%), %		8.80		41.37	
Initial Average Speed (Sint), mi/h		58.3		48.5	
Average Speed at Midpoint (SPLmid), mi/h		60.2		46.6	
Percent Followers at Midpoint (PFPLmid), %		21.4		7.0	
Vehicle Results					
Average Speed, mi/h		50.9	Percent Followers, %		30.5
Segment Travel Time, minutes		1.67	Follower Density, followers/mi/ln		2.4
Vehicle LOS		B			
Segment 19					
Vehicle Inputs					
Segment Type		Passing Lanes	Length, ft		3168
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		375	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.87	Total Trucks, %		22.00
Segment Capacity, veh/h		1300	Demand/Capacity (D/C)		0.29
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.0
Speed Slope Coefficient		7.60765	Speed Power Coefficient		0.87306
PF Slope Coefficient		-1.15694	PF Power Coefficient		0.78069
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		2.8
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1109	-	-	59.5
2	Horizontal Curve	2059	1042	2	52.7
Passing Lane Results					
		Faster Lane		Slower Lane	
Flow Rate, veh/h		225		150	
Percentage of Heavy Vehicles (HV%), %		8.80		41.76	
Initial Average Speed (Sint), mi/h		61.3		60.7	
Average Speed at Midpoint (SPLmid), mi/h		63.2		58.8	
Percent Followers at Midpoint (PFPLmid), %		31.0		21.7	

Vehicle Results			
Average Speed, mi/h	55.1	Percent Followers, %	41.6
Segment Travel Time, minutes	0.65	Follower Density, followers/mi/ln	2.8
Vehicle LOS	B		

Segment 20

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5227
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	375	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.22

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	61.5
Speed Slope Coefficient	3.89525	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.28213	PF Power Coefficient	0.76773
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	3.0
%Improved % Followers	17.5	% Improved Avg Speed	0.4

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	634	1042	2	52.7
2	Tangent	53	-	-	59.3
3	Horizontal Curve	1214	955	2	52.7
4	Tangent	264	-	-	59.3
5	Horizontal Curve	1531	1273	2	58.9
6	Tangent	1531	-	-	59.3

Vehicle Results			
Average Speed, mi/h	57.0	Percent Followers, %	45.3
Segment Travel Time, minutes	1.04	Follower Density, followers/mi/ln	2.5
Vehicle LOS	B		

Segment 21

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2165
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.3

Demand and Capacity			
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Directional Demand Flow Rate, veh/h	375	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.22

Intermediate Results			
Segment Vertical Class	3	Free-Flow Speed, mi/h	58.2
Speed Slope Coefficient	8.45373	Speed Power Coefficient	0.61698
PF Slope Coefficient	-1.37631	PF Power Coefficient	0.76388
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	3.6
%Improved % Followers	15.5	% Improved Avg Speed	0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	422	955	2	52.7
2	Tangent	53	-	-	54.4
3	Horizontal Curve	1056	716	2	46.0
4	Tangent	53	-	-	54.4
5	Horizontal Curve	581	955	2	52.7

Vehicle Results			
Average Speed, mi/h	49.5	Percent Followers, %	47.8
Segment Travel Time, minutes	0.50	Follower Density, followers/mi/ln	3.1
Vehicle LOS	B		

Segment 22

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3750
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	375	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.22

Intermediate Results			
Segment Vertical Class	4	Free-Flow Speed, mi/h	55.4
Speed Slope Coefficient	10.65976	Speed Power Coefficient	0.60372
PF Slope Coefficient	-1.60099	PF Power Coefficient	0.74834
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	4.0
%Improved % Followers	12.8	% Improved Avg Speed	0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	106	-	-	50.6

2	Horizontal Curve	950	955	2	50.6
3	Tangent	53	-	-	50.6
4	Horizontal Curve	898	1042	2	50.6
5	Tangent	53	-	-	50.6
6	Horizontal Curve	845	996	2	50.6
7	Tangent	53	-	-	50.6
8	Horizontal Curve	792	1042	2	50.6

Vehicle Results					
Average Speed, mi/h		50.6	Percent Followers, %		53.6
Segment Travel Time, minutes		0.84	Follower Density, followers/mi/ln		3.5
Vehicle LOS		B			

Segment 23

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2482
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	11.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	375	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.22

Intermediate Results			
Segment Vertical Class	3	Free-Flow Speed, mi/h	55.8
Speed Slope Coefficient	7.62366	Speed Power Coefficient	0.59794
PF Slope Coefficient	-1.37647	PF Power Coefficient	0.75713
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	3.4
%Improved % Followers	11.4	% Improved Avg Speed	0.0

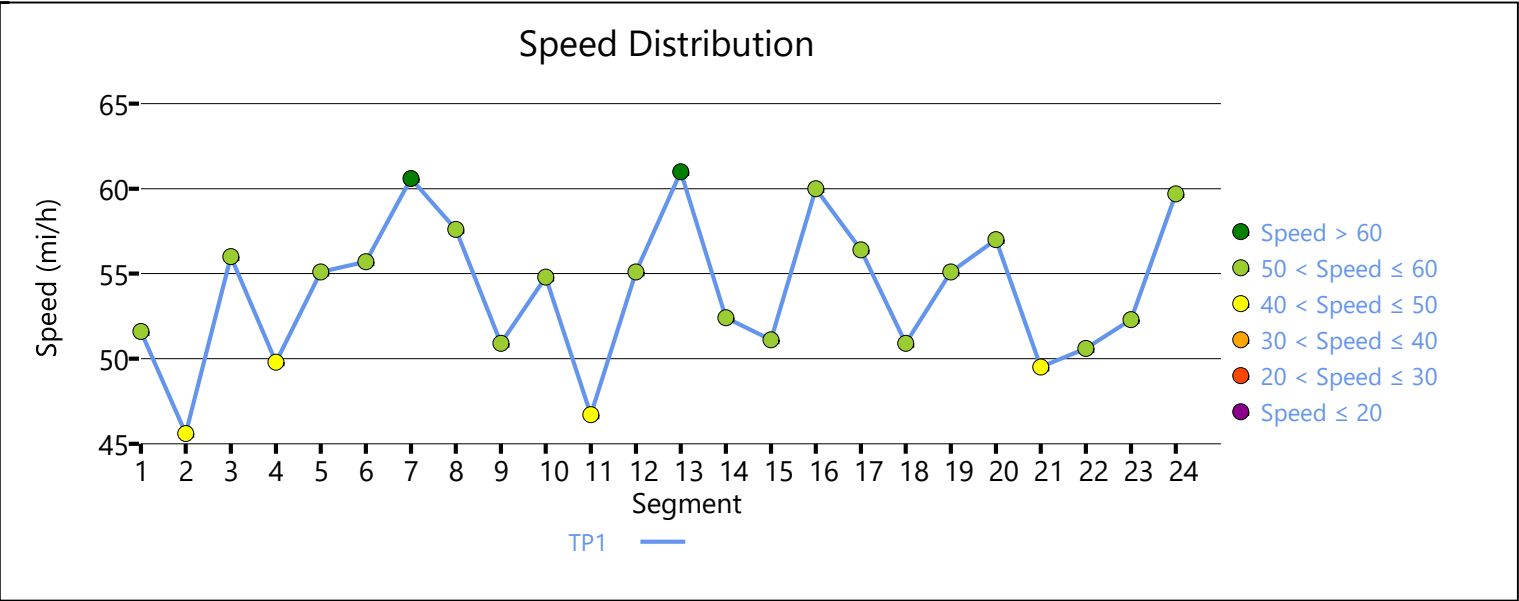
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2482	-	-	52.3

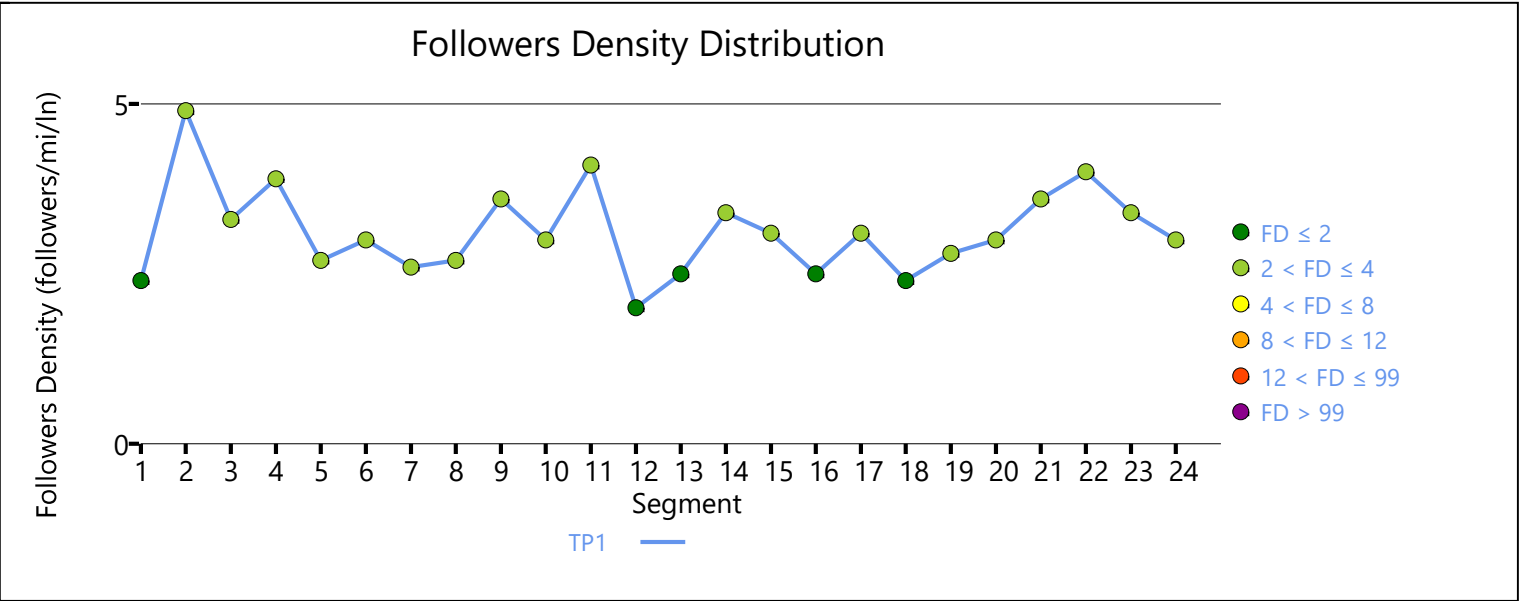
Vehicle Results			
Average Speed, mi/h	52.3	Percent Followers, %	48.0
Segment Travel Time, minutes	0.54	Follower Density, followers/mi/ln	3.1
Vehicle LOS	B		

Segment 24

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1267
Lane Width, ft	12	Shoulder Width, ft	6

Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		375	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.87	Total Trucks, %		22.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.22
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.0
Speed Slope Coefficient		3.86735	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.37557	PF Power Coefficient		0.74346
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		3.0
%Improved % Followers		10.8	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1267	-	-	59.7
Vehicle Results					
Average Speed, mi/h		59.7	Percent Followers, %		48.5
Segment Travel Time, minutes		0.24	Follower Density, followers/mi/ln		2.7
Vehicle LOS		B			
Facility Results					
T	Follower Density, followers/mi/ln			LOS	
1	2.7			B	





HCS7 Two-Lane Highway Report

Project Information

Analyst		Date	4/14/2024
Agency		Analysis Year	2024
Jurisdiction		Time Analyzed	
Project Description	Port Orford south UGB to Gold Beach north UGB	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	2746
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	323	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.19

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.0
Speed Slope Coefficient	3.89011	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.31685	PF Power Coefficient	0.76212
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.4
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1637	-	-	59.9
2	Horizontal Curve	1109	873	0	52.7

Vehicle Results

Average Speed, mi/h	57.0	Percent Followers, %	42.7
Segment Travel Time, minutes	0.55	Follower Density, followers/mi/ln	2.4
Vehicle LOS	B		

Segment 2

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	1795
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h		323	Opposing Demand Flow Rate, veh/h		310
Peak Hour Factor		0.87	Total Trucks, %		22.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.19
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.0
Speed Slope Coefficient		3.65704	Speed Power Coefficient		0.51309
PF Slope Coefficient		-1.28947	PF Power Coefficient		0.79224
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		2.6
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	739	573	0	39.4
2	Tangent	1056	-	-	60.3
Vehicle Results					
Average Speed, mi/h		51.7	Percent Followers, %		40.9
Segment Travel Time, minutes		0.39	Follower Density, followers/mi/ln		2.6
Vehicle LOS		B			
Segment 3					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		950
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		5.6
Demand and Capacity					
Directional Demand Flow Rate, veh/h		323	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.87	Total Trucks, %		22.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.19
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		60.6
Speed Slope Coefficient		3.79147	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.38900	PF Power Coefficient		0.74041
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		2.5
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	950	-	-	58.5
Vehicle Results					
Average Speed, mi/h		58.5	Percent Followers, %		45.2

Segment Travel Time, minutes		0.18	Follower Density, followers/mi/ln		2.5
Vehicle LOS		B			
Segment 4					
Vehicle Inputs					
Segment Type		Passing Lanes	Length, ft		3115
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		1.7
Demand and Capacity					
Directional Demand Flow Rate, veh/h		323	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.87	Total Trucks, %		22.00
Segment Capacity, veh/h		1300	Demand/Capacity (D/C)		0.25
Intermediate Results					
Segment Vertical Class		3	Free-Flow Speed, mi/h		58.5
Speed Slope Coefficient		9.39564	Speed Power Coefficient		1.05207
PF Slope Coefficient		-0.84408	PF Power Coefficient		0.66141
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		1.9
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3115	-	-	56.6
Passing Lane Results					
		Faster Lane		Slower Lane	
Flow Rate, veh/h		197		126	
Percentage of Heavy Vehicles (HV%), %		8.80		42.68	
Initial Average Speed (Sint), mi/h		59.9		54.9	
Average Speed at Midpoint (SPLmid), mi/h		61.8		53.0	
Percent Followers at Midpoint (PFPLmid), %		26.1		18.3	
Vehicle Results					
Average Speed, mi/h		56.6	Percent Followers, %		32.9
Segment Travel Time, minutes		0.63	Follower Density, followers/mi/ln		1.9
Vehicle LOS		A			
Segment 5					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		6019
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					

Directional Demand Flow Rate, veh/h	323	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.19

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	62.0
Speed Slope Coefficient	3.92577	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.27403	PF Power Coefficient	0.76732
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	2.5
%Improved % Followers	18.6	% Improved Avg Speed	2.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2218	-	-	59.9
2	Horizontal Curve	950	573	2	46.1
3	Tangent	53	-	-	59.9
4	Horizontal Curve	1214	573	2	46.1
5	Tangent	634	-	-	59.9
6	Horizontal Curve	950	716	2	46.1

Vehicle Results			
Average Speed, mi/h	53.8	Percent Followers, %	41.4
Segment Travel Time, minutes	1.27	Follower Density, followers/mi/ln	2.0
Vehicle LOS	B		

Segment 6

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2270
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	323	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.19

Intermediate Results			
Segment Vertical Class	3	Free-Flow Speed, mi/h	58.5
Speed Slope Coefficient	8.62180	Speed Power Coefficient	0.62110
PF Slope Coefficient	-1.36937	PF Power Coefficient	0.76552
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	2.9
%Improved % Followers	16.7	% Improved Avg Speed	1.6

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h

1	Tangent	211	-	-	55.2
2	Horizontal Curve	317	2548	2	55.2
3	Horizontal Curve	1742	615	2	46.1

Vehicle Results

Average Speed, mi/h	49.0	Percent Followers, %	43.8
Segment Travel Time, minutes	0.53	Follower Density, followers/mi/ln	2.4
Vehicle LOS	B		

Segment 7

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	8293
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	323	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.19

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.3
Speed Slope Coefficient	3.91099	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.27917	PF Power Coefficient	0.75540
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	2.7
%Improved % Followers	11.9	% Improved Avg Speed	0.4

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	581	-	-	59.2
2	Horizontal Curve	634	1433	2	59.1
3	Tangent	106	-	-	59.2
4	Horizontal Curve	1373	716	2	46.1
5	Tangent	370	-	-	59.2
6	Horizontal Curve	158	259	2	32.7
7	Tangent	53	-	-	59.2
8	Horizontal Curve	211	673	2	46.1
9	Tangent	106	-	-	59.2
10	Horizontal Curve	53	1280	2	59.1
11	Tangent	106	-	-	59.2
12	Horizontal Curve	106	243	2	32.7
13	Tangent	53	-	-	59.2
14	Horizontal Curve	264	190	2	32.7
15	Tangent	317	-	-	59.2

16	Horizontal Curve	264	787	2	52.7
17	Horizontal Curve	370	305	2	39.4
18	Tangent	158	-	-	59.2
19	Horizontal Curve	158	292	2	32.7
20	Tangent	53	-	-	59.2
21	Horizontal Curve	158	266	2	32.7
22	Horizontal Curve	106	235	2	32.7
23	Tangent	581	-	-	59.2
24	Horizontal Curve	1954	955	2	52.7

Vehicle Results

Average Speed, mi/h	51.2	Percent Followers, %	42.0
Segment Travel Time, minutes	1.84	Follower Density, followers/mi/ln	2.3
Vehicle LOS	B		

Segment 8

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	2112
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	323	Opposing Demand Flow Rate, veh/h	310
Peak Hour Factor	0.87	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.19

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.3
Speed Slope Coefficient	3.62825	Speed Power Coefficient	0.51309
PF Slope Coefficient	-1.28064	PF Power Coefficient	0.79519
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	2.2
%Improved % Followers	11.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	264	955	2	52.7
2	Tangent	1848	-	-	59.7

Vehicle Results

Average Speed, mi/h	58.8	Percent Followers, %	40.6
Segment Travel Time, minutes	0.41	Follower Density, followers/mi/ln	2.0
Vehicle LOS	A		

Segment 9

Vehicle Inputs					
Segment Type		Passing Constrained		Length, ft	
Lane Width, ft		12		Shoulder Width, ft	
Speed Limit, mi/h		55		Access Point Density, pts/mi	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		323		Opposing Demand Flow Rate, veh/h	
Peak Hour Factor		0.87		Total Trucks, %	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)	
Intermediate Results					
Segment Vertical Class		1		Free-Flow Speed, mi/h	
Speed Slope Coefficient		3.87678		Speed Power Coefficient	
PF Slope Coefficient		-1.34801		PF Power Coefficient	
In Passing Lane Effective Length?		Yes		Total Segment Density, veh/mi/ln	
%Improved % Followers		10.3		% Improved Avg Speed	
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1848	-	-	59.9
Vehicle Results					
Average Speed, mi/h		59.9		Percent Followers, %	
Segment Travel Time, minutes		0.35		Follower Density, followers/mi/ln	
Vehicle LOS		B			
Segment 10					
Vehicle Inputs					
Segment Type		Passing Zone		Length, ft	
Lane Width, ft		12		Shoulder Width, ft	
Speed Limit, mi/h		55		Access Point Density, pts/mi	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		323		Opposing Demand Flow Rate, veh/h	
Peak Hour Factor		0.87		Total Trucks, %	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)	
Intermediate Results					
Segment Vertical Class		2		Free-Flow Speed, mi/h	
Speed Slope Coefficient		4.95899		Speed Power Coefficient	
PF Slope Coefficient		-1.23226		PF Power Coefficient	
In Passing Lane Effective Length?		Yes		Total Segment Density, veh/mi/ln	
%Improved % Followers		9.3		% Improved Avg Speed	
Subsegment Data					

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3010	-	-	59.1

Vehicle Results

Average Speed, mi/h	59.1	Percent Followers, %	39.1
Segment Travel Time, minutes	0.58	Follower Density, followers/mi/ln	1.9
Vehicle LOS	A		

Segment 11

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	2270
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	323	Opposing Demand Flow Rate, veh/h	310
Peak Hour Factor	0.87	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.19

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	61.1
Speed Slope Coefficient	4.85828	Speed Power Coefficient	0.59120
PF Slope Coefficient	-1.26098	PF Power Coefficient	0.79828
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	2.2
%Improved % Followers	8.6	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2270	-	-	59.1

Vehicle Results

Average Speed, mi/h	59.1	Percent Followers, %	40.0
Segment Travel Time, minutes	0.44	Follower Density, followers/mi/ln	2.0
Vehicle LOS	A		

Segment 12

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	3907
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	323	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.19

Intermediate Results			
Segment Vertical Class	2	Free-Flow Speed, mi/h	60.7
Speed Slope Coefficient	5.44376	Speed Power Coefficient	0.47984
PF Slope Coefficient	-1.34497	PF Power Coefficient	0.75568
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	2.5
%Improved % Followers	7.5	% Improved Avg Speed	0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	475	-	-	58.0
2	Horizontal Curve	686	1432	2	58.0
3	Tangent	1320	-	-	58.0
4	Horizontal Curve	792	716	2	46.1
5	Tangent	634	-	-	58.0

Vehicle Results			
Average Speed, mi/h	55.6	Percent Followers, %	43.6
Segment Travel Time, minutes	0.80	Follower Density, followers/mi/ln	2.3
Vehicle LOS	B		

Segment 13

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4488
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	300	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.94	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.18

Intermediate Results			
Segment Vertical Class	2	Free-Flow Speed, mi/h	60.6
Speed Slope Coefficient	5.49563	Speed Power Coefficient	0.48185
PF Slope Coefficient	-1.33390	PF Power Coefficient	0.75686
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	2.3
%Improved % Followers	6.6	% Improved Avg Speed	0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	1214	669	0	46.1
2	Tangent	3274	-	-	58.1

Vehicle Results			
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Average Speed, mi/h	54.9	Percent Followers, %	41.5
Segment Travel Time, minutes	0.93	Follower Density, followers/mi/ln	2.1
Vehicle LOS	B		

Segment 14

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	3644
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	300	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.94	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.18

Intermediate Results

Segment Vertical Class	4	Free-Flow Speed, mi/h	55.1
Speed Slope Coefficient	10.40263	Speed Power Coefficient	0.60449
PF Slope Coefficient	-1.59828	PF Power Coefficient	0.74511
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	3.0
%Improved % Followers	5.7	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	581	716	2	46.1
2	Tangent	106	-	-	51.2
3	Horizontal Curve	845	573	2	46.1
4	Tangent	106	-	-	51.2
5	Horizontal Curve	739	637	2	46.1
6	Tangent	317	-	-	51.2
7	Horizontal Curve	950	902	2	51.2

Vehicle Results

Average Speed, mi/h	48.2	Percent Followers, %	47.9
Segment Travel Time, minutes	0.86	Follower Density, followers/mi/ln	2.8
Vehicle LOS	B		

Segment 15

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	5439
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.0

Demand and Capacity

Directional Demand Flow Rate, veh/h		300	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.94	Total Trucks, %		22.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.18
Intermediate Results					
Segment Vertical Class		5	Free-Flow Speed, mi/h		52.2
Speed Slope Coefficient		15.26525	Speed Power Coefficient		0.57177
PF Slope Coefficient		-1.88067	PF Power Coefficient		0.85124
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		3.2
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	53	-	-	46.2
2	Horizontal Curve	475	819	0	46.2
3	Horizontal Curve	581	819	0	46.2
4	Horizontal Curve	1214	1637	0	46.2
5	Tangent	264	-	-	46.2
6	Horizontal Curve	898	958	2	46.2
7	Horizontal Curve	1056	1432	2	46.2
8	Tangent	898	-	-	46.2
Vehicle Results					
Average Speed, mi/h		46.2	Percent Followers, %		49.1
Segment Travel Time, minutes		1.34	Follower Density, followers/mi/ln		3.2
Vehicle LOS		B			
Segment 16					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		2270
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		2.3
Demand and Capacity					
Directional Demand Flow Rate, veh/h		300	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.94	Total Trucks, %		22.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.18
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.4
Speed Slope Coefficient		3.85221	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.33684	PF Power Coefficient		0.75639
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		2.1
%Improved % Followers		0.0	% Improved Avg Speed		0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	1056	1432	2	59.1
2	Tangent	1214	-	-	59.4

Vehicle Results			
Average Speed, mi/h	59.3	Percent Followers, %	41.6
Segment Travel Time, minutes	0.44	Follower Density, followers/mi/ln	2.1
Vehicle LOS	B		

Segment 17

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3011
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	300	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.94	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.18

Intermediate Results			
Segment Vertical Class	4	Free-Flow Speed, mi/h	55.0
Speed Slope Coefficient	10.19086	Speed Power Coefficient	0.61969
PF Slope Coefficient	-1.57720	PF Power Coefficient	0.72814
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.8
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	1373	881	2	51.3
2	Tangent	106	-	-	51.3
3	Horizontal Curve	898	955	2	51.3
4	Tangent	634	-	-	51.3

Vehicle Results			
Average Speed, mi/h	51.3	Percent Followers, %	48.1
Segment Travel Time, minutes	0.67	Follower Density, followers/mi/ln	2.8
Vehicle LOS	B		

Segment 18

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	11298
Lane Width, ft	12	Shoulder Width, ft	6

Speed Limit, mi/h		55	Access Point Density, pts/mi		1.9
Demand and Capacity					
Directional Demand Flow Rate, veh/h		312	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.90	Total Trucks, %		22.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.18
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.5
Speed Slope Coefficient		3.94068	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.29627	PF Power Coefficient		0.73316
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		2.5
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	1109	955	2	52.7
2	Horizontal Curve	898	1432	2	59.1
3	Tangent	53	-	-	59.4
4	Horizontal Curve	1056	573	2	46.1
5	Tangent	211	-	-	59.4
6	Horizontal Curve	1373	1432	2	59.1
7	Tangent	739	-	-	59.4
8	Horizontal Curve	686	716	2	46.1
9	Tangent	158	-	-	59.4
10	Horizontal Curve	686	716	2	46.1
11	Tangent	53	-	-	59.4
12	Horizontal Curve	792	1115	2	52.7
13	Horizontal Curve	739	573	2	46.1
14	Tangent	106	-	-	59.4
15	Horizontal Curve	1056	955	2	52.7
16	Horizontal Curve	686	651	2	46.1
17	Tangent	158	-	-	59.4
18	Horizontal Curve	739	573	2	46.1
Vehicle Results					
Average Speed, mi/h		52.2	Percent Followers, %		42.4
Segment Travel Time, minutes		2.46	Follower Density, followers/mi/ln		2.5
Vehicle LOS		B			
Segment 19					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		2534
Lane Width, ft		12	Shoulder Width, ft		6

Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		312	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.90	Total Trucks, %		22.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.18
Intermediate Results					
Segment Vertical Class		3	Free-Flow Speed, mi/h		58.5
Speed Slope Coefficient		8.72982	Speed Power Coefficient		0.62395
PF Slope Coefficient		-1.35826	PF Power Coefficient		0.76671
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		2.4
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	950	1273	2	55.2
2	Tangent	1584	-	-	55.2
Vehicle Results					
Average Speed, mi/h		55.2	Percent Followers, %		42.7
Segment Travel Time, minutes		0.52	Follower Density, followers/mi/ln		2.4
Vehicle LOS		B			
Segment 20					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		1478
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		3.6
Demand and Capacity					
Directional Demand Flow Rate, veh/h		312	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.90	Total Trucks, %		22.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.18
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.1
Speed Slope Coefficient		3.82157	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.37491	PF Power Coefficient		0.74454
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		2.3
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	1478	1432	2	59.1

Vehicle Results											
Average Speed, mi/h		59.1		Percent Followers, %		43.9					
Segment Travel Time, minutes		0.28		Follower Density, followers/mi/ln		2.3					
Vehicle LOS		B									
Segment 21											
Vehicle Inputs											
Segment Type		Passing Zone		Length, ft		3116					
Lane Width, ft		12		Shoulder Width, ft		6					
Speed Limit, mi/h		55		Access Point Density, pts/mi		0.0					
Demand and Capacity											
Directional Demand Flow Rate, veh/h		312		Opposing Demand Flow Rate, veh/h		288					
Peak Hour Factor		0.90		Total Trucks, %		22.00					
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.18					
Intermediate Results											
Segment Vertical Class		1		Free-Flow Speed, mi/h		62.0					
Speed Slope Coefficient		3.66933		Speed Power Coefficient		0.51778					
PF Slope Coefficient		-1.24502		PF Power Coefficient		0.80761					
In Passing Lane Effective Length?		No		Total Segment Density, veh/mi/ln		2.0					
%Improved % Followers		0.0		% Improved Avg Speed		0.0					
Subsegment Data											
#	Segment Type		Length, ft		Radius, ft		Superelevation, %		Average Speed, mi/h		
1	Horizontal Curve		370		1432		2		59.1		
2	Tangent		2746		-		-		60.3		
Vehicle Results											
Average Speed, mi/h			60.2			Percent Followers, %			38.5		
Segment Travel Time, minutes			0.59			Follower Density, followers/mi/ln			2.0		
Vehicle LOS			A								
Segment 22											
Vehicle Inputs											
Segment Type			Passing Constrained			Length, ft			2112		
Lane Width, ft			12			Shoulder Width, ft			6		
Speed Limit, mi/h			55			Access Point Density, pts/mi			0.0		
Demand and Capacity											
Directional Demand Flow Rate, veh/h			326			Opposing Demand Flow Rate, veh/h			-		
Peak Hour Factor			0.85			Total Trucks, %			22.00		
Segment Capacity, veh/h			1700			Demand/Capacity (D/C)			0.19		

Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.0
Speed Slope Coefficient		3.88098	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.33723	PF Power Coefficient		0.75596
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		2.4
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2112	-	-	59.9
Vehicle Results					
Average Speed, mi/h		59.9	Percent Followers, %		43.6
Segment Travel Time, minutes		0.40	Follower Density, followers/mi/ln		2.4
Vehicle LOS		B			
Segment 23					
Vehicle Inputs					
Segment Type		Passing Zone	Length, ft		3432
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		1.5
Demand and Capacity					
Directional Demand Flow Rate, veh/h		326	Opposing Demand Flow Rate, veh/h		301
Peak Hour Factor		0.85	Total Trucks, %		22.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.19
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.6
Speed Slope Coefficient		3.65696	Speed Power Coefficient		0.51496
PF Slope Coefficient		-1.24322	PF Power Coefficient		0.80760
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		2.1
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3432	-	-	59.9
Vehicle Results					
Average Speed, mi/h		59.9	Percent Followers, %		39.5
Segment Travel Time, minutes		0.65	Follower Density, followers/mi/ln		2.1
Vehicle LOS		B			
Segment 24					

Vehicle Inputs					
Segment Type		Passing Constrained		Length, ft	
Lane Width, ft		12		Shoulder Width, ft	
Speed Limit, mi/h		55		Access Point Density, pts/mi	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		326		Opposing Demand Flow Rate, veh/h	
Peak Hour Factor		0.85		Total Trucks, %	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)	
Intermediate Results					
Segment Vertical Class		1		Free-Flow Speed, mi/h	
Speed Slope Coefficient		3.83862		Speed Power Coefficient	
PF Slope Coefficient		-1.32551		PF Power Coefficient	
In Passing Lane Effective Length?		No		Total Segment Density, veh/mi/ln	
%Improved % Followers		0.0		% Improved Avg Speed	
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2746	-	-	59.0
Vehicle Results					
Average Speed, mi/h		59.0		Percent Followers, %	
Segment Travel Time, minutes		0.53		Follower Density, followers/mi/ln	
Vehicle LOS		B			
Segment 25					
Vehicle Inputs					
Segment Type		Passing Zone		Length, ft	
Lane Width, ft		12		Shoulder Width, ft	
Speed Limit, mi/h		55		Access Point Density, pts/mi	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		337		Opposing Demand Flow Rate, veh/h	
Peak Hour Factor		0.87		Total Trucks, %	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)	
Intermediate Results					
Segment Vertical Class		2		Free-Flow Speed, mi/h	
Speed Slope Coefficient		4.82581		Speed Power Coefficient	
PF Slope Coefficient		-1.27156		PF Power Coefficient	
In Passing Lane Effective Length?		No		Total Segment Density, veh/mi/ln	
%Improved % Followers		0.0		% Improved Avg Speed	
Subsegment Data					

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2059	-	-	59.1

Vehicle Results

Average Speed, mi/h	59.1	Percent Followers, %	41.4
Segment Travel Time, minutes	0.40	Follower Density, followers/mi/ln	2.4
Vehicle LOS	B		

Segment 26

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	5597
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	337	Opposing Demand Flow Rate, veh/h	310
Peak Hour Factor	0.87	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.20

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.0
Speed Slope Coefficient	3.70299	Speed Power Coefficient	0.51309
PF Slope Coefficient	-1.21884	PF Power Coefficient	0.81077
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.2
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5597	-	-	60.2

Vehicle Results

Average Speed, mi/h	60.2	Percent Followers, %	39.6
Segment Travel Time, minutes	1.06	Follower Density, followers/mi/ln	2.2
Vehicle LOS	B		

Segment 27

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	3485
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	9.1

Demand and Capacity

Directional Demand Flow Rate, veh/h	337	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.20

Intermediate Results					
Segment Vertical Class	1	Free-Flow Speed, mi/h	59.7		
Speed Slope Coefficient	3.77620	Speed Power Coefficient	0.41674		
PF Slope Coefficient	-1.32009	PF Power Coefficient	0.76077		
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.6		
%Improved % Followers	0.0	% Improved Avg Speed	0.0		
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	1584	2292	2	57.6
2	Tangent	1901	-	-	57.6
Vehicle Results					
Average Speed, mi/h	57.6	Percent Followers, %	43.8		
Segment Travel Time, minutes	0.69	Follower Density, followers/mi/ln	2.6		
Vehicle LOS	B				
Segment 28					
Vehicle Inputs					
Segment Type	Passing Zone	Length, ft	3379		
Lane Width, ft	12	Shoulder Width, ft	6		
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.6		
Demand and Capacity					
Directional Demand Flow Rate, veh/h	373	Opposing Demand Flow Rate, veh/h	344		
Peak Hour Factor	0.84	Total Trucks, %	22.00		
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.22		
Intermediate Results					
Segment Vertical Class	1	Free-Flow Speed, mi/h	61.6		
Speed Slope Coefficient	3.66734	Speed Power Coefficient	0.50657		
PF Slope Coefficient	-1.25134	PF Power Coefficient	0.80479		
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.7		
%Improved % Followers	0.0	% Improved Avg Speed	0.0		
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3379	-	-	59.7
Vehicle Results					
Average Speed, mi/h	59.7	Percent Followers, %	43.2		
Segment Travel Time, minutes	0.64	Follower Density, followers/mi/ln	2.7		
Vehicle LOS	B				
Segment 29					

Vehicle Inputs					
Segment Type		Passing Zone		Length, ft	
Lane Width, ft		12		Shoulder Width, ft	
Speed Limit, mi/h		55		Access Point Density, pts/mi	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		373		Opposing Demand Flow Rate, veh/h	
Peak Hour Factor		0.84		Total Trucks, %	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)	
Intermediate Results					
Segment Vertical Class		1		Free-Flow Speed, mi/h	
Speed Slope Coefficient		3.69803		Speed Power Coefficient	
PF Slope Coefficient		-1.23915		PF Power Coefficient	
In Passing Lane Effective Length?		No		Total Segment Density, veh/mi/ln	
%Improved % Followers		0.0		% Improved Avg Speed	
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	11774	-	-	59.1
Vehicle Results					
Average Speed, mi/h		59.1		Percent Followers, %	
Segment Travel Time, minutes		2.27		Follower Density, followers/mi/ln	
Vehicle LOS		B			
Segment 30					
Vehicle Inputs					
Segment Type		Passing Zone		Length, ft	
Lane Width, ft		12		Shoulder Width, ft	
Speed Limit, mi/h		55		Access Point Density, pts/mi	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		422		Opposing Demand Flow Rate, veh/h	
Peak Hour Factor		0.90		Total Trucks, %	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)	
Intermediate Results					
Segment Vertical Class		1		Free-Flow Speed, mi/h	
Speed Slope Coefficient		3.75789		Speed Power Coefficient	
PF Slope Coefficient		-1.24072		PF Power Coefficient	
In Passing Lane Effective Length?		No		Total Segment Density, veh/mi/ln	
%Improved % Followers		0.0		% Improved Avg Speed	
Subsegment Data					

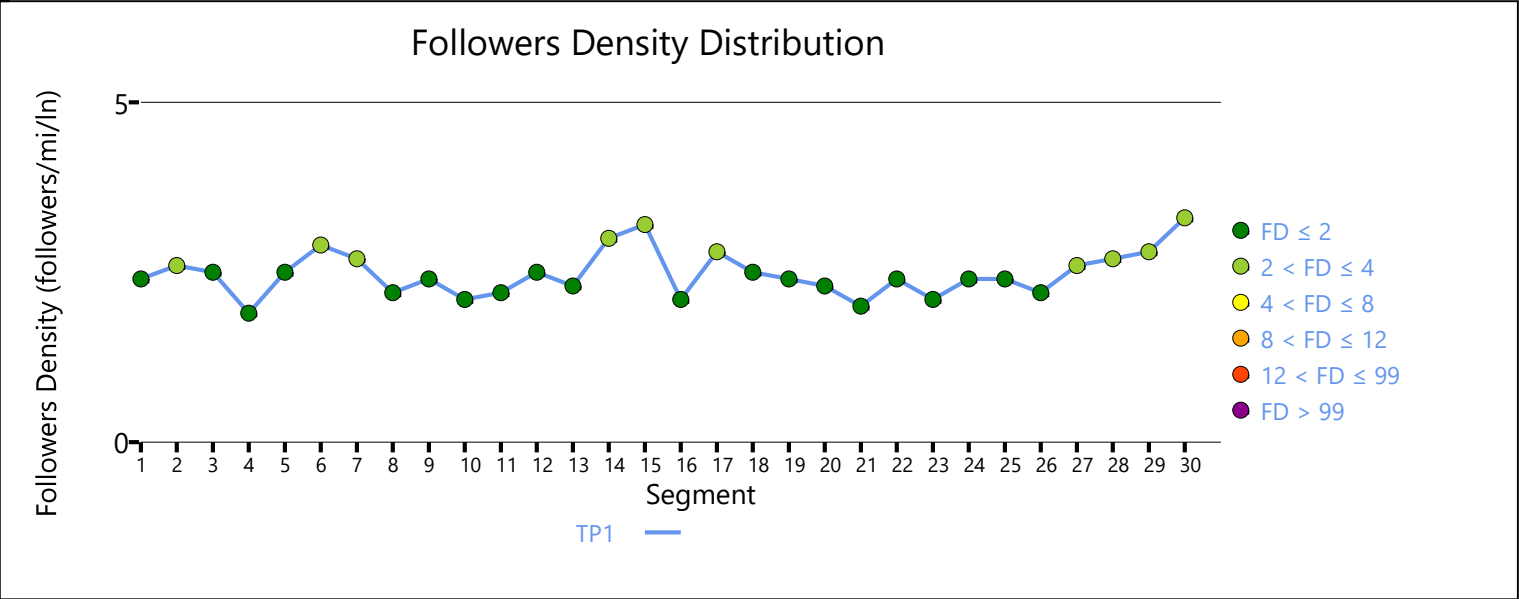
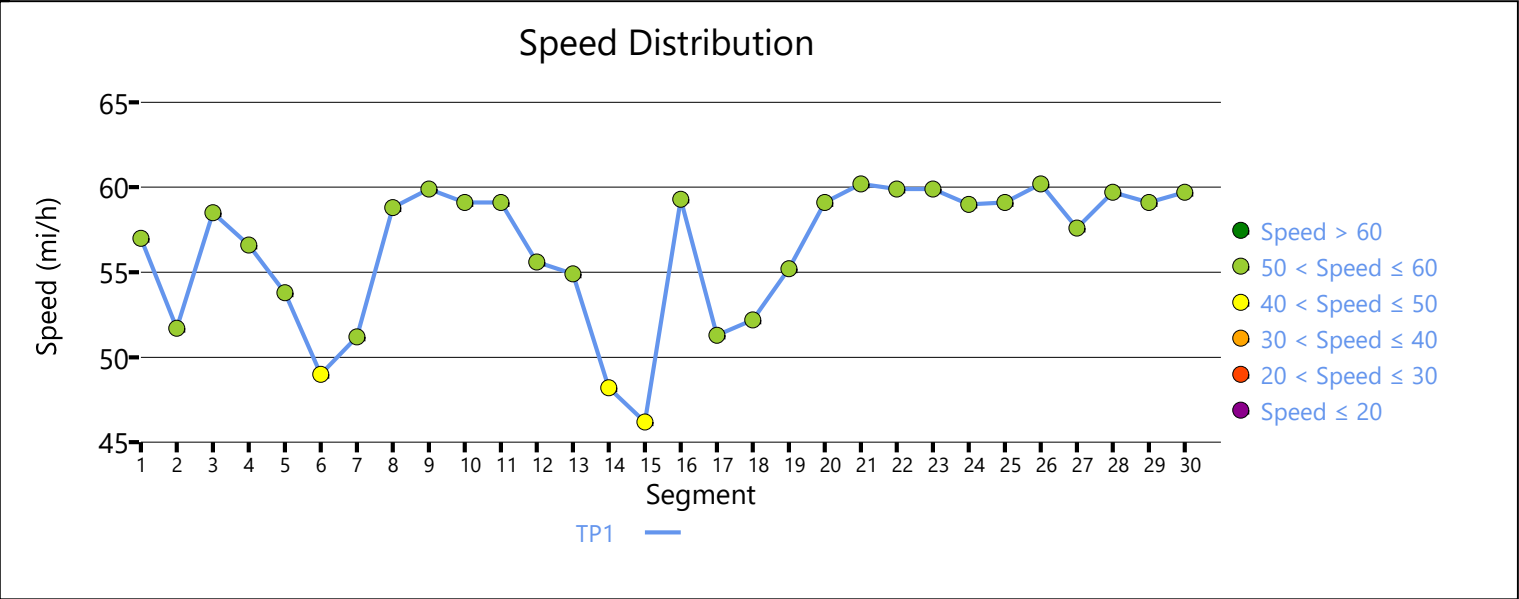
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	10771	-	-	59.7

Vehicle Results

Average Speed, mi/h	59.7	Percent Followers, %	47.0
Segment Travel Time, minutes	2.05	Follower Density, followers/mi/ln	3.3
Vehicle LOS	B		

Facility Results

T	Follower Density, followers/mi/ln	LOS
1	2.5	B



HCS7 Two-Lane Highway Report

Project Information

Analyst		Date	4/27/2024
Agency		Analysis Year	2024
Jurisdiction		Time Analyzed	
Project Description	Gold Beach north UGB to Port Orford south UGB	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	7920
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.8

Demand and Capacity

Directional Demand Flow Rate, veh/h	390	Opposing Demand Flow Rate, veh/h	422
Peak Hour Factor	0.90	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.23

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.5
Speed Slope Coefficient	3.72907	Speed Power Coefficient	0.49328
PF Slope Coefficient	-1.23398	PF Power Coefficient	0.79426
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.9
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	7920	-	-	59.5

Vehicle Results

Average Speed, mi/h	59.5	Percent Followers, %	44.2
Segment Travel Time, minutes	1.51	Follower Density, followers/mi/ln	2.9
Vehicle LOS	B		

Segment 2

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	1690
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	344	Opposing Demand Flow Rate, veh/h	-
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Peak Hour Factor	0.84	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.20

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.0
Speed Slope Coefficient	3.87412	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.35531	PF Power Coefficient	0.75014
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.6
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1690	-	-	59.8

Vehicle Results

Average Speed, mi/h	59.8	Percent Followers, %	45.6
Segment Travel Time, minutes	0.32	Follower Density, followers/mi/ln	2.6
Vehicle LOS	B		

Segment 3

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	15365
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	75.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	344	Opposing Demand Flow Rate, veh/h	373
Peak Hour Factor	0.84	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.20

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	52.0
Speed Slope Coefficient	3.21805	Speed Power Coefficient	0.50144
PF Slope Coefficient	-1.28178	PF Power Coefficient	0.75046
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	3.0
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	15365	-	-	50.4

Vehicle Results

Average Speed, mi/h	50.4	Percent Followers, %	43.8
Segment Travel Time, minutes	3.47	Follower Density, followers/mi/ln	3.0
Vehicle LOS	B		

Segment 4					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		3801
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		21.9
Demand and Capacity					
Directional Demand Flow Rate, veh/h		310	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.87	Total Trucks, %		22.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.18
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		56.5
Speed Slope Coefficient		3.60647	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.34031	PF Power Coefficient		0.75354
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		2.4
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2851	-	-	54.6
2	Horizontal Curve	950	2292	2	54.6
Vehicle Results					
Average Speed, mi/h		54.6	Percent Followers, %		42.6
Segment Travel Time, minutes		0.79	Follower Density, followers/mi/ln		2.4
Vehicle LOS		B			
Segment 5					
Vehicle Inputs					
Segment Type		Passing Zone	Length, ft		6231
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		310	Opposing Demand Flow Rate, veh/h		337
Peak Hour Factor		0.87	Total Trucks, %		22.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.18
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.0
Speed Slope Coefficient		3.71645	Speed Power Coefficient		0.50793
PF Slope Coefficient		-1.22040	PF Power Coefficient		0.80766
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		1.9

%Improved % Followers		0.0		% Improved Avg Speed		0.0	
Subsegment Data							
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h		
1	Horizontal Curve	634	2292	2	60.3		
2	Tangent	5597	-	-	60.3		
Vehicle Results							
Average Speed, mi/h		60.3		Percent Followers, %		37.8	
Segment Travel Time, minutes		1.17		Follower Density, followers/mi/ln		1.9	
Vehicle LOS		A					
Segment 6							
Vehicle Inputs							
Segment Type		Passing Zone		Length, ft		1162	
Lane Width, ft		12		Shoulder Width, ft		6	
Speed Limit, mi/h		55		Access Point Density, pts/mi		0.0	
Demand and Capacity							
Directional Demand Flow Rate, veh/h		301		Opposing Demand Flow Rate, veh/h		326	
Peak Hour Factor		0.85		Total Trucks, %		22.00	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.18	
Intermediate Results							
Segment Vertical Class		1		Free-Flow Speed, mi/h		62.0	
Speed Slope Coefficient		3.65301		Speed Power Coefficient		0.51001	
PF Slope Coefficient		-1.31604		PF Power Coefficient		0.78249	
In Passing Lane Effective Length?		No		Total Segment Density, veh/mi/ln		2.0	
%Improved % Followers		0.0		% Improved Avg Speed		0.0	
Subsegment Data							
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h		
1	Tangent	1162	-	-	60.4		
Vehicle Results							
Average Speed, mi/h		60.4		Percent Followers, %		40.2	
Segment Travel Time, minutes		0.22		Follower Density, followers/mi/ln		2.0	
Vehicle LOS		B					
Segment 7							
Vehicle Inputs							
Segment Type		Passing Constrained		Length, ft		2957	
Lane Width, ft		12		Shoulder Width, ft		6	
Speed Limit, mi/h		55		Access Point Density, pts/mi		5.6	

Demand and Capacity					
Directional Demand Flow Rate, veh/h		301	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.85	Total Trucks, %		22.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.18
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		60.6
Speed Slope Coefficient		3.81703	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.32403	PF Power Coefficient		0.76020
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		2.1
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2957	-	-	58.6
Vehicle Results					
Average Speed, mi/h		58.6	Percent Followers, %		41.2
Segment Travel Time, minutes		0.57	Follower Density, followers/mi/ln		2.1
Vehicle LOS		B			
Segment 8					
Vehicle Inputs					
Segment Type		Passing Zone	Length, ft		3326
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		1.6
Demand and Capacity					
Directional Demand Flow Rate, veh/h		301	Opposing Demand Flow Rate, veh/h		326
Peak Hour Factor		0.85	Total Trucks, %		22.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.18
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.6
Speed Slope Coefficient		3.66155	Speed Power Coefficient		0.51001
PF Slope Coefficient		-1.24950	PF Power Coefficient		0.80553
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		1.9
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3326	-	-	60.0
Vehicle Results					
Average Speed, mi/h		60.0	Percent Followers, %		37.8

Segment Travel Time, minutes	0.63	Follower Density, followers/mi/ln	1.9
Vehicle LOS	A		

Segment 9

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	1742
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	301	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.85	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.18

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.0
Speed Slope Coefficient	3.87501	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.35283	PF Power Coefficient	0.75095
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.1
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1742	-	-	60.0

Vehicle Results

Average Speed, mi/h	60.0	Percent Followers, %	42.3
Segment Travel Time, minutes	0.33	Follower Density, followers/mi/ln	2.1
Vehicle LOS	B		

Segment 10

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	3432
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	288	Opposing Demand Flow Rate, veh/h	312
Peak Hour Factor	0.90	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.17

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.0
Speed Slope Coefficient	3.68056	Speed Power Coefficient	0.51271
PF Slope Coefficient	-1.24297	PF Power Coefficient	0.80794

In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	1.7
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3432	-	-	60.4

Vehicle Results

Average Speed, mi/h	60.4	Percent Followers, %	36.5
Segment Travel Time, minutes	0.65	Follower Density, followers/mi/ln	1.7
Vehicle LOS	A		

Segment 11

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	2323
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.2

Demand and Capacity

Directional Demand Flow Rate, veh/h	288	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.90	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.17

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.7
Speed Slope Coefficient	3.86790	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.33247	PF Power Coefficient	0.75760
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.0
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	475	-	-	59.7
2	Horizontal Curve	1848	1432	2	59.2

Vehicle Results

Average Speed, mi/h	59.3	Percent Followers, %	40.5
Segment Travel Time, minutes	0.45	Follower Density, followers/mi/ln	2.0
Vehicle LOS	A		

Segment 12

Vehicle Inputs

Segment Type	Passing Lanes	Length, ft	2534
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity					
Directional Demand Flow Rate, veh/h		288	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.90	Total Trucks, %		22.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.17
Intermediate Results					
Segment Vertical Class		3	Free-Flow Speed, mi/h		58.5
Speed Slope Coefficient		8.77159	Speed Power Coefficient		0.62509
PF Slope Coefficient		-1.35444	PF Power Coefficient		0.76708
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		2.1
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1584	-	-	55.5
2	Horizontal Curve	950	1273	2	55.5
Vehicle Results					
Average Speed, mi/h		55.5	Percent Followers, %		40.6
Segment Travel Time, minutes		0.52	Follower Density, followers/mi/ln		2.1
Vehicle LOS		B			
Segment 13					
Vehicle Inputs					
Segment Type		Passing Lanes	Length, ft		2639
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		288	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.90	Total Trucks, %		22.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.17
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.0
Speed Slope Coefficient		3.88867	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.31981	PF Power Coefficient		0.76127
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		2.3
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	739	573	2	46.1
2	Tangent	158	-	-	60.0

3	Horizontal Curve	686	651	2	46.1
4	Horizontal Curve	1056	955	2	52.8

Vehicle Results

Average Speed, mi/h	49.6	Percent Followers, %	40.0
Segment Travel Time, minutes	0.60	Follower Density, followers/mi/ln	2.3
Vehicle LOS	B		

Segment 14

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	8659
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	3.8

Demand and Capacity

Directional Demand Flow Rate, veh/h	288	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.94	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.17

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.0
Speed Slope Coefficient	3.89619	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.28324	PF Power Coefficient	0.75225
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	2.2
%Improved % Followers	18.8	% Improved Avg Speed	1.8

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	106	-	-	59.1
2	Horizontal Curve	739	573	2	46.1
3	Horizontal Curve	792	1115	2	52.8
4	Tangent	53	-	-	59.1
5	Horizontal Curve	686	716	2	46.1
6	Tangent	158	-	-	59.1
7	Horizontal Curve	686	716	2	46.1
8	Tangent	739	-	-	59.1
9	Horizontal Curve	1373	1432	2	59.1
10	Tangent	211	-	-	59.1
11	Horizontal Curve	1056	573	2	46.1
12	Tangent	53	-	-	59.1
13	Horizontal Curve	898	1432	2	59.1
14	Horizontal Curve	1109	955	2	52.8

Vehicle Results

Average Speed, mi/h	53.0	Percent Followers, %	39.6
Segment Travel Time, minutes	1.86	Follower Density, followers/mi/ln	2.2
Vehicle LOS	B		

Segment 15

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	3011
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	288	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.94	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.17

Intermediate Results

Segment Vertical Class	4	Free-Flow Speed, mi/h	55.5
Speed Slope Coefficient	10.48118	Speed Power Coefficient	0.62210
PF Slope Coefficient	-1.57592	PF Power Coefficient	0.72926
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	2.6
%Improved % Followers	15.6	% Improved Avg Speed	1.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	634	-	-	51.8
2	Horizontal Curve	898	955	2	51.8
3	Tangent	106	-	-	51.8
4	Horizontal Curve	1373	881	2	51.8

Vehicle Results

Average Speed, mi/h	51.8	Percent Followers, %	47.1
Segment Travel Time, minutes	0.66	Follower Density, followers/mi/ln	2.6
Vehicle LOS	B		

Segment 16

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	2904
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	6.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	288	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.94	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.17

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	60.3
Speed Slope Coefficient	3.80414	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.32735	PF Power Coefficient	0.75929
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	2.0
%Improved % Followers	13.3	% Improved Avg Speed	0.2

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1214	-	-	58.4
2	Horizontal Curve	1056	1432	2	58.4
3	Tangent	634	-	-	58.4

Vehicle Results			
Average Speed, mi/h	58.4	Percent Followers, %	40.3
Segment Travel Time, minutes	0.56	Follower Density, followers/mi/ln	2.0
Vehicle LOS	A		

Segment 17

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4805
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	288	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.94	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.17

Intermediate Results			
Segment Vertical Class	5	Free-Flow Speed, mi/h	53.1
Speed Slope Coefficient	15.33504	Speed Power Coefficient	0.60343
PF Slope Coefficient	-1.85038	PF Power Coefficient	0.84240
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	2.9
%Improved % Followers	11.5	% Improved Avg Speed	0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	264	-	-	47.5
2	Horizontal Curve	1056	1432	2	47.5
3	Horizontal Curve	898	958	2	47.5
4	Tangent	264	-	-	47.5
5	Horizontal Curve	1214	1637	0	47.5
6	Horizontal Curve	581	819	0	47.5

7	Horizontal Curve	475	819	0	47.5
8	Tangent	53	-	-	47.5

Vehicle Results

Average Speed, mi/h	47.5	Percent Followers, %	47.7
Segment Travel Time, minutes	1.15	Follower Density, followers/mi/ln	2.9
Vehicle LOS	B		

Segment 18

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	1267
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	5.9

Demand and Capacity

Directional Demand Flow Rate, veh/h	288	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.94	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.17

Intermediate Results

Segment Vertical Class	3	Free-Flow Speed, mi/h	57.1
Speed Slope Coefficient	7.66098	Speed Power Coefficient	0.59732
PF Slope Coefficient	-1.44589	PF Power Coefficient	0.75314
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	2.3
%Improved % Followers	10.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	950	902	2	52.8
2	Tangent	317	-	-	54.2

Vehicle Results

Average Speed, mi/h	53.1	Percent Followers, %	43.3
Segment Travel Time, minutes	0.27	Follower Density, followers/mi/ln	2.3
Vehicle LOS	B		

Segment 19

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	2377
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	288	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.94	Total Trucks, %	22.00

Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.17
Intermediate Results					
Segment Vertical Class		3	Free-Flow Speed, mi/h		58.5
Speed Slope Coefficient		8.66630	Speed Power Coefficient		0.62225
PF Slope Coefficient		-1.36458	PF Power Coefficient		0.76605
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		2.5
%Improved % Followers		8.7	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	739	637	2	46.1
2	Tangent	106	-	-	55.5
3	Horizontal Curve	845	573	2	46.1
4	Tangent	106	-	-	55.5
5	Horizontal Curve	581	716	2	46.1
Vehicle Results					
Average Speed, mi/h		47.0	Percent Followers, %		40.9
Segment Travel Time, minutes		0.58	Follower Density, followers/mi/ln		2.5
Vehicle LOS		B			
Segment 20					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		4488
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		288	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.94	Total Trucks, %		22.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.17
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.0
Speed Slope Coefficient		3.91077	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.28518	PF Power Coefficient		0.76892
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		2.0
%Improved % Followers		7.6	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3274	-	-	60.0
2	Horizontal Curve	1214	669	0	46.1

Vehicle Results			
Average Speed, mi/h	56.3	Percent Followers, %	39.0
Segment Travel Time, minutes	0.91	Follower Density, followers/mi/ln	2.0
Vehicle LOS	A		

Segment 21

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2060
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	310	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.18

Intermediate Results			
Segment Vertical Class	3	Free-Flow Speed, mi/h	58.5
Speed Slope Coefficient	8.53130	Speed Power Coefficient	0.61883
PF Slope Coefficient	-1.38009	PF Power Coefficient	0.76430
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	2.6
%Improved % Followers	6.4	% Improved Avg Speed	0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	634	-	-	55.3
2	Horizontal Curve	792	716	2	46.1
3	Tangent	634	-	-	55.3

Vehicle Results			
Average Speed, mi/h	51.8	Percent Followers, %	43.1
Segment Travel Time, minutes	0.45	Follower Density, followers/mi/ln	2.6
Vehicle LOS	B		

Segment 22

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3009
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	310	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.18

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	62.0
Speed Slope Coefficient	3.89358	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.31015	PF Power Coefficient	0.76397
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	2.2
%Improved % Followers	5.5	% Improved Avg Speed	0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	686	-	-	59.9
2	Horizontal Curve	686	1432	2	59.1
3	Tangent	1637	-	-	59.9

Vehicle Results			
Average Speed, mi/h	59.7	Percent Followers, %	41.5
Segment Travel Time, minutes	0.57	Follower Density, followers/mi/ln	2.2
Vehicle LOS	B		

Segment 23

Vehicle Inputs			
Segment Type	Passing Zone	Length, ft	3221
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	310	Opposing Demand Flow Rate, veh/h	323
Peak Hour Factor	0.87	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.18

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	62.0
Speed Slope Coefficient	3.68110	Speed Power Coefficient	0.51058
PF Slope Coefficient	-1.24883	PF Power Coefficient	0.80617
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.0
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3221	-	-	60.3

Vehicle Results			
Average Speed, mi/h	60.3	Percent Followers, %	38.5
Segment Travel Time, minutes	0.61	Follower Density, followers/mi/ln	2.0
Vehicle LOS	A		

Segment 24					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		1901
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		310	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.87	Total Trucks, %		22.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.18
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.0
Speed Slope Coefficient		3.87765	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.34571	PF Power Coefficient		0.75326
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		2.2
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1901	-	-	59.9
Vehicle Results					
Average Speed, mi/h		59.9	Percent Followers, %		42.7
Segment Travel Time, minutes		0.36	Follower Density, followers/mi/ln		2.2
Vehicle LOS		B			
Segment 25					
Vehicle Inputs					
Segment Type		Passing Zone	Length, ft		2112
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		310	Opposing Demand Flow Rate, veh/h		323
Peak Hour Factor		0.87	Total Trucks, %		22.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.18
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.0
Speed Slope Coefficient		3.66581	Speed Power Coefficient		0.51058
PF Slope Coefficient		-1.27914	PF Power Coefficient		0.79610
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		2.0
%Improved % Followers		0.0	% Improved Avg Speed		0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2112	-	-	60.3
Vehicle Results					
Average Speed, mi/h		60.3	Percent Followers, %		39.6
Segment Travel Time, minutes		0.40	Follower Density, followers/mi/ln		2.0
Vehicle LOS		B			
Segment 26					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		9508
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		1.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		310	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.87	Total Trucks, %		22.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.18
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.7
Speed Slope Coefficient		3.94044	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.28122	PF Power Coefficient		0.74821
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		2.5
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	581	-	-	59.7
2	Horizontal Curve	2218	955	2	52.7
3	Tangent	581	-	-	59.7
4	Horizontal Curve	106	235	2	32.7
5	Horizontal Curve	158	266	2	32.7
6	Tangent	53	-	-	59.7
7	Horizontal Curve	158	292	2	32.7
8	Tangent	158	-	-	59.7
9	Horizontal Curve	370	305	2	39.4
10	Horizontal Curve	264	787	2	52.7
11	Tangent	317	-	-	59.7
12	Horizontal Curve	264	190	2	32.7
13	Tangent	53	-	-	59.7
14	Horizontal Curve	106	243	2	32.7

15	Tangent	106	-	-	59.7
16	Horizontal Curve	53	1280	2	59.1
17	Tangent	106	-	-	59.7
18	Horizontal Curve	211	673	2	46.1
19	Tangent	53	-	-	59.7
20	Horizontal Curve	158	259	2	32.7
21	Tangent	370	-	-	59.7
22	Horizontal Curve	1373	716	2	46.1
23	Tangent	106	-	-	59.7
24	Horizontal Curve	634	1433	2	59.1
25	Tangent	581	-	-	59.7
26	Horizontal Curve	370	615	2	46.1

Vehicle Results

Average Speed, mi/h	51.5	Percent Followers, %	41.4
Segment Travel Time, minutes	2.10	Follower Density, followers/mi/ln	2.5
Vehicle LOS	B		

Segment 27

Vehicle Inputs

Segment Type	Passing Lanes	Length, ft	2851
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	310	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	22.00
Segment Capacity, veh/h	1200	Demand/Capacity (D/C)	0.26

Intermediate Results

Segment Vertical Class	4	Free-Flow Speed, mi/h	58.2
Speed Slope Coefficient	11.62596	Speed Power Coefficient	1.07737
PF Slope Coefficient	-1.09139	PF Power Coefficient	0.88720
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.1
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	1373	615	2	46.1
2	Horizontal Curve	317	2548	2	56.0
3	Tangent	211	-	-	56.0
4	Horizontal Curve	950	716	2	46.1

Passing Lane Results

	Faster Lane	Slower Lane
Flow Rate, veh/h	190	120
Percentage of Heavy Vehicles (HV%), %	8.80	42.93
Initial Average Speed (Sint), mi/h	60.1	53.7
Average Speed at Midpoint (SPLmid), mi/h	61.9	51.9
Percent Followers at Midpoint (PFPLmid), %	23.7	8.6

Vehicle Results

Average Speed, mi/h	47.9	Percent Followers, %	32.1
Segment Travel Time, minutes	0.68	Follower Density, followers/mi/ln	2.1
Vehicle LOS	B		

Segment 28

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	5861
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	310	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	22.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.18

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.0
Speed Slope Coefficient	3.92432	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.27469	PF Power Coefficient	0.76772
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	2.3
%Improved % Followers	18.5	% Improved Avg Speed	1.7

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	634	-	-	59.9
2	Horizontal Curve	1214	573	2	46.1
3	Tangent	53	-	-	59.9
4	Horizontal Curve	950	573	2	46.1
5	Tangent	3010	-	-	59.9

Vehicle Results

Average Speed, mi/h	55.7	Percent Followers, %	40.5
Segment Travel Time, minutes	1.20	Follower Density, followers/mi/ln	1.8
Vehicle LOS	A		

Segment 29

Vehicle Inputs					
Segment Type		Passing Constrained		Length, ft	
Lane Width, ft		12		Shoulder Width, ft	
Speed Limit, mi/h		55		Access Point Density, pts/mi	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		310		Opposing Demand Flow Rate, veh/h	
Peak Hour Factor		0.87		Total Trucks, %	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)	
Intermediate Results					
Segment Vertical Class		2		Free-Flow Speed, mi/h	
Speed Slope Coefficient		4.94053		Speed Power Coefficient	
PF Slope Coefficient		-1.47554		PF Power Coefficient	
In Passing Lane Effective Length?		Yes		Total Segment Density, veh/mi/ln	
%Improved % Followers		17.2		% Improved Avg Speed	
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1373	-	-	57.7
Vehicle Results					
Average Speed, mi/h		58.5		Percent Followers, %	
Segment Travel Time, minutes		0.27		Follower Density, followers/mi/ln	
Vehicle LOS		B			
Segment 30					
Vehicle Inputs					
Segment Type		Passing Constrained		Length, ft	
Lane Width, ft		12		Shoulder Width, ft	
Speed Limit, mi/h		55		Access Point Density, pts/mi	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		310		Opposing Demand Flow Rate, veh/h	
Peak Hour Factor		0.87		Total Trucks, %	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)	
Intermediate Results					
Segment Vertical Class		1		Free-Flow Speed, mi/h	
Speed Slope Coefficient		3.92956		Speed Power Coefficient	
PF Slope Coefficient		-1.27273		PF Power Coefficient	
In Passing Lane Effective Length?		Yes		Total Segment Density, veh/mi/ln	
%Improved % Followers		12.9		% Improved Avg Speed	
Subsegment Data					

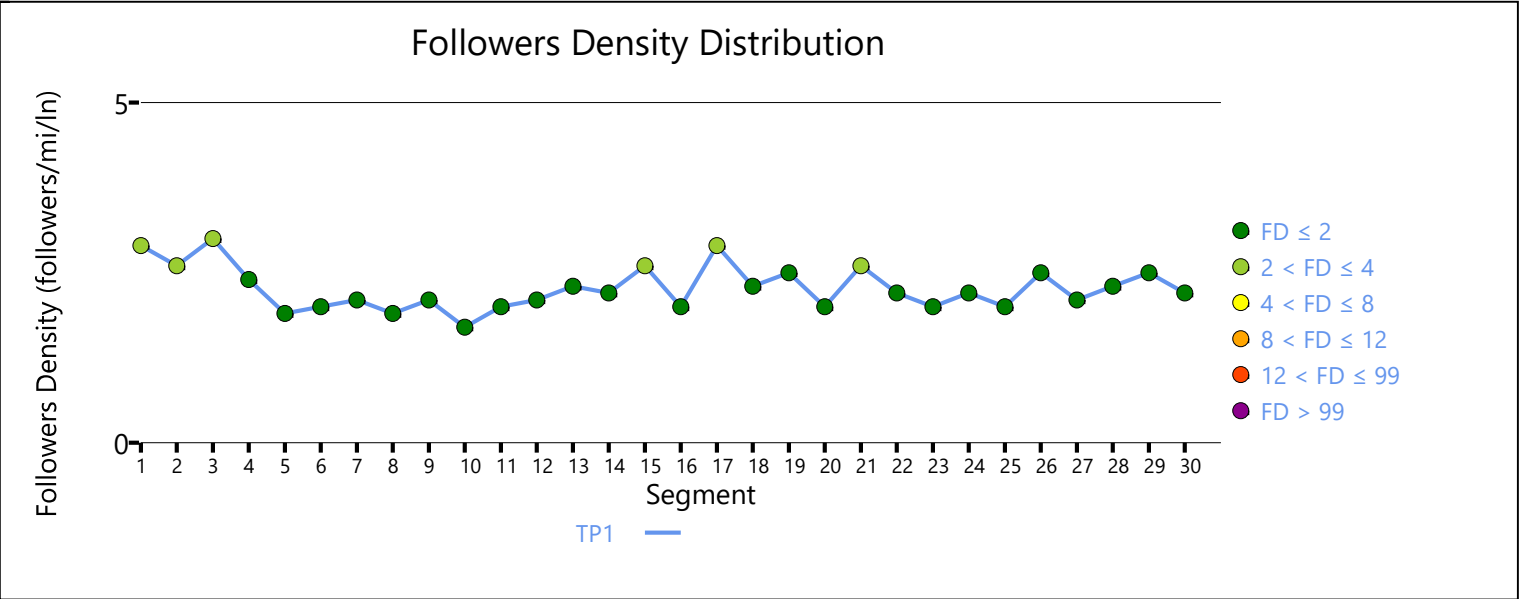
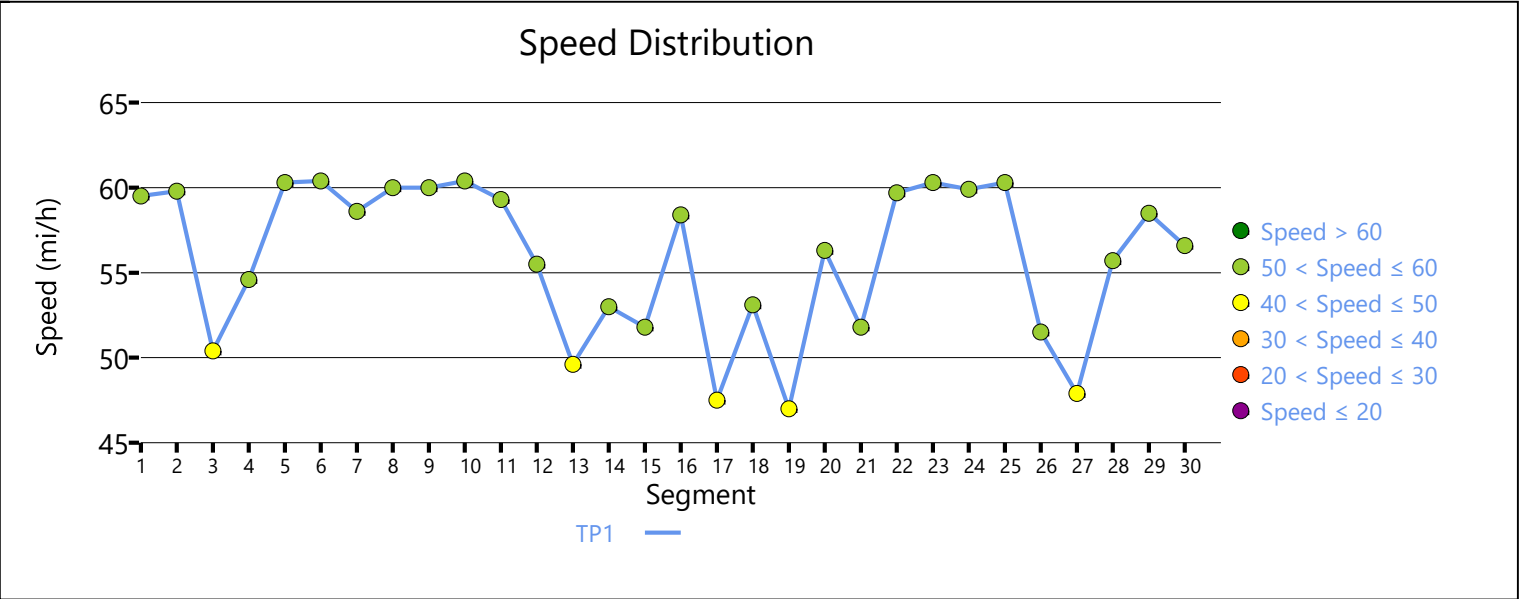
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2957	-	-	59.9
2	Horizontal Curve	739	573	0	39.4
3	Horizontal Curve	1109	873	0	52.7
4	Tangent	1637	-	-	59.9

Vehicle Results

Average Speed, mi/h	56.6	Percent Followers, %	40.5
Segment Travel Time, minutes	1.29	Follower Density, followers/mi/ln	1.9
Vehicle LOS	A		

Facility Results

T	Follower Density, followers/mi/ln	LOS
1	2.3	B



HCS7 Two-Lane Highway Report

Project Information

Analyst		Date	4/27/2024
Agency		Analysis Year	2024
Jurisdiction		Time Analyzed	
Project Description	Port Orford north UGB to Bandon south UGB	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	6020
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	12.9

Demand and Capacity

Directional Demand Flow Rate, veh/h	392	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.95	Total Trucks, %	7.18
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.23

Intermediate Results

Segment Vertical Class	4	Free-Flow Speed, mi/h	57.1
Speed Slope Coefficient	8.21304	Speed Power Coefficient	0.51902
PF Slope Coefficient	-1.71709	PF Power Coefficient	0.75838
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	4.2
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5650	-	-	52.7
2	Horizontal Curve	370	1910	2	52.7

Vehicle Results

Average Speed, mi/h	52.7	Percent Followers, %	57.0
Segment Travel Time, minutes	1.30	Follower Density, followers/mi/ln	4.2
Vehicle LOS	C		

Segment 2

Vehicle Inputs

Segment Type	Passing Lanes	Length, ft	4224
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	20.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	400	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.94	Total Trucks, %	7.18
Segment Capacity, veh/h	1500	Demand/Capacity (D/C)	0.27

Intermediate Results			
Segment Vertical Class	4	Free-Flow Speed, mi/h	56.2
Speed Slope Coefficient	5.66561	Speed Power Coefficient	1.02023
PF Slope Coefficient	-1.05987	PF Power Coefficient	0.84920
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.8
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	845	1910	2	54.5
2	Tangent	3379	-	-	54.5

Passing Lane Results		
	Faster Lane	Slower Lane
Flow Rate, veh/h	245	155
Percentage of Heavy Vehicles (HV%), %	2.87	13.98
Initial Average Speed (Sint), mi/h	56.4	54.5
Average Speed at Midpoint (SPLmid), mi/h	58.1	52.8
Percent Followers at Midpoint (PFPLmid), %	29.9	19.4

Vehicle Results			
Average Speed, mi/h	54.5	Percent Followers, %	38.5
Segment Travel Time, minutes	0.88	Follower Density, followers/mi/ln	2.8
Vehicle LOS	B		

Segment 3

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5069
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	3.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	395	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.95	Total Trucks, %	7.18
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.23

Intermediate Results			
Segment Vertical Class	3	Free-Flow Speed, mi/h	60.5
Speed Slope Coefficient	7.57296	Speed Power Coefficient	0.62051
PF Slope Coefficient	-1.35655	PF Power Coefficient	0.74785
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	3.4

%Improved % Followers		20.0		% Improved Avg Speed		2.9	
Subsegment Data							
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h		
1	Tangent	5069	-	-	56.9		
Vehicle Results							
Average Speed, mi/h		58.6		Percent Followers, %		49.2	
Segment Travel Time, minutes		0.98		Follower Density, followers/mi/ln		2.6	
Vehicle LOS		B					
Segment 4							
Vehicle Inputs							
Segment Type		Passing Zone		Length, ft		1690	
Lane Width, ft		12		Shoulder Width, ft		6	
Speed Limit, mi/h		55		Access Point Density, pts/mi		1.4	
Demand and Capacity							
Directional Demand Flow Rate, veh/h		395		Opposing Demand Flow Rate, veh/h		395	
Peak Hour Factor		0.95		Total Trucks, %		7.18	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.23	
Intermediate Results							
Segment Vertical Class		1		Free-Flow Speed, mi/h		62.1	
Speed Slope Coefficient		3.68638		Speed Power Coefficient		0.49769	
PF Slope Coefficient		-1.30818		PF Power Coefficient		0.78439	
In Passing Lane Effective Length?		Yes		Total Segment Density, veh/mi/ln		3.1	
%Improved % Followers		18.6		% Improved Avg Speed		2.7	
Subsegment Data							
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h		
1	Tangent	1690	-	-	60.1		
Vehicle Results							
Average Speed, mi/h		61.7		Percent Followers, %		46.8	
Segment Travel Time, minutes		0.31		Follower Density, followers/mi/ln		2.4	
Vehicle LOS		B					
Segment 5							
Vehicle Inputs							
Segment Type		Passing Constrained		Length, ft		5069	
Lane Width, ft		12		Shoulder Width, ft		6	
Speed Limit, mi/h		55		Access Point Density, pts/mi		0.0	
Demand and Capacity							

Directional Demand Flow Rate, veh/h		395	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.95	Total Trucks, %		7.18
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.23
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.5
Speed Slope Coefficient		3.94348	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.27690	PF Power Coefficient		0.76806
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		3.2
%Improved % Followers		15.2	% Improved Avg Speed		1.9
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	1056	955	2	53.0
2	Tangent	845	-	-	60.1
3	Horizontal Curve	634	788	2	53.0
4	Tangent	2534	-	-	60.1
Vehicle Results					
Average Speed, mi/h		58.8	Percent Followers, %		46.5
Segment Travel Time, minutes		0.98	Follower Density, followers/mi/ln		2.6
Vehicle LOS		B			
Segment 6					
Vehicle Inputs					
Segment Type		Passing Zone	Length, ft		1531
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		1.2
Demand and Capacity					
Directional Demand Flow Rate, veh/h		446	Opposing Demand Flow Rate, veh/h		412
Peak Hour Factor		0.95	Total Trucks, %		7.18
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.26
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.2
Speed Slope Coefficient		3.69063	Speed Power Coefficient		0.49496
PF Slope Coefficient		-1.31794	PF Power Coefficient		0.78091
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		3.8
%Improved % Followers		13.9	% Improved Avg Speed		1.4
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1531	-	-	60.0

Vehicle Results					
Average Speed, mi/h	60.8	Percent Followers, %	50.4		
Segment Travel Time, minutes	0.29	Follower Density, followers/mi/ln	3.2		
Vehicle LOS	B				
Segment 7					
Vehicle Inputs					
Segment Type	Passing Constrained	Length, ft	10876		
Lane Width, ft	12	Shoulder Width, ft	6		
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.7		
Demand and Capacity					
Directional Demand Flow Rate, veh/h	461	Opposing Demand Flow Rate, veh/h	-		
Peak Hour Factor	0.92	Total Trucks, %	7.18		
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.27		
Intermediate Results					
Segment Vertical Class	1	Free-Flow Speed, mi/h	61.8		
Speed Slope Coefficient	3.95375	Speed Power Coefficient	0.41674		
PF Slope Coefficient	-1.29186	PF Power Coefficient	0.73539		
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	4.1		
%Improved % Followers	9.6	% Improved Avg Speed	0.0		
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5333	-	-	59.2
2	Horizontal Curve	264	2292	2	59.2
3	Tangent	739	-	-	59.2
4	Horizontal Curve	317	716	2	46.3
5	Tangent	634	-	-	59.2
6	Horizontal Curve	950	1637	2	59.1
7	Tangent	1214	-	-	59.2
8	Horizontal Curve	686	1146	2	52.9
9	Tangent	53	-	-	59.2
10	Horizontal Curve	686	1146	2	52.9
Vehicle Results					
Average Speed, mi/h	58.0	Percent Followers, %	51.8		
Segment Travel Time, minutes	2.13	Follower Density, followers/mi/ln	3.7		
Vehicle LOS	B				
Segment 8					
Vehicle Inputs					

Segment Type		Passing Lanes	Length, ft	2165	
Lane Width, ft		12	Shoulder Width, ft	6	
Speed Limit, mi/h		55	Access Point Density, pts/mi	0.0	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		461	Opposing Demand Flow Rate, veh/h	-	
Peak Hour Factor		0.92	Total Trucks, %	7.18	
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)	0.27	
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h	62.5	
Speed Slope Coefficient		3.91541	Speed Power Coefficient	0.41674	
PF Slope Coefficient		-1.31699	PF Power Coefficient	0.76030	
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln	4.0	
%Improved % Followers		8.9	% Improved Avg Speed	0.0	
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1426	-	-	59.9
2	Horizontal Curve	317	1432	2	59.1
3	Tangent	422	-	-	59.9
Vehicle Results					
Average Speed, mi/h		59.8	Percent Followers, %	51.8	
Segment Travel Time, minutes		0.41	Follower Density, followers/mi/ln	3.6	
Vehicle LOS		B			
Segment 9					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft	6759	
Lane Width, ft		12	Shoulder Width, ft	6	
Speed Limit, mi/h		55	Access Point Density, pts/mi	1.1	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		461	Opposing Demand Flow Rate, veh/h	-	
Peak Hour Factor		0.92	Total Trucks, %	7.18	
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)	0.27	
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h	62.2	
Speed Slope Coefficient		3.94417	Speed Power Coefficient	0.41674	
PF Slope Coefficient		-1.27197	PF Power Coefficient	0.76323	
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln	4.0	
%Improved % Followers		7.2	% Improved Avg Speed	0.0	

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	370	-	-	59.6
2	Horizontal Curve	528	955	2	52.9
3	Tangent	264	-	-	59.6
4	Horizontal Curve	422	1910	2	59.1
5	Tangent	1109	-	-	59.6
6	Horizontal Curve	317	881	2	52.9
7	Tangent	1901	-	-	59.6
8	Horizontal Curve	317	1910	2	59.1
9	Tangent	1531	-	-	59.6
Vehicle Results					
Average Speed, mi/h		58.7	Percent Followers, %		50.6
Segment Travel Time, minutes		1.31	Follower Density, followers/mi/ln		3.7
Vehicle LOS		B			
Segment 10					
Vehicle Inputs					
Segment Type		Passing Lanes	Length, ft		4646
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		1.7
Demand and Capacity					
Directional Demand Flow Rate, veh/h		461	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.92	Total Trucks, %		7.18
Segment Capacity, veh/h		1500	Demand/Capacity (D/C)		0.31
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.0
Speed Slope Coefficient		5.83329	Speed Power Coefficient		0.91415
PF Slope Coefficient		-1.17880	PF Power Coefficient		0.84429
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		3.5
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4646	-	-	59.7
Passing Lane Results					
		Faster Lane		Slower Lane	
Flow Rate, veh/h		278		183	
Percentage of Heavy Vehicles (HV%), %		2.87		13.75	
Initial Average Speed (Sint), mi/h		61.1		61.2	

Average Speed at Midpoint (SPLmid), mi/h	62.7	59.5
Percent Followers at Midpoint (PFPLmid), %	34.5	24.3

Vehicle Results

Average Speed, mi/h	59.7	Percent Followers, %	45.8
Segment Travel Time, minutes	0.88	Follower Density, followers/mi/ln	3.5
Vehicle LOS	B		

Segment 11

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	1003
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	461	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	7.18
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.27

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.5
Speed Slope Coefficient	3.89410	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.37258	PF Power Coefficient	0.74241
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	4.1
%Improved % Followers	23.4	% Improved Avg Speed	2.6

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1003	-	-	59.9

Vehicle Results

Average Speed, mi/h	61.4	Percent Followers, %	53.8
Segment Travel Time, minutes	0.19	Follower Density, followers/mi/ln	3.1
Vehicle LOS	B		

Segment 12

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	2798
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	25.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	461	Opposing Demand Flow Rate, veh/h	425
Peak Hour Factor	0.92	Total Trucks, %	7.18
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.27

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	56.2
Speed Slope Coefficient	3.39104	Speed Power Coefficient	0.49285
PF Slope Coefficient	-1.30568	PF Power Coefficient	0.78023
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	4.3
%Improved % Followers	19.9	% Improved Avg Speed	2.1

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2798	-	-	54.2

Vehicle Results			
Average Speed, mi/h	55.3	Percent Followers, %	51.0
Segment Travel Time, minutes	0.57	Follower Density, followers/mi/ln	3.4
Vehicle LOS	B		

Segment 13			
Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	581
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	461	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	7.18
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.27

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	62.5
Speed Slope Coefficient	3.89410	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.37258	PF Power Coefficient	0.74241
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	4.2
%Improved % Followers	19.3	% Improved Avg Speed	2.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	264	-	-	59.9
2	Horizontal Curve	317	1910	2	59.1

Vehicle Results			
Average Speed, mi/h	60.7	Percent Followers, %	53.8
Segment Travel Time, minutes	0.11	Follower Density, followers/mi/ln	3.3
Vehicle LOS	B		

Segment 14			
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Vehicle Inputs					
Segment Type		Passing Constrained		Length, ft	
Lane Width, ft		12		Shoulder Width, ft	
Speed Limit, mi/h		40		Access Point Density, pts/mi	
4858					
Demand and Capacity					
Directional Demand Flow Rate, veh/h		461		Opposing Demand Flow Rate, veh/h	
Peak Hour Factor		0.92		Total Trucks, %	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)	
0.27					
Intermediate Results					
Segment Vertical Class		1		Free-Flow Speed, mi/h	
Speed Slope Coefficient		2.47253		Speed Power Coefficient	
PF Slope Coefficient		-1.39343		PF Power Coefficient	
In Passing Lane Effective Length?		Yes		Total Segment Density, veh/mi/ln	
%Improved % Followers		15.5		% Improved Avg Speed	
35.4					
0.41674					
0.67872					
7.7					
1.3					
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	792	1910	2	33.7
2	Tangent	4066	-	-	33.7
Vehicle Results					
Average Speed, mi/h		34.2		Percent Followers, %	
Segment Travel Time, minutes		1.61		Follower Density, followers/mi/ln	
Vehicle LOS		C			
56.1					
6.4					
Segment 15					
Vehicle Inputs					
Segment Type		Passing Constrained		Length, ft	
Lane Width, ft		12		Shoulder Width, ft	
Speed Limit, mi/h		55		Access Point Density, pts/mi	
1531					
6					
0.0					
Demand and Capacity					
Directional Demand Flow Rate, veh/h		461		Opposing Demand Flow Rate, veh/h	
Peak Hour Factor		0.92		Total Trucks, %	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)	
0.27					
Intermediate Results					
Segment Vertical Class		1		Free-Flow Speed, mi/h	
Speed Slope Coefficient		3.89806		Speed Power Coefficient	
PF Slope Coefficient		-1.36046		PF Power Coefficient	
In Passing Lane Effective Length?		Yes		Total Segment Density, veh/mi/ln	
%Improved % Followers		14.6		% Improved Avg Speed	
62.5					
0.41674					
0.74645					
4.1					
1.1					

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	422	1432	2	59.1
2	Tangent	1109	-	-	59.9
Vehicle Results					
Average Speed, mi/h		60.3	Percent Followers, %		53.4
Segment Travel Time, minutes		0.29	Follower Density, followers/mi/ln		3.5
Vehicle LOS		B			
Segment 16					
Vehicle Inputs					
Segment Type		Passing Zone	Length, ft		1531
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		10.5
Demand and Capacity					
Directional Demand Flow Rate, veh/h		461	Opposing Demand Flow Rate, veh/h		425
Peak Hour Factor		0.92	Total Trucks, %		7.18
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.27
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		59.8
Speed Slope Coefficient		3.56802	Speed Power Coefficient		0.49285
PF Slope Coefficient		-1.33410	PF Power Coefficient		0.77454
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		4.1
%Improved % Followers		13.8	% Improved Avg Speed		0.8
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1531	-	-	57.7
Vehicle Results					
Average Speed, mi/h		58.2	Percent Followers, %		51.9
Segment Travel Time, minutes		0.30	Follower Density, followers/mi/ln		3.5
Vehicle LOS		B			
Segment 17					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		10876
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.8
Demand and Capacity					

Directional Demand Flow Rate, veh/h		461	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.92	Total Trucks, %		7.18
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.27
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.3
Speed Slope Coefficient		3.97950	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.28761	PF Power Coefficient		0.73661
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		4.0
%Improved % Followers		9.5	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	6072	-	-	59.7
2	Horizontal Curve	317	955	2	52.9
3	Tangent	106	-	-	59.7
4	Horizontal Curve	264	9955	2	59.7
5	Tangent	1320	-	-	59.7
6	Horizontal Curve	158	573	2	46.3
7	Tangent	792	-	-	59.7
8	Horizontal Curve	211	955	2	52.9
9	Tangent	1003	-	-	59.7
10	Horizontal Curve	158	955	2	52.9
11	Tangent	475	-	-	59.7
Vehicle Results					
Average Speed, mi/h		59.0	Percent Followers, %		51.7
Segment Travel Time, minutes		2.09	Follower Density, followers/mi/ln		3.7
Vehicle LOS		B			
Segment 18					
Vehicle Inputs					
Segment Type		Passing Lanes	Length, ft		2059
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		42.9
Demand and Capacity					
Directional Demand Flow Rate, veh/h		502	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.89	Total Trucks, %		7.18
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.30
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		52.5
Speed Slope Coefficient		3.37341	Speed Power Coefficient		0.41674

PF Slope Coefficient	-1.39752	PF Power Coefficient	0.73487
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	5.7
%Improved % Followers	8.4	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2059	-	-	50.2

Vehicle Results

Average Speed, mi/h	50.2	Percent Followers, %	56.9
Segment Travel Time, minutes	0.47	Follower Density, followers/mi/ln	5.2
Vehicle LOS	C		

Segment 19

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	4858
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	6.2

Demand and Capacity

Directional Demand Flow Rate, veh/h	502	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.89	Total Trucks, %	7.18
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.30

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	60.9
Speed Slope Coefficient	3.85734	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.29243	PF Power Coefficient	0.76416
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	4.7
%Improved % Followers	7.1	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1584	-	-	58.3
2	Horizontal Curve	106	573	2	46.3
3	Tangent	845	-	-	58.3
4	Horizontal Curve	264	716	2	46.3
5	Tangent	2059	-	-	58.3

Vehicle Results

Average Speed, mi/h	57.4	Percent Followers, %	53.4
Segment Travel Time, minutes	0.96	Follower Density, followers/mi/ln	4.3
Vehicle LOS	C		

Segment 20

Vehicle Inputs					
Segment Type		Passing Zone		Length, ft	
Lane Width, ft		12		Shoulder Width, ft	
Speed Limit, mi/h		55		Access Point Density, pts/mi	
3.0					
Demand and Capacity					
Directional Demand Flow Rate, veh/h		502		Opposing Demand Flow Rate, veh/h	
Peak Hour Factor		0.89		Total Trucks, %	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)	
0.30					
Intermediate Results					
Segment Vertical Class		1		Free-Flow Speed, mi/h	
Speed Slope Coefficient		3.69362		Speed Power Coefficient	
PF Slope Coefficient		-1.29136		PF Power Coefficient	
In Passing Lane Effective Length?		Yes		Total Segment Density, veh/mi/ln	
%Improved % Followers		6.5		% Improved Avg Speed	
0.0					
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2429	-	-	59.3
Vehicle Results					
Average Speed, mi/h		59.3		Percent Followers, %	
Segment Travel Time, minutes		0.47		Follower Density, followers/mi/ln	
Vehicle LOS		C			
Segment 21					
Vehicle Inputs					
Segment Type		Passing Constrained		Length, ft	
Lane Width, ft		12		Shoulder Width, ft	
Speed Limit, mi/h		55		Access Point Density, pts/mi	
2.7					
Demand and Capacity					
Directional Demand Flow Rate, veh/h		490		Opposing Demand Flow Rate, veh/h	
Peak Hour Factor		0.93		Total Trucks, %	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)	
0.29					
Intermediate Results					
Segment Vertical Class		1		Free-Flow Speed, mi/h	
Speed Slope Coefficient		3.92248		Speed Power Coefficient	
PF Slope Coefficient		-1.27550		PF Power Coefficient	
In Passing Lane Effective Length?		Yes		Total Segment Density, veh/mi/ln	
%Improved % Followers		5.2		% Improved Avg Speed	
0.0					
Subsegment Data					

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4541	-	-	59.1
2	Horizontal Curve	158	573	2	46.3
3	Tangent	1214	-	-	59.1
4	Horizontal Curve	264	1432	2	59.1
5	Tangent	581	-	-	59.1

Vehicle Results

Average Speed, mi/h	58.8	Percent Followers, %	52.3
Segment Travel Time, minutes	1.31	Follower Density, followers/mi/ln	4.1
Vehicle LOS	C		

Segment 22

Vehicle Inputs

Segment Type	Passing Lanes	Length, ft	2746
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	6.2

Demand and Capacity

Directional Demand Flow Rate, veh/h	490	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.93	Total Trucks, %	7.18
Segment Capacity, veh/h	1500	Demand/Capacity (D/C)	0.33

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	60.9
Speed Slope Coefficient	5.63146	Speed Power Coefficient	0.79859
PF Slope Coefficient	-1.31101	PF Power Coefficient	0.79135
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	4.4
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	370	-	-	58.3
2	Horizontal Curve	264	1432	2	58.3
3	Tangent	2112	-	-	58.3

Passing Lane Results

	Faster Lane	Slower Lane
Flow Rate, veh/h	294	196
Percentage of Heavy Vehicles (HV%), %	2.87	13.65
Initial Average Speed (Sint), mi/h	59.6	59.8
Average Speed at Midpoint (SPLmid), mi/h	61.3	58.1
Percent Followers at Midpoint (PFPLmid), %	41.4	29.9

Vehicle Results

Average Speed, mi/h	58.3	Percent Followers, %	52.6
Segment Travel Time, minutes	0.54	Follower Density, followers/mi/ln	4.4
Vehicle LOS	C		

Segment 23

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	3749
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	21.9

Demand and Capacity

Directional Demand Flow Rate, veh/h	490	Opposing Demand Flow Rate, veh/h	453
Peak Hour Factor	0.93	Total Trucks, %	7.18
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.29

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	57.0
Speed Slope Coefficient	3.45169	Speed Power Coefficient	0.48868
PF Slope Coefficient	-1.28588	PF Power Coefficient	0.78614
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	4.7
%Improved % Followers	20.2	% Improved Avg Speed	2.2

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3749	-	-	54.8

Vehicle Results

Average Speed, mi/h	56.0	Percent Followers, %	52.0
Segment Travel Time, minutes	0.76	Follower Density, followers/mi/ln	3.6
Vehicle LOS	B		

Segment 24

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	3221
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	50	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	490	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.93	Total Trucks, %	7.18
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.29

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	56.8
Speed Slope Coefficient	3.61408	Speed Power Coefficient	0.41674

PF Slope Coefficient	-1.35138	PF Power Coefficient	0.74994
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	5.0
%Improved % Followers	16.7	% Improved Avg Speed	1.7

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3115	-	-	54.3
2	Horizontal Curve	106	358	2	37.7

Vehicle Results			
Average Speed, mi/h	54.7	Percent Followers, %	54.7
Segment Travel Time, minutes	0.67	Follower Density, followers/mi/ln	4.1
Vehicle LOS	B		

Segment 25

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1478
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	490	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.93	Total Trucks, %	7.18
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.29

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	62.5
Speed Slope Coefficient	3.89709	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.36334	PF Power Coefficient	0.74549
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	4.7
%Improved % Followers	15.5	% Improved Avg Speed	1.5

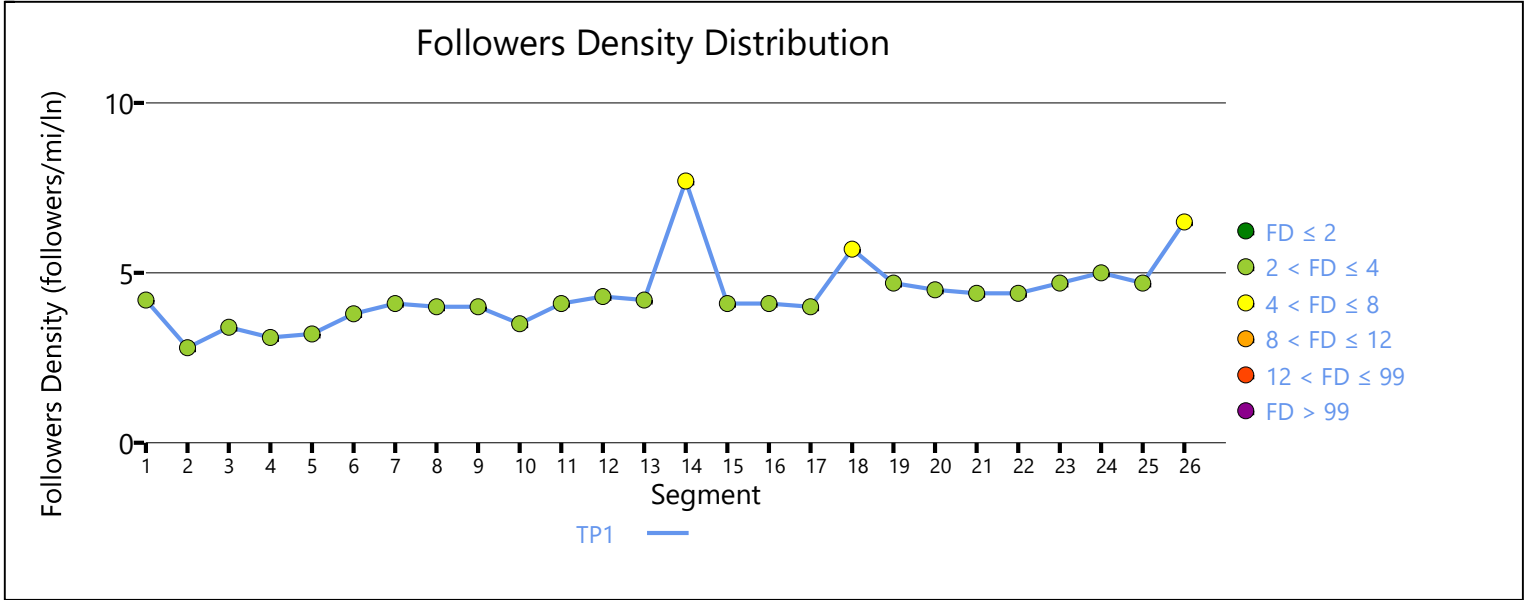
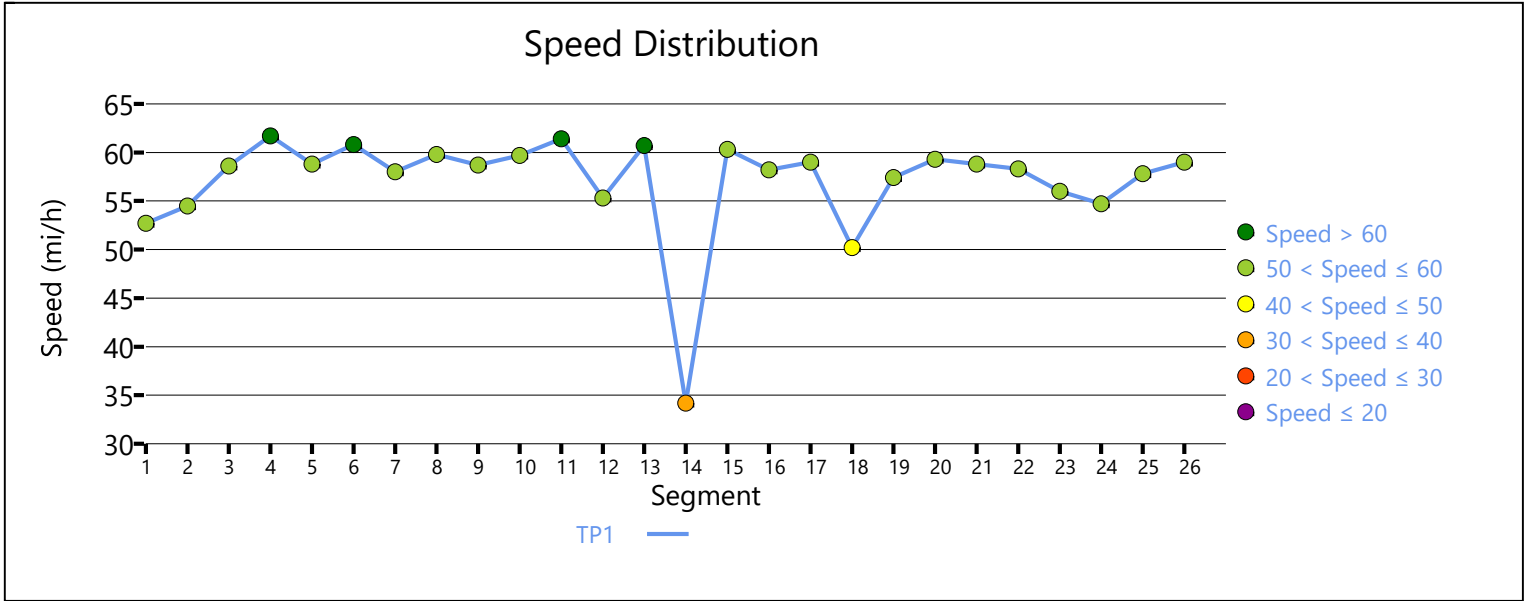
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	581	-	-	59.8
2	Horizontal Curve	211	358	2	39.7
3	Tangent	686	-	-	59.8

Vehicle Results			
Average Speed, mi/h	57.8	Percent Followers, %	55.1
Segment Travel Time, minutes	0.29	Follower Density, followers/mi/ln	4.0
Vehicle LOS	B		

Segment 26

Vehicle Inputs			
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Segment Type		Passing Constrained	Length, ft	15575	
Lane Width, ft		12	Shoulder Width, ft	6	
Speed Limit, mi/h		55	Access Point Density, pts/mi	0.0	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		618	Opposing Demand Flow Rate, veh/h	-	
Peak Hour Factor		0.95	Total Trucks, %	7.18	
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)	0.36	
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h	62.5	
Speed Slope Coefficient		4.01938	Speed Power Coefficient	0.41674	
PF Slope Coefficient		-1.33984	PF Power Coefficient	0.69081	
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln	6.5	
%Improved % Followers		6.6	% Improved Avg Speed	0.0	
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	158	716	2	46.2
2	Tangent	1478	-	-	59.4
3	Horizontal Curve	106	573	2	46.2
4	Tangent	317	-	-	59.4
5	Horizontal Curve	475	1432	2	58.8
6	Tangent	528	-	-	59.4
7	Horizontal Curve	211	716	2	46.2
8	Tangent	12302	-	-	59.4
Vehicle Results					
Average Speed, mi/h		59.0	Percent Followers, %	61.7	
Segment Travel Time, minutes		3.00	Follower Density, followers/mi/ln	6.0	
Vehicle LOS		C			
Facility Results					
T	Follower Density, followers/mi/ln			LOS	
1	4.1			C	



HCS7 Two-Lane Highway Report

Project Information

Analyst		Date	4/14/2024
Agency		Analysis Year	2024
Jurisdiction		Time Analyzed	
Project Description	Bandon south UGB to Port Orford north UGB	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	15417
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	4.8

Demand and Capacity

Directional Demand Flow Rate, veh/h	571	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.95	Total Trucks, %	7.18
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.34

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.3
Speed Slope Coefficient	3.95344	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34871	PF Power Coefficient	0.68967
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	5.9
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	12302	-	-	58.4
2	Horizontal Curve	211	716	2	46.3
3	Tangent	528	-	-	58.4
4	Horizontal Curve	475	1432	2	58.4
5	Tangent	317	-	-	58.4
6	Horizontal Curve	106	573	2	46.3
7	Tangent	1478	-	-	58.4

Vehicle Results

Average Speed, mi/h	58.1	Percent Followers, %	60.0
Segment Travel Time, minutes	3.01	Follower Density, followers/mi/ln	5.9
Vehicle LOS	C		

Segment 2

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	1636
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	571	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.95	Total Trucks, %	7.18
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.34

Intermediate Results

Segment Vertical Class	3	Free-Flow Speed, mi/h	61.3
Speed Slope Coefficient	6.29432	Speed Power Coefficient	0.59126
PF Slope Coefficient	-1.43299	PF Power Coefficient	0.74843
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	6.4
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	158	716	2	46.3
2	Tangent	686	-	-	57.3
3	Horizontal Curve	211	358	2	39.7
4	Tangent	581	-	-	57.3

Vehicle Results

Average Speed, mi/h	54.0	Percent Followers, %	61.0
Segment Travel Time, minutes	0.34	Follower Density, followers/mi/ln	6.4
Vehicle LOS	C		

Segment 3

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	3221
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	50	Access Point Density, pts/mi	8.2

Demand and Capacity

Directional Demand Flow Rate, veh/h	453	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.93	Total Trucks, %	7.18
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.27

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	54.7
Speed Slope Coefficient	3.50297	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.36673	PF Power Coefficient	0.74451
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	4.6
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	106	358	2	37.7
2	Tangent	3115	-	-	52.4
Vehicle Results					
Average Speed, mi/h		52.0	Percent Followers, %		53.1
Segment Travel Time, minutes		0.70	Follower Density, followers/mi/ln		4.6
Vehicle LOS		B			
Segment 4					
Vehicle Inputs					
Segment Type		Passing Zone	Length, ft		2376
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		13.3
Demand and Capacity					
Directional Demand Flow Rate, veh/h		453	Opposing Demand Flow Rate, veh/h		490
Peak Hour Factor		0.93	Total Trucks, %		7.18
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.27
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		59.1
Speed Slope Coefficient		3.55953	Speed Power Coefficient		0.48338
PF Slope Coefficient		-1.31154	PF Power Coefficient		0.78157
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		4.0
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2376	-	-	57.0
Vehicle Results					
Average Speed, mi/h		57.0	Percent Followers, %		50.6
Segment Travel Time, minutes		0.47	Follower Density, followers/mi/ln		4.0
Vehicle LOS		C			
Segment 5					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		10137
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		4.2
Demand and Capacity					

Directional Demand Flow Rate, veh/h	453	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.93	Total Trucks, %	7.18
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.27

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	61.4
Speed Slope Coefficient	3.92832	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.28960	PF Power Coefficient	0.74047
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	3.9
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3485	-	-	58.9
2	Horizontal Curve	264	1432	2	58.9
3	Tangent	950	-	-	58.9
4	Horizontal Curve	264	1432	2	58.9
5	Tangent	1214	-	-	58.9
6	Horizontal Curve	158	573	2	46.4
7	Tangent	3802	-	-	58.9

Vehicle Results			
Average Speed, mi/h	58.7	Percent Followers, %	51.2
Segment Travel Time, minutes	1.96	Follower Density, followers/mi/ln	3.9
Vehicle LOS	B		

Segment 6

Vehicle Inputs			
Segment Type	Passing Zone	Length, ft	2323
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	4.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	453	Opposing Demand Flow Rate, veh/h	490
Peak Hour Factor	0.93	Total Trucks, %	7.18
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.27

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	61.3
Speed Slope Coefficient	3.67799	Speed Power Coefficient	0.48338
PF Slope Coefficient	-1.30006	PF Power Coefficient	0.78669
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	3.8
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2323	-	-	59.1
Vehicle Results					
Average Speed, mi/h		59.1	Percent Followers, %		50.2
Segment Travel Time, minutes		0.45	Follower Density, followers/mi/ln		3.8
Vehicle LOS		B			
Segment 7					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		8079
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		4.6
Demand and Capacity					
Directional Demand Flow Rate, veh/h		464	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.89	Total Trucks, %		7.18
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.27
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.3
Speed Slope Coefficient		3.90761	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.28059	PF Power Coefficient		0.75442
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		4.1
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2904	-	-	58.7
2	Horizontal Curve	264	716	2	46.3
3	Tangent	845	-	-	58.7
4	Horizontal Curve	106	573	2	46.3
5	Tangent	3960	-	-	58.7

Vehicle Results			
Average Speed, mi/h	58.2	Percent Followers, %	51.2
Segment Travel Time, minutes	1.58	Follower Density, followers/mi/ln	4.1
Vehicle LOS	C		
Segment 8			
Vehicle Inputs			
Segment Type	Passing Lanes	Length, ft	2480
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.1

Demand and Capacity							
Directional Demand Flow Rate, veh/h		464		Opposing Demand Flow Rate, veh/h		-	
Peak Hour Factor		0.89		Total Trucks, %		7.18	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.27	
Intermediate Results							
Segment Vertical Class		1		Free-Flow Speed, mi/h		61.9	
Speed Slope Coefficient		3.88696		Speed Power Coefficient		0.41674	
PF Slope Coefficient		-1.32188		PF Power Coefficient		0.75904	
In Passing Lane Effective Length?		No		Total Segment Density, veh/mi/ln		4.2	
%Improved % Followers		0.0		% Improved Avg Speed		0.0	
Subsegment Data							
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h		
1	Tangent	158	-	-	59.4		
2	Horizontal Curve	158	955	2	52.9		
3	Tangent	1003	-	-	59.4		
4	Horizontal Curve	211	955	2	52.9		
5	Tangent	792	-	-	59.4		
6	Horizontal Curve	158	573	2	46.3		
Vehicle Results							
Average Speed, mi/h		57.6		Percent Followers, %		52.2	
Segment Travel Time, minutes		0.49		Follower Density, followers/mi/ln		4.2	
Vehicle LOS		C					
Segment 9							
Vehicle Inputs							
Segment Type		Passing Constrained		Length, ft		4911	
Lane Width, ft		12		Shoulder Width, ft		6	
Speed Limit, mi/h		55		Access Point Density, pts/mi		0.0	
Demand and Capacity							
Directional Demand Flow Rate, veh/h		464		Opposing Demand Flow Rate, veh/h		-	
Peak Hour Factor		0.89		Total Trucks, %		7.18	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.27	
Intermediate Results							
Segment Vertical Class		1		Free-Flow Speed, mi/h		62.5	
Speed Slope Coefficient		3.94189		Speed Power Coefficient		0.41674	
PF Slope Coefficient		-1.27823		PF Power Coefficient		0.76813	
In Passing Lane Effective Length?		Yes		Total Segment Density, veh/mi/ln		4.0	
%Improved % Followers		9.5		% Improved Avg Speed		0.0	

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1320	-	-	59.9
2	Horizontal Curve	264	955	2	52.9
3	Tangent	106	-	-	59.9
4	Horizontal Curve	317	955	2	52.9
5	Tangent	2904	-	-	59.9
Vehicle Results					
Average Speed, mi/h		59.1	Percent Followers, %		50.8
Segment Travel Time, minutes		0.95	Follower Density, followers/mi/ln		4.0
Vehicle LOS		B			
Segment 10					
Vehicle Inputs					
Segment Type		Passing Zone	Length, ft		3485
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		1.5
Demand and Capacity					
Directional Demand Flow Rate, veh/h		464	Opposing Demand Flow Rate, veh/h		502
Peak Hour Factor		0.89	Total Trucks, %		7.18
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.27
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.1
Speed Slope Coefficient		3.73676	Speed Power Coefficient		0.48178
PF Slope Coefficient		-1.26766	PF Power Coefficient		0.79664
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		3.9
%Improved % Followers		8.2	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3485	-	-	59.8
Vehicle Results					
Average Speed, mi/h		59.8	Percent Followers, %		49.7
Segment Travel Time, minutes		0.66	Follower Density, followers/mi/ln		3.9
Vehicle LOS		B			
Segment 11					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		2745
Lane Width, ft		12	Shoulder Width, ft		6

Speed Limit, mi/h		50	Access Point Density, pts/mi		5.8
Demand and Capacity					
Directional Demand Flow Rate, veh/h		425	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.92	Total Trucks, %		7.18
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.25
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		55.3
Speed Slope Coefficient		3.52932	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.37455	PF Power Coefficient		0.74333
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		4.1
%Improved % Followers		7.5	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2323	-	-	53.1
2	Horizontal Curve	422	1432	2	53.1
Vehicle Results					
Average Speed, mi/h		53.1	Percent Followers, %		51.7
Segment Travel Time, minutes		0.59	Follower Density, followers/mi/ln		4.1
Vehicle LOS		B			
Segment 12					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		4541
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		19.8
Demand and Capacity					
Directional Demand Flow Rate, veh/h		425	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.92	Total Trucks, %		7.18
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.25
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		57.5
Speed Slope Coefficient		3.66979	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.32386	PF Power Coefficient		0.75524
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		3.9
%Improved % Followers		6.5	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4066	-	-	55.2

2	Horizontal Curve	475	3000	0	55.2
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Vehicle Results

Average Speed, mi/h	55.2	Percent Followers, %	50.0
Segment Travel Time, minutes	0.93	Follower Density, followers/mi/ln	3.9
Vehicle LOS	B		

Segment 13

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	2482
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	425	Opposing Demand Flow Rate, veh/h	461
Peak Hour Factor	0.92	Total Trucks, %	7.18
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.25

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.5
Speed Slope Coefficient	3.73427	Speed Power Coefficient	0.48750
PF Slope Coefficient	-1.28458	PF Power Coefficient	0.79248
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	3.4
%Improved % Followers	5.6	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	317	1910	2	59.2
2	Horizontal Curve	317	1910	2	59.2
3	Tangent	1848	-	-	60.3

Vehicle Results

Average Speed, mi/h	60.0	Percent Followers, %	47.9
Segment Travel Time, minutes	0.47	Follower Density, followers/mi/ln	3.4
Vehicle LOS	B		

Segment 14

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	2218
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	4.8

Demand and Capacity

Directional Demand Flow Rate, veh/h	425	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	7.18

Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.25
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.3
Speed Slope Coefficient		3.84431	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.34170	PF Power Coefficient		0.75338
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		3.7
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2218	-	-	58.9
Vehicle Results					
Average Speed, mi/h		58.9	Percent Followers, %		50.5
Segment Travel Time, minutes		0.43	Follower Density, followers/mi/ln		3.7
Vehicle LOS		B			
Segment 15					
Vehicle Inputs					
Segment Type		Passing Lanes	Length, ft		3062
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		425	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.92	Total Trucks, %		7.18
Segment Capacity, veh/h		1500	Demand/Capacity (D/C)		0.28
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.5
Speed Slope Coefficient		5.79327	Speed Power Coefficient		0.81022
PF Slope Coefficient		-1.27697	PF Power Coefficient		0.80408
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		3.3
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3062	-	-	60.1
Passing Lane Results					
		Faster Lane		Slower Lane	
Flow Rate, veh/h		259		166	
Percentage of Heavy Vehicles (HV%), %		2.87		13.88	
Initial Average Speed (Sint), mi/h		61.4		61.6	

Average Speed at Midpoint (SPLmid), mi/h	63.0	59.9
Percent Followers at Midpoint (PFPLmid), %	36.9	25.7

Vehicle Results

Average Speed, mi/h	60.1	Percent Followers, %	47.4
Segment Travel Time, minutes	0.58	Follower Density, followers/mi/ln	3.3
Vehicle LOS	B		

Segment 16

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	11194
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.9

Demand and Capacity

Directional Demand Flow Rate, veh/h	425	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	7.18
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.25

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.0
Speed Slope Coefficient	3.96673	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.29275	PF Power Coefficient	0.73317
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	3.6
%Improved % Followers	14.2	% Improved Avg Speed	1.2

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3115	-	-	59.5
2	Horizontal Curve	317	1910	2	59.2
3	Tangent	1901	-	-	59.5
4	Horizontal Curve	317	881	2	53.0
5	Tangent	1109	-	-	59.5
6	Horizontal Curve	422	1910	2	59.2
7	Tangent	264	-	-	59.5
8	Horizontal Curve	528	955	2	53.0
9	Tangent	792	-	-	59.5
10	Horizontal Curve	317	1432	2	59.2
11	Tangent	1426	-	-	59.5
12	Horizontal Curve	686	1146	2	53.0

Vehicle Results

Average Speed, mi/h	59.3	Percent Followers, %	49.9
Segment Travel Time, minutes	2.15	Follower Density, followers/mi/ln	3.1

Vehicle LOS		B			
Segment 17					
Vehicle Inputs					
Segment Type		Passing Constrained		Length, ft	
Lane Width, ft		12		Shoulder Width, ft	
Speed Limit, mi/h		55		Access Point Density, pts/mi	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		425		Opposing Demand Flow Rate, veh/h	
Peak Hour Factor		0.92		Total Trucks, %	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)	
Intermediate Results					
Segment Vertical Class		2		Free-Flow Speed, mi/h	
Speed Slope Coefficient		3.98000		Speed Power Coefficient	
PF Slope Coefficient		-1.43801		PF Power Coefficient	
In Passing Lane Effective Length?		Yes		Total Segment Density, veh/mi/ln	
%Improved % Followers		13.1		% Improved Avg Speed	
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	53	-	-	58.4
2	Horizontal Curve	686	1146	2	53.0
3	Tangent	1214	-	-	58.4
Vehicle Results					
Average Speed, mi/h		57.0		Percent Followers, %	
Segment Travel Time, minutes		0.39		Follower Density, followers/mi/ln	
Vehicle LOS		B			
Segment 18					
Vehicle Inputs					
Segment Type		Passing Constrained		Length, ft	
Lane Width, ft		12		Shoulder Width, ft	
Speed Limit, mi/h		55		Access Point Density, pts/mi	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		425		Opposing Demand Flow Rate, veh/h	
Peak Hour Factor		0.92		Total Trucks, %	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)	
Intermediate Results					
Segment Vertical Class		1		Free-Flow Speed, mi/h	
Speed Slope Coefficient		3.93639		Speed Power Coefficient	

PF Slope Coefficient	-1.27406	PF Power Coefficient	0.75949
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	3.5
%Improved % Followers	9.8	% Improved Avg Speed	0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	950	1637	2	59.2
2	Tangent	634	-	-	59.5
3	Horizontal Curve	317	716	2	46.4
4	Tangent	739	-	-	59.5
5	Horizontal Curve	264	2292	2	59.5
6	Tangent	4541	-	-	59.5

Vehicle Results			
Average Speed, mi/h	58.9	Percent Followers, %	48.6
Segment Travel Time, minutes	1.44	Follower Density, followers/mi/ln	3.2
Vehicle LOS	B		

Segment 19

Vehicle Inputs			
Segment Type	Passing Zone	Length, ft	1426
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	425	Opposing Demand Flow Rate, veh/h	461
Peak Hour Factor	0.92	Total Trucks, %	7.18
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.25

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	62.5
Speed Slope Coefficient	3.71719	Speed Power Coefficient	0.48750
PF Slope Coefficient	-1.32777	PF Power Coefficient	0.77741
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	3.5
%Improved % Followers	9.3	% Improved Avg Speed	0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1426	-	-	60.3

Vehicle Results			
Average Speed, mi/h	60.3	Percent Followers, %	49.5
Segment Travel Time, minutes	0.27	Follower Density, followers/mi/ln	3.2
Vehicle LOS	B		

Segment 20					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		4066
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		2.6
Demand and Capacity					
Directional Demand Flow Rate, veh/h		425	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.92	Total Trucks, %		7.18
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.25
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.8
Speed Slope Coefficient		3.89772	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.29367	PF Power Coefficient		0.76574
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		3.6
%Improved % Followers		7.9	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3432	-	-	59.4
2	Horizontal Curve	634	788	2	53.0
Vehicle Results					
Average Speed, mi/h		58.4	Percent Followers, %		48.9
Segment Travel Time, minutes		0.79	Follower Density, followers/mi/ln		3.3
Vehicle LOS		B			
Segment 21					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		1267
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		395	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.95	Total Trucks, %		7.18
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.23
Intermediate Results					
Segment Vertical Class		3	Free-Flow Speed, mi/h		61.3
Speed Slope Coefficient		6.08907	Speed Power Coefficient		0.58785
PF Slope Coefficient		-1.46238	PF Power Coefficient		0.74548
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		3.6

%Improved % Followers	7.9	% Improved Avg Speed	0.0
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Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	845	-	-	58.4
2	Horizontal Curve	422	955	2	53.0

Vehicle Results

Average Speed, mi/h	56.6	Percent Followers, %	51.9
Segment Travel Time, minutes	0.25	Follower Density, followers/mi/ln	3.3
Vehicle LOS	B		

Segment 22

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	1426
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	7.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	395	Opposing Demand Flow Rate, veh/h	395
Peak Hour Factor	0.95	Total Trucks, %	7.18
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.23

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	60.6
Speed Slope Coefficient	3.60034	Speed Power Coefficient	0.49769
PF Slope Coefficient	-1.33088	PF Power Coefficient	0.77585
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	3.3
%Improved % Followers	7.5	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	634	955	2	53.0
2	Tangent	792	-	-	58.7

Vehicle Results

Average Speed, mi/h	56.1	Percent Followers, %	47.6
Segment Travel Time, minutes	0.29	Follower Density, followers/mi/ln	3.1
Vehicle LOS	B		

Segment 23

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	3326
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	3.2

Demand and Capacity							
Directional Demand Flow Rate, veh/h		395		Opposing Demand Flow Rate, veh/h		-	
Peak Hour Factor		0.95		Total Trucks, %		7.18	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.23	
Intermediate Results							
Segment Vertical Class		3		Free-Flow Speed, mi/h		60.5	
Speed Slope Coefficient		6.95129		Speed Power Coefficient		0.60216	
PF Slope Coefficient		-1.36393		PF Power Coefficient		0.75251	
In Passing Lane Effective Length?		Yes		Total Segment Density, veh/mi/ln		3.4	
%Improved % Followers		6.6		% Improved Avg Speed		0.0	
Subsegment Data							
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h		
1	Tangent	3326	-	-	57.2		
Vehicle Results							
Average Speed, mi/h		57.2		Percent Followers, %		49.2	
Segment Travel Time, minutes		0.66		Follower Density, followers/mi/ln		3.2	
Vehicle LOS		B					
Segment 24							
Vehicle Inputs							
Segment Type		Passing Lanes		Length, ft		5122	
Lane Width, ft		12		Shoulder Width, ft		6	
Speed Limit, mi/h		55		Access Point Density, pts/mi		2.1	
Demand and Capacity							
Directional Demand Flow Rate, veh/h		400		Opposing Demand Flow Rate, veh/h		-	
Peak Hour Factor		0.94		Total Trucks, %		7.18	
Segment Capacity, veh/h		1500		Demand/Capacity (D/C)		0.27	
Intermediate Results							
Segment Vertical Class		3		Free-Flow Speed, mi/h		61.0	
Speed Slope Coefficient		6.76267		Speed Power Coefficient		1.09026	
PF Slope Coefficient		-1.06016		PF Power Coefficient		0.85035	
In Passing Lane Effective Length?		No		Total Segment Density, veh/mi/ln		2.6	
%Improved % Followers		0.0		% Improved Avg Speed		0.0	
Subsegment Data							
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h		
1	Tangent	5122	-	-	59.1		
Passing Lane Results							
		Faster Lane		Slower Lane			

Flow Rate, veh/h	245	155
Percentage of Heavy Vehicles (HV%), %	2.87	13.98
Initial Average Speed (Sint), mi/h	60.9	59.5
Average Speed at Midpoint (SPLmid), mi/h	62.6	57.9
Percent Followers at Midpoint (PFPLmid), %	30.1	18.8

Vehicle Results

Average Speed, mi/h	59.1	Percent Followers, %	38.5
Segment Travel Time, minutes	0.98	Follower Density, followers/mi/ln	2.6
Vehicle LOS	B		

Segment 25

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	3643
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	392	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.95	Total Trucks, %	7.18
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.23

Intermediate Results

Segment Vertical Class	3	Free-Flow Speed, mi/h	61.0
Speed Slope Coefficient	7.19556	Speed Power Coefficient	0.60971
PF Slope Coefficient	-1.35689	PF Power Coefficient	0.75375
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	3.3
%Improved % Followers	20.5	% Improved Avg Speed	2.4

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	898	-	-	57.6
2	Horizontal Curve	1214	1910	2	57.6
3	Tangent	1531	-	-	57.6

Vehicle Results

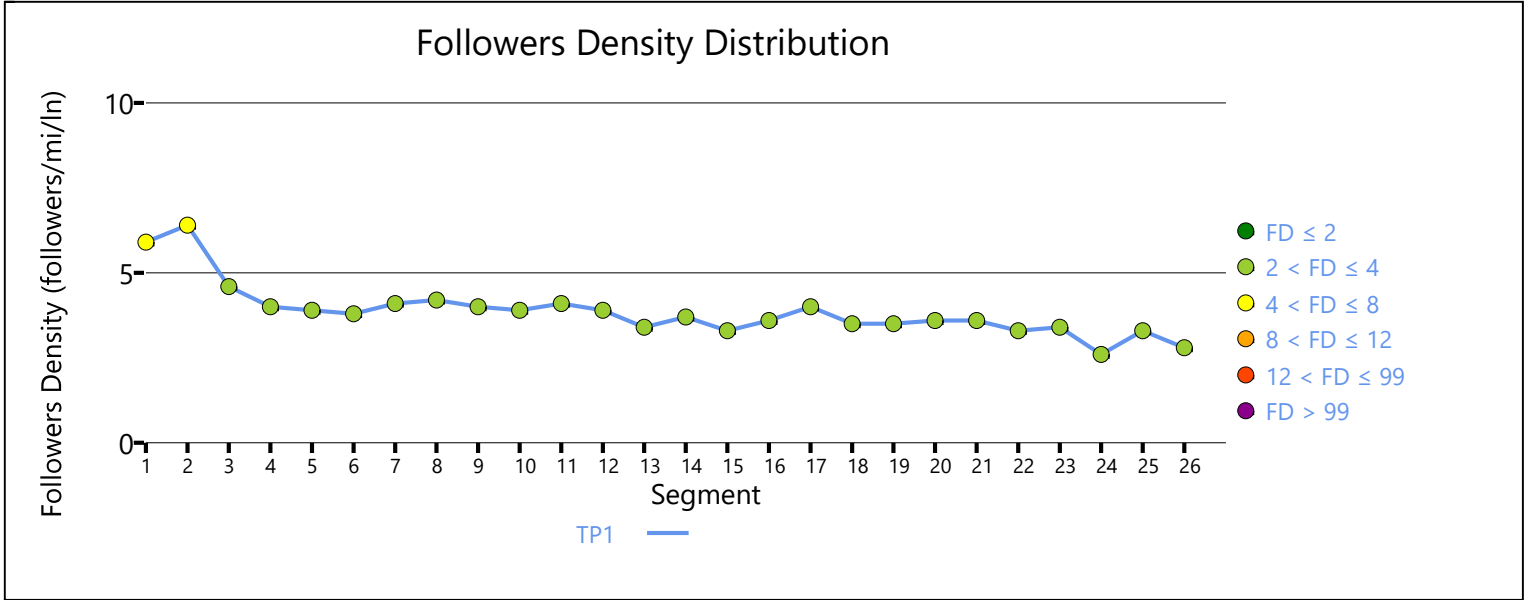
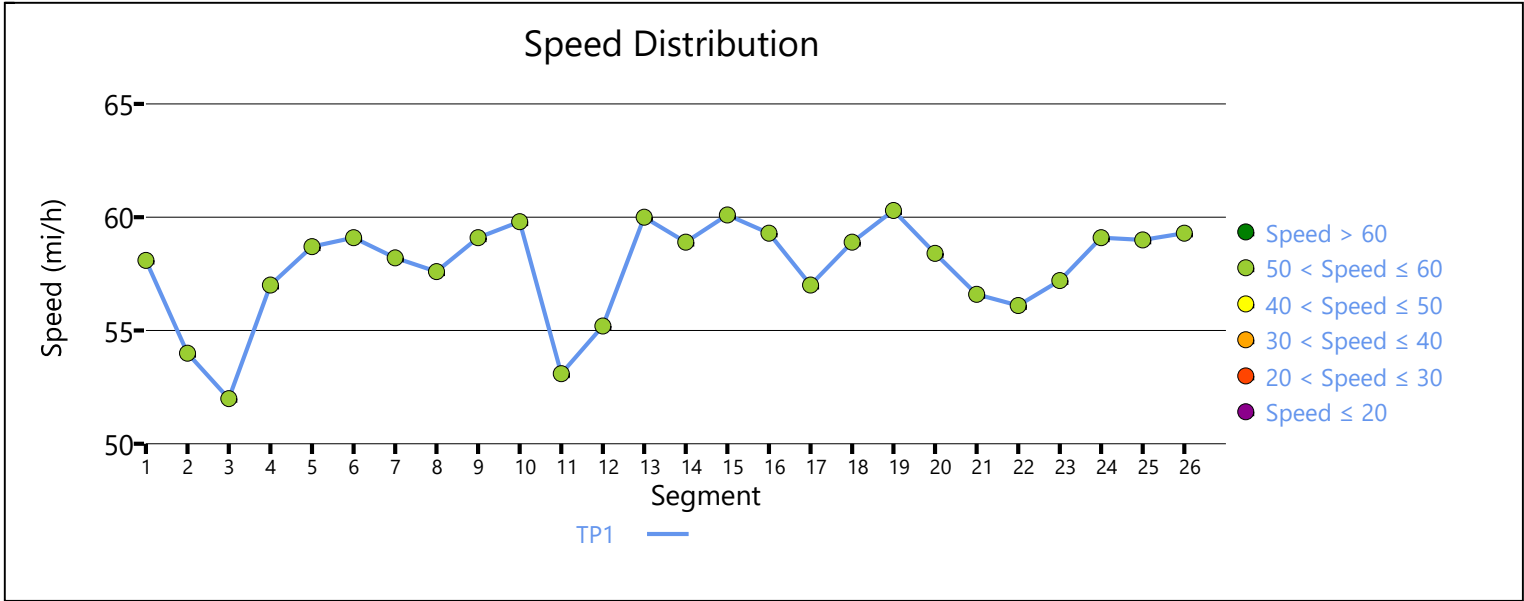
Average Speed, mi/h	59.0	Percent Followers, %	48.8
Segment Travel Time, minutes	0.70	Follower Density, followers/mi/ln	2.6
Vehicle LOS	B		

Segment 26

Vehicle Inputs

Segment Type	Passing Lanes	Length, ft	4118
Lane Width, ft	12	Shoulder Width, ft	6

Speed Limit, mi/h		55	Access Point Density, pts/mi		5.1
Demand and Capacity					
Directional Demand Flow Rate, veh/h		392	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.95	Total Trucks, %		7.18
Segment Capacity, veh/h		1500	Demand/Capacity (D/C)		0.26
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.2
Speed Slope Coefficient		5.72664	Speed Power Coefficient		0.88503
PF Slope Coefficient		-1.20973	PF Power Coefficient		0.83026
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		2.8
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4118	-	-	59.3
Passing Lane Results					
		Faster Lane		Slower Lane	
Flow Rate, veh/h		240		151	
Percentage of Heavy Vehicles (HV%), %		2.87		14.02	
Initial Average Speed (Sint), mi/h		60.4		60.5	
Average Speed at Midpoint (SPLmid), mi/h		62.0		58.9	
Percent Followers at Midpoint (PFPLmid), %		32.5		22.1	
Vehicle Results					
Average Speed, mi/h		59.3	Percent Followers, %		42.6
Segment Travel Time, minutes		0.79	Follower Density, followers/mi/ln		2.8
Vehicle LOS		B			
Facility Results					
T	Follower Density, followers/mi/ln			LOS	
1	3.9			B	



HCS7 Two-Lane Highway Report					
Project Information					
Analyst			Date		4/27/2024
Agency			Analysis Year		2024
Jurisdiction			Time Analyzed		
Project Description		Bandon north UGB to US 101/OR 42 junction		Units	U.S. Customary
Segment 1					
Vehicle Inputs					
Segment Type		Passing Constrained		Length, ft	11458
Lane Width, ft		12		Shoulder Width, ft	6
Speed Limit, mi/h		55		Access Point Density, pts/mi	0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		724		Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor		0.97		Total Trucks, %	7.70
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)	0.43
Intermediate Results					
Segment Vertical Class		4		Free-Flow Speed, mi/h	60.1
Speed Slope Coefficient		11.19658		Speed Power Coefficient	0.40379
PF Slope Coefficient		-1.96698		PF Power Coefficient	0.75522
In Passing Lane Effective Length?		No		Total Segment Density, veh/mi/ln	11.2
%Improved % Followers		0.0		% Improved Avg Speed	0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3749	-	-	50.8
2	Horizontal Curve	1056	1910	2	50.8
3	Tangent	6653	-	-	50.8
Vehicle Results					
Average Speed, mi/h		50.8		Percent Followers, %	78.6
Segment Travel Time, minutes		2.56		Follower Density, followers/mi/ln	11.2
Vehicle LOS		D			
Segment 2					
Vehicle Inputs					
Segment Type		Passing Zone		Length, ft	3749
Lane Width, ft		12		Shoulder Width, ft	6
Speed Limit, mi/h		55		Access Point Density, pts/mi	14.8
Demand and Capacity					
Directional Demand Flow Rate, veh/h		753		Opposing Demand Flow Rate, veh/h	724
					7.70

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Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.44
Intermediate Results					
Segment Vertical Class		2	Free-Flow Speed, mi/h		58.4
Speed Slope Coefficient		3.45632	Speed Power Coefficient		0.49936
PF Slope Coefficient		-1.30991	PF Power Coefficient		0.76850
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	3749	-	-	55.6
Vehicle Results					
Average Speed, mi/h		55.6	Percent Followers, %		65.1
Segment Travel Time, minutes		0.77	Follower Density, followers/mi/ln		8.8
Vehicle LOS		D			
Segment 3					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		2482
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		7.1
Demand and Capacity					
Directional Demand Flow Rate, veh/h		753	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.89	Total Trucks, %		7.70
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.44
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		60.7
Speed Slope Coefficient		3.81606	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.33814	PF Power Coefficient		0.75470
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		8.7
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2482	-	-	57.5
Vehicle Results					
Average Speed, mi/h		57.5	Percent Followers, %		66.0
Segment Travel Time, minutes		0.49	Follower Density, followers/mi/ln		8.7
Vehicle LOS		D			
Segment 4					
Vehicle Inputs					
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Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		753	Opposing Demand Flow Rate, veh/h		724
Peak Hour Factor		0.89	Total Trucks, %		7.70
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.44
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.4
Speed Slope Coefficient		3.78251	Speed Power Coefficient		0.45748
PF Slope Coefficient		-1.32317	PF Power Coefficient		0.77663
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		8.3
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2006	-	-	59.3
Vehicle Results					
Average Speed, mi/h		59.3	Percent Followers, %		65.4
Segment Travel Time, minutes		0.38	Follower Density, followers/mi/ln		8.3
Vehicle LOS		D			
Segment 5					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		3326
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		3.4
Demand and Capacity					
Directional Demand Flow Rate, veh/h		753	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.89	Total Trucks, %		7.70
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.44
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.6
Speed Slope Coefficient		3.87731	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.30825	PF Power Coefficient		0.76274
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		8.4
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3326	-	-	58.3
Vehicle Results					
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Segment Travel Time, minutes		0.65	Follower Density, followers/mi/ln		8.4
Vehicle LOS		D			
Segment 6					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		4858
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		753	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.89	Total Trucks, %		7.70
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.44
Intermediate Results					
Segment Vertical Class		4	Free-Flow Speed, mi/h		60.1
Speed Slope Coefficient		9.45901	Speed Power Coefficient		0.56714
PF Slope Coefficient		-1.65922	PF Power Coefficient		0.75272
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		10.5
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3168	-	-	52.7
2	Horizontal Curve	1690	955	2	52.6
Vehicle Results					
Average Speed, mi/h		52.7	Percent Followers, %		73.8
Segment Travel Time, minutes		1.05	Follower Density, followers/mi/ln		10.5
Vehicle LOS		D			
Segment 7					
Vehicle Inputs					
Segment Type		Passing Lanes	Length, ft		4119
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		1.3
Demand and Capacity					
Directional Demand Flow Rate, veh/h		753	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.89	Total Trucks, %		7.70
Segment Capacity, veh/h		1400	Demand/Capacity (D/C)		0.54
Intermediate Results					
Segment Vertical Class		5	Free-Flow Speed, mi/h		60.0
Speed Slope Coefficient		9.76952	Speed Power Coefficient		1.02347
PF Slope Coefficient		-1.01573	PF Power Coefficient		0.83248
			Density, veh/mi/ln		7.8

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%Improved % Followers	0.0	% Improved Avg Speed	0.0
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Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	792	-	-	53.7
2	Horizontal Curve	1373	955	2	52.6
3	Tangent	106	-	-	53.7
4	Horizontal Curve	1848	1910	2	53.7

Passing Lane Results

	Faster Lane	Slower Lane
Flow Rate, veh/h	430	322
Percentage of Heavy Vehicles (HV%), %	3.08	13.87
Initial Average Speed (Sint), mi/h	59.5	55.5
Average Speed at Midpoint (SPLmid), mi/h	61.2	53.8
Percent Followers at Midpoint (PFPLmid), %	40.8	31.3

Vehicle Results

Average Speed, mi/h	53.4	Percent Followers, %	55.2
Segment Travel Time, minutes	0.88	Follower Density, followers/mi/ln	7.8
Vehicle LOS	C		

Segment 8

Vehicle Inputs

Segment Type	Passing Lanes	Length, ft	3591
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	3.8

Demand and Capacity

Directional Demand Flow Rate, veh/h	753	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.89	Total Trucks, %	7.70
Segment Capacity, veh/h	1500	Demand/Capacity (D/C)	0.50

Intermediate Results

Segment Vertical Class	4	Free-Flow Speed, mi/h	60.2
Speed Slope Coefficient	7.04578	Speed Power Coefficient	0.95917
PF Slope Coefficient	-1.07485	PF Power Coefficient	0.85510
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	634	-	-	55.5
2	Horizontal Curve	2957	2292	2	55.5

Passing Lane Results

	Faster Lane	Slower Lane
		322

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Percentage of Heavy Vehicles (HV%), %	3.08	13.87
Initial Average Speed (Sint), mi/h	59.2	56.9
Average Speed at Midpoint (SPLmid), mi/h	60.9	55.2
Percent Followers at Midpoint (PFPLmid), %	43.9	34.0

Vehicle Results

Average Speed, mi/h	55.5	Percent Followers, %	57.0
Segment Travel Time, minutes	0.74	Follower Density, followers/mi/ln	7.7
Vehicle LOS	C		

Segment 9

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	7234
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	5.6

Demand and Capacity

Directional Demand Flow Rate, veh/h	753	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.89	Total Trucks, %	7.70
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.44

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.0
Speed Slope Coefficient	3.88628	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.28166	PF Power Coefficient	0.75825
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	8.4
%Improved % Followers	14.4	% Improved Avg Speed	0.6

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4066	-	-	57.8
2	Horizontal Curve	1584	1432	2	57.8
3	Tangent	1584	-	-	57.8

Vehicle Results

Average Speed, mi/h	58.1	Percent Followers, %	64.4
Segment Travel Time, minutes	1.41	Follower Density, followers/mi/ln	7.1
Vehicle LOS	C		

Segment 10

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	7920
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.0

Demand and Capacity

		id Flow Rate, veh/h	-
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Peak Hour Factor		0.89	Total Trucks, %		7.70
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.44
Intermediate Results					
Segment Vertical Class		2	Free-Flow Speed, mi/h		61.4
Speed Slope Coefficient		4.90556	Speed Power Coefficient		0.48525
PF Slope Coefficient		-1.32529	PF Power Coefficient		0.74255
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		8.6
%Improved % Followers		9.6	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	581	-	-	57.4
2	Horizontal Curve	2112	2292	2	57.4
3	Tangent	5227	-	-	57.4
Vehicle Results					
Average Speed, mi/h		57.4	Percent Followers, %		65.8
Segment Travel Time, minutes		1.57	Follower Density, followers/mi/ln		7.8
Vehicle LOS		C			
Segment 11					
Vehicle Inputs					
Segment Type		Passing Zone	Length, ft		4594
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		18.2
Demand and Capacity					
Directional Demand Flow Rate, veh/h		600	Opposing Demand Flow Rate, veh/h		576
Peak Hour Factor		0.97	Total Trucks, %		7.70
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.35
Intermediate Results					
Segment Vertical Class		2	Free-Flow Speed, mi/h		57.5
Speed Slope Coefficient		3.21289	Speed Power Coefficient		0.51566
PF Slope Coefficient		-1.27845	PF Power Coefficient		0.77506
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		6.3
%Improved % Followers		9.2	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4594	-	-	55.3
Vehicle Results					
Average Speed, mi/h		55.3	Percent Followers, %		57.7
Segment Travel Time, minutes		0.94	Follower Density, followers/mi/ln		5.7
Vehicle LOS		C			

Segment 12					
Vehicle Inputs					
Segment Type		Passing Zone	Length, ft		3274
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		2.6
Demand and Capacity					
Directional Demand Flow Rate, veh/h		600	Opposing Demand Flow Rate, veh/h		576
Peak Hour Factor		0.97	Total Trucks, %		7.70
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.35
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.8
Speed Slope Coefficient		3.73489	Speed Power Coefficient		0.47259
PF Slope Coefficient		-1.28049	PF Power Coefficient		0.79176
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		5.8
%Improved % Followers		8.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3274	-	-	59.1
Vehicle Results					
Average Speed, mi/h		59.1	Percent Followers, %		57.5
Segment Travel Time, minutes		0.63	Follower Density, followers/mi/ln		5.4
Vehicle LOS		C			
Segment 13					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		1373
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		600	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.97	Total Trucks, %		7.70
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.35
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.4
Speed Slope Coefficient		3.89419	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.36947	PF Power Coefficient		0.74352
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		6.6
%Improved % Followers		7.6	% Improved Avg Speed		0.0
Subsegment Data					

1	Tangent	475	-	-	59.5
2	Horizontal Curve	898	955	2	52.8
Vehicle Results					
Average Speed, mi/h		55.1	Percent Followers, %		60.8
Segment Travel Time, minutes		0.28	Follower Density, followers/mi/ln		6.1
Vehicle LOS		C			
Segment 14					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		4014
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		2.6
Demand and Capacity					
Directional Demand Flow Rate, veh/h		600	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.97	Total Trucks, %		7.70
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.35
Intermediate Results					
Segment Vertical Class		3	Free-Flow Speed, mi/h		60.6
Speed Slope Coefficient		7.37128	Speed Power Coefficient		0.61404
PF Slope Coefficient		-1.35407	PF Power Coefficient		0.75269
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		6.6
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	1162	955	2	52.8
2	Tangent	370	-	-	55.8
3	Horizontal Curve	1584	1910	2	55.8
4	Tangent	898	-	-	55.8
Vehicle Results					
Average Speed, mi/h		54.9	Percent Followers, %		60.2
Segment Travel Time, minutes		0.83	Follower Density, followers/mi/ln		6.6
Vehicle LOS		C			
Segment 15					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		5016
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		600	Opposing Demand Flow Rate, veh/h		-
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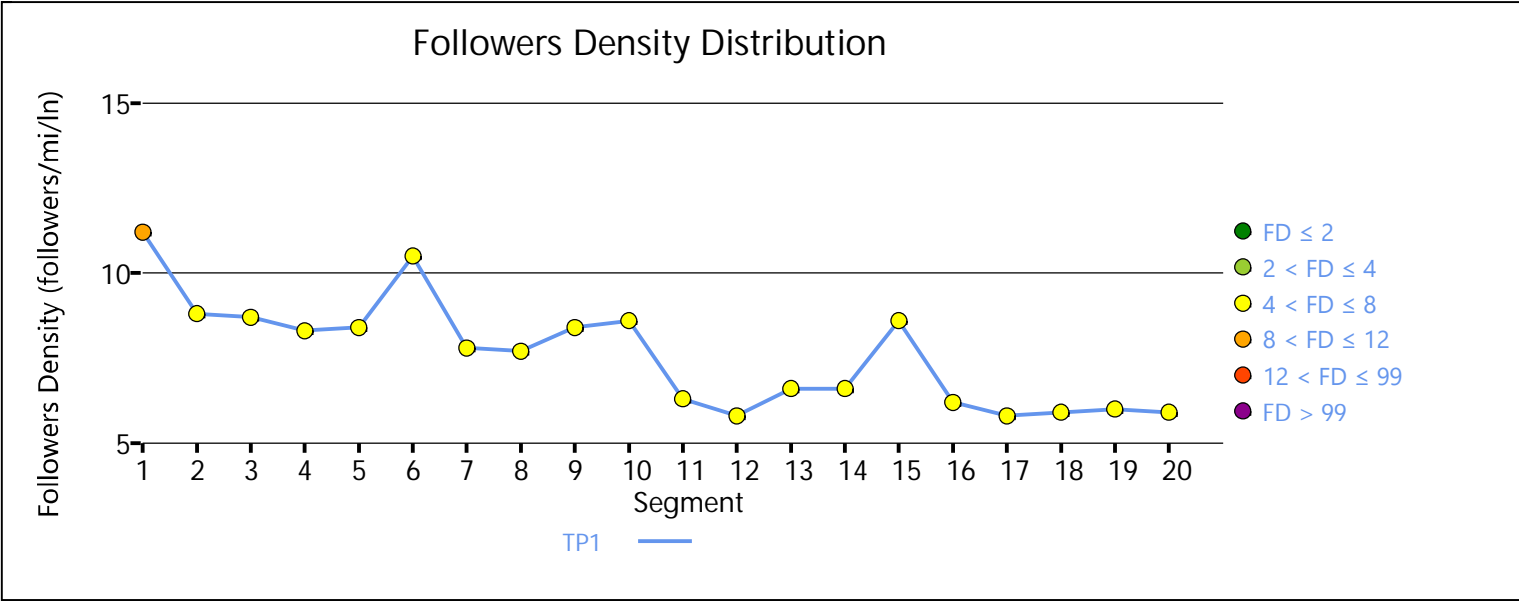
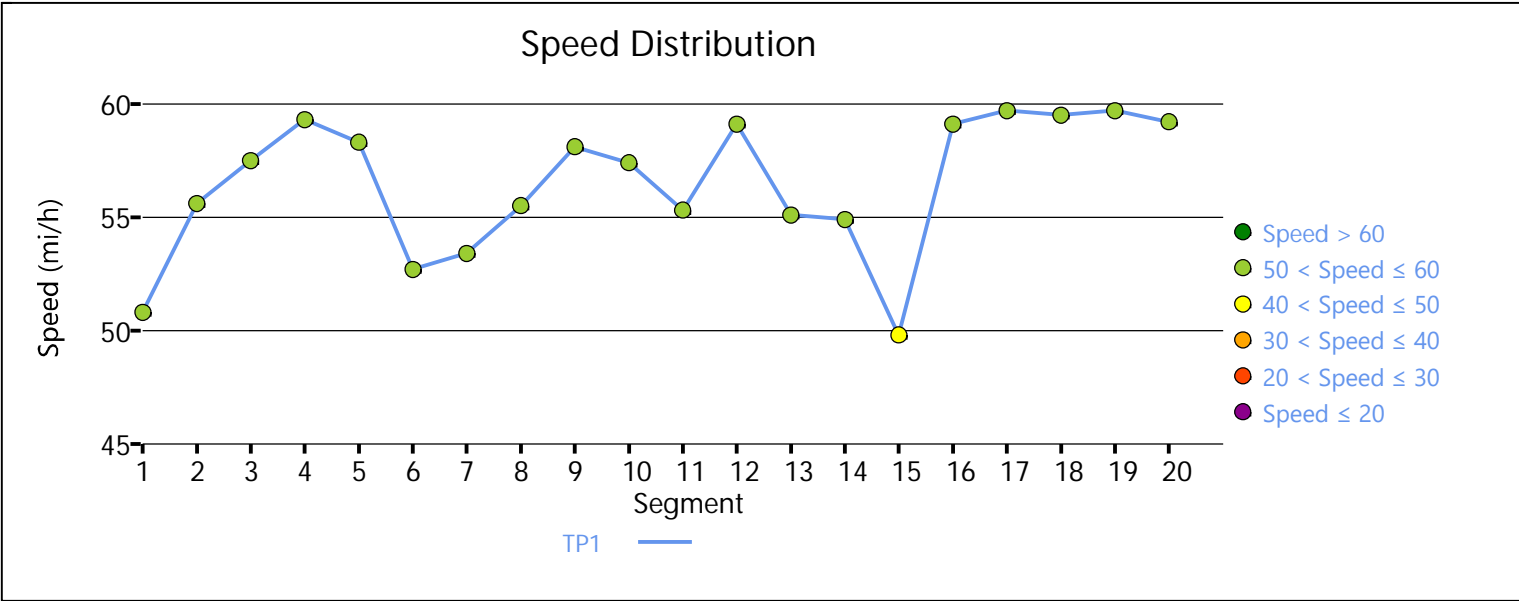
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.35
Intermediate Results					
Segment Vertical Class		5	Free-Flow Speed, mi/h		59.3
Speed Slope Coefficient		13.78285	Speed Power Coefficient		0.55070
PF Slope Coefficient		-1.88380	PF Power Coefficient		0.81718
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		8.6
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5016	-	-	49.8
Vehicle Results					
Average Speed, mi/h		49.8	Percent Followers, %		71.1
Segment Travel Time, minutes		1.14	Follower Density, followers/mi/ln		8.6
Vehicle LOS		D			
Segment 16					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		1531
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		1.6
Demand and Capacity					
Directional Demand Flow Rate, veh/h		600	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.97	Total Trucks, %		7.70
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.35
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.0
Speed Slope Coefficient		3.87544	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.36445	PF Power Coefficient		0.74560
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		6.2
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1531	-	-	59.1
Vehicle Results					
Average Speed, mi/h		59.1	Percent Followers, %		60.6
Segment Travel Time, minutes		0.29	Follower Density, followers/mi/ln		6.2
Vehicle LOS		C			
Segment 17					
Vehicle Inputs					
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Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		600	Opposing Demand Flow Rate, veh/h		576
Peak Hour Factor		0.97	Total Trucks, %		7.70
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.35
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.4
Speed Slope Coefficient		3.76678	Speed Power Coefficient		0.47259
PF Slope Coefficient		-1.28194	PF Power Coefficient		0.79184
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	3010	-	-	59.7
Vehicle Results					
Average Speed, mi/h		59.7	Percent Followers, %		57.5
Segment Travel Time, minutes		0.57	Follower Density, followers/mi/ln		5.8
Vehicle LOS		C			
Segment 18					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		3749
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		600	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.97	Total Trucks, %		7.70
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.35
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.4
Speed Slope Coefficient		3.92842	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.29273	PF Power Coefficient		0.76656
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		5.9
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	2957	2292	2	59.5
2	Tangent	792	-	-	59.5

Average Speed, mi/h	59.5	Percent Followers, %	58.3		
Segment Travel Time, minutes	0.72	Follower Density, followers/mi/ln	5.9		
Vehicle LOS	C				
Segment 19					
Vehicle Inputs					
Segment Type	Passing Zone	Length, ft	1426		
Lane Width, ft	12	Shoulder Width, ft	6		
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0		
Demand and Capacity					
Directional Demand Flow Rate, veh/h	600	Opposing Demand Flow Rate, veh/h	576		
Peak Hour Factor	0.97	Total Trucks, %	7.70		
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.35		
Intermediate Results					
Segment Vertical Class	1	Free-Flow Speed, mi/h	62.4		
Speed Slope Coefficient	3.74256	Speed Power Coefficient	0.47259		
PF Slope Coefficient	-1.33966	PF Power Coefficient	0.77273		
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	6.0		
%Improved % Followers	0.0	% Improved Avg Speed	0.0		
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1426	-	-	59.7
Vehicle Results					
Average Speed, mi/h	59.7	Percent Followers, %	59.5		
Segment Travel Time, minutes	0.27	Follower Density, followers/mi/ln	6.0		
Vehicle LOS	C				
Segment 20					
Vehicle Inputs					
Segment Type	Passing Constrained	Length, ft	3802		
Lane Width, ft	12	Shoulder Width, ft	6		
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4		
Demand and Capacity					
Directional Demand Flow Rate, veh/h	600	Opposing Demand Flow Rate, veh/h	-		
Peak Hour Factor	0.97	Total Trucks, %	7.70		
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.35		
Intermediate Results					
Segment Vertical Class	1	Free-Flow Speed, mi/h	62.1		
Speed Slope Coefficient	3.91006	Speed Power Coefficient	0.41674		
PF Slope Coefficient	-1.29505	PF Power Coefficient	0.76585		
		Density, veh/mi/ln	5.9		

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%Improved % Followers		0.0		% Improved Avg Speed		0.0	
Subsegment Data							
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h		
1	Tangent	3802	-	-	59.2		
Vehicle Results							
Average Speed, mi/h		59.2		Percent Followers, %		58.3	
Segment Travel Time, minutes		0.73		Follower Density, followers/mi/ln		5.9	
Vehicle LOS		C					
Facility Results							
T		Follower Density, followers/mi/ln			LOS		
1		7.9			C		



HCS7 Two-Lane Highway Report

Project Information

Analyst		Date	4/14/2024
Agency		Analysis Year	2024
Jurisdiction		Time Analyzed	
Project Description	US 101/OR 42 juntion to Bandon north UGB	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	4805
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.1

Demand and Capacity

Directional Demand Flow Rate, veh/h	576	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.97	Total Trucks, %	7.70
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.34

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.2
Speed Slope Coefficient	3.92497	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.28177	PF Power Coefficient	0.76747
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	5.5
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4805	-	-	59.3

Vehicle Results

Average Speed, mi/h	59.3	Percent Followers, %	56.8
Segment Travel Time, minutes	0.92	Follower Density, followers/mi/ln	5.5
Vehicle LOS	C		

Segment 2

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	1214
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	576	Opposing Demand Flow Rate, veh/h	600
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Peak Hour Factor	0.97	Total Trucks, %	7.70
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.34

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.4
Speed Slope Coefficient	3.74561	Speed Power Coefficient	0.46989
PF Slope Coefficient	-1.34790	PF Power Coefficient	0.76967
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	5.6
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1214	-	-	59.8

Vehicle Results

Average Speed, mi/h	59.8	Percent Followers, %	58.6
Segment Travel Time, minutes	0.23	Follower Density, followers/mi/ln	5.6
Vehicle LOS	C		

Segment 3

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	2218
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	4.8

Demand and Capacity

Directional Demand Flow Rate, veh/h	576	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.97	Total Trucks, %	7.70
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.34

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.2
Speed Slope Coefficient	3.84337	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34179	PF Power Coefficient	0.75342
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	Horizontal Curve	2218	2292	2	58.4

Vehicle Results

Average Speed, mi/h	58.4	Percent Followers, %	58.8
Segment Travel Time, minutes	0.43	Follower Density, followers/mi/ln	5.8
Vehicle LOS	C		

Segment 4					
Vehicle Inputs					
Segment Type		Passing Zone	Length, ft	2429	
Lane Width, ft		12	Shoulder Width, ft	6	
Speed Limit, mi/h		55	Access Point Density, pts/mi	0.0	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		576	Opposing Demand Flow Rate, veh/h	600	
Peak Hour Factor		0.97	Total Trucks, %	7.70	
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)	0.34	
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h	62.4	
Speed Slope Coefficient		3.76395	Speed Power Coefficient	0.46989	
PF Slope Coefficient		-1.29961	PF Power Coefficient	0.78610	
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln	5.5	
%Improved % Followers		0.0	% Improved Avg Speed	0.0	
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	739	2292	2	59.8
2	Tangent	1690	-	-	59.8
Vehicle Results					
Average Speed, mi/h		59.8	Percent Followers, %	56.9	
Segment Travel Time, minutes		0.46	Follower Density, followers/mi/ln	5.5	
Vehicle LOS		C			
Segment 5					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft	2904	
Lane Width, ft		12	Shoulder Width, ft	6	
Speed Limit, mi/h		55	Access Point Density, pts/mi	1.8	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		576	Opposing Demand Flow Rate, veh/h	-	
Peak Hour Factor		0.97	Total Trucks, %	7.70	
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)	0.34	
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h	62.0	
Speed Slope Coefficient		3.89364	Speed Power Coefficient	0.41674	
PF Slope Coefficient		-1.31419	PF Power Coefficient	0.76126	
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln	5.6	

%Improved % Followers		0.0		% Improved Avg Speed		0.0	
Subsegment Data							
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h		
1	Tangent	2904	-	-	59.1		
Vehicle Results							
Average Speed, mi/h		59.1		Percent Followers, %		57.8	
Segment Travel Time, minutes		0.56		Follower Density, followers/mi/ln		5.6	
Vehicle LOS		C					
Segment 6							
Vehicle Inputs							
Segment Type		Passing Lanes		Length, ft		7445	
Lane Width, ft		12		Shoulder Width, ft		6	
Speed Limit, mi/h		55		Access Point Density, pts/mi		1.4	
Demand and Capacity							
Directional Demand Flow Rate, veh/h		576		Opposing Demand Flow Rate, veh/h		-	
Peak Hour Factor		0.97		Total Trucks, %		7.70	
Segment Capacity, veh/h		1400		Demand/Capacity (D/C)		0.41	
Intermediate Results							
Segment Vertical Class		5		Free-Flow Speed, mi/h		59.9	
Speed Slope Coefficient		12.09349		Speed Power Coefficient		1.13325	
PF Slope Coefficient		-0.93529		PF Power Coefficient		0.92154	
In Passing Lane Effective Length?		No		Total Segment Density, veh/mi/ln		4.5	
%Improved % Followers		0.0		% Improved Avg Speed		0.0	
Subsegment Data							
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h		
1	Tangent	5861	-	-	54.7		
2	Horizontal Curve	1584	1910	2	54.7		
Passing Lane Results							
		Faster Lane			Slower Lane		
Flow Rate, veh/h		340			237		
Percentage of Heavy Vehicles (HV%), %		3.08			14.33		
Initial Average Speed (Sint), mi/h		59.7			56.2		
Average Speed at Midpoint (SPLmid), mi/h		61.4			54.5		
Percent Followers at Midpoint (PFPLmid), %		30.6			20.3		
Vehicle Results							
Average Speed, mi/h		54.7		Percent Followers, %		43.0	
Segment Travel Time, minutes		1.55		Follower Density, followers/mi/ln		4.5	

Vehicle LOS		C			
Segment 7					
Vehicle Inputs					
Segment Type		Passing Constrained		Length, ft	
Lane Width, ft		12		Shoulder Width, ft	
Speed Limit, mi/h		55		Access Point Density, pts/mi	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		576		Opposing Demand Flow Rate, veh/h	
Peak Hour Factor		0.97		Total Trucks, %	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)	
Intermediate Results					
Segment Vertical Class		2		Free-Flow Speed, mi/h	
Speed Slope Coefficient		4.41005		Speed Power Coefficient	
PF Slope Coefficient		-1.38596		PF Power Coefficient	
In Passing Lane Effective Length?		Yes		Total Segment Density, veh/mi/ln	
%Improved % Followers		19.5		% Improved Avg Speed	
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	686	1910	2	58.9
2	Tangent	370	-	-	58.9
3	Horizontal Curve	1637	955	2	52.8
Vehicle Results					
Average Speed, mi/h		56.5		Percent Followers, %	
Segment Travel Time, minutes		0.54		Follower Density, followers/mi/ln	
Vehicle LOS		C			
Segment 8					
Vehicle Inputs					
Segment Type		Passing Zone		Length, ft	
Lane Width, ft		12		Shoulder Width, ft	
Speed Limit, mi/h		55		Access Point Density, pts/mi	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		576		Opposing Demand Flow Rate, veh/h	
Peak Hour Factor		0.97		Total Trucks, %	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)	
Intermediate Results					
Segment Vertical Class		2		Free-Flow Speed, mi/h	
Speed Slope Coefficient		4.29642		Speed Power Coefficient	

PF Slope Coefficient		-1.24897	PF Power Coefficient		0.78657
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		5.5
%Improved % Followers		15.8	% Improved Avg Speed		1.6
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	422	955	2	52.8
2	Tangent	5016	-	-	58.4
Vehicle Results					
Average Speed, mi/h		58.9	Percent Followers, %		55.5
Segment Travel Time, minutes		1.05	Follower Density, followers/mi/ln		4.6
Vehicle LOS		C			
Segment 9					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		1003
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		724	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.89	Total Trucks, %		7.70
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.43
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.4
Speed Slope Coefficient		3.89316	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.37269	PF Power Coefficient		0.74245
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		8.1
%Improved % Followers		13.7	% Improved Avg Speed		0.7
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1003	-	-	59.2
Vehicle Results					
Average Speed, mi/h		59.7	Percent Followers, %		66.0
Segment Travel Time, minutes		0.19	Follower Density, followers/mi/ln		6.9
Vehicle LOS		C			
Segment 10					
Vehicle Inputs					
Segment Type		Passing Zone	Length, ft		2746
Lane Width, ft		12	Shoulder Width, ft		6

Speed Limit, mi/h		55	Access Point Density, pts/mi		3.8
Demand and Capacity					
Directional Demand Flow Rate, veh/h		724	Opposing Demand Flow Rate, veh/h		753
Peak Hour Factor		0.89	Total Trucks, %		7.70
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.43
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.5
Speed Slope Coefficient		3.74737	Speed Power Coefficient		0.45490
PF Slope Coefficient		-1.30750	PF Power Coefficient		0.78087
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		7.9
%Improved % Followers		12.4	% Improved Avg Speed		0.3
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2746	-	-	58.5
Vehicle Results					
Average Speed, mi/h		58.6	Percent Followers, %		63.8
Segment Travel Time, minutes		0.53	Follower Density, followers/mi/ln		6.9
Vehicle LOS		C			
Segment 11					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		1056
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		724	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.89	Total Trucks, %		7.70
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.43
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.4
Speed Slope Coefficient		3.89316	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.37269	PF Power Coefficient		0.74245
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		8.1
%Improved % Followers		11.9	% Improved Avg Speed		0.1
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1056	-	-	59.2
Vehicle Results					

Average Speed, mi/h	59.3	Percent Followers, %	66.0
Segment Travel Time, minutes	0.20	Follower Density, followers/mi/ln	7.1
Vehicle LOS	C		

Segment 12

Vehicle Inputs

Segment Type	Passing Lanes	Length, ft	5175
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	724	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.89	Total Trucks, %	7.70
Segment Capacity, veh/h	1500	Demand/Capacity (D/C)	0.48

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	61.9
Speed Slope Coefficient	6.14112	Speed Power Coefficient	1.01950
PF Slope Coefficient	-1.09316	PF Power Coefficient	0.85272
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	7.0
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3749	-	-	58.1
2	Horizontal Curve	1426	2292	2	58.1

Passing Lane Results

	Faster Lane	Slower Lane
Flow Rate, veh/h	416	308
Percentage of Heavy Vehicles (HV%), %	3.08	13.94
Initial Average Speed (Sint), mi/h	60.5	60.0
Average Speed at Midpoint (SPLmid), mi/h	62.2	58.3
Percent Followers at Midpoint (PFPLmid), %	42.9	32.1

Vehicle Results

Average Speed, mi/h	58.1	Percent Followers, %	56.4
Segment Travel Time, minutes	1.01	Follower Density, followers/mi/ln	7.0
Vehicle LOS	C		

Segment 13

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	8712
Lane Width, ft	12	Shoulder Width, ft	6

Speed Limit, mi/h		55	Access Point Density, pts/mi		3.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		724	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.89	Total Trucks, %		7.70
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.43
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.7
Speed Slope Coefficient		3.93324	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.27925	PF Power Coefficient		0.75159
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		7.8
%Improved % Followers		14.8	% Improved Avg Speed		1.6
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	686	2292	2	58.5
2	Tangent	2165	-	-	58.5
3	Horizontal Curve	1584	1432	2	58.5
4	Tangent	4277	-	-	58.5
Vehicle Results					
Average Speed, mi/h		59.4	Percent Followers, %		63.3
Segment Travel Time, minutes		1.67	Follower Density, followers/mi/ln		6.6
Vehicle LOS		C			
Segment 14					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		3380
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		1.6
Demand and Capacity					
Directional Demand Flow Rate, veh/h		724	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.89	Total Trucks, %		7.70
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.43
Intermediate Results					
Segment Vertical Class		3	Free-Flow Speed, mi/h		60.8
Speed Slope Coefficient		7.19020	Speed Power Coefficient		0.60950
PF Slope Coefficient		-1.36016	PF Power Coefficient		0.75422
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		8.6
%Improved % Followers		12.9	% Improved Avg Speed		1.1
Subsegment Data					

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	2746	2292	2	55.5
2	Tangent	634	-	-	55.5
Vehicle Results					
Average Speed, mi/h		56.1	Percent Followers, %		65.6
Segment Travel Time, minutes		0.69	Follower Density, followers/mi/ln		7.4
Vehicle LOS		C			
Segment 15					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		5809
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		1.8
Demand and Capacity					
Directional Demand Flow Rate, veh/h		724	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.89	Total Trucks, %		7.70
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.43
Intermediate Results					
Segment Vertical Class		5	Free-Flow Speed, mi/h		58.6
Speed Slope Coefficient		14.17492	Speed Power Coefficient		0.51110
PF Slope Coefficient		-1.92633	PF Power Coefficient		0.83045
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		11.8
%Improved % Followers		10.4	% Improved Avg Speed		0.2
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	1848	1910	2	47.4
2	Tangent	106	-	-	47.4
3	Horizontal Curve	1373	955	2	47.4
4	Tangent	792	-	-	47.4
5	Horizontal Curve	1690	955	2	47.4
Vehicle Results					
Average Speed, mi/h		47.5	Percent Followers, %		77.1
Segment Travel Time, minutes		1.39	Follower Density, followers/mi/ln		10.5
Vehicle LOS		D			
Segment 16					
Vehicle Inputs					
Segment Type		Passing Lanes	Length, ft		2059
Lane Width, ft		12	Shoulder Width, ft		6

Speed Limit, mi/h		55	Access Point Density, pts/mi		2.6
Demand and Capacity					
Directional Demand Flow Rate, veh/h		724	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.89	Total Trucks, %		7.70
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.43
Intermediate Results					
Segment Vertical Class		3	Free-Flow Speed, mi/h		60.6
Speed Slope Coefficient		6.80542	Speed Power Coefficient		0.59922
PF Slope Coefficient		-1.38035	PF Power Coefficient		0.75245
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		8.6
%Improved % Followers		9.6	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2059	-	-	55.5
Vehicle Results					
Average Speed, mi/h		55.5	Percent Followers, %		66.1
Segment Travel Time, minutes		0.42	Follower Density, followers/mi/ln		7.8
Vehicle LOS		C			
Segment 17					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		3485
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		1.5
Demand and Capacity					
Directional Demand Flow Rate, veh/h		724	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.89	Total Trucks, %		7.70
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.43
Intermediate Results					
Segment Vertical Class		4	Free-Flow Speed, mi/h		59.8
Speed Slope Coefficient		8.80775	Speed Power Coefficient		0.59912
PF Slope Coefficient		-1.60976	PF Power Coefficient		0.72687
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		9.8
%Improved % Followers		8.5	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3485	-	-	53.1
Vehicle Results					

Average Speed, mi/h	53.1	Percent Followers, %	72.0
Segment Travel Time, minutes	0.75	Follower Density, followers/mi/ln	9.0
Vehicle LOS	D		

Segment 18

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	1901
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	724	Opposing Demand Flow Rate, veh/h	753
Peak Hour Factor	0.89	Total Trucks, %	7.70
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.43

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.4
Speed Slope Coefficient	3.78640	Speed Power Coefficient	0.45490
PF Slope Coefficient	-1.32916	PF Power Coefficient	0.77419
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	7.9
%Improved % Followers	7.9	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1901	-	-	59.4

Vehicle Results

Average Speed, mi/h	59.4	Percent Followers, %	64.5
Segment Travel Time, minutes	0.36	Follower Density, followers/mi/ln	7.2
Vehicle LOS	C		

Segment 19

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	2693
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	5.9

Demand and Capacity

Directional Demand Flow Rate, veh/h	724	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.89	Total Trucks, %	7.70
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.43

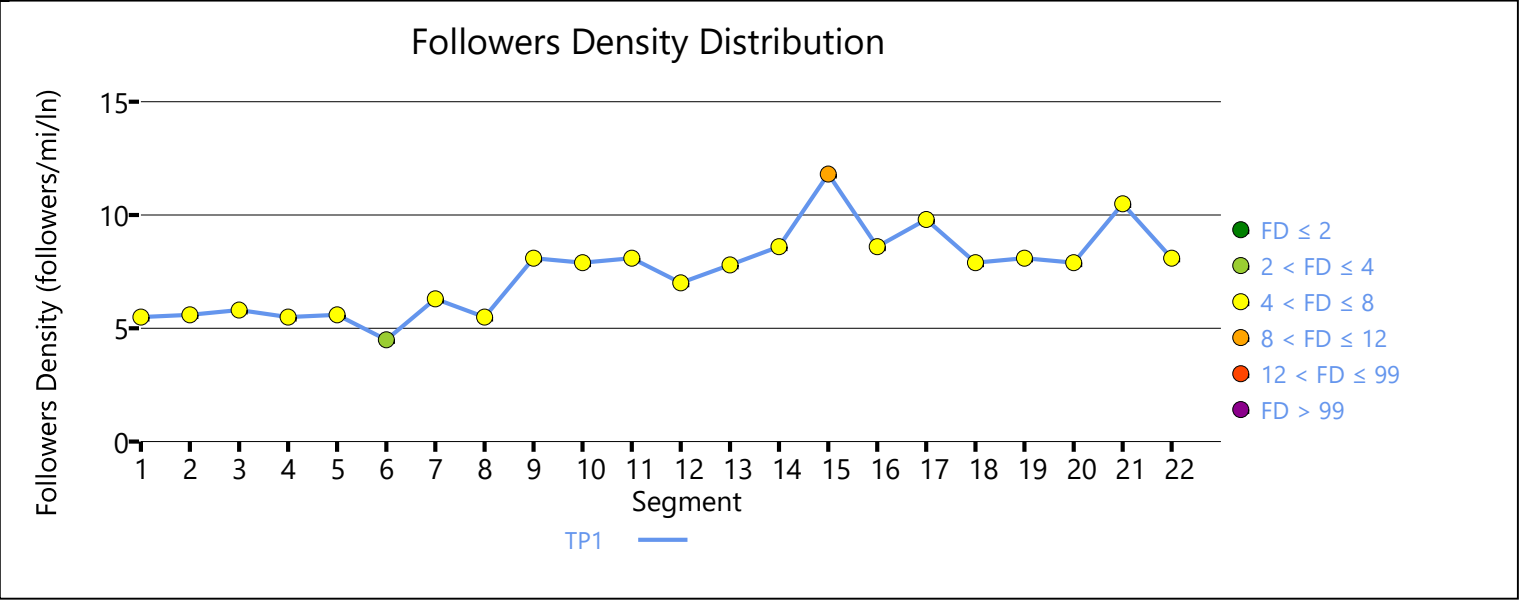
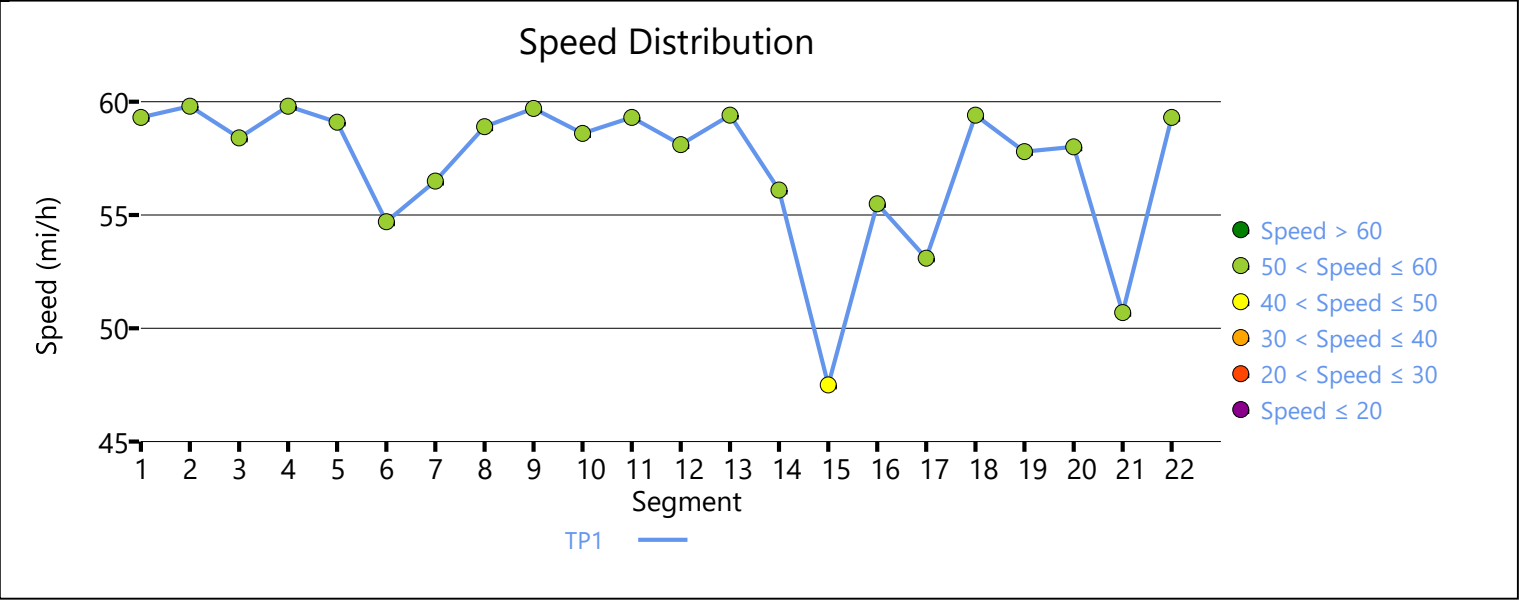
Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.0
Speed Slope Coefficient	3.83526	Speed Power Coefficient	0.41674

PF Slope Coefficient		-1.32915	PF Power Coefficient		0.75721
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		8.1
%Improved % Followers		7.2	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2693	-	-	57.8
Vehicle Results					
Average Speed, mi/h		57.8	Percent Followers, %		64.7
Segment Travel Time, minutes		0.53	Follower Density, followers/mi/ln		7.5
Vehicle LOS		C			
Segment 20					
Vehicle Inputs					
Segment Type		Passing Zone	Length, ft		3590
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		5.9
Demand and Capacity					
Directional Demand Flow Rate, veh/h		724	Opposing Demand Flow Rate, veh/h		753
Peak Hour Factor		0.89	Total Trucks, %		7.70
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.43
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.0
Speed Slope Coefficient		3.72956	Speed Power Coefficient		0.45490
PF Slope Coefficient		-1.29247	PF Power Coefficient		0.78436
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		7.9
%Improved % Followers		6.3	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3590	-	-	58.0
Vehicle Results					
Average Speed, mi/h		58.0	Percent Followers, %		63.3
Segment Travel Time, minutes		0.70	Follower Density, followers/mi/ln		7.4
Vehicle LOS		C			
Segment 21					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		10349
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		4.6

Demand and Capacity					
Directional Demand Flow Rate, veh/h		695	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.97	Total Trucks, %		7.70
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.41
Intermediate Results					
Segment Vertical Class		4	Free-Flow Speed, mi/h		58.9
Speed Slope Coefficient		10.31524	Speed Power Coefficient		0.42509
PF Slope Coefficient		-1.91262	PF Power Coefficient		0.76108
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		10.5
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	7656	-	-	50.7
2	Horizontal Curve	1056	1910	2	50.7
3	Tangent	1637	-	-	50.7
Vehicle Results					
Average Speed, mi/h		50.7	Percent Followers, %		76.5
Segment Travel Time, minutes		2.32	Follower Density, followers/mi/ln		10.5
Vehicle LOS		D			
Segment 22					
Vehicle Inputs					
Segment Type		Passing Zone	Length, ft		2112
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		739	Opposing Demand Flow Rate, veh/h		801
Peak Hour Factor		0.97	Total Trucks, %		7.70
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.43
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.4
Speed Slope Coefficient		3.79870	Speed Power Coefficient		0.45089
PF Slope Coefficient		-1.32331	PF Power Coefficient		0.77529
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		8.1
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2112	-	-	59.3

Vehicle Results			
Average Speed, mi/h	59.3	Percent Followers, %	64.9
Segment Travel Time, minutes	0.40	Follower Density, followers/mi/ln	8.1
Vehicle LOS	D		
Facility Results			
T	Follower Density, followers/mi/ln	LOS	
1	7.1	C	



HCS7 Two-Lane Highway Report

Project Information

Analyst		Date	4/14/2024
Agency		Analysis Year	2024
Jurisdiction		Time Analyzed	
Project Description	Lakeside south UGB to North Bend north UGB	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	7234
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.2

Demand and Capacity

Directional Demand Flow Rate, veh/h	708	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.96	Total Trucks, %	18.89
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.42

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	60.2
Speed Slope Coefficient	5.39045	Speed Power Coefficient	0.48902
PF Slope Coefficient	-1.32248	PF Power Coefficient	0.74997
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	8.1
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2165	-	-	56.0
2	Horizontal Curve	2218	2292	2	56.0
3	Tangent	2851	-	-	56.0

Vehicle Results

Average Speed, mi/h	56.0	Percent Followers, %	64.0
Segment Travel Time, minutes	1.47	Follower Density, followers/mi/ln	8.1
Vehicle LOS	D		

Segment 2

Vehicle Inputs

Segment Type	Passing Lanes	Length, ft	1901
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.8

Demand and Capacity					
Directional Demand Flow Rate, veh/h		708	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.96	Total Trucks, %		18.89
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.42
Intermediate Results					
Segment Vertical Class		2	Free-Flow Speed, mi/h		60.3
Speed Slope Coefficient		4.98706	Speed Power Coefficient		0.47196
PF Slope Coefficient		-1.39217	PF Power Coefficient		0.74623
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		8.3
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1901	-	-	56.4
Vehicle Results					
Average Speed, mi/h		56.4	Percent Followers, %		65.9
Segment Travel Time, minutes		0.38	Follower Density, followers/mi/ln		8.3
Vehicle LOS		D			
Segment 3					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		4699
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		2.2
Demand and Capacity					
Directional Demand Flow Rate, veh/h		708	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.96	Total Trucks, %		18.89
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.42
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.5
Speed Slope Coefficient		3.88878	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.28725	PF Power Coefficient		0.76744
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		7.6
%Improved % Followers		17.2	% Improved Avg Speed		2.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4699	-	-	58.4
Vehicle Results					
Average Speed, mi/h		58.4	Percent Followers, %		62.8

Segment Travel Time, minutes	0.91	Follower Density, followers/mi/ln	7.6
Vehicle LOS	C		

Segment 4

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	1478
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	3.6

Demand and Capacity

Directional Demand Flow Rate, veh/h	799	Opposing Demand Flow Rate, veh/h	680
Peak Hour Factor	0.96	Total Trucks, %	18.89
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.47

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	60.4
Speed Slope Coefficient	4.53727	Speed Power Coefficient	0.52083
PF Slope Coefficient	-1.38485	PF Power Coefficient	0.76332
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	9.7
%Improved % Followers	12.8	% Improved Avg Speed	0.8

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1478	-	-	56.6

Vehicle Results

Average Speed, mi/h	56.6	Percent Followers, %	68.9
Segment Travel Time, minutes	0.30	Follower Density, followers/mi/ln	9.7
Vehicle LOS	D		

Segment 5

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	1584
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	799	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.96	Total Trucks, %	18.89
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.47

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.1
Speed Slope Coefficient	3.87788	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.36001	PF Power Coefficient	0.74819

In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	9.3
%Improved % Followers	10.3	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1584	-	-	58.7

Vehicle Results

Average Speed, mi/h	58.7	Percent Followers, %	68.3
Segment Travel Time, minutes	0.31	Follower Density, followers/mi/ln	9.3
Vehicle LOS	D		

Segment 6

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	2957
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	799	Opposing Demand Flow Rate, veh/h	680
Peak Hour Factor	0.96	Total Trucks, %	18.89
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.47

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.1
Speed Slope Coefficient	3.76740	Speed Power Coefficient	0.46155
PF Slope Coefficient	-1.29224	PF Power Coefficient	0.78813
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	9.0
%Improved % Followers	8.3	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2957	-	-	58.9

Vehicle Results

Average Speed, mi/h	58.9	Percent Followers, %	66.1
Segment Travel Time, minutes	0.57	Follower Density, followers/mi/ln	9.0
Vehicle LOS	D		

Segment 7

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	1742
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity					
Directional Demand Flow Rate, veh/h		799	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.96	Total Trucks, %		18.89
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.47
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.1
Speed Slope Coefficient		3.88062	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.35222	PF Power Coefficient		0.75074
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		9.3
%Improved % Followers		6.7	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1742	-	-	58.7
Vehicle Results					
Average Speed, mi/h		58.7	Percent Followers, %		68.1
Segment Travel Time, minutes		0.34	Follower Density, followers/mi/ln		9.3
Vehicle LOS		D			
Segment 8					
Vehicle Inputs					
Segment Type		Passing Zone	Length, ft		3274
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		6.5
Demand and Capacity					
Directional Demand Flow Rate, veh/h		799	Opposing Demand Flow Rate, veh/h		680
Peak Hour Factor		0.96	Total Trucks, %		18.89
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.47
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		60.4
Speed Slope Coefficient		3.68335	Speed Power Coefficient		0.46155
PF Slope Coefficient		-1.29608	PF Power Coefficient		0.78587
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		9.2
%Improved % Followers		5.4	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3274	-	-	57.3
Vehicle Results					
Average Speed, mi/h		57.3	Percent Followers, %		66.3

Segment Travel Time, minutes	0.65	Follower Density, followers/mi/ln	9.2
Vehicle LOS	D		

Segment 9

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	8448
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	5.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	871	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	18.89
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.51

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	60.8
Speed Slope Coefficient	3.88393	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.28453	PF Power Coefficient	0.75263
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	10.4
%Improved % Followers	3.5	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	8448	-	-	57.3

Vehicle Results

Average Speed, mi/h	57.3	Percent Followers, %	68.6
Segment Travel Time, minutes	1.67	Follower Density, followers/mi/ln	10.4
Vehicle LOS	D		

Segment 10

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	1690
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	3.1

Demand and Capacity

Directional Demand Flow Rate, veh/h	871	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	18.89
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.51

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	60.3
Speed Slope Coefficient	4.84700	Speed Power Coefficient	0.46818
PF Slope Coefficient	-1.44879	PF Power Coefficient	0.73693

In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		11.3
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1690	-	-	56.0
Vehicle Results					
Average Speed, mi/h		56.0	Percent Followers, %		73.0
Segment Travel Time, minutes		0.34	Follower Density, followers/mi/ln		11.3
Vehicle LOS		D			
Segment 11					
Vehicle Inputs					
Segment Type		Passing Zone	Length, ft		7550
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		5.6
Demand and Capacity					
Directional Demand Flow Rate, veh/h		1014	Opposing Demand Flow Rate, veh/h		864
Peak Hour Factor		0.94	Total Trucks, %		18.89
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.60
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		60.7
Speed Slope Coefficient		3.77188	Speed Power Coefficient		0.44610
PF Slope Coefficient		-1.27274	PF Power Coefficient		0.77564
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		12.9
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	7550	-	-	57.0
Vehicle Results					
Average Speed, mi/h		57.0	Percent Followers, %		72.4
Segment Travel Time, minutes		1.50	Follower Density, followers/mi/ln		12.9
Vehicle LOS		E			
Segment 12					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		1690
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0

Demand and Capacity					
Directional Demand Flow Rate, veh/h		1014	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.94	Total Trucks, %		18.89
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.60
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.1
Speed Slope Coefficient		3.87973	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.35470	PF Power Coefficient		0.74993
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	1690	-	-	58.3
Vehicle Results					
Average Speed, mi/h		58.3	Percent Followers, %		74.6
Segment Travel Time, minutes		0.33	Follower Density, followers/mi/ln		13.0
Vehicle LOS		E			
Segment 13					
Vehicle Inputs					
Segment Type		Passing Lanes	Length, ft		3538
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		1014	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.94	Total Trucks, %		18.89
Segment Capacity, veh/h		1300	Demand/Capacity (D/C)		0.78
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.1
Speed Slope Coefficient		7.24671	Speed Power Coefficient		0.88158
PF Slope Coefficient		-1.19239	PF Power Coefficient		0.79485
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		12.8
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3538	-	-	55.4
Passing Lane Results					
		Faster Lane		Slower Lane	

Flow Rate, veh/h	524	490
Percentage of Heavy Vehicles (HV%), %	7.56	31.01
Initial Average Speed (Sint), mi/h	59.6	58.0
Average Speed at Midpoint (SPLmid), mi/h	61.6	56.0
Percent Followers at Midpoint (PFPLmid), %	51.7	48.5

Vehicle Results

Average Speed, mi/h	55.4	Percent Followers, %	70.0
Segment Travel Time, minutes	0.73	Follower Density, followers/mi/ln	12.8
Vehicle LOS	E		

Segment 14

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	5914
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	3.6

Demand and Capacity

Directional Demand Flow Rate, veh/h	1016	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	18.89
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.60

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.2
Speed Slope Coefficient	3.88164	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.28179	PF Power Coefficient	0.76506
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	12.9
%Improved % Followers	14.8	% Improved Avg Speed	1.4

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1848	-	-	57.4
2	Horizontal Curve	3221	2292	2	57.4
3	Tangent	53	-	-	57.4
4	Horizontal Curve	792	2292	2	57.4

Vehicle Results

Average Speed, mi/h	58.3	Percent Followers, %	72.7
Segment Travel Time, minutes	1.15	Follower Density, followers/mi/ln	10.8
Vehicle LOS	D		

Segment 15

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	1478
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Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	7.1

Demand and Capacity

Directional Demand Flow Rate, veh/h	1016	Opposing Demand Flow Rate, veh/h	865
Peak Hour Factor	0.92	Total Trucks, %	18.89
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.60

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	60.3
Speed Slope Coefficient	3.68319	Speed Power Coefficient	0.44600
PF Slope Coefficient	-1.37027	PF Power Coefficient	0.76026
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	13.4
%Improved % Followers	13.5	% Improved Avg Speed	1.2

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	422	2292	2	56.8
2	Tangent	1056	-	-	56.8

Vehicle Results

Average Speed, mi/h	57.4	Percent Followers, %	75.0
Segment Travel Time, minutes	0.29	Follower Density, followers/mi/ln	11.5
Vehicle LOS	D		

Segment 16

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	1373
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	3.8

Demand and Capacity

Directional Demand Flow Rate, veh/h	1016	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	18.89
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.60

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.1
Speed Slope Coefficient	3.82250	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.38089	PF Power Coefficient	0.74223
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	13.3
%Improved % Followers	12.5	% Improved Avg Speed	1.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
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1	Tangent	1373	-	-	57.4
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Vehicle Results

Average Speed, mi/h	58.0	Percent Followers, %	75.3
Segment Travel Time, minutes	0.27	Follower Density, followers/mi/ln	11.5
Vehicle LOS	D		

Segment 17

Vehicle Inputs

Segment Type	Passing Lanes	Length, ft	2429
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.2

Demand and Capacity

Directional Demand Flow Rate, veh/h	1251	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.98	Total Trucks, %	18.89
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.74

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	60.5
Speed Slope Coefficient	5.02643	Speed Power Coefficient	0.47285
PF Slope Coefficient	-1.39087	PF Power Coefficient	0.74660
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	18.3
%Improved % Followers	8.6	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1320	-	-	55.1
2	Horizontal Curve	581	1432	2	55.1
3	Horizontal Curve	475	1432	2	55.1
4	Tangent	53	-	-	55.1

Vehicle Results

Average Speed, mi/h	55.1	Percent Followers, %	80.7
Segment Travel Time, minutes	0.50	Follower Density, followers/mi/ln	16.7
Vehicle LOS	E		

Segment 18

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	3485
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	35	Access Point Density, pts/mi	1.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	1251	Opposing Demand Flow Rate, veh/h	-
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Peak Hour Factor	0.98	Total Trucks, %	18.89
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.74

Intermediate Results

Segment Vertical Class	3	Free-Flow Speed, mi/h	38.9
Speed Slope Coefficient	4.05523	Speed Power Coefficient	0.45092
PF Slope Coefficient	-1.51812	PF Power Coefficient	0.68351
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	30.0
%Improved % Followers	6.7	% Improved Avg Speed	0.0

Subsegment Data

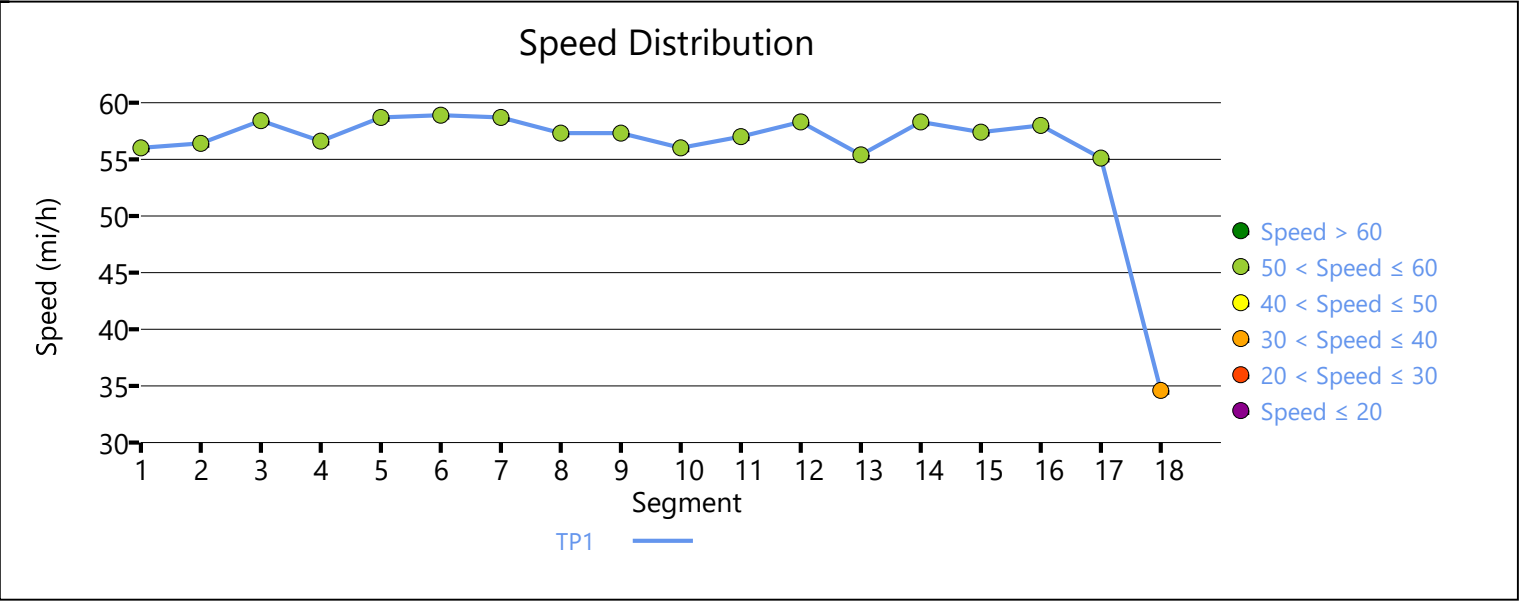
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3485	-	-	34.6

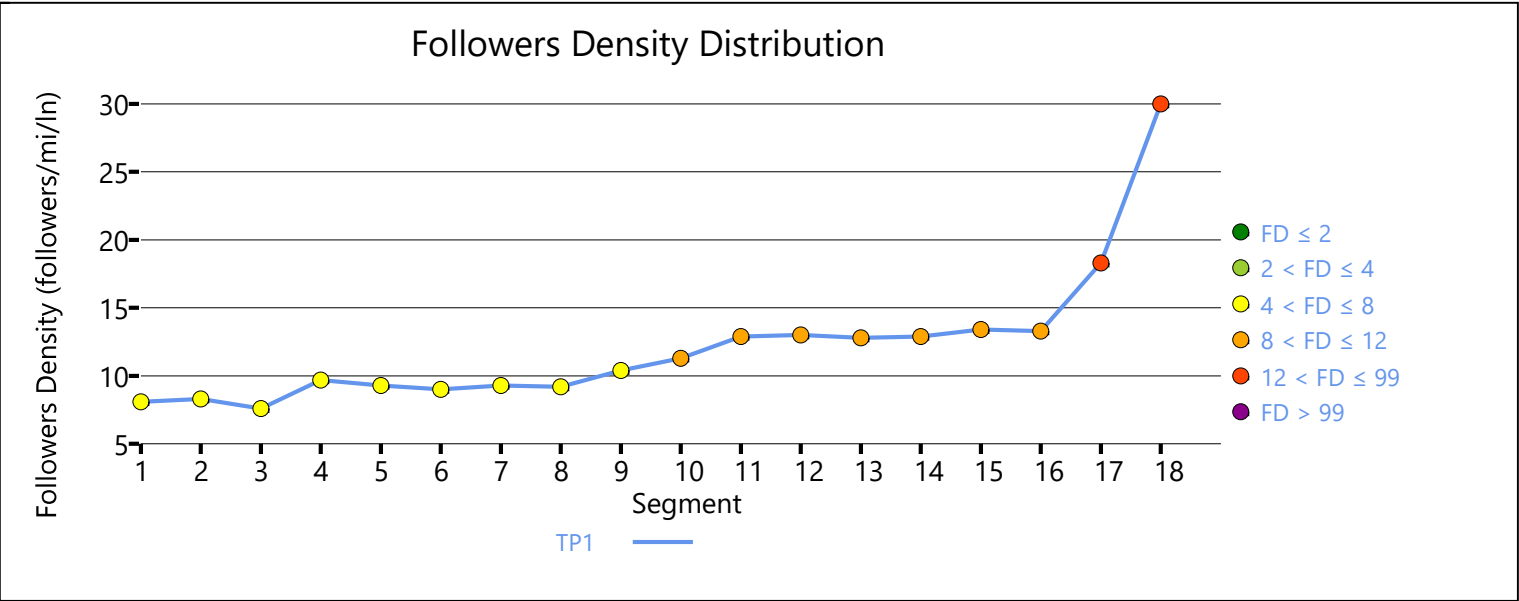
Vehicle Results

Average Speed, mi/h	34.6	Percent Followers, %	83.0
Segment Travel Time, minutes	1.15	Follower Density, followers/mi/ln	28.0
Vehicle LOS	E		

Facility Results

T	Follower Density, followers/mi/ln	LOS
1	11.5	D





HCS7 Two-Lane Highway Report

Project Information

Analyst		Date	4/27/2024
Agency		Analysis Year	2024
Jurisdiction		Time Analyzed	
Project Description	North Bend north UGB to Lakeside south UGB	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	2059
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	1510	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.90	Total Trucks, %	18.89
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.89

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	39.3
Speed Slope Coefficient	3.45778	Speed Power Coefficient	0.41622
PF Slope Coefficient	-1.56096	PF Power Coefficient	0.67401
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	37.3
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2059	-	-	35.3

Vehicle Results

Average Speed, mi/h	35.3	Percent Followers, %	87.3
Segment Travel Time, minutes	0.66	Follower Density, followers/mi/ln	37.3
Vehicle LOS	E		

Segment 2

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	1953
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	45	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	1510	Opposing Demand Flow Rate, veh/h	-
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Peak Hour Factor		0.90	Total Trucks, %		18.89
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.89
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		50.7
Speed Slope Coefficient		3.26622	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.43272	PF Power Coefficient		0.72503
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		27.5
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1478	-	-	46.9
2	Horizontal Curve	475	1432	2	46.9
Vehicle Results					
Average Speed, mi/h		46.9	Percent Followers, %		85.5
Segment Travel Time, minutes		0.47	Follower Density, followers/mi/ln		27.5
Vehicle LOS		E			
Segment 3					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		2693
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		1510	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.90	Total Trucks, %		18.89
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.89
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.1
Speed Slope Coefficient		3.89501	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.31773	PF Power Coefficient		0.76150
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		21.9
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	581	1432	2	57.4
2	Tangent	2112	-	-	57.6
Vehicle Results					
Average Speed, mi/h		57.5	Percent Followers, %		83.5

Segment Travel Time, minutes	0.53	Follower Density, followers/mi/ln	21.9
Vehicle LOS	E		

Segment 4

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	1637
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	865	Opposing Demand Flow Rate, veh/h	1016
Peak Hour Factor	0.92	Total Trucks, %	18.89
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.51

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.1
Speed Slope Coefficient	3.80780	Speed Power Coefficient	0.43622
PF Slope Coefficient	-1.35352	PF Power Coefficient	0.76246
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	10.4
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1637	-	-	58.7

Vehicle Results

Average Speed, mi/h	58.7	Percent Followers, %	70.2
Segment Travel Time, minutes	0.32	Follower Density, followers/mi/ln	10.4
Vehicle LOS	D		

Segment 5

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	6336
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	865	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	18.89
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.51

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.1
Speed Slope Coefficient	3.93424	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.27244	PF Power Coefficient	0.76619

In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	10.0
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	1214	2292	2	58.6
2	Tangent	53	-	-	58.6
3	Horizontal Curve	3221	2292	2	58.6
4	Tangent	1848	-	-	58.6

Vehicle Results

Average Speed, mi/h	58.6	Percent Followers, %	68.0
Segment Travel Time, minutes	1.23	Follower Density, followers/mi/ln	10.0
Vehicle LOS	D		

Segment 6

Vehicle Inputs

Segment Type	Passing Lanes	Length, ft	2640
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	864	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.94	Total Trucks, %	18.89
Segment Capacity, veh/h	1300	Demand/Capacity (D/C)	0.66

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.1
Speed Slope Coefficient	7.20136	Speed Power Coefficient	0.83235
PF Slope Coefficient	-1.25823	PF Power Coefficient	0.77064
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	10.4
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2640	-	-	56.3

Passing Lane Results

	Faster Lane	Slower Lane
Flow Rate, veh/h	461	403
Percentage of Heavy Vehicles (HV%), %	7.56	31.84
Initial Average Speed (Sint), mi/h	59.8	58.6
Average Speed at Midpoint (SPLmid), mi/h	61.8	56.6
Percent Followers at Midpoint (PFPLmid), %	50.7	45.6

Vehicle Results											
Average Speed, mi/h		56.3		Percent Followers, %		67.5					
Segment Travel Time, minutes		0.53		Follower Density, followers/mi/ln		10.4					
Vehicle LOS		D									
Segment 7											
Vehicle Inputs											
Segment Type		Passing Constrained		Length, ft		1637					
Lane Width, ft		12		Shoulder Width, ft		6					
Speed Limit, mi/h		55		Access Point Density, pts/mi		0.0					
Demand and Capacity											
Directional Demand Flow Rate, veh/h		864		Opposing Demand Flow Rate, veh/h		-					
Peak Hour Factor		0.94		Total Trucks, %		18.89					
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.51					
Intermediate Results											
Segment Vertical Class		1		Free-Flow Speed, mi/h		62.1					
Speed Slope Coefficient		3.87881		Speed Power Coefficient		0.41674					
PF Slope Coefficient		-1.35731		PF Power Coefficient		0.74907					
In Passing Lane Effective Length?		Yes		Total Segment Density, veh/mi/ln		10.4					
%Improved % Followers		21.6		% Improved Avg Speed		2.2					
Subsegment Data											
#	Segment Type		Length, ft		Radius, ft		Superelevation, %		Average Speed, mi/h		
1	Tangent		1637		-		-		58.6		
Vehicle Results											
Average Speed, mi/h			59.9			Percent Followers, %			70.4		
Segment Travel Time, minutes			0.31			Follower Density, followers/mi/ln			8.0		
Vehicle LOS			C								
Segment 8											
Vehicle Inputs											
Segment Type			Passing Zone			Length, ft			8184		
Lane Width, ft			12			Shoulder Width, ft			6		
Speed Limit, mi/h			55			Access Point Density, pts/mi			11.1		
Demand and Capacity											
Directional Demand Flow Rate, veh/h			864			Opposing Demand Flow Rate, veh/h			1014		
Peak Hour Factor			0.94			Total Trucks, %			18.89		
Segment Capacity, veh/h			1700			Demand/Capacity (D/C)			0.51		
Intermediate Results											

Segment Vertical Class	1	Free-Flow Speed, mi/h	59.3
Speed Slope Coefficient	3.72781	Speed Power Coefficient	0.43636
PF Slope Coefficient	-1.28916	PF Power Coefficient	0.76364
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	10.6
%Improved % Followers	12.2	% Improved Avg Speed	1.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	8184	-	-	56.0

Vehicle Results

Average Speed, mi/h	56.5	Percent Followers, %	68.4
Segment Travel Time, minutes	1.65	Follower Density, followers/mi/ln	9.2
Vehicle LOS	D		

Segment 9

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	2006
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.7

Demand and Capacity

Directional Demand Flow Rate, veh/h	741	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	18.89
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.44

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	60.9
Speed Slope Coefficient	5.03500	Speed Power Coefficient	0.47283
PF Slope Coefficient	-1.42115	PF Power Coefficient	0.74191
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	8.9
%Improved % Followers	12.1	% Improved Avg Speed	1.3

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2006	-	-	56.8

Vehicle Results

Average Speed, mi/h	57.5	Percent Followers, %	68.0
Segment Travel Time, minutes	0.40	Follower Density, followers/mi/ln	7.7
Vehicle LOS	C		

Segment 10

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	7339
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Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	15.8

Demand and Capacity

Directional Demand Flow Rate, veh/h	680	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.96	Total Trucks, %	18.89
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.40

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	58.1
Speed Slope Coefficient	3.72874	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.30453	PF Power Coefficient	0.75162
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	7.7
%Improved % Followers	9.2	% Improved Avg Speed	0.5

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	7339	-	-	55.1

Vehicle Results

Average Speed, mi/h	55.4	Percent Followers, %	62.3
Segment Travel Time, minutes	1.51	Follower Density, followers/mi/ln	7.0
Vehicle LOS	C		

Segment 11

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	3802
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.6

Demand and Capacity

Directional Demand Flow Rate, veh/h	680	Opposing Demand Flow Rate, veh/h	799
Peak Hour Factor	0.96	Total Trucks, %	18.89
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.40

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.4
Speed Slope Coefficient	3.76514	Speed Power Coefficient	0.45105
PF Slope Coefficient	-1.28694	PF Power Coefficient	0.78628
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	7.1
%Improved % Followers	7.8	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3802	-	-	58.5

Vehicle Results											
Average Speed, mi/h		58.5		Percent Followers, %		61.3					
Segment Travel Time, minutes		0.74		Follower Density, followers/mi/ln		6.6					
Vehicle LOS		C									
Segment 12											
Vehicle Inputs											
Segment Type		Passing Constrained		Length, ft		1373					
Lane Width, ft		12		Shoulder Width, ft		6					
Speed Limit, mi/h		55		Access Point Density, pts/mi		0.0					
Demand and Capacity											
Directional Demand Flow Rate, veh/h		680		Opposing Demand Flow Rate, veh/h		-					
Peak Hour Factor		0.96		Total Trucks, %		18.89					
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.40					
Intermediate Results											
Segment Vertical Class		1		Free-Flow Speed, mi/h		62.1					
Speed Slope Coefficient		3.87399		Speed Power Coefficient		0.41674					
PF Slope Coefficient		-1.37173		PF Power Coefficient		0.74431					
In Passing Lane Effective Length?		Yes		Total Segment Density, veh/mi/ln		7.4					
%Improved % Followers		7.3		% Improved Avg Speed		0.0					
Subsegment Data											
#	Segment Type		Length, ft		Radius, ft		Superelevation, %		Average Speed, mi/h		
1	Tangent		1373		-		-		59.0		
Vehicle Results											
Average Speed, mi/h			59.0			Percent Followers, %			64.3		
Segment Travel Time, minutes			0.26			Follower Density, followers/mi/ln			6.9		
Vehicle LOS			C								
Segment 13											
Vehicle Inputs											
Segment Type			Passing Zone			Length, ft			2693		
Lane Width, ft			12			Shoulder Width, ft			6		
Speed Limit, mi/h			55			Access Point Density, pts/mi			0.0		
Demand and Capacity											
Directional Demand Flow Rate, veh/h			680			Opposing Demand Flow Rate, veh/h			799		
Peak Hour Factor			0.96			Total Trucks, %			18.89		
Segment Capacity, veh/h			1700			Demand/Capacity (D/C)			0.40		
Intermediate Results											

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.1
Speed Slope Coefficient	3.78654	Speed Power Coefficient	0.45105
PF Slope Coefficient	-1.30592	PF Power Coefficient	0.78191
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	7.1
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2693	-	-	59.1

Vehicle Results

Average Speed, mi/h	59.1	Percent Followers, %	61.9
Segment Travel Time, minutes	0.52	Follower Density, followers/mi/ln	7.1
Vehicle LOS	C		

Segment 14

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	1848
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	680	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.96	Total Trucks, %	18.89
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.40

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.1
Speed Slope Coefficient	3.88239	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34741	PF Power Coefficient	0.75230
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	7.3
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1848	-	-	59.0

Vehicle Results

Average Speed, mi/h	59.0	Percent Followers, %	63.5
Segment Travel Time, minutes	0.36	Follower Density, followers/mi/ln	7.3
Vehicle LOS	C		

Segment 15

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	1584
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Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	3.2

Demand and Capacity

Directional Demand Flow Rate, veh/h	603	Opposing Demand Flow Rate, veh/h	708
Peak Hour Factor	0.96	Total Trucks, %	18.89
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.35

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	60.5
Speed Slope Coefficient	4.58732	Speed Power Coefficient	0.51855
PF Slope Coefficient	-1.37958	PF Power Coefficient	0.76412
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	6.4
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1584	-	-	57.3

Vehicle Results

Average Speed, mi/h	57.3	Percent Followers, %	60.8
Segment Travel Time, minutes	0.31	Follower Density, followers/mi/ln	6.4
Vehicle LOS	C		

Segment 16

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	4541
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	18.2

Demand and Capacity

Directional Demand Flow Rate, veh/h	603	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.96	Total Trucks, %	18.89
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.35

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	57.5
Speed Slope Coefficient	3.67034	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.32237	PF Power Coefficient	0.75696
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	6.5
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4541	-	-	54.8

Vehicle Results											
Average Speed, mi/h		54.8		Percent Followers, %		59.4					
Segment Travel Time, minutes		0.94		Follower Density, followers/mi/ln		6.5					
Vehicle LOS		C									
Segment 17											
Vehicle Inputs											
Segment Type		Passing Constrained		Length, ft		4646					
Lane Width, ft		12		Shoulder Width, ft		6					
Speed Limit, mi/h		55		Access Point Density, pts/mi		3.6					
Demand and Capacity											
Directional Demand Flow Rate, veh/h		603		Opposing Demand Flow Rate, veh/h		-					
Peak Hour Factor		0.96		Total Trucks, %		18.89					
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.35					
Intermediate Results											
Segment Vertical Class		3		Free-Flow Speed, mi/h		58.2					
Speed Slope Coefficient		8.86965		Speed Power Coefficient		0.64081					
PF Slope Coefficient		-1.33693		PF Power Coefficient		0.75993					
In Passing Lane Effective Length?		No		Total Segment Density, veh/mi/ln		6.9					
%Improved % Followers		0.0		% Improved Avg Speed		0.0					
Subsegment Data											
#	Segment Type		Length, ft		Radius, ft		Superelevation, %		Average Speed, mi/h		
1	Tangent		4646		-		-		52.5		
Vehicle Results											
Average Speed, mi/h			52.5			Percent Followers, %			59.8		
Segment Travel Time, minutes			1.01			Follower Density, followers/mi/ln			6.9		
Vehicle LOS			C								
Segment 18											
Vehicle Inputs											
Segment Type			Passing Constrained			Length, ft			5492		
Lane Width, ft			12			Shoulder Width, ft			6		
Speed Limit, mi/h			55			Access Point Density, pts/mi			4.5		
Demand and Capacity											
Directional Demand Flow Rate, veh/h			603			Opposing Demand Flow Rate, veh/h			-		
Peak Hour Factor			0.96			Total Trucks, %			18.89		
Segment Capacity, veh/h			1700			Demand/Capacity (D/C)			0.35		
Intermediate Results											

Segment Vertical Class	2	Free-Flow Speed, mi/h	59.8
Speed Slope Coefficient	5.08820	Speed Power Coefficient	0.47949
PF Slope Coefficient	-1.33179	PF Power Coefficient	0.75253
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	6.4
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

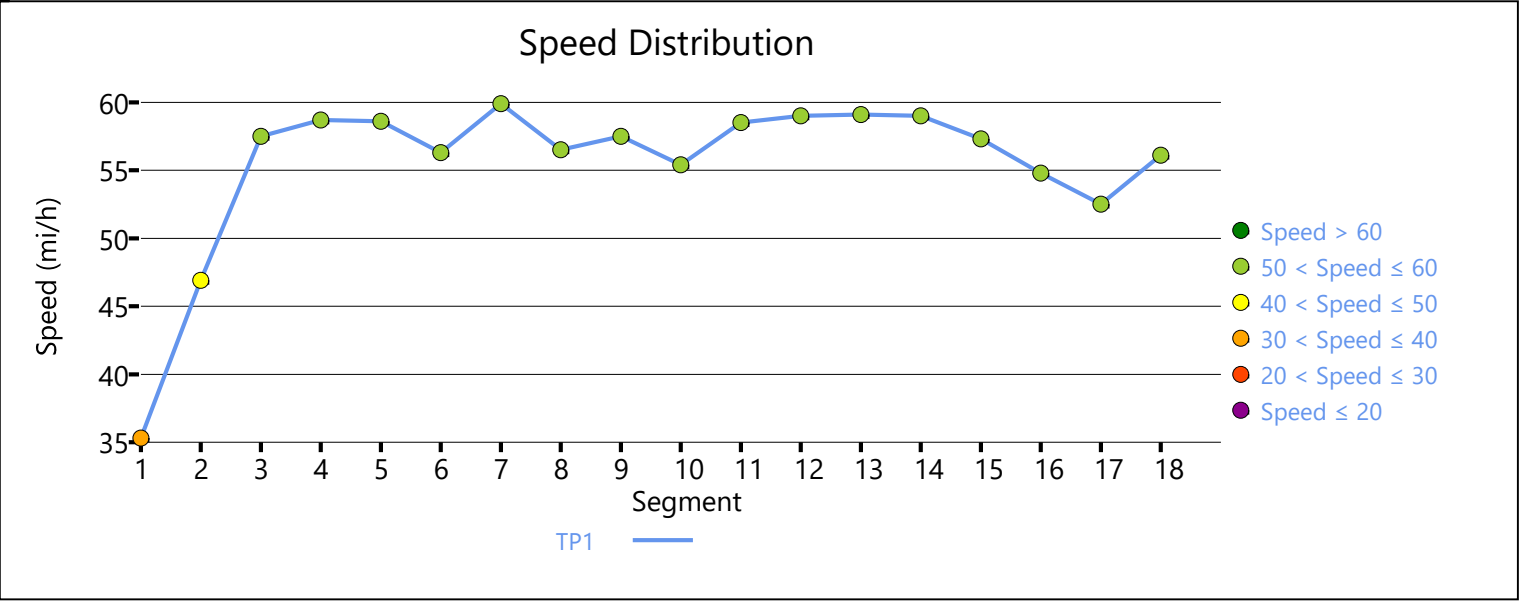
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1109	-	-	56.1
2	Horizontal Curve	2218	2292	2	56.1
3	Tangent	2165	-	-	56.1

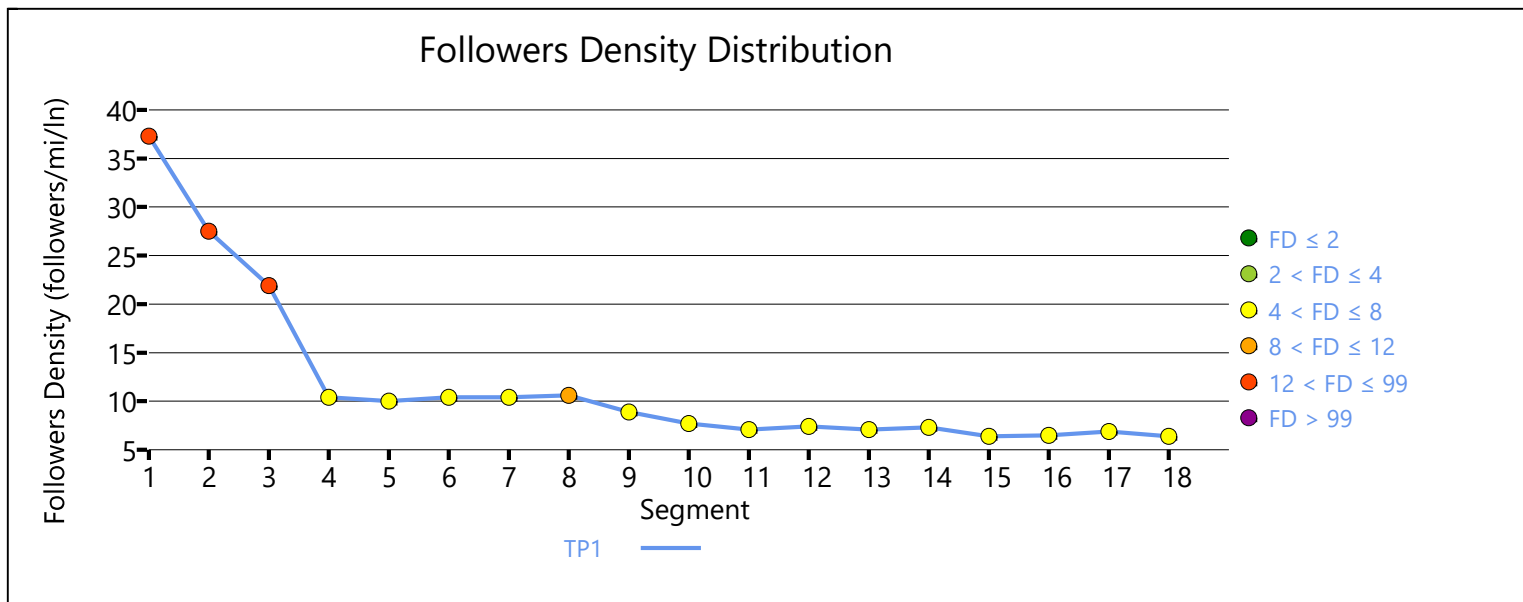
Vehicle Results

Average Speed, mi/h	56.1	Percent Followers, %	59.8
Segment Travel Time, minutes	1.11	Follower Density, followers/mi/ln	6.4
Vehicle LOS	C		

Facility Results

T	Follower Density, followers/mi/ln	LOS
1	10.0	D





HCS7 Two-Lane Highway Report

Project Information

Analyst		Date	3/7/2024
Agency		Analysis Year	2024
Jurisdiction		Time Analyzed	
Project Description	Lakeside north UGB to Reedsport south UGB	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	1320
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	690	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.96	Total Trucks, %	3.38
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.41

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	62.4
Speed Slope Coefficient	3.54910	Speed Power Coefficient	0.45095
PF Slope Coefficient	-1.47791	PF Power Coefficient	0.72616
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	7.8
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1320	-	-	59.6

Vehicle Results

Average Speed, mi/h	59.6	Percent Followers, %	67.6
Segment Travel Time, minutes	0.25	Follower Density, followers/mi/ln	7.8
Vehicle LOS	C		

Segment 2

Vehicle Inputs

Segment Type	Passing Lanes	Length, ft	3802
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	690	Opposing Demand Flow Rate, veh/h	-
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Peak Hour Factor		0.96	Total Trucks, %		3.38
Segment Capacity, veh/h		1500	Demand/Capacity (D/C)		0.46
Intermediate Results					
Segment Vertical Class		4	Free-Flow Speed, mi/h		61.7
Speed Slope Coefficient		5.69335	Speed Power Coefficient		0.92255
PF Slope Coefficient		-1.15064	PF Power Coefficient		0.84339
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		6.7
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3802	-	-	58.3
Passing Lane Results					
		Faster Lane		Slower Lane	
Flow Rate, veh/h		405		285	
Percentage of Heavy Vehicles (HV%), %		1.35		6.26	
Initial Average Speed (Sint), mi/h		60.5		59.8	
Average Speed at Midpoint (SPLmid), mi/h		62.1		58.2	
Percent Followers at Midpoint (PFPLmid), %		43.1		31.1	
Vehicle Results					
Average Speed, mi/h		58.3	Percent Followers, %		56.9
Segment Travel Time, minutes		0.74	Follower Density, followers/mi/ln		6.7
Vehicle LOS		C			
Segment 3					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		1267
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		656	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.87	Total Trucks, %		3.38
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.39
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.6
Speed Slope Coefficient		3.90096	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.37180	PF Power Coefficient		0.74214
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		7.0
%Improved % Followers		23.4	% Improved Avg Speed		3.3

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1267	-	-	59.5
Vehicle Results					
Average Speed, mi/h		61.5	Percent Followers, %		63.3
Segment Travel Time, minutes		0.23	Follower Density, followers/mi/ln		5.2
Vehicle LOS		C			
Segment 4					
Vehicle Inputs					
Segment Type		Passing Zone	Length, ft		3115
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		15.4
Demand and Capacity					
Directional Demand Flow Rate, veh/h		656	Opposing Demand Flow Rate, veh/h		683
Peak Hour Factor		0.87	Total Trucks, %		3.38
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.39
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		58.7
Speed Slope Coefficient		3.58926	Speed Power Coefficient		0.46130
PF Slope Coefficient		-1.31231	PF Power Coefficient		0.77818
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		7.2
%Improved % Followers		19.2	% Improved Avg Speed		2.8
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3115	-	-	56.0
Vehicle Results					
Average Speed, mi/h		57.6	Percent Followers, %		61.2
Segment Travel Time, minutes		0.62	Follower Density, followers/mi/ln		5.6
Vehicle LOS		C			
Segment 5					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		5174
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.7
Demand and Capacity					
Directional Demand Flow Rate, veh/h		656	Opposing Demand Flow Rate, veh/h		-

Peak Hour Factor	0.87	Total Trucks, %	3.38
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.39

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.4
Speed Slope Coefficient	3.94189	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.27697	PF Power Coefficient	0.76729
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	6.8
%Improved % Followers	14.9	% Improved Avg Speed	2.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2270	-	-	59.3
2	Horizontal Curve	1584	2086	2	58.9
3	Horizontal Curve	634	969	2	52.8
4	Tangent	53	-	-	59.3
5	Horizontal Curve	475	941	2	52.8
6	Tangent	158	-	-	59.3

Vehicle Results

Average Speed, mi/h	59.0	Percent Followers, %	60.3
Segment Travel Time, minutes	1.00	Follower Density, followers/mi/ln	5.7
Vehicle LOS	C		

Segment 6

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	3168
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	656	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	3.38
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.39

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	62.4
Speed Slope Coefficient	3.94758	Speed Power Coefficient	0.45796
PF Slope Coefficient	-1.36862	PF Power Coefficient	0.74403
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	8.0
%Improved % Followers	13.1	% Improved Avg Speed	1.5

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	475	587	2	46.3

2	Tangent	739	-	-	59.4
3	Horizontal Curve	898	568	2	46.3
4	Tangent	158	-	-	59.4
5	Horizontal Curve	898	973	2	52.8

Vehicle Results

Average Speed, mi/h	52.6	Percent Followers, %	63.2
Segment Travel Time, minutes	0.68	Follower Density, followers/mi/ln	6.9
Vehicle LOS	C		

Segment 7

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	3855
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	794	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.88	Total Trucks, %	3.38
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.47

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.0
Speed Slope Coefficient	3.90356	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.29590	PF Power Coefficient	0.76504
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	9.0
%Improved % Followers	9.9	% Improved Avg Speed	0.2

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2640	-	-	58.6
2	Horizontal Curve	1162	1432	2	58.6
3	Tangent	53	-	-	58.6

Vehicle Results

Average Speed, mi/h	58.8	Percent Followers, %	66.3
Segment Travel Time, minutes	0.75	Follower Density, followers/mi/ln	8.1
Vehicle LOS	D		

Segment 8

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	6548
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	3.5

Demand and Capacity							
Directional Demand Flow Rate, veh/h		794		Opposing Demand Flow Rate, veh/h		-	
Peak Hour Factor		0.88		Total Trucks, %		3.38	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.47	
Intermediate Results							
Segment Vertical Class		5		Free-Flow Speed, mi/h		60.1	
Speed Slope Coefficient		10.87738		Speed Power Coefficient		0.43042	
PF Slope Coefficient		-1.96828		PF Power Coefficient		0.82630	
In Passing Lane Effective Length?		Yes		Total Segment Density, veh/mi/ln		12.6	
%Improved % Followers		7.4		% Improved Avg Speed		0.0	
Subsegment Data							
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h		
1	Horizontal Curve	1056	1146	2	50.8		
2	Tangent	317	-	-	50.8		
3	Horizontal Curve	1162	1432	2	50.8		
4	Tangent	4013	-	-	50.8		
Vehicle Results							
Average Speed, mi/h		50.8		Percent Followers, %		80.4	
Segment Travel Time, minutes		1.46		Follower Density, followers/mi/ln		11.6	
Vehicle LOS		D					
Segment 9							
Vehicle Inputs							
Segment Type		Passing Constrained		Length, ft		1795	
Lane Width, ft		12		Shoulder Width, ft		6	
Speed Limit, mi/h		45		Access Point Density, pts/mi		0.0	
Demand and Capacity							
Directional Demand Flow Rate, veh/h		950		Opposing Demand Flow Rate, veh/h		-	
Peak Hour Factor		0.90		Total Trucks, %		3.38	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.56	
Intermediate Results							
Segment Vertical Class		3		Free-Flow Speed, mi/h		50.9	
Speed Slope Coefficient		3.77213		Speed Power Coefficient		0.45528	
PF Slope Coefficient		-1.50090		PF Power Coefficient		0.71060	
In Passing Lane Effective Length?		Yes		Total Segment Density, veh/mi/ln		15.3	
%Improved % Followers		5.3		% Improved Avg Speed		0.0	
Subsegment Data							
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h		

1	Tangent	686	-	-	47.4
2	Horizontal Curve	1109	955	2	47.4

Vehicle Results

Average Speed, mi/h	47.4	Percent Followers, %	76.5
Segment Travel Time, minutes	0.43	Follower Density, followers/mi/ln	14.5
Vehicle LOS	D		

Segment 10

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	4012
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.3

Demand and Capacity

Directional Demand Flow Rate, veh/h	950	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.90	Total Trucks, %	3.38
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.56

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.3
Speed Slope Coefficient	3.92159	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.29082	PF Power Coefficient	0.76620
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	11.9
%Improved % Followers	4.2	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	211	955	2	52.6
2	Tangent	211	-	-	58.6
3	Horizontal Curve	1056	1432	2	58.4
4	Tangent	739	-	-	58.6
5	Horizontal Curve	1003	955	2	52.6
6	Tangent	792	-	-	58.6

Vehicle Results

Average Speed, mi/h	56.7	Percent Followers, %	71.1
Segment Travel Time, minutes	0.80	Follower Density, followers/mi/ln	11.4
Vehicle LOS	D		

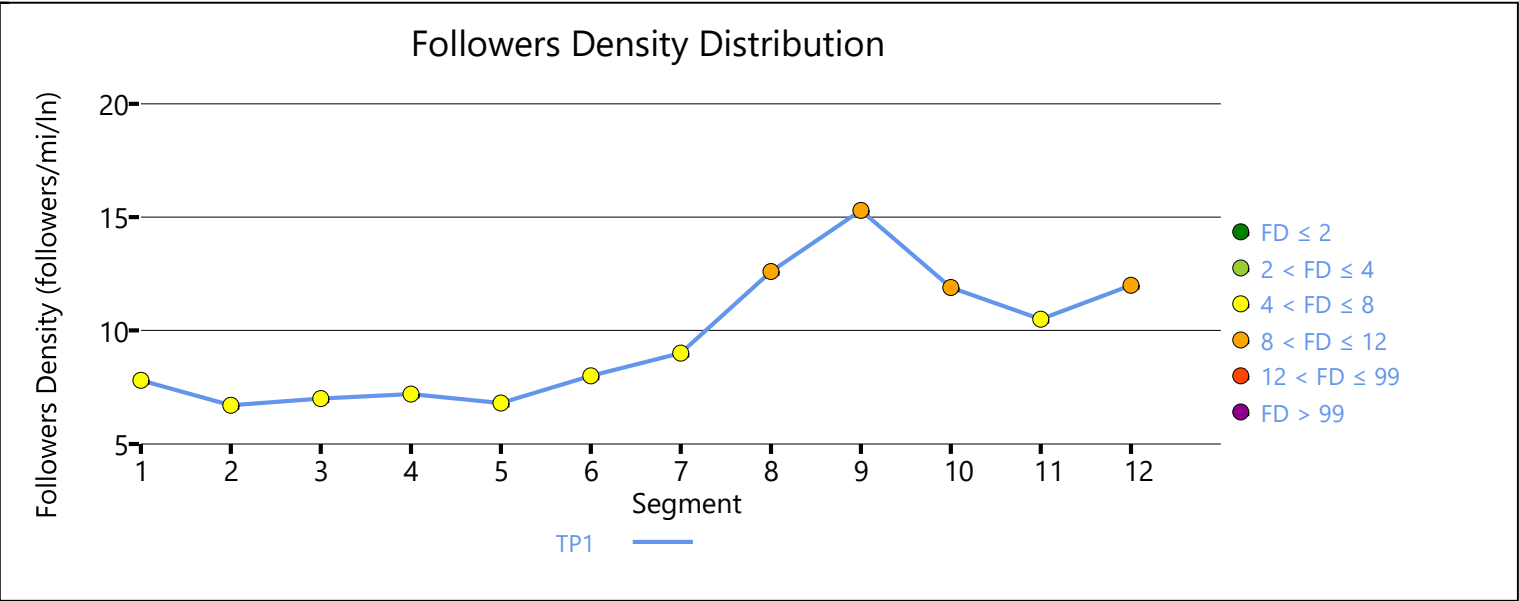
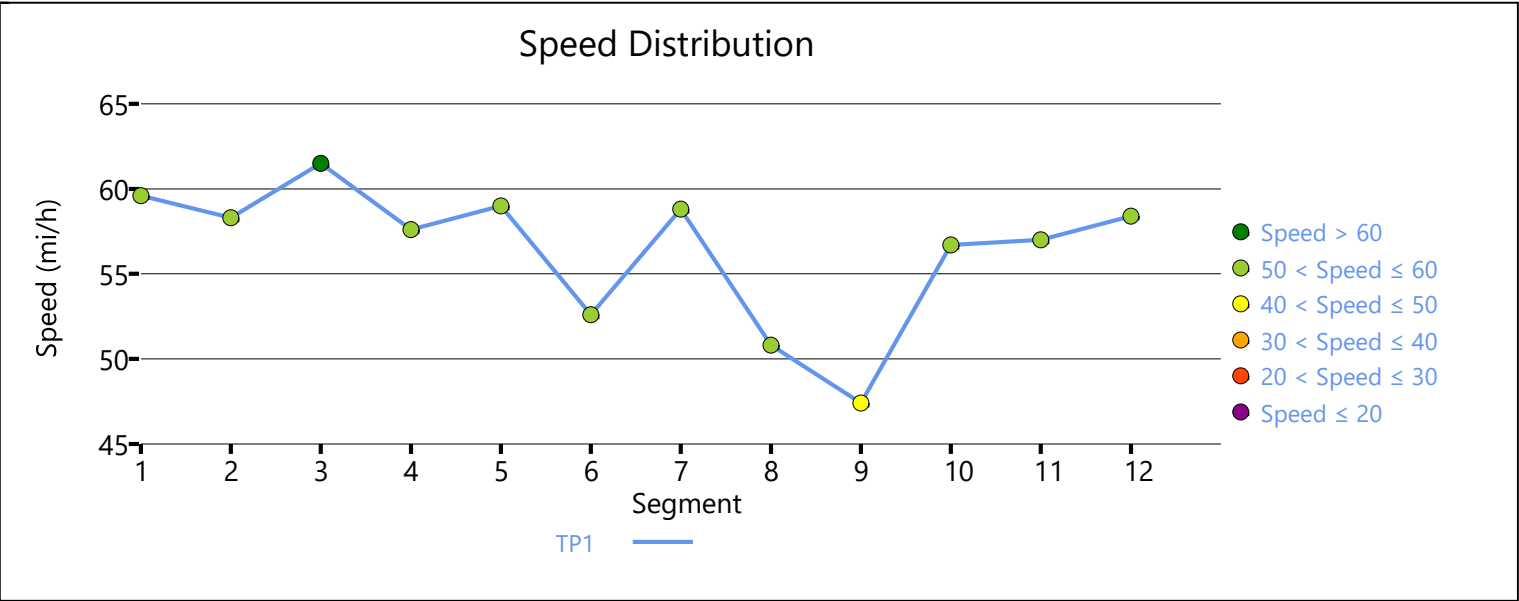
Segment 11

Vehicle Inputs

Segment Type	Passing Lanes	Length, ft	5544
Lane Width, ft	12	Shoulder Width, ft	6

Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		933	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.87	Total Trucks, %		3.38
Segment Capacity, veh/h		1500	Demand/Capacity (D/C)		0.62
Intermediate Results					
Segment Vertical Class		4	Free-Flow Speed, mi/h		62.0
Speed Slope Coefficient		6.05501	Speed Power Coefficient		1.02649
PF Slope Coefficient		-1.08592	PF Power Coefficient		0.87983
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		10.5
%Improved % Followers		4.3	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5544	-	-	57.0
Passing Lane Results					
		Faster Lane		Slower Lane	
Flow Rate, veh/h		531		402	
Percentage of Heavy Vehicles (HV%), %		1.35		6.06	
Initial Average Speed (Sint), mi/h		60.2		59.4	
Average Speed at Midpoint (SPLmid), mi/h		61.9		57.7	
Percent Followers at Midpoint (PFPLmid), %		47.9		36.8	
Vehicle Results					
Average Speed, mi/h		57.0	Percent Followers, %		64.0
Segment Travel Time, minutes		1.11	Follower Density, followers/mi/ln		10.5
Vehicle LOS		D			
Segment 12					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		2060
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		933	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.87	Total Trucks, %		3.38
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.55
Intermediate Results					
Segment Vertical Class		3	Free-Flow Speed, mi/h		62.1
Speed Slope Coefficient		5.36922	Speed Power Coefficient		0.56005

PF Slope Coefficient		-1.41079	PF Power Coefficient		0.74808
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		12.0
%Improved % Followers		18.8	% Improved Avg Speed		2.1
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1162	-	-	57.2
2	Horizontal Curve	898	1432	2	57.2
Vehicle Results					
Average Speed, mi/h		58.4	Percent Followers, %		73.8
Segment Travel Time, minutes		0.40	Follower Density, followers/mi/ln		9.6
Vehicle LOS		D			
Facility Results					
T	Follower Density, followers/mi/ln			LOS	
1	8.8			D	



HCS7 Two-Lane Highway Report

Project Information

Analyst		Date	4/14/2024
Agency		Analysis Year	2024
Jurisdiction		Time Analyzed	
Project Description	Reedsport south UGB to Lakeside north UGB	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	2852
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	3.7

Demand and Capacity

Directional Demand Flow Rate, veh/h	971	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	3.38
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.57

Intermediate Results

Segment Vertical Class	3	Free-Flow Speed, mi/h	61.1
Speed Slope Coefficient	5.63365	Speed Power Coefficient	0.56011
PF Slope Coefficient	-1.38201	PF Power Coefficient	0.74828
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	12.9
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	898	1432	2	55.9
2	Tangent	1954	-	-	55.9

Vehicle Results

Average Speed, mi/h	55.9	Percent Followers, %	74.1
Segment Travel Time, minutes	0.58	Follower Density, followers/mi/ln	12.9
Vehicle LOS	E		

Segment 2

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	9450
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.2

Demand and Capacity

Directional Demand Flow Rate, veh/h	989	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.90	Total Trucks, %	3.38
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.58

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	62.0
Speed Slope Coefficient	3.95736	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.28026	PF Power Coefficient	0.74675
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	12.4
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5544	-	-	58.3
2	Horizontal Curve	1003	955	2	52.6
3	Tangent	739	-	-	58.3
4	Horizontal Curve	1056	1432	2	58.3
5	Tangent	211	-	-	58.3
6	Horizontal Curve	211	955	2	52.6
7	Horizontal Curve	686	955	2	52.6

Vehicle Results			
Average Speed, mi/h	57.1	Percent Followers, %	71.9
Segment Travel Time, minutes	1.88	Follower Density, followers/mi/ln	12.4
Vehicle LOS	E		

Segment 3

Vehicle Inputs			
Segment Type	Passing Lanes	Length, ft	8078
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	5.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	827	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.88	Total Trucks, %	3.38
Segment Capacity, veh/h	1500	Demand/Capacity (D/C)	0.55

Intermediate Results			
Segment Vertical Class	5	Free-Flow Speed, mi/h	60.1
Speed Slope Coefficient	8.43347	Speed Power Coefficient	1.16749
PF Slope Coefficient	-0.95601	PF Power Coefficient	0.91400
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	8.5
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	422	955	2	52.7
2	Tangent	686	-	-	54.3
3	Tangent	4013	-	-	54.3
4	Horizontal Curve	1214	1432	2	54.3
5	Tangent	317	-	-	54.3
6	Horizontal Curve	1056	1146	2	52.7
7	Tangent	53	-	-	54.3
8	Horizontal Curve	317	1432	2	54.3

Passing Lane Results

	Faster Lane	Slower Lane
Flow Rate, veh/h	477	351
Percentage of Heavy Vehicles (HV%), %	1.35	6.14
Initial Average Speed (S _{int}), mi/h	58.9	57.1
Average Speed at Midpoint (S _{PLmid}), mi/h	60.6	55.4
Percent Followers at Midpoint (PF _{PLmid}), %	40.6	30.5

Vehicle Results

Average Speed, mi/h	54.0	Percent Followers, %	55.2
Segment Travel Time, minutes	1.70	Follower Density, followers/mi/ln	8.5
Vehicle LOS	D		

Segment 4

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	11088
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	683	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	3.38
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.40

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.5
Speed Slope Coefficient	3.99185	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.28801	PF Power Coefficient	0.73475
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	7.5
%Improved % Followers	14.6	% Improved Avg Speed	2.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	845	1432	2	58.8

2	Tangent	2640	-	-	59.3
3	Horizontal Curve	898	973	2	52.8
4	Tangent	158	-	-	59.3
5	Horizontal Curve	898	568	2	46.3
6	Tangent	739	-	-	59.3
7	Horizontal Curve	475	587	2	46.3
8	Tangent	158	-	-	59.3
9	Horizontal Curve	475	941	2	52.8
10	Tangent	53	-	-	59.3
11	Horizontal Curve	634	969	2	52.8
12	Horizontal Curve	1584	2086	2	58.8
13	Tangent	1531	-	-	59.3

Vehicle Results

Average Speed, mi/h	57.5	Percent Followers, %	62.2
Segment Travel Time, minutes	2.19	Follower Density, followers/mi/ln	6.3
Vehicle LOS	C		

Segment 5

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	1426
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	683	Opposing Demand Flow Rate, veh/h	656
Peak Hour Factor	0.87	Total Trucks, %	3.38
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.40

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.6
Speed Slope Coefficient	3.76708	Speed Power Coefficient	0.46392
PF Slope Coefficient	-1.34558	PF Power Coefficient	0.76945
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	7.2
%Improved % Followers	13.9	% Improved Avg Speed	1.8

Subsegment Data

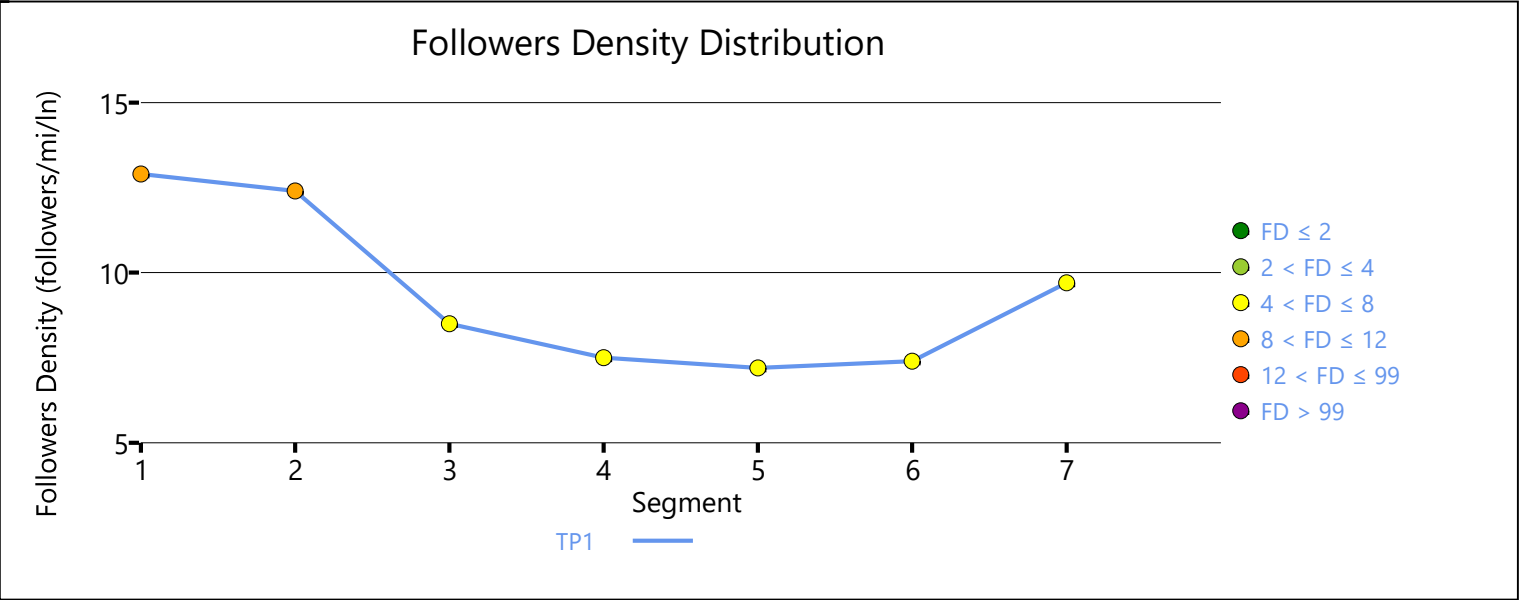
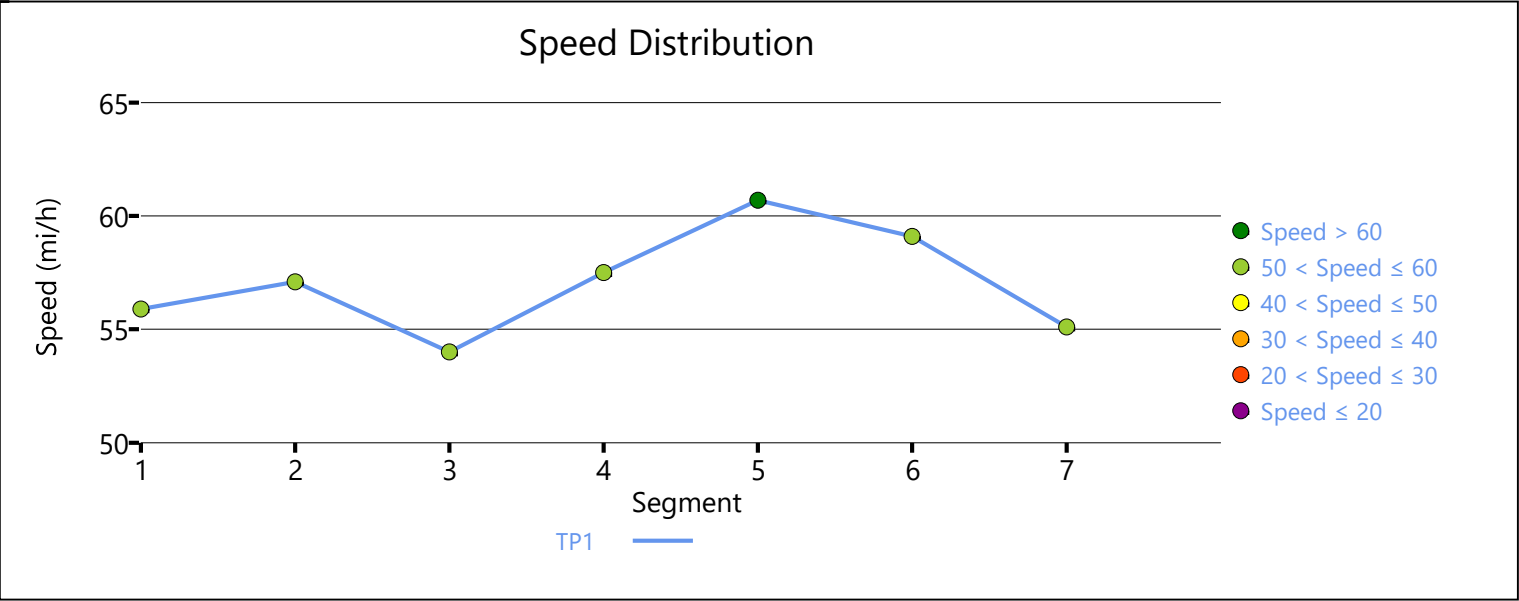
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1426	-	-	59.7

Vehicle Results

Average Speed, mi/h	60.7	Percent Followers, %	63.3
Segment Travel Time, minutes	0.27	Follower Density, followers/mi/ln	6.1
Vehicle LOS	C		

Segment 6					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		2165
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		4.9
Demand and Capacity					
Directional Demand Flow Rate, veh/h		683	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.87	Total Trucks, %		3.38
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.40
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.4
Speed Slope Coefficient		3.84901	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.34316	PF Power Coefficient		0.75248
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		7.4
%Improved % Followers		13.1	% Improved Avg Speed		1.5
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2165	-	-	58.3
Vehicle Results					
Average Speed, mi/h		59.1	Percent Followers, %		63.5
Segment Travel Time, minutes		0.42	Follower Density, followers/mi/ln		6.4
Vehicle LOS		C			
Segment 7					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		6653
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.8
Demand and Capacity					
Directional Demand Flow Rate, veh/h		718	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.96	Total Trucks, %		3.38
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.42
Intermediate Results					
Segment Vertical Class		4	Free-Flow Speed, mi/h		61.4
Speed Slope Coefficient		8.13180	Speed Power Coefficient		0.49363
PF Slope Coefficient		-1.73905	PF Power Coefficient		0.76208
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		9.7
%Improved % Followers		10.5	% Improved Avg Speed		0.3

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	6653	-	-	55.0
Vehicle Results					
Average Speed, mi/h		55.1	Percent Followers, %		74.1
Segment Travel Time, minutes		1.37	Follower Density, followers/mi/ln		8.6
Vehicle LOS		D			
Facility Results					
T	Follower Density, followers/mi/ln			LOS	
1	8.9			D	



HCS7 Two-Lane Highway Report

Project Information

Analyst		Date	3/7/2024
Agency		Analysis Year	2024
Jurisdiction		Time Analyzed	
Project Description	Reedsport north UGB to north Douglas County line	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	6705
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	6.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	585	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.84	Total Trucks, %	3.38
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.34

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.0
Speed Slope Coefficient	3.87739	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.28317	PF Power Coefficient	0.75968
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	739	-	-	58.1
2	Horizontal Curve	211	2078	0	58.1
3	Horizontal Curve	3326	2078	0	58.1
4	Horizontal Curve	475	2165	0	58.1
5	Horizontal Curve	317	2292	0	58.1
6	Tangent	845	-	-	58.1
7	Horizontal Curve	792	1348	2	58.1

Vehicle Results

Average Speed, mi/h	58.1	Percent Followers, %	57.4
Segment Travel Time, minutes	1.31	Follower Density, followers/mi/ln	5.8
Vehicle LOS	C		

Segment 2

Vehicle Inputs

Segment Type		Passing Constrained	Length, ft	1584	
Lane Width, ft		12	Shoulder Width, ft	6	
Speed Limit, mi/h		45	Access Point Density, pts/mi	0.0	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		435	Opposing Demand Flow Rate, veh/h	-	
Peak Hour Factor		0.84	Total Trucks, %	3.38	
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)	0.26	
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h	51.2	
Speed Slope Coefficient		3.28799	Speed Power Coefficient	0.41674	
PF Slope Coefficient		-1.45023	PF Power Coefficient	0.71942	
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln	4.9	
%Improved % Followers		0.0	% Improved Avg Speed	0.0	
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	1003	1348	2	49.1
2	Tangent	581	-	-	49.1
Vehicle Results					
Average Speed, mi/h		49.1	Percent Followers, %	54.9	
Segment Travel Time, minutes		0.37	Follower Density, followers/mi/ln	4.9	
Vehicle LOS		B			
Segment 3					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft	3982	
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		546	Opposing Demand Flow Rate, veh/h	-	
Peak Hour Factor		0.85	Total Trucks, %	3.38	
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)	0.32	
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h	39.8	
Speed Slope Coefficient		2.70311	Speed Power Coefficient	0.41674	
PF Slope Coefficient		-1.41129	PF Power Coefficient	0.69696	
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln	8.7	
%Improved % Followers		0.0	% Improved Avg Speed	0.0	
Subsegment Data					

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1267	-	-	37.9
2	Horizontal Curve	264	1910	2	37.8
3	Tangent	264	-	-	37.9
4	Horizontal Curve	370	573	2	37.9
5	Tangent	158	-	-	37.9
6	Horizontal Curve	528	955	2	37.9
7	Tangent	23	-	-	37.9
8	Horizontal Curve	686	1433	2	37.8
9	Tangent	422	-	-	37.9

Vehicle Results

Average Speed, mi/h	37.9	Percent Followers, %	60.4
Segment Travel Time, minutes	1.20	Follower Density, followers/mi/ln	8.7
Vehicle LOS	C		

Segment 4

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	3959
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	541	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.86	Total Trucks, %	3.38
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.32

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.6
Speed Slope Coefficient	3.93861	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.28863	PF Power Coefficient	0.76689
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	5.1
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1531	-	-	59.8
2	Horizontal Curve	950	955	2	52.9
3	Tangent	1478	-	-	59.8

Vehicle Results

Average Speed, mi/h	58.1	Percent Followers, %	55.3
Segment Travel Time, minutes	0.77	Follower Density, followers/mi/ln	5.1
Vehicle LOS	C		

Segment 5					
Vehicle Inputs					
Segment Type		Passing Lanes	Length, ft	4699	
Lane Width, ft		12	Shoulder Width, ft	6	
Speed Limit, mi/h		55	Access Point Density, pts/mi	3.8	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		406	Opposing Demand Flow Rate, veh/h	-	
Peak Hour Factor		0.87	Total Trucks, %	3.38	
Segment Capacity, veh/h		1500	Demand/Capacity (D/C)	0.27	
Intermediate Results					
Segment Vertical Class		5	Free-Flow Speed, mi/h	60.7	
Speed Slope Coefficient		6.49545	Speed Power Coefficient	1.02440	
PF Slope Coefficient		-1.02754	PF Power Coefficient	0.84240	
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln	2.7	
%Improved % Followers		0.0	% Improved Avg Speed	0.0	
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3854	-	-	58.8
2	Horizontal Curve	845	603	2	46.5
Passing Lane Results					
		Faster Lane		Slower Lane	
Flow Rate, veh/h		250		156	
Percentage of Heavy Vehicles (HV%), %		1.35		6.63	
Initial Average Speed (Sint), mi/h		60.6		59.3	
Average Speed at Midpoint (SPLmid), mi/h		62.2		57.7	
Percent Followers at Midpoint (PFPLmid), %		29.0		19.0	
Vehicle Results					
Average Speed, mi/h		56.6	Percent Followers, %	38.2	
Segment Travel Time, minutes		0.94	Follower Density, followers/mi/ln	2.7	
Vehicle LOS		B			
Segment 6					
Vehicle Inputs					
Segment Type		Passing Lanes	Length, ft	3114	
Lane Width, ft		12	Shoulder Width, ft	6	
Speed Limit, mi/h		55	Access Point Density, pts/mi	0.0	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		406	Opposing Demand Flow Rate, veh/h	-	

Peak Hour Factor	0.87	Total Trucks, %	3.38
Segment Capacity, veh/h	1500	Demand/Capacity (D/C)	0.27

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.6
Speed Slope Coefficient	5.33205	Speed Power Coefficient	0.79902
PF Slope Coefficient	-1.33848	PF Power Coefficient	0.79983
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	3.7
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	686	573	2	46.5
2	Horizontal Curve	1003	955	2	53.1
3	Tangent	950	-	-	60.5
4	Horizontal Curve	475	573	2	46.5

Passing Lane Results

	Faster Lane	Slower Lane
Flow Rate, veh/h	250	156
Percentage of Heavy Vehicles (HV%), %	1.35	6.63
Initial Average Speed (Sint), mi/h	61.5	61.9
Average Speed at Midpoint (SPLmid), mi/h	63.1	60.4
Percent Followers at Midpoint (PFPLmid), %	36.3	25.0

Vehicle Results

Average Speed, mi/h	52.9	Percent Followers, %	47.8
Segment Travel Time, minutes	0.67	Follower Density, followers/mi/ln	3.7
Vehicle LOS	B		

Segment 7

Vehicle Inputs

Segment Type	Passing Lanes	Length, ft	5333
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.1

Demand and Capacity

Directional Demand Flow Rate, veh/h	406	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	3.38
Segment Capacity, veh/h	1500	Demand/Capacity (D/C)	0.27

Intermediate Results

Segment Vertical Class	3	Free-Flow Speed, mi/h	61.9
Speed Slope Coefficient	6.03689	Speed Power Coefficient	1.10254
PF Slope Coefficient	-1.18244	PF Power Coefficient	0.86804

In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	3.2
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	686	573	2	46.5
2	Horizontal Curve	1637	955	2	53.1
3	Tangent	845	-	-	60.2
4	Horizontal Curve	1109	573	2	46.5
5	Tangent	1056	-	-	60.2

Passing Lane Results

	Faster Lane	Slower Lane
Flow Rate, veh/h	250	156
Percentage of Heavy Vehicles (HV%), %	1.35	6.63
Initial Average Speed (Sint), mi/h	61.5	61.0
Average Speed at Midpoint (SPLmid), mi/h	63.0	59.5
Percent Followers at Midpoint (PFPLmid), %	31.4	19.5

Vehicle Results

Average Speed, mi/h	53.4	Percent Followers, %	41.7
Segment Travel Time, minutes	1.13	Follower Density, followers/mi/ln	3.2
Vehicle LOS	B		

Segment 8

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	1795
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	406	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	3.38
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.24

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.6
Speed Slope Coefficient	3.90951	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34672	PF Power Coefficient	0.75047
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	3.5
%Improved % Followers	22.1	% Improved Avg Speed	2.4

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1056	-	-	60.2

2	Horizontal Curve	739	1146	2	53.1
Vehicle Results					
Average Speed, mi/h		58.7	Percent Followers, %		49.6
Segment Travel Time, minutes		0.35	Follower Density, followers/mi/ln		2.7
Vehicle LOS		B			
Segment 9					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		6494
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		2.6
Demand and Capacity					
Directional Demand Flow Rate, veh/h		406	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.87	Total Trucks, %		3.38
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.24
Intermediate Results					
Segment Vertical Class		4	Free-Flow Speed, mi/h		60.9
Speed Slope Coefficient		7.92454	Speed Power Coefficient		0.49515
PF Slope Coefficient		-1.73369	PF Power Coefficient		0.76091
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		4.3
%Improved % Followers		16.5	% Improved Avg Speed		1.4
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	1214	1146	2	53.1
2	Tangent	211	-	-	56.5
3	Horizontal Curve	845	955	2	53.1
4	Horizontal Curve	739	1273	2	56.5
5	Tangent	581	-	-	56.5
6	Horizontal Curve	2006	1432	2	56.5
7	Tangent	898	-	-	56.5
Vehicle Results					
Average Speed, mi/h		56.2	Percent Followers, %		58.2
Segment Travel Time, minutes		1.31	Follower Density, followers/mi/ln		3.5
Vehicle LOS		B			
Segment 10					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		3643
Lane Width, ft		12	Shoulder Width, ft		6

Speed Limit, mi/h		55	Access Point Density, pts/mi		4.7
Demand and Capacity					
Directional Demand Flow Rate, veh/h		406	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.87	Total Trucks, %		3.38
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.24
Intermediate Results					
Segment Vertical Class		2	Free-Flow Speed, mi/h		61.2
Speed Slope Coefficient		3.80007	Speed Power Coefficient		0.45281
PF Slope Coefficient		-1.36468	PF Power Coefficient		0.74323
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		3.7
%Improved % Followers		14.4	% Improved Avg Speed		0.9
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	581	-	-	59.0
2	Horizontal Curve	1214	674	2	46.5
3	Tangent	1848	-	-	59.0
Vehicle Results					
Average Speed, mi/h		55.3	Percent Followers, %		50.2
Segment Travel Time, minutes		0.75	Follower Density, followers/mi/ln		3.2
Vehicle LOS		B			
Segment 11					
Vehicle Inputs					
Segment Type		Passing Zone	Length, ft		1584
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		10.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		522	Opposing Demand Flow Rate, veh/h		543
Peak Hour Factor		0.83	Total Trucks, %		3.38
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.31
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		60.1
Speed Slope Coefficient		3.61053	Speed Power Coefficient		0.47652
PF Slope Coefficient		-1.34442	PF Power Coefficient		0.77064
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		5.0
%Improved % Followers		12.5	% Improved Avg Speed		0.1
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h

1	Tangent	1584	-	-	57.7
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Vehicle Results

Average Speed, mi/h	57.7	Percent Followers, %	55.7
Segment Travel Time, minutes	0.31	Follower Density, followers/mi/ln	4.4
Vehicle LOS	C		

Segment 12

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	5861
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	3.3

Demand and Capacity

Directional Demand Flow Rate, veh/h	522	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.83	Total Trucks, %	3.38
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.31

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.8
Speed Slope Coefficient	3.91321	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.27866	PF Power Coefficient	0.76445
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	4.9
%Improved % Followers	10.1	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	792	-	-	59.0
2	Horizontal Curve	1320	1432	2	59.0
3	Tangent	1056	-	-	59.0
4	Horizontal Curve	634	637	2	46.4
5	Tangent	1003	-	-	59.0
6	Horizontal Curve	422	1432	2	59.0
7	Tangent	634	-	-	59.0

Vehicle Results

Average Speed, mi/h	57.7	Percent Followers, %	54.0
Segment Travel Time, minutes	1.15	Follower Density, followers/mi/ln	4.4
Vehicle LOS	C		

Segment 13

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	1373
Lane Width, ft	12	Shoulder Width, ft	6

Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0		
Demand and Capacity					
Directional Demand Flow Rate, veh/h	522	Opposing Demand Flow Rate, veh/h	-		
Peak Hour Factor	0.83	Total Trucks, %	3.38		
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.31		
Intermediate Results					
Segment Vertical Class	3	Free-Flow Speed, mi/h	62.1		
Speed Slope Coefficient	4.93274	Speed Power Coefficient	0.55264		
PF Slope Coefficient	-1.46376	PF Power Coefficient	0.74280		
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	5.8		
%Improved % Followers	9.6	% Improved Avg Speed	0.0		
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	686	-	-	59.0
2	Horizontal Curve	581	573	2	46.4
3	Tangent	106	-	-	59.0
Vehicle Results					
Average Speed, mi/h	53.7	Percent Followers, %	59.5		
Segment Travel Time, minutes	0.29	Follower Density, followers/mi/ln	5.2		
Vehicle LOS	C				

Segment 14

Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft	1373	
Lane Width, ft		12	Shoulder Width, ft	6	
Speed Limit, mi/h		55	Access Point Density, pts/mi	0.0	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		522	Opposing Demand Flow Rate, veh/h	-	
Peak Hour Factor		0.83	Total Trucks, %	3.38	
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)	0.31	
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h	62.6	
Speed Slope Coefficient		3.90198	Speed Power Coefficient	0.41674	
PF Slope Coefficient		-1.36859	PF Power Coefficient	0.74322	
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln	5.2	
%Improved % Followers		9.2	% Improved Avg Speed	0.0	
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h

1	Horizontal Curve	581	819	2	53.0
2	Tangent	792	-	-	59.9

Vehicle Results

Average Speed, mi/h	56.9	Percent Followers, %	57.0
Segment Travel Time, minutes	0.27	Follower Density, followers/mi/ln	4.7
Vehicle LOS	C		

Segment 15

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	1267
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	522	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.83	Total Trucks, %	3.38
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.31

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	62.4
Speed Slope Coefficient	3.54910	Speed Power Coefficient	0.45095
PF Slope Coefficient	-1.47791	PF Power Coefficient	0.72616
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	5.3
%Improved % Followers	8.8	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	845	1273	2	59.1
2	Tangent	422	-	-	60.0

Vehicle Results

Average Speed, mi/h	59.4	Percent Followers, %	60.2
Segment Travel Time, minutes	0.24	Follower Density, followers/mi/ln	4.8
Vehicle LOS	C		

Segment 16

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	6706
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.9

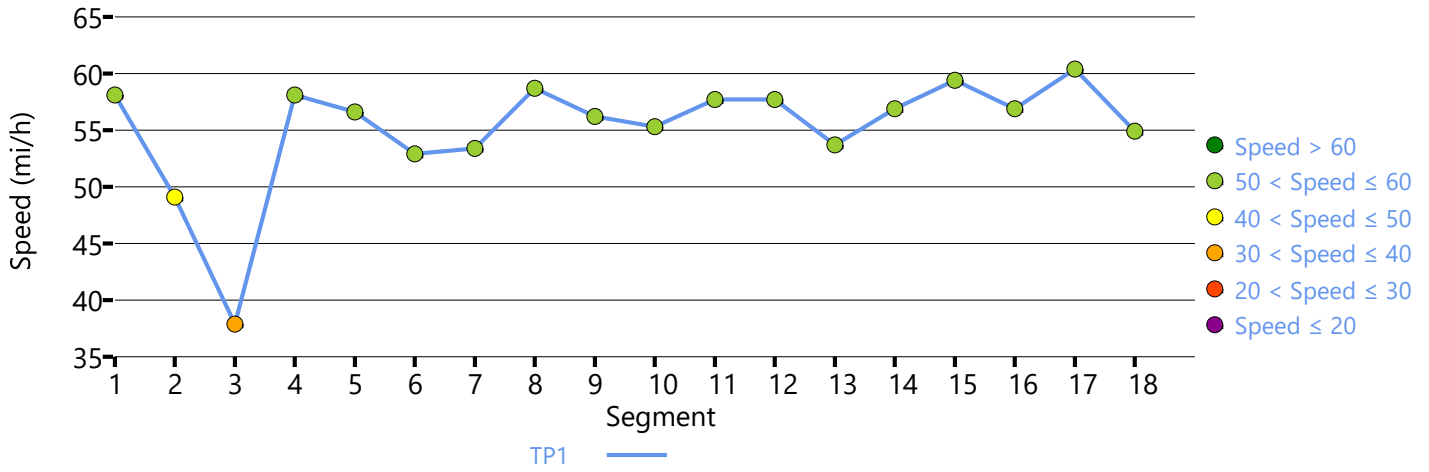
Demand and Capacity

Directional Demand Flow Rate, veh/h	522	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.83	Total Trucks, %	3.38

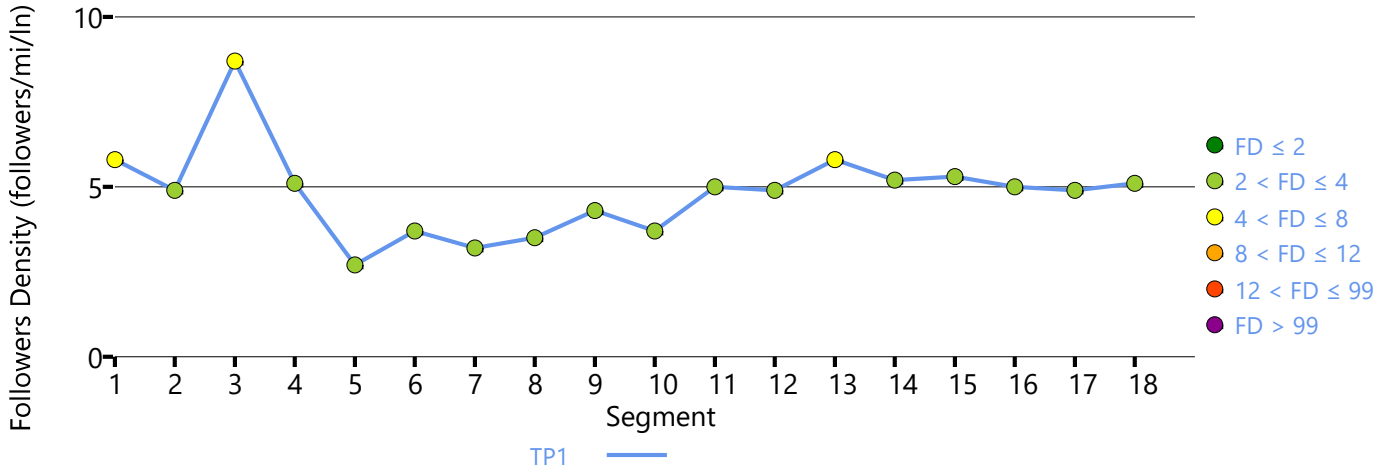
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.31
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.9
Speed Slope Coefficient		3.92618	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.27534	PF Power Coefficient		0.76203
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		5.0
%Improved % Followers		6.9	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	792	573	2	46.4
2	Tangent	158	-	-	59.1
3	Horizontal Curve	370	716	2	46.4
4	Tangent	1690	-	-	59.1
5	Horizontal Curve	528	7910	2	59.1
6	Tangent	845	-	-	59.1
7	Horizontal Curve	792	1432	2	59.1
8	Tangent	1531	-	-	59.1
Vehicle Results					
Average Speed, mi/h		56.9	Percent Followers, %		54.0
Segment Travel Time, minutes		1.34	Follower Density, followers/mi/ln		4.6
Vehicle LOS		C			
Segment 17					
Vehicle Inputs					
Segment Type		Passing Zone	Length, ft		1056
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		522	Opposing Demand Flow Rate, veh/h		543
Peak Hour Factor		0.83	Total Trucks, %		3.38
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.31
Intermediate Results					
Segment Vertical Class		2	Free-Flow Speed, mi/h		62.5
Speed Slope Coefficient		3.19306	Speed Power Coefficient		0.52207
PF Slope Coefficient		-1.37765	PF Power Coefficient		0.76130
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		4.9
%Improved % Followers		6.7	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h

1	Tangent	1056	-	-	60.4
Vehicle Results					
Average Speed, mi/h		60.4	Percent Followers, %		56.8
Segment Travel Time, minutes		0.20	Follower Density, followers/mi/ln		4.6
Vehicle LOS		C			
Segment 18					
Vehicle Inputs					
Segment Type		Passing Zone	Length, ft		7339
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		21.4
Demand and Capacity					
Directional Demand Flow Rate, veh/h		522	Opposing Demand Flow Rate, veh/h		543
Peak Hour Factor		0.83	Total Trucks, %		3.38
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.31
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		57.2
Speed Slope Coefficient		3.52102	Speed Power Coefficient		0.47652
PF Slope Coefficient		-1.27212	PF Power Coefficient		0.77706
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		5.1
%Improved % Followers		5.1	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	7339	-	-	54.9
Vehicle Results					
Average Speed, mi/h		54.9	Percent Followers, %		53.6
Segment Travel Time, minutes		1.52	Follower Density, followers/mi/ln		4.8
Vehicle LOS		C			
Facility Results					
T	Follower Density, followers/mi/ln			LOS	
1	4.5			C	

Speed Distribution



Followers Density Distribution



HCS7 Two-Lane Highway Report

Project Information

Analyst		Date	4/14/2024
Agency		Analysis Year	2024
Jurisdiction	ODOT	Time Analyzed	
Project Description	North Douglas County Line to Reedsport north UGB	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	2218
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	4.8

Demand and Capacity

Directional Demand Flow Rate, veh/h	543	Opposing Demand Flow Rate, veh/h	522
Peak Hour Factor	0.83	Total Trucks, %	3.38
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.32

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.4
Speed Slope Coefficient	3.68700	Speed Power Coefficient	0.47924
PF Slope Coefficient	-1.30699	PF Power Coefficient	0.78378
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	5.1
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2218	-	-	58.9

Vehicle Results

Average Speed, mi/h	58.9	Percent Followers, %	55.5
Segment Travel Time, minutes	0.43	Follower Density, followers/mi/ln	5.1
Vehicle LOS	C		

Segment 2

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	2112
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	543	Opposing Demand Flow Rate, veh/h	-
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Peak Hour Factor		0.83	Total Trucks, %		3.38
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.32
Intermediate Results					
Segment Vertical Class		2	Free-Flow Speed, mi/h		61.8
Speed Slope Coefficient		3.65060	Speed Power Coefficient		0.45026
PF Slope Coefficient		-1.42214	PF Power Coefficient		0.73464
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		5.5
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2112	-	-	59.3
Vehicle Results					
Average Speed, mi/h		59.3	Percent Followers, %		59.7
Segment Travel Time, minutes		0.41	Follower Density, followers/mi/ln		5.5
Vehicle LOS		C			
Segment 3					
Vehicle Inputs					
Segment Type		Passing Zone	Length, ft		2059
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		543	Opposing Demand Flow Rate, veh/h		522
Peak Hour Factor		0.83	Total Trucks, %		3.38
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.32
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.6
Speed Slope Coefficient		3.74906	Speed Power Coefficient		0.47924
PF Slope Coefficient		-1.30489	PF Power Coefficient		0.78479
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		5.0
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2059	-	-	60.0
Vehicle Results					
Average Speed, mi/h		60.0	Percent Followers, %		55.4
Segment Travel Time, minutes		0.39	Follower Density, followers/mi/ln		5.0
Vehicle LOS		C			

Segment 4					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		1320
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		543	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.83	Total Trucks, %		3.38
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.32
Intermediate Results					
Segment Vertical Class		2	Free-Flow Speed, mi/h		62.4
Speed Slope Coefficient		3.54910	Speed Power Coefficient		0.45095
PF Slope Coefficient		-1.47791	PF Power Coefficient		0.72616
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		5.6
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1320	-	-	60.0
Vehicle Results					
Average Speed, mi/h		60.0	Percent Followers, %		61.3
Segment Travel Time, minutes		0.25	Follower Density, followers/mi/ln		5.6
Vehicle LOS		C			
Segment 5					
Vehicle Inputs					
Segment Type		Passing Zone	Length, ft		1214
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		543	Opposing Demand Flow Rate, veh/h		522
Peak Hour Factor		0.83	Total Trucks, %		3.38
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.32
Intermediate Results					
Segment Vertical Class		3	Free-Flow Speed, mi/h		62.1
Speed Slope Coefficient		4.33200	Speed Power Coefficient		0.59211
PF Slope Coefficient		-1.36244	PF Power Coefficient		0.77431
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		5.3
%Improved % Followers		0.0	% Improved Avg Speed		0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	1214	1432	2	59.1
Vehicle Results					
Average Speed, mi/h		59.1	Percent Followers, %		57.2
Segment Travel Time, minutes		0.23	Follower Density, followers/mi/ln		5.3
Vehicle LOS		C			
Segment 6					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		10178
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		1.2
Demand and Capacity					
Directional Demand Flow Rate, veh/h		543	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.83	Total Trucks, %		3.38
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.32
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		62.3
Speed Slope Coefficient		3.97612	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.28257	PF Power Coefficient		0.74185
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		5.3
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	1795	1432	2	59.1
2	Tangent	845	-	-	59.5
3	Horizontal Curve	528	1910	2	59.1
4	Tangent	1690	-	-	59.5
5	Horizontal Curve	370	716	2	46.4
6	Tangent	1518	-	-	59.5
7	Horizontal Curve	792	573	2	46.4
8	Tangent	422	-	-	59.5
9	Horizontal Curve	845	1273	2	59.1
10	Tangent	792	-	-	59.5
11	Horizontal Curve	581	819	2	52.9
Vehicle Results					
Average Speed, mi/h		57.5	Percent Followers, %		55.8
Segment Travel Time, minutes		2.01	Follower Density, followers/mi/ln		5.3

Vehicle LOS		C			
Segment 7					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		2007
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		2.6
Demand and Capacity					
Directional Demand Flow Rate, veh/h		543	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.83	Total Trucks, %		3.38
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.32
Intermediate Results					
Segment Vertical Class		3	Free-Flow Speed, mi/h		61.4
Speed Slope Coefficient		5.24772	Speed Power Coefficient		0.55345
PF Slope Coefficient		-1.41711	PF Power Coefficient		0.74586
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		5.9
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	106	-	-	58.1
2	Horizontal Curve	581	573	2	46.4
3	Tangent	1320	-	-	58.1
Vehicle Results					
Average Speed, mi/h		54.7	Percent Followers, %		59.3
Segment Travel Time, minutes		0.42	Follower Density, followers/mi/ln		5.9
Vehicle LOS		C			

Segment 8				
Vehicle Inputs				
Segment Type		Passing Constrained	Length, ft	5227
Lane Width, ft		12	Shoulder Width, ft	6
Speed Limit, mi/h		55	Access Point Density, pts/mi	3.0
Demand and Capacity				
Directional Demand Flow Rate, veh/h		543	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor		0.83	Total Trucks, %	3.38
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)	0.32
Intermediate Results				
Segment Vertical Class		1	Free-Flow Speed, mi/h	61.8
Speed Slope Coefficient		3.91084	Speed Power Coefficient	0.41674

PF Slope Coefficient		-1.28177	PF Power Coefficient		0.76574
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		5.2
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	422	1432	2	59.0
2	Tangent	1003	-	-	59.0
3	Horizontal Curve	634	637	2	46.4
4	Tangent	1056	-	-	59.0
5	Horizontal Curve	1320	1432	2	59.0
6	Tangent	792	-	-	59.0
Vehicle Results					
Average Speed, mi/h		57.5	Percent Followers, %		55.2
Segment Travel Time, minutes		1.03	Follower Density, followers/mi/ln		5.2
Vehicle LOS		C			
Segment 9					
Vehicle Inputs					
Segment Type		Passing Zone	Length, ft		2587
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		4.1
Demand and Capacity					
Directional Demand Flow Rate, veh/h		543	Opposing Demand Flow Rate, veh/h		522
Peak Hour Factor		0.83	Total Trucks, %		3.38
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.32
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.6
Speed Slope Coefficient		3.70127	Speed Power Coefficient		0.47924
PF Slope Coefficient		-1.29420	PF Power Coefficient		0.78796
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		5.1
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2587	-	-	59.1
Vehicle Results					
Average Speed, mi/h		59.1	Percent Followers, %		55.1
Segment Travel Time, minutes		0.50	Follower Density, followers/mi/ln		5.1
Vehicle LOS		C			

Segment 10					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		2745
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		3.8
Demand and Capacity					
Directional Demand Flow Rate, veh/h		501	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.87	Total Trucks, %		3.38
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.29
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.6
Speed Slope Coefficient		3.87222	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.32214	PF Power Coefficient		0.75861
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		5.1
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	845	-	-	59.0
2	Horizontal Curve	1214	674	2	46.4
3	Tangent	686	-	-	59.0
Vehicle Results					
Average Speed, mi/h		53.4	Percent Followers, %		54.3
Segment Travel Time, minutes		0.58	Follower Density, followers/mi/ln		5.1
Vehicle LOS		C			

Segment 11			
Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	7128
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.5
Demand and Capacity			
Directional Demand Flow Rate, veh/h	501	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	3.38
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.29
Intermediate Results			
Segment Vertical Class	4	Free-Flow Speed, mi/h	61.2
Speed Slope Coefficient	8.21687	Speed Power Coefficient	0.48095
PF Slope Coefficient	-1.76051	PF Power Coefficient	0.76348

In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	5.9
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	792	-	-	55.9
2	Horizontal Curve	2006	1432	2	55.9
3	Tangent	581	-	-	55.9
4	Horizontal Curve	739	1273	2	55.9
5	Horizontal Curve	845	955	2	53.0
6	Tangent	211	-	-	55.9
7	Horizontal Curve	1954	1146	2	53.0

Vehicle Results			
Average Speed, mi/h	54.8	Percent Followers, %	64.6
Segment Travel Time, minutes	1.48	Follower Density, followers/mi/ln	5.9
Vehicle LOS	C		

Segment 12

Vehicle Inputs			
Segment Type	Passing Lanes	Length, ft	4066
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	501	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	3.38
Segment Capacity, veh/h	1500	Demand/Capacity (D/C)	0.33

Intermediate Results			
Segment Vertical Class	3	Free-Flow Speed, mi/h	62.1
Speed Slope Coefficient	6.06929	Speed Power Coefficient	0.95478
PF Slope Coefficient	-1.23159	PF Power Coefficient	0.83917
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	4.5
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2112	-	-	59.6
2	Horizontal Curve	1109	573	2	46.4
3	Tangent	845	-	-	59.6

Passing Lane Results		
	Faster Lane	Slower Lane
Flow Rate, veh/h	303	198

Percentage of Heavy Vehicles (HV%), %	1.35	6.48
Initial Average Speed (Sint), mi/h	61.2	60.9
Average Speed at Midpoint (SPLmid), mi/h	62.8	59.3
Percent Followers at Midpoint (PFPLmid), %	38.3	25.3

Vehicle Results

Average Speed, mi/h	56.0	Percent Followers, %	49.8
Segment Travel Time, minutes	0.83	Follower Density, followers/mi/ln	4.5
Vehicle LOS	C		

Segment 13

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	4752
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.1

Demand and Capacity

Directional Demand Flow Rate, veh/h	501	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	3.38
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.29

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.3
Speed Slope Coefficient	3.93223	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.28149	PF Power Coefficient	0.76720
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	5.2
%Improved % Followers	20.0	% Improved Avg Speed	3.2

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	1637	955	2	53.0
2	Horizontal Curve	1162	573	2	46.4
3	Tangent	950	-	-	59.6
4	Horizontal Curve	1003	573	2	46.4

Vehicle Results

Average Speed, mi/h	53.0	Percent Followers, %	53.0
Segment Travel Time, minutes	1.02	Follower Density, followers/mi/ln	4.0
Vehicle LOS	C		

Segment 14

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	6864
Lane Width, ft	12	Shoulder Width, ft	6

Speed Limit, mi/h	55	Access Point Density, pts/mi	1.5		
Demand and Capacity					
Directional Demand Flow Rate, veh/h	563	Opposing Demand Flow Rate, veh/h	-		
Peak Hour Factor	0.86	Total Trucks, %	3.38		
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.33		
Intermediate Results					
Segment Vertical Class	5	Free-Flow Speed, mi/h	60.6		
Speed Slope Coefficient	11.38807	Speed Power Coefficient	0.41464		
PF Slope Coefficient	-1.98051	PF Power Coefficient	0.82815		
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	7.8		
%Improved % Followers	14.4	% Improved Avg Speed	1.8		
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	1531	603	2	46.4
2	Tangent	5333	-	-	52.3
Vehicle Results					
Average Speed, mi/h	51.9	Percent Followers, %	70.8		
Segment Travel Time, minutes	1.50	Follower Density, followers/mi/ln	6.6		
Vehicle LOS	C				

Segment 15

Vehicle Inputs					
Segment Type		Passing Constrained		Length, ft	
Lane Width, ft		12		Shoulder Width, ft	
Speed Limit, mi/h		55		Access Point Density, pts/mi	
2481					
6					
6.4					
Demand and Capacity					
Directional Demand Flow Rate, veh/h		563		Opposing Demand Flow Rate, veh/h	
Peak Hour Factor		0.86		Total Trucks, %	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)	
0.33					
Intermediate Results					
Segment Vertical Class		1		Free-Flow Speed, mi/h	
Speed Slope Coefficient		3.83333		Speed Power Coefficient	
PF Slope Coefficient		-1.33581		PF Power Coefficient	
In Passing Lane Effective Length?		Yes		Total Segment Density, veh/mi/ln	
%Improved % Followers		13.1		% Improved Avg Speed	
1.5					
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	950	955	2	52.9

2	Tangent	1531	-	-	58.2
Vehicle Results					
Average Speed, mi/h		57.0	Percent Followers, %		57.9
Segment Travel Time, minutes		0.49	Follower Density, followers/mi/ln		5.0
Vehicle LOS		C			
Segment 16					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		3590
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		35	Access Point Density, pts/mi		10.3
Demand and Capacity					
Directional Demand Flow Rate, veh/h		568	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.85	Total Trucks, %		3.38
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.33
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		37.2
Speed Slope Coefficient		2.55903	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.41640	PF Power Coefficient		0.68514
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		9.9
%Improved % Followers		11.5	% Improved Avg Speed		0.9
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	422	-	-	35.3
2	Horizontal Curve	264	1433	2	35.3
3	Tangent	53	-	-	35.3
4	Horizontal Curve	528	955	2	35.3
5	Tangent	158	-	-	35.3
6	Horizontal Curve	370	573	2	35.3
7	Tangent	264	-	-	35.3
8	Horizontal Curve	264	1910	2	35.3
9	Tangent	1267	-	-	35.3
Vehicle Results					
Average Speed, mi/h		35.7	Percent Followers, %		61.8
Segment Travel Time, minutes		1.14	Follower Density, followers/mi/ln		8.7
Vehicle LOS		C			
Segment 17					
Vehicle Inputs					

Segment Type		Passing Constrained	Length, ft	1003	
Lane Width, ft		12	Shoulder Width, ft	6	
Speed Limit, mi/h		45	Access Point Density, pts/mi	0.0	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		568	Opposing Demand Flow Rate, veh/h	-	
Peak Hour Factor		0.85	Total Trucks, %	3.38	
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)	0.33	
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h	51.2	
Speed Slope Coefficient		3.28308	Speed Power Coefficient	0.41674	
PF Slope Coefficient		-1.46651	PF Power Coefficient	0.71504	
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln	7.3	
%Improved % Followers		11.1	% Improved Avg Speed	0.8	
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	581	-	-	48.8
2	Horizontal Curve	422	1348	2	48.8
Vehicle Results					
Average Speed, mi/h		49.2	Percent Followers, %	62.4	
Segment Travel Time, minutes		0.23	Follower Density, followers/mi/ln	6.4	
Vehicle LOS		C			
Segment 18					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft	5702	
Lane Width, ft		12	Shoulder Width, ft	6	
Speed Limit, mi/h		55	Access Point Density, pts/mi	5.6	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		608	Opposing Demand Flow Rate, veh/h	-	
Peak Hour Factor		0.84	Total Trucks, %	3.38	
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)	0.36	
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h	61.2	
Speed Slope Coefficient		3.88056	Speed Power Coefficient	0.41674	
PF Slope Coefficient		-1.28446	PF Power Coefficient	0.76332	
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln	6.1	
%Improved % Followers		8.7	% Improved Avg Speed	0.0	
Subsegment Data					

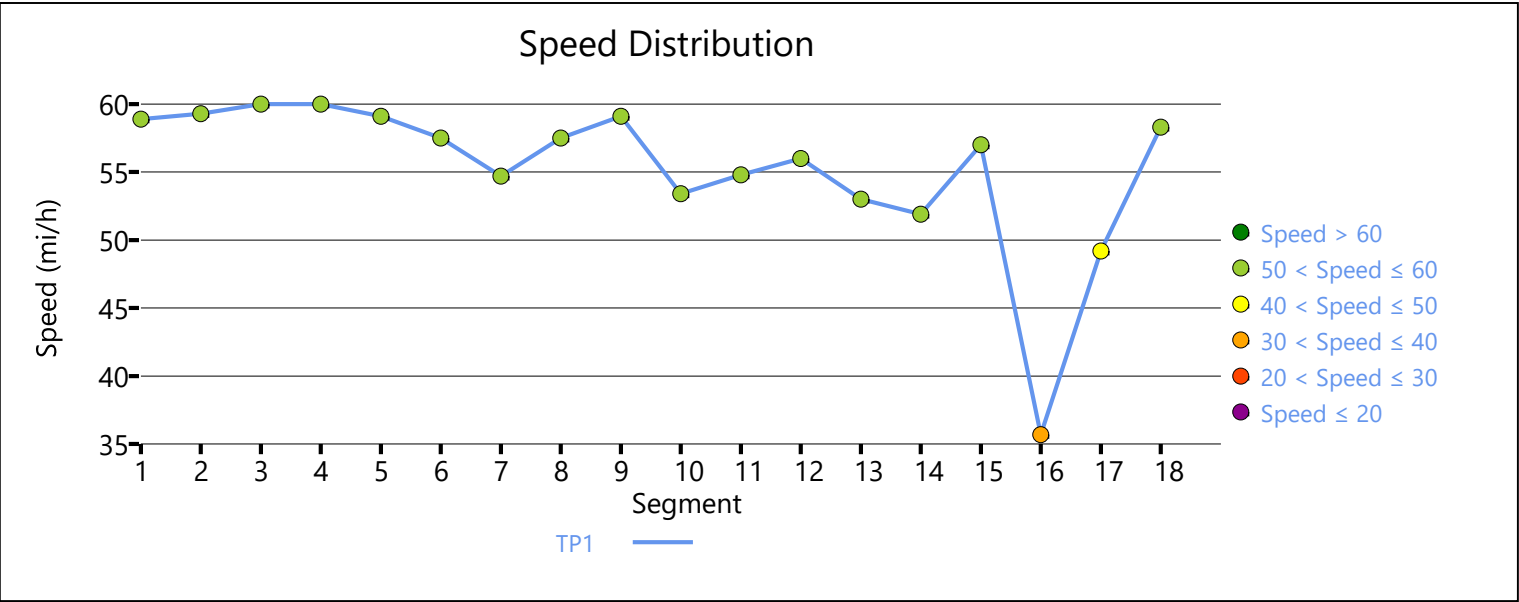
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	792	1348	2	58.3
2	Tangent	53	-	-	58.3
3	Horizontal Curve	317	2292	0	58.3
4	Horizontal Curve	475	2165	0	58.3
5	Horizontal Curve	3326	2078	0	58.3
6	Horizontal Curve	211	2078	0	58.3
7	Tangent	528	-	-	58.3

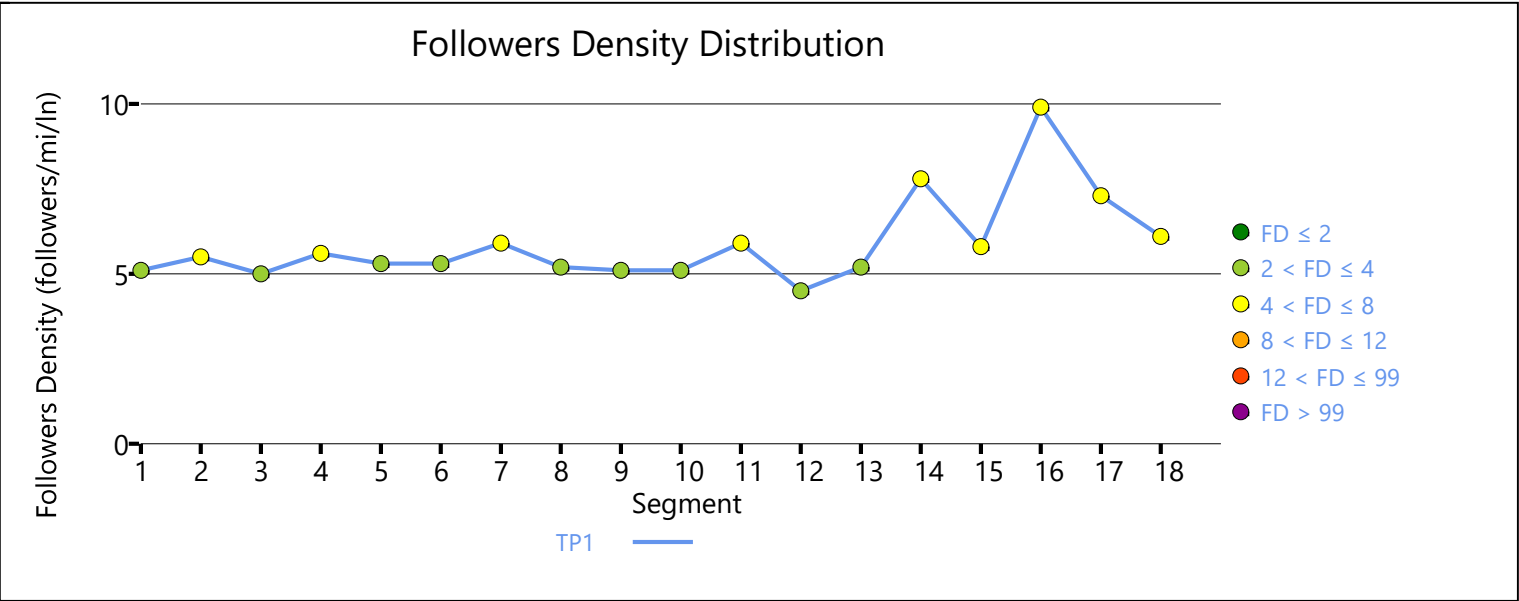
Vehicle Results

Average Speed, mi/h	58.3	Percent Followers, %	58.5
Segment Travel Time, minutes	1.11	Follower Density, followers/mi/ln	5.6
Vehicle LOS	C		

Facility Results

T	Follower Density, followers/mi/ln	LOS
1	5.5	C





HCS7 Two-Lane Highway Report

Project Information

Analyst	RXO	Date	3/7/2024
Agency	ODOT	Analysis Year	2024
Jurisdiction		Time Analyzed	
Project Description	OR 42 - OR 42 Couplet to OR 542 (WB)	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	2957
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	3.6

Demand and Capacity

Directional Demand Flow Rate, veh/h	316	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.77	Total Trucks, %	27.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.19

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	60.9
Speed Slope Coefficient	3.83511	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.32046	PF Power Coefficient	0.76174
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.5
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	792	955	2	52.6
2	Tangent	422	-	-	58.9
3	Horizontal Curve	634	955	2	52.6
4	Tangent	211	-	-	58.9
5	Horizontal Curve	898	955	2	52.6

Vehicle Results

Average Speed, mi/h	54.0	Percent Followers, %	42.2
Segment Travel Time, minutes	0.62	Follower Density, followers/mi/ln	2.5
Vehicle LOS	B		

Segment 2

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	15682
Lane Width, ft	12	Shoulder Width, ft	6

Speed Limit, mi/h		55	Access Point Density, pts/mi		0.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		316	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.77	Total Trucks, %		27.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.19
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.8
Speed Slope Coefficient		3.98422	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.34509	PF Power Coefficient		0.69090
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		2.5
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	686	-	-	59.7
2	Tangent	158	-	-	59.7
3	Horizontal Curve	686	955	2	52.6
4	Tangent	106	-	-	59.7
5	Horizontal Curve	845	1146	2	52.6
6	Tangent	106	-	-	59.7
7	Horizontal Curve	634	955	2	52.6
8	Tangent	158	-	-	59.7
9	Horizontal Curve	739	1146	2	52.6
10	Tangent	634	-	-	59.7
11	Horizontal Curve	1690	2292	2	59.7
12	Tangent	792	-	-	59.7
13	Horizontal Curve	158	318	2	39.3
14	Tangent	106	-	-	59.7
15	Horizontal Curve	686	751	2	52.6
16	Tangent	317	-	-	59.7
17	Horizontal Curve	422	1658	9	59.7
18	Tangent	53	-	-	59.7
19	Horizontal Curve	422	1186	10	59.0
20	Horizontal Curve	422	2139	9	59.7
21	Tangent	845	-	-	59.7
22	Horizontal Curve	370	1430	10	59.7
23	Tangent	1162	-	-	59.7
24	Horizontal Curve	264	716	2	46.0
25	Tangent	264	-	-	59.7
26	Horizontal Curve	317	523	2	46.0
27	Tangent	106	-	-	59.7

28	Horizontal Curve	528	462	2	46.0
29	Horizontal Curve	264	286	10	32.5
30	Horizontal Curve	528	1614	8	59.7
31	Tangent	1214	-	-	59.7

Vehicle Results

Average Speed, mi/h	56.4	Percent Followers, %	45.5
Segment Travel Time, minutes	3.16	Follower Density, followers/mi/ln	2.5
Vehicle LOS	B		

Segment 3

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	2165
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	316	Opposing Demand Flow Rate, veh/h	201
Peak Hour Factor	0.77	Total Trucks, %	27.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.19

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.8
Speed Slope Coefficient	3.61837	Speed Power Coefficient	0.53888
PF Slope Coefficient	-1.25305	PF Power Coefficient	0.80472
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.1
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1954	-	-	60.2
2	Horizontal Curve	211	955	2	52.6

Vehicle Results

Average Speed, mi/h	59.5	Percent Followers, %	39.1
Segment Travel Time, minutes	0.41	Follower Density, followers/mi/ln	2.1
Vehicle LOS	B		

Segment 4

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	2218
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	316	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.77	Total Trucks, %	27.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.19

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	61.8
Speed Slope Coefficient	3.87357	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.33428	PF Power Coefficient	0.75751
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.7
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	317	-	-	59.8
2	Horizontal Curve	158	716	2	46.0
3	Tangent	106	-	-	59.8
4	Horizontal Curve	264	477	2	46.0
5	Horizontal Curve	317	477	2	46.0
6	Tangent	211	-	-	59.8
7	Horizontal Curve	845	716	2	46.0

Vehicle Results			
Average Speed, mi/h	49.9	Percent Followers, %	42.7
Segment Travel Time, minutes	0.50	Follower Density, followers/mi/ln	2.7
Vehicle LOS	B		

Segment 5

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2112
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	5.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	316	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.77	Total Trucks, %	27.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.19

Intermediate Results			
Segment Vertical Class	2	Free-Flow Speed, mi/h	59.1
Speed Slope Coefficient	5.07678	Speed Power Coefficient	0.46382
PF Slope Coefficient	-1.42220	PF Power Coefficient	0.74416
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.8
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	158	716	2	46.0
2	Tangent	898	-	-	56.6
3	Horizontal Curve	1056	573	2	46.0

Vehicle Results

Average Speed, mi/h	50.5	Percent Followers, %	45.3
Segment Travel Time, minutes	0.48	Follower Density, followers/mi/ln	2.8
Vehicle LOS	B		

Segment 6

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	10347
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.6

Demand and Capacity

Directional Demand Flow Rate, veh/h	309	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	27.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.18

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.2
Speed Slope Coefficient	3.91570	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.29101	PF Power Coefficient	0.74101
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.4
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	422	-	-	59.1
2	Horizontal Curve	581	395	2	39.3
3	Tangent	1531	-	-	59.1
4	Horizontal Curve	211	1910	2	59.0
5	Tangent	475	-	-	59.1
6	Horizontal Curve	950	637	2	46.0
7	Tangent	422	-	-	59.1
8	Horizontal Curve	264	473	2	46.0
9	Tangent	475	-	-	59.1
10	Horizontal Curve	264	318	2	39.3
11	Tangent	211	-	-	59.1
12	Horizontal Curve	475	477	2	46.0
13	Tangent	211	-	-	59.1
14	Horizontal Curve	422	955	2	52.6

15	Tangent	792	-	-	59.1
16	Horizontal Curve	264	409	2	39.3
17	Horizontal Curve	317	573	2	46.0
18	Tangent	317	-	-	59.1
19	Horizontal Curve	317	955	2	52.6
20	Tangent	106	-	-	59.1
21	Horizontal Curve	264	409	2	39.3
22	Tangent	317	-	-	59.1
23	Horizontal Curve	422	881	2	52.6
24	Tangent	53	-	-	59.1
25	Horizontal Curve	264	1146	2	52.6

Vehicle Results

Average Speed, mi/h	53.0	Percent Followers, %	41.8
Segment Travel Time, minutes	2.22	Follower Density, followers/mi/ln	2.4
Vehicle LOS	B		

Segment 7

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	15629
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.7

Demand and Capacity

Directional Demand Flow Rate, veh/h	309	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	27.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.18

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.4
Speed Slope Coefficient	3.96088	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34824	PF Power Coefficient	0.69047
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.4
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	2270	1146	2	52.6
2	Tangent	53	-	-	59.3
3	Horizontal Curve	317	1910	2	59.0
4	Tangent	7867	-	-	59.3
5	Horizontal Curve	634	1910	2	59.0
6	Tangent	158	-	-	59.3
7	Horizontal Curve	1162	716	2	46.0

8	Horizontal Curve	686	955	2	52.6
9	Tangent	53	-	-	59.3
10	Horizontal Curve	1003	1273	2	59.0
11	Tangent	53	-	-	59.3
12	Horizontal Curve	1003	1273	2	59.0
13	Tangent	370	-	-	59.3

Vehicle Results

Average Speed, mi/h	57.0	Percent Followers, %	45.1
Segment Travel Time, minutes	3.12	Follower Density, followers/mi/ln	2.4
Vehicle LOS	B		

Segment 8

Vehicle Inputs

Segment Type	Passing Lanes	Length, ft	2640
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	4.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	309	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	27.00
Segment Capacity, veh/h	1100	Demand/Capacity (D/C)	0.28

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	60.8
Speed Slope Coefficient	8.09721	Speed Power Coefficient	0.87198
PF Slope Coefficient	-1.30268	PF Power Coefficient	0.75280
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.2
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2640	-	-	58.7

Passing Lane Results

	Faster Lane	Slower Lane
Flow Rate, veh/h	188	121
Percentage of Heavy Vehicles (HV%), %	10.80	52.21
Initial Average Speed (Sint), mi/h	60.5	59.7
Average Speed at Midpoint (SPLmid), mi/h	62.5	57.7
Percent Followers at Midpoint (PFPLmid), %	30.6	19.3

Vehicle Results

Average Speed, mi/h	58.7	Percent Followers, %	41.6
Segment Travel Time, minutes	0.51	Follower Density, followers/mi/ln	2.2

Vehicle LOS		B			
Segment 9					
Vehicle Inputs					
Segment Type		Passing Zone		Length, ft	
Lane Width, ft		12		Shoulder Width, ft	
Speed Limit, mi/h		55		Access Point Density, pts/mi	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		309		Opposing Demand Flow Rate, veh/h	
Peak Hour Factor		0.87		Total Trucks, %	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)	
Intermediate Results					
Segment Vertical Class		1		Free-Flow Speed, mi/h	
Speed Slope Coefficient		3.56055		Speed Power Coefficient	
PF Slope Coefficient		-1.25117		PF Power Coefficient	
In Passing Lane Effective Length?		Yes		Total Segment Density, veh/mi/ln	
%Improved % Followers		23.4		% Improved Avg Speed	
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	211	-	-	59.2
2	Horizontal Curve	1214	1910	2	59.0
3	Tangent	739	-	-	59.2
4	Horizontal Curve	211	1910	2	59.0
Vehicle Results					
Average Speed, mi/h		60.6		Percent Followers, %	
Segment Travel Time, minutes		0.45		Follower Density, followers/mi/ln	
Vehicle LOS		A			
Segment 10					
Vehicle Inputs					
Segment Type		Passing Constrained		Length, ft	
Lane Width, ft		12		Shoulder Width, ft	
Speed Limit, mi/h		55		Access Point Density, pts/mi	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		309		Opposing Demand Flow Rate, veh/h	
Peak Hour Factor		0.87		Total Trucks, %	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)	
Intermediate Results					
Segment Vertical Class		1		Free-Flow Speed, mi/h	

Speed Slope Coefficient	3.91431	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.27607	PF Power Coefficient	0.76827
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	2.2
%Improved % Followers	16.8	% Improved Avg Speed	1.7

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	370	1910	2	59.0
2	Horizontal Curve	370	716	2	46.0
3	Horizontal Curve	422	716	2	46.0
4	Tangent	475	-	-	59.8
5	Tangent	264	-	-	59.8
6	Horizontal Curve	528	1910	2	59.0
7	Horizontal Curve	581	1910	2	59.0
8	Tangent	739	-	-	59.8
9	Horizontal Curve	1214	1910	2	59.0
10	Tangent	53	-	-	59.8
11	Horizontal Curve	739	1146	2	52.6

Vehicle Results

Average Speed, mi/h	57.5	Percent Followers, %	40.4
Segment Travel Time, minutes	1.14	Follower Density, followers/mi/ln	1.8
Vehicle LOS	A		

Segment 11

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	1531
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	309	Opposing Demand Flow Rate, veh/h	0
Peak Hour Factor	0.87	Total Trucks, %	27.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.18

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.8
Speed Slope Coefficient	3.46082	Speed Power Coefficient	0.67576
PF Slope Coefficient	-1.15398	PF Power Coefficient	0.82710
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	1.9
%Improved % Followers	15.6	% Improved Avg Speed	1.5

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
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1	Horizontal Curve	422	1146	2	52.6
2	Tangent	1109	-	-	60.6

Vehicle Results

Average Speed, mi/h	59.3	Percent Followers, %	35.4
Segment Travel Time, minutes	0.29	Follower Density, followers/mi/ln	1.6
Vehicle LOS	A		

Segment 12

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	9451
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.8

Demand and Capacity

Directional Demand Flow Rate, veh/h	399	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.83	Total Trucks, %	27.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.23

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.1
Speed Slope Coefficient	3.90661	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.28569	PF Power Coefficient	0.74775
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	3.3
%Improved % Followers	9.7	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1637	-	-	58.7
2	Horizontal Curve	1848	1273	2	58.7
3	Tangent	2006	-	-	58.7
4	Horizontal Curve	1848	1910	2	58.7
5	Tangent	211	-	-	58.7
6	Horizontal Curve	1373	1146	2	52.5
7	Tangent	211	-	-	58.7
8	Horizontal Curve	317	1910	2	58.7

Vehicle Results

Average Speed, mi/h	57.8	Percent Followers, %	47.6
Segment Travel Time, minutes	1.86	Follower Density, followers/mi/ln	3.0
Vehicle LOS	B		

Segment 13

Vehicle Inputs

Segment Type		Passing Zone	Length, ft	2165	
Lane Width, ft		12	Shoulder Width, ft	6	
Speed Limit, mi/h		55	Access Point Density, pts/mi	4.9	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		399	Opposing Demand Flow Rate, veh/h	255	
Peak Hour Factor		0.83	Total Trucks, %	27.00	
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)	0.23	
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h	60.6	
Speed Slope Coefficient		3.57057	Speed Power Coefficient	0.52503	
PF Slope Coefficient		-1.27193	PF Power Coefficient	0.79783	
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln	3.1	
%Improved % Followers		8.9	% Improved Avg Speed	0.0	
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	475	1910	2	58.7
2	Tangent	1690	-	-	58.7
Vehicle Results					
Average Speed, mi/h		58.7	Percent Followers, %	45.7	
Segment Travel Time, minutes		0.42	Follower Density, followers/mi/ln	2.8	
Vehicle LOS		B			
Segment 14					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft	2798	
Lane Width, ft		12	Shoulder Width, ft	6	
Speed Limit, mi/h		55	Access Point Density, pts/mi	2.8	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		399	Opposing Demand Flow Rate, veh/h	-	
Peak Hour Factor		0.83	Total Trucks, %	27.00	
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)	0.23	
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h	61.1	
Speed Slope Coefficient		3.84385	Speed Power Coefficient	0.41674	
PF Slope Coefficient		-1.32275	PF Power Coefficient	0.76113	
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln	3.6	
%Improved % Followers		7.9	% Improved Avg Speed	0.0	
Subsegment Data					

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	475	-	-	58.8
2	Horizontal Curve	264	1146	2	52.5
3	Horizontal Curve	1003	1146	2	52.5
4	Tangent	158	-	-	58.8
5	Horizontal Curve	898	1146	2	52.5

Vehicle Results

Average Speed, mi/h	53.9	Percent Followers, %	48.2
Segment Travel Time, minutes	0.59	Follower Density, followers/mi/ln	3.3
Vehicle LOS	B		

Segment 15

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	3696
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	399	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.83	Total Trucks, %	27.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.23

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	59.9
Speed Slope Coefficient	5.46438	Speed Power Coefficient	0.47450
PF Slope Coefficient	-1.35193	PF Power Coefficient	0.75636
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	3.4
%Improved % Followers	6.8	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3696	-	-	56.8

Vehicle Results

Average Speed, mi/h	56.8	Percent Followers, %	49.1
Segment Travel Time, minutes	0.74	Follower Density, followers/mi/ln	3.2
Vehicle LOS	B		

Segment 16

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	1636
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	3.2

Demand and Capacity					
Directional Demand Flow Rate, veh/h		399	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.83	Total Trucks, %		27.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.23
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.0
Speed Slope Coefficient		3.82080	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.36651	PF Power Coefficient		0.74781
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		4.1
%Improved % Followers		6.3	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	211	-	-	58.7
2	Horizontal Curve	739	573	2	45.9
3	Tangent	158	-	-	58.7
4	Horizontal Curve	528	573	2	45.9
Vehicle Results					
Average Speed, mi/h		48.8	Percent Followers, %		49.7
Segment Travel Time, minutes		0.38	Follower Density, followers/mi/ln		3.8
Vehicle LOS		B			
Segment 17					
Vehicle Inputs					
Segment Type		Passing Zone	Length, ft		845
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		2.1
Demand and Capacity					
Directional Demand Flow Rate, veh/h		399	Opposing Demand Flow Rate, veh/h		255
Peak Hour Factor		0.83	Total Trucks, %		27.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.23
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.3
Speed Slope Coefficient		3.59407	Speed Power Coefficient		0.52503
PF Slope Coefficient		-1.30607	PF Power Coefficient		0.78538
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln		3.4
%Improved % Followers		6.1	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h

1	Horizontal Curve	264	573	2	45.9
2	Tangent	581	-	-	59.4

Vehicle Results

Average Speed, mi/h	55.2	Percent Followers, %	47.0
Segment Travel Time, minutes	0.17	Follower Density, followers/mi/ln	3.2
Vehicle LOS	B		

Segment 18

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	5175
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	399	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.83	Total Trucks, %	27.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.23

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.4
Speed Slope Coefficient	3.88843	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.28296	PF Power Coefficient	0.76821
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	3.3
%Improved % Followers	4.8	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1901	-	-	59.1
2	Horizontal Curve	898	1910	2	58.7
3	Horizontal Curve	686	1910	2	58.7
4	Tangent	370	-	-	59.1
5	Horizontal Curve	1320	1146	2	52.5

Vehicle Results

Average Speed, mi/h	57.3	Percent Followers, %	46.9
Segment Travel Time, minutes	1.03	Follower Density, followers/mi/ln	3.1
Vehicle LOS	B		

Segment 19

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	4065
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	3.9

Demand and Capacity							
Directional Demand Flow Rate, veh/h		399		Opposing Demand Flow Rate, veh/h		255	
Peak Hour Factor		0.83		Total Trucks, %		27.00	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.23	
Intermediate Results							
Segment Vertical Class		1		Free-Flow Speed, mi/h		60.8	
Speed Slope Coefficient		3.60852		Speed Power Coefficient		0.52503	
PF Slope Coefficient		-1.22832		PF Power Coefficient		0.81152	
In Passing Lane Effective Length?		No		Total Segment Density, veh/mi/ln		3.0	
%Improved % Followers		0.0		% Improved Avg Speed		0.0	
Subsegment Data							
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h		
1	Horizontal Curve	158	1146	2	52.5		
2	Tangent	3907	-	-	58.9		
Vehicle Results							
Average Speed, mi/h		58.7		Percent Followers, %		44.2	
Segment Travel Time, minutes		0.79		Follower Density, followers/mi/ln		3.0	
Vehicle LOS		B					
Segment 20							
Vehicle Inputs							
Segment Type		Passing Constrained		Length, ft		4224	
Lane Width, ft		12		Shoulder Width, ft		6	
Speed Limit, mi/h		55		Access Point Density, pts/mi		8.7	
Demand and Capacity							
Directional Demand Flow Rate, veh/h		344		Opposing Demand Flow Rate, veh/h		-	
Peak Hour Factor		0.90		Total Trucks, %		27.00	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.20	
Intermediate Results							
Segment Vertical Class		1		Free-Flow Speed, mi/h		59.6	
Speed Slope Coefficient		3.78103		Speed Power Coefficient		0.41674	
PF Slope Coefficient		-1.30817		PF Power Coefficient		0.76333	
In Passing Lane Effective Length?		No		Total Segment Density, veh/mi/ln		2.7	
%Improved % Followers		0.0		% Improved Avg Speed		0.0	
Subsegment Data							
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h		
1	Tangent	739	-	-	57.5		
2	Horizontal Curve	739	955	2	52.6		

3	Tangent	686	-	-	57.5
4	Horizontal Curve	1162	1910	2	57.5
5	Tangent	898	-	-	57.5
Vehicle Results					
Average Speed, mi/h		56.7	Percent Followers, %		44.0
Segment Travel Time, minutes		0.85	Follower Density, followers/mi/ln		2.7
Vehicle LOS		B			
Segment 21					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		15207
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		0.3
Demand and Capacity					
Directional Demand Flow Rate, veh/h		353	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.91	Total Trucks, %		27.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.21
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.7
Speed Slope Coefficient		3.97745	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.33895	PF Power Coefficient		0.69588
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		3.1
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	1003	1432	2	58.9
2	Tangent	1109	-	-	59.5
3	Horizontal Curve	1003	955	2	52.6
4	Tangent	106	-	-	59.5
5	Horizontal Curve	845	477	2	45.9
6	Horizontal Curve	1478	1910	2	58.9
7	Tangent	581	-	-	59.5
8	Horizontal Curve	581	819	2	52.6
9	Tangent	106	-	-	59.5
10	Horizontal Curve	1267	819	2	52.6
11	Tangent	106	-	-	59.5
12	Horizontal Curve	1373	819	2	52.6
13	Tangent	581	-	-	59.5
14	Horizontal Curve	1742	637	2	45.9
15	Tangent	53	-	-	59.5

16	Horizontal Curve	1478	955	2	52.6
17	Tangent	1373	-	-	59.5
18	Horizontal Curve	422	573	2	45.9
Vehicle Results					
Average Speed, mi/h		54.1	Percent Followers, %		47.7
Segment Travel Time, minutes		3.19	Follower Density, followers/mi/ln		3.1
Vehicle LOS		B			
Segment 22					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		7180
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		1.5
Demand and Capacity					
Directional Demand Flow Rate, veh/h		465	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.75	Total Trucks, %		27.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.27
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.4
Speed Slope Coefficient		3.90655	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.27609	PF Power Coefficient		0.76234
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		4.6
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	422	573	2	45.8
2	Tangent	53	-	-	58.9
3	Horizontal Curve	739	955	2	52.4
4	Tangent	1214	-	-	58.9
5	Horizontal Curve	845	477	2	45.8
6	Tangent	53	-	-	58.9
7	Horizontal Curve	634	536	2	45.8
8	Tangent	422	-	-	58.9
9	Horizontal Curve	1742	573	2	45.8
10	Tangent	1056	-	-	58.9
Vehicle Results					
Average Speed, mi/h		51.6	Percent Followers, %		50.9
Segment Travel Time, minutes		1.58	Follower Density, followers/mi/ln		4.6
Vehicle LOS		C			

Segment 23					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		1584
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		10.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		465	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.75	Total Trucks, %		27.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.27
Intermediate Results					
Segment Vertical Class		2	Free-Flow Speed, mi/h		57.9
Speed Slope Coefficient		4.71099	Speed Power Coefficient		0.45465
PF Slope Coefficient		-1.47067	PF Power Coefficient		0.73533
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		5.1
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	475	-	-	54.9
2	Horizontal Curve	475	573	2	45.8
3	Tangent	634	-	-	54.9
Vehicle Results					
Average Speed, mi/h		52.2	Percent Followers, %		56.7
Segment Travel Time, minutes		0.34	Follower Density, followers/mi/ln		5.1
Vehicle LOS		C			

Segment 24			
Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5439
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	4.9
Demand and Capacity			
Directional Demand Flow Rate, veh/h	465	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.75	Total Trucks, %	27.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.27
Intermediate Results			
Segment Vertical Class	2	Free-Flow Speed, mi/h	58.9
Speed Slope Coefficient	5.23934	Speed Power Coefficient	0.47522
PF Slope Coefficient	-1.33167	PF Power Coefficient	0.75584

In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	5.0
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

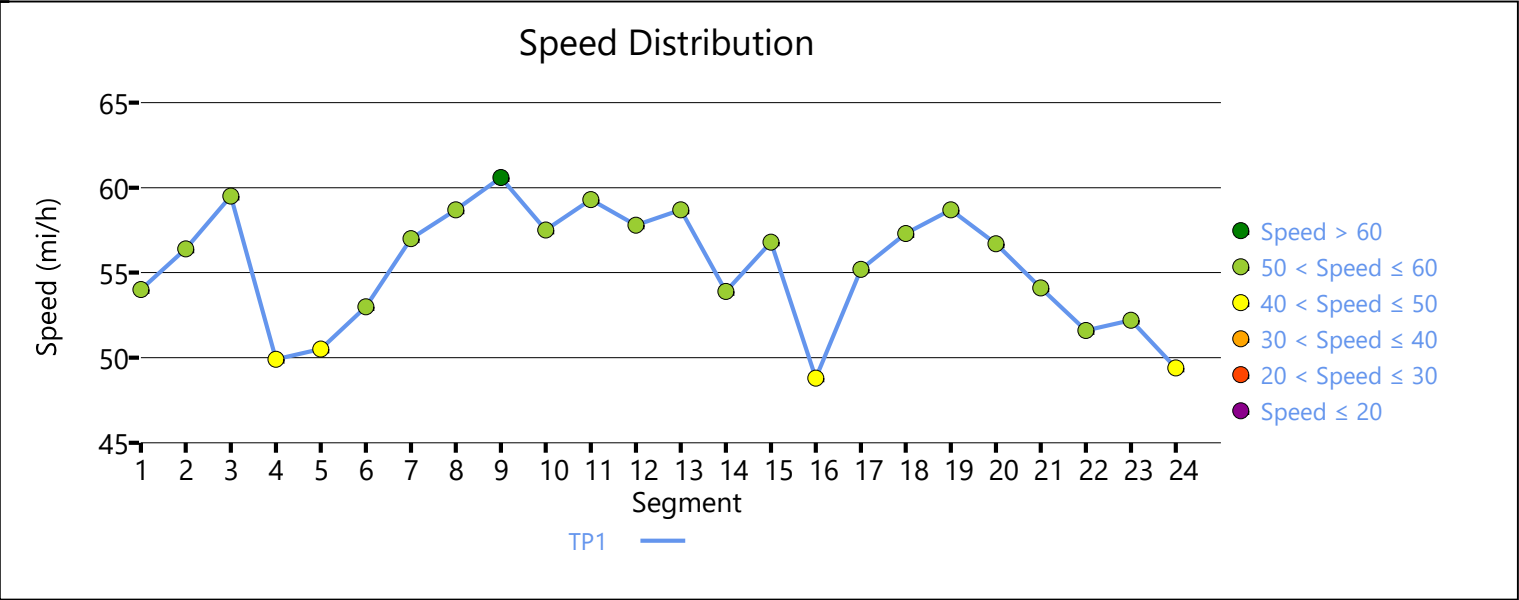
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	581	573	2	45.8
2	Tangent	264	-	-	55.6
3	Horizontal Curve	634	573	2	45.8
4	Tangent	317	-	-	55.6
5	Horizontal Curve	898	637	2	45.8
6	Tangent	475	-	-	55.6
7	Horizontal Curve	1056	573	2	45.8
8	Tangent	264	-	-	55.6
9	Horizontal Curve	950	955	2	52.4

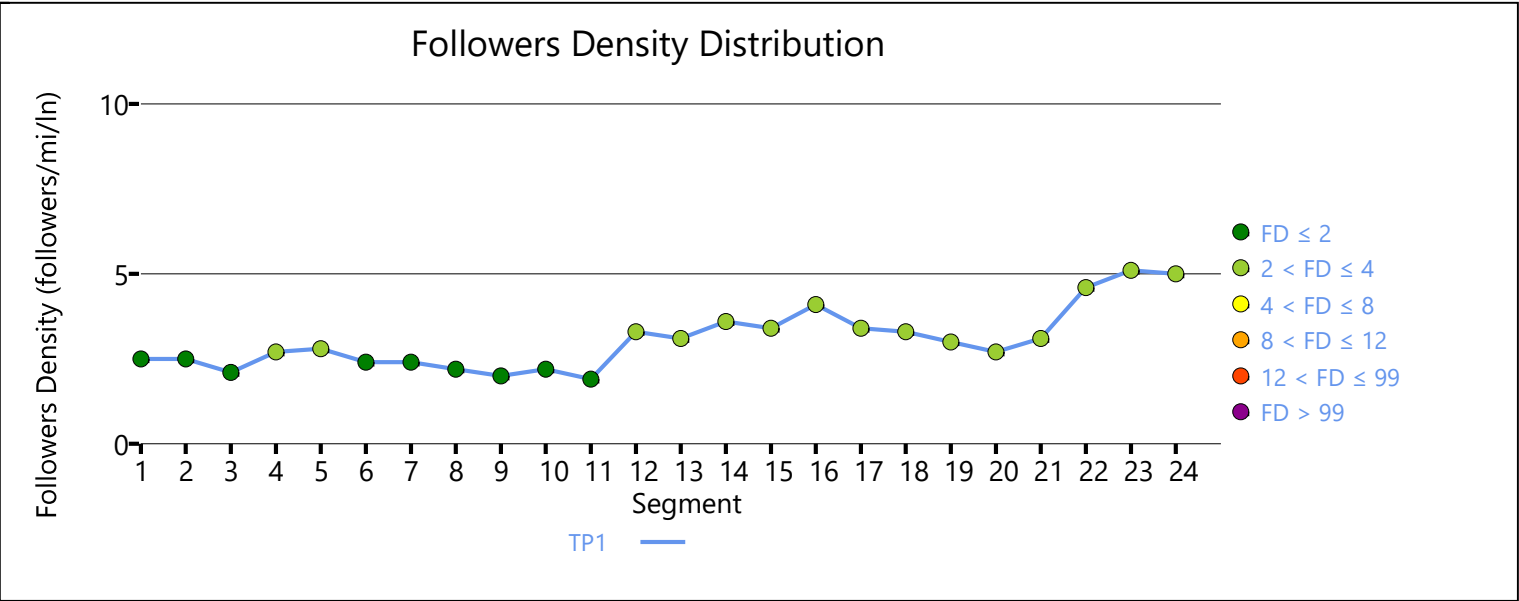
Vehicle Results

Average Speed, mi/h	49.4	Percent Followers, %	52.6
Segment Travel Time, minutes	1.25	Follower Density, followers/mi/ln	5.0
Vehicle LOS	C		

Facility Results

T	Follower Density, followers/mi/ln	LOS
1	2.9	B





HCS7 Two-Lane Highway Report

Project Information

Analyst	RXO	Date	3/7/2024
Agency		Analysis Year	2024
Jurisdiction		Time Analyzed	
Project Description	OR 42 - OR 542 to OR 42 couplet (EB)	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	2745
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	9.6

Demand and Capacity

Directional Demand Flow Rate, veh/h	297	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.75	Total Trucks, %	27.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.17

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	59.4
Speed Slope Coefficient	3.75099	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.33918	PF Power Coefficient	0.75657
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.4
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	950	955	2	52.6
2	Tangent	264	-	-	57.5
3	Horizontal Curve	1056	573	2	46.0
4	Tangent	475	-	-	57.5

Vehicle Results

Average Speed, mi/h	51.4	Percent Followers, %	41.4
Segment Travel Time, minutes	0.61	Follower Density, followers/mi/ln	2.4
Vehicle LOS	B		

Segment 2

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	3802
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	4.2

Demand and Capacity							
Directional Demand Flow Rate, veh/h		297		Opposing Demand Flow Rate, veh/h		-	
Peak Hour Factor		0.75		Total Trucks, %		27.00	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.17	
Intermediate Results							
Segment Vertical Class		2		Free-Flow Speed, mi/h		59.2	
Speed Slope Coefficient		5.24044		Speed Power Coefficient		0.47072	
PF Slope Coefficient		-1.35509		PF Power Coefficient		0.75482	
In Passing Lane Effective Length?		No		Total Segment Density, veh/mi/ln		2.6	
%Improved % Followers		0.0		% Improved Avg Speed		0.0	
Subsegment Data							
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h		
1	Horizontal Curve	898	637	2	46.0		
2	Tangent	317	-	-	56.7		
3	Horizontal Curve	634	573	2	46.0		
4	Tangent	264	-	-	56.7		
5	Horizontal Curve	1003	573	2	46.0		
6	Tangent	211	-	-	56.7		
7	Horizontal Curve	475	573	2	46.0		
Vehicle Results							
Average Speed, mi/h		48.2		Percent Followers, %		41.9	
Segment Travel Time, minutes		0.90		Follower Density, followers/mi/ln		2.6	
Vehicle LOS		B					
Segment 3							
Vehicle Inputs							
Segment Type		Passing Zone		Length, ft		1109	
Lane Width, ft		12		Shoulder Width, ft		6	
Speed Limit, mi/h		55		Access Point Density, pts/mi		0.0	
Demand and Capacity							
Directional Demand Flow Rate, veh/h		297		Opposing Demand Flow Rate, veh/h		465	
Peak Hour Factor		0.75		Total Trucks, %		27.00	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.17	
Intermediate Results							
Segment Vertical Class		1		Free-Flow Speed, mi/h		61.8	
Speed Slope Coefficient		3.68047		Speed Power Coefficient		0.48686	
PF Slope Coefficient		-1.33644		PF Power Coefficient		0.77632	
In Passing Lane Effective Length?		No		Total Segment Density, veh/mi/ln		2.0	
%Improved % Followers		0.0		% Improved Avg Speed		0.0	

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1109	-	-	60.1

Vehicle Results			
Average Speed, mi/h	60.1	Percent Followers, %	40.6
Segment Travel Time, minutes	0.21	Follower Density, followers/mi/ln	2.0
Vehicle LOS	B		

Segment 4

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	6546
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	297	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.75	Total Trucks, %	27.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.17

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	61.4
Speed Slope Coefficient	3.89977	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.27689	PF Power Coefficient	0.76490
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.3
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	422	-	-	59.4
2	Horizontal Curve	1742	573	2	46.0
3	Tangent	422	-	-	59.4
4	Horizontal Curve	634	536	2	46.0
5	Tangent	53	-	-	59.4
6	Horizontal Curve	845	477	2	46.0
7	Tangent	1214	-	-	59.4
8	Horizontal Curve	739	955	2	52.6
9	Tangent	53	-	-	59.4
10	Horizontal Curve	422	573	2	46.0

Vehicle Results			
Average Speed, mi/h	51.2	Percent Followers, %	39.6
Segment Travel Time, minutes	1.45	Follower Density, followers/mi/ln	2.3
Vehicle LOS	B		

Segment 5					
Vehicle Inputs					
Segment Type		Passing Zone	Length, ft	1372	
Lane Width, ft		12	Shoulder Width, ft	6	
Speed Limit, mi/h		55	Access Point Density, pts/mi	3.8	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		225	Opposing Demand Flow Rate, veh/h	353	
Peak Hour Factor		0.91	Total Trucks, %	27.00	
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)	0.13	
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h	60.9	
Speed Slope Coefficient		3.60106	Speed Power Coefficient	0.50497	
PF Slope Coefficient		-1.32366	PF Power Coefficient	0.78022	
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln	1.4	
%Improved % Followers		0.0	% Improved Avg Speed	0.0	
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	422	573	2	46.1
2	Tangent	950	-	-	59.6
Vehicle Results					
Average Speed, mi/h		55.4	Percent Followers, %	33.9	
Segment Travel Time, minutes		0.28	Follower Density, followers/mi/ln	1.4	
Vehicle LOS		A			
Segment 6					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft	14732	
Lane Width, ft		12	Shoulder Width, ft	6	
Speed Limit, mi/h		55	Access Point Density, pts/mi	2.5	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		225	Opposing Demand Flow Rate, veh/h	-	
Peak Hour Factor		0.91	Total Trucks, %	27.00	
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)	0.13	
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h	61.2	
Speed Slope Coefficient		3.94489	Speed Power Coefficient	0.41674	
PF Slope Coefficient		-1.33738	PF Power Coefficient	0.69962	
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln	1.6	

%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	422	-	-	59.5
2	Horizontal Curve	1478	955	2	52.8
3	Tangent	53	-	-	59.5
4	Horizontal Curve	1742	637	2	46.1
5	Tangent	581	-	-	59.5
6	Horizontal Curve	1373	819	2	52.8
7	Tangent	106	-	-	59.5
8	Horizontal Curve	1267	819	2	52.8
9	Tangent	106	-	-	59.5
10	Horizontal Curve	581	819	2	52.8
11	Tangent	581	-	-	59.5
12	Horizontal Curve	1478	1910	2	59.2
13	Horizontal Curve	845	477	2	46.1
14	Tangent	106	-	-	59.5
15	Horizontal Curve	1003	955	2	52.8
16	Tangent	1109	-	-	59.5
17	Horizontal Curve	1003	1432	2	59.2
18	Tangent	898	-	-	59.5

Vehicle Results			
Average Speed, mi/h	54.5	Percent Followers, %	37.6
Segment Travel Time, minutes	3.07	Follower Density, followers/mi/ln	1.6
Vehicle LOS	A		

Segment 7

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4699
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	7.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	220	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.90	Total Trucks, %	27.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.13

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	59.8
Speed Slope Coefficient	3.79691	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.30092	PF Power Coefficient	0.76424
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	1.3

%Improved % Followers	0.0	% Improved Avg Speed	0.0
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Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	1162	1910	2	58.3
2	Tangent	686	-	-	58.3
3	Horizontal Curve	739	955	2	52.8
4	Tangent	2112	-	-	58.3

Vehicle Results			
Average Speed, mi/h	57.4	Percent Followers, %	33.6
Segment Travel Time, minutes	0.93	Follower Density, followers/mi/ln	1.3
Vehicle LOS	A		

Segment 8

Vehicle Inputs			
Segment Type	Passing Zone	Length, ft	2112
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	7.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	255	Opposing Demand Flow Rate, veh/h	399
Peak Hour Factor	0.83	Total Trucks, %	27.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.15

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	59.9
Speed Slope Coefficient	3.57587	Speed Power Coefficient	0.49703
PF Slope Coefficient	-1.30207	PF Power Coefficient	0.78768
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	1.6
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2112	-	-	58.5

Vehicle Results			
Average Speed, mi/h	58.5	Percent Followers, %	35.9
Segment Travel Time, minutes	0.41	Follower Density, followers/mi/ln	1.6
Vehicle LOS	A		

Segment 9

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2956
Lane Width, ft	12	Shoulder Width, ft	6

Speed Limit, mi/h		55	Access Point Density, pts/mi		5.4
Demand and Capacity					
Directional Demand Flow Rate, veh/h		255	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.83	Total Trucks, %		27.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.15
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		60.5
Speed Slope Coefficient		3.81070	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.32448	PF Power Coefficient		0.76063
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		1.7
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	422	-	-	58.7
2	Horizontal Curve	1531	1146	2	52.7
3	Tangent	317	-	-	58.7
4	Horizontal Curve	686	1910	2	58.7
Vehicle Results					
Average Speed, mi/h		55.6	Percent Followers, %		37.4
Segment Travel Time, minutes		0.60	Follower Density, followers/mi/ln		1.7
Vehicle LOS		A			
Segment 10					
Vehicle Inputs					
Segment Type		Passing Zone	Length, ft		2799
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		1.9
Demand and Capacity					
Directional Demand Flow Rate, veh/h		255	Opposing Demand Flow Rate, veh/h		399
Peak Hour Factor		0.83	Total Trucks, %		27.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.15
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.3
Speed Slope Coefficient		3.66159	Speed Power Coefficient		0.49703
PF Slope Coefficient		-1.27287	PF Power Coefficient		0.79826
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		1.5
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	898	1910	2	59.1
2	Tangent	1901	-	-	59.9
Vehicle Results					
Average Speed, mi/h		59.6	Percent Followers, %		34.8
Segment Travel Time, minutes		0.53	Follower Density, followers/mi/ln		1.5
Vehicle LOS		A			
Segment 11					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		2481
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		2.1
Demand and Capacity					
Directional Demand Flow Rate, veh/h		255	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.83	Total Trucks, %		27.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.15
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.3
Speed Slope Coefficient		3.84896	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.33032	PF Power Coefficient		0.75893
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		1.9
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	581	-	-	59.5
2	Horizontal Curve	792	573	2	46.0
3	Tangent	158	-	-	59.5
4	Horizontal Curve	739	573	2	46.0
5	Tangent	211	-	-	59.5
Vehicle Results					
Average Speed, mi/h		51.2	Percent Followers, %		37.6
Segment Travel Time, minutes		0.55	Follower Density, followers/mi/ln		1.9
Vehicle LOS		A			
Segment 12					
Vehicle Inputs					
Segment Type		Passing Constrained	Length, ft		1795
Lane Width, ft		12	Shoulder Width, ft		6

Speed Limit, mi/h		55		Access Point Density, pts/mi		2.9	
Demand and Capacity							
Directional Demand Flow Rate, veh/h		255		Opposing Demand Flow Rate, veh/h		-	
Peak Hour Factor		0.83		Total Trucks, %		27.00	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.15	
Intermediate Results							
Segment Vertical Class		3		Free-Flow Speed, mi/h		56.9	
Speed Slope Coefficient		8.37955		Speed Power Coefficient		0.60122	
PF Slope Coefficient		-1.39312		PF Power Coefficient		0.76418	
In Passing Lane Effective Length?		No		Total Segment Density, veh/mi/ln		1.8	
%Improved % Followers		0.0		% Improved Avg Speed		0.0	
Subsegment Data							
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h		
1	Tangent	1795	-	-	54.1		
Vehicle Results							
Average Speed, mi/h		54.1		Percent Followers, %		38.8	
Segment Travel Time, minutes		0.38		Follower Density, followers/mi/ln		1.8	
Vehicle LOS		A					
Segment 13							
Vehicle Inputs							
Segment Type		Passing Constrained		Length, ft		3960	
Lane Width, ft		12		Shoulder Width, ft		6	
Speed Limit, mi/h		55		Access Point Density, pts/mi		0.0	
Demand and Capacity							
Directional Demand Flow Rate, veh/h		255		Opposing Demand Flow Rate, veh/h		-	
Peak Hour Factor		0.83		Total Trucks, %		27.00	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.15	
Intermediate Results							
Segment Vertical Class		1		Free-Flow Speed, mi/h		61.8	
Speed Slope Coefficient		3.89599		Speed Power Coefficient		0.41674	
PF Slope Coefficient		-1.29297		PF Power Coefficient		0.76837	
In Passing Lane Effective Length?		No		Total Segment Density, veh/mi/ln		1.6	
%Improved % Followers		0.0		% Improved Avg Speed		0.0	
Subsegment Data							
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h		
1	Tangent	1901	-	-	60.0		
2	Horizontal Curve	898	1146	2	52.7		

3	Tangent	158	-	-	60.0
4	Horizontal Curve	1003	1146	2	52.7

Vehicle Results

Average Speed, mi/h	56.5	Percent Followers, %	36.4
Segment Travel Time, minutes	0.80	Follower Density, followers/mi/ln	1.6
Vehicle LOS	A		

Segment 14

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	2059
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.8

Demand and Capacity

Directional Demand Flow Rate, veh/h	255	Opposing Demand Flow Rate, veh/h	399
Peak Hour Factor	0.83	Total Trucks, %	27.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.15

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.1
Speed Slope Coefficient	3.63873	Speed Power Coefficient	0.49703
PF Slope Coefficient	-1.29720	PF Power Coefficient	0.79004
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	1.6
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	264	1146	2	52.7
2	Tangent	1795	-	-	59.7

Vehicle Results

Average Speed, mi/h	58.8	Percent Followers, %	35.7
Segment Travel Time, minutes	0.40	Follower Density, followers/mi/ln	1.6
Vehicle LOS	A		

Segment 15

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	9451
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.8

Demand and Capacity

Directional Demand Flow Rate, veh/h	255	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.83	Total Trucks, %	27.00

Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.15
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.1
Speed Slope Coefficient		3.90661	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.28569	PF Power Coefficient		0.74775
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		1.6
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	370	-	-	59.3
2	Horizontal Curve	792	1910	2	59.1
3	Tangent	211	-	-	59.3
4	Horizontal Curve	1373	1146	2	52.7
5	Tangent	211	-	-	59.3
6	Horizontal Curve	1848	1910	2	59.1
7	Tangent	2006	-	-	59.3
8	Horizontal Curve	1848	1273	2	59.1
9	Tangent	792	-	-	59.3
Vehicle Results					
Average Speed, mi/h		58.3	Percent Followers, %		37.1
Segment Travel Time, minutes		1.84	Follower Density, followers/mi/ln		1.6
Vehicle LOS		A			

Segment 16

Vehicle Inputs			
Segment Type	Passing Zone	Length, ft	1531
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0
Demand and Capacity			
Directional Demand Flow Rate, veh/h	198	Opposing Demand Flow Rate, veh/h	309
Peak Hour Factor	0.87	Total Trucks, %	27.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12
Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	61.8
Speed Slope Coefficient	3.64309	Speed Power Coefficient	0.51332
PF Slope Coefficient	-1.30202	PF Power Coefficient	0.78802
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	1.0
%Improved % Followers	0.0	% Improved Avg Speed	0.0
Subsegment Data			

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1531	-	-	60.7

Vehicle Results

Average Speed, mi/h	60.7	Percent Followers, %	30.4
Segment Travel Time, minutes	0.29	Follower Density, followers/mi/ln	1.0
Vehicle LOS	A		

Segment 17

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	3590
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	198	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	27.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.8
Speed Slope Coefficient	3.89173	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.29902	PF Power Coefficient	0.76721
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	1.1
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	422	-	-	60.3
2	Horizontal Curve	1162	1146	2	52.8
3	Tangent	53	-	-	60.3
4	Horizontal Curve	1214	1910	2	59.3
5	Tangent	739	-	-	60.3

Vehicle Results

Average Speed, mi/h	57.6	Percent Followers, %	31.2
Segment Travel Time, minutes	0.71	Follower Density, followers/mi/ln	1.1
Vehicle LOS	A		

Segment 18

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	1373
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity							
Directional Demand Flow Rate, veh/h		198		Opposing Demand Flow Rate, veh/h		309	
Peak Hour Factor		0.87		Total Trucks, %		27.00	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.12	
Intermediate Results							
Segment Vertical Class		1		Free-Flow Speed, mi/h		61.8	
Speed Slope Coefficient		3.64016		Speed Power Coefficient		0.51332	
PF Slope Coefficient		-1.31048		PF Power Coefficient		0.78484	
In Passing Lane Effective Length?		No		Total Segment Density, veh/mi/ln		1.0	
%Improved % Followers		0.0		% Improved Avg Speed		0.0	
Subsegment Data							
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h		
1	Horizontal Curve	581	1910	2	59.3		
2	Horizontal Curve	528	1910	2	59.3		
3	Tangent	264	-	-	60.7		
Vehicle Results							
Average Speed, mi/h		59.6		Percent Followers, %		30.7	
Segment Travel Time, minutes		0.26		Follower Density, followers/mi/ln		1.0	
Vehicle LOS		A					
Segment 19							
Vehicle Inputs							
Segment Type		Passing Constrained		Length, ft		897	
Lane Width, ft		12		Shoulder Width, ft		6	
Speed Limit, mi/h		55		Access Point Density, pts/mi		0.0	
Demand and Capacity							
Directional Demand Flow Rate, veh/h		198		Opposing Demand Flow Rate, veh/h		-	
Peak Hour Factor		0.87		Total Trucks, %		27.00	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.12	
Intermediate Results							
Segment Vertical Class		1		Free-Flow Speed, mi/h		61.8	
Speed Slope Coefficient		3.85833		Speed Power Coefficient		0.41674	
PF Slope Coefficient		-1.37656		PF Power Coefficient		0.74381	
In Passing Lane Effective Length?		No		Total Segment Density, veh/mi/ln		1.2	
%Improved % Followers		0.0		% Improved Avg Speed		0.0	
Subsegment Data							
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h		
1	Tangent	475	-	-	60.3		

2	Horizontal Curve	422	716	2	46.1
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Vehicle Results

Average Speed, mi/h	53.6	Percent Followers, %	33.8
Segment Travel Time, minutes	0.19	Follower Density, followers/mi/ln	1.2
Vehicle LOS	A		

Segment 20

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	1532
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	6.9

Demand and Capacity

Directional Demand Flow Rate, veh/h	198	Opposing Demand Flow Rate, veh/h	309
Peak Hour Factor	0.87	Total Trucks, %	27.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	60.1
Speed Slope Coefficient	3.54962	Speed Power Coefficient	0.51332
PF Slope Coefficient	-1.31191	PF Power Coefficient	0.78365
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	1.1
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	370	716	2	46.1
2	Horizontal Curve	581	1910	2	59.0
3	Tangent	581	-	-	59.0

Vehicle Results

Average Speed, mi/h	55.9	Percent Followers, %	30.8
Segment Travel Time, minutes	0.31	Follower Density, followers/mi/ln	1.1
Vehicle LOS	A		

Segment 21

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	1583
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	6.7

Demand and Capacity

Directional Demand Flow Rate, veh/h	198	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	27.00

Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.12
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		60.1
Speed Slope Coefficient		3.77244	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.37736	PF Power Coefficient		0.74496
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		1.1
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	158	-	-	58.7
2	Horizontal Curve	1214	1910	2	58.7
3	Tangent	211	-	-	58.7
Vehicle Results					
Average Speed, mi/h		58.7	Percent Followers, %		33.7
Segment Travel Time, minutes		0.31	Follower Density, followers/mi/ln		1.1
Vehicle LOS		A			
Segment 22					
Vehicle Inputs					
Segment Type		Passing Lanes	Length, ft		2640
Lane Width, ft		12	Shoulder Width, ft		6
Speed Limit, mi/h		55	Access Point Density, pts/mi		4.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h		198	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.87	Total Trucks, %		27.00
Segment Capacity, veh/h		1100	Demand/Capacity (D/C)		0.18
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		60.8
Speed Slope Coefficient		8.09721	Speed Power Coefficient		0.87198
PF Slope Coefficient		-1.30268	PF Power Coefficient		0.75280
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		1.1
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2640	-	-	59.7
Passing Lane Results					
		Faster Lane		Slower Lane	
Flow Rate, veh/h		127		71	

Percentage of Heavy Vehicles (HV%), %	10.80	55.84
Initial Average Speed (Sint), mi/h	61.0	59.8
Average Speed at Midpoint (SPLmid), mi/h	63.0	57.9
Percent Followers at Midpoint (PFPLmid), %	23.5	14.1

Vehicle Results

Average Speed, mi/h	59.7	Percent Followers, %	31.9
Segment Travel Time, minutes	0.50	Follower Density, followers/mi/ln	1.1
Vehicle LOS	A		

Segment 23

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	15629
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.7

Demand and Capacity

Directional Demand Flow Rate, veh/h	198	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	27.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.4
Speed Slope Coefficient	3.96088	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34824	PF Power Coefficient	0.69047
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	1.2
%Improved % Followers	12.1	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	370	-	-	59.9
2	Horizontal Curve	1003	1273	2	59.3
3	Tangent	53	-	-	59.9
4	Horizontal Curve	1003	1273	2	59.3
5	Tangent	53	-	-	59.9
6	Horizontal Curve	686	955	2	52.8
7	Horizontal Curve	1162	716	2	46.1
8	Tangent	158	-	-	59.9
9	Horizontal Curve	634	1910	2	59.3
10	Tangent	7867	-	-	59.9
11	Horizontal Curve	317	1910	2	59.3
12	Tangent	53	-	-	59.9
13	Horizontal Curve	2270	1146	2	52.8

Vehicle Results			
Average Speed, mi/h	57.4	Percent Followers, %	35.6
Segment Travel Time, minutes	3.09	Follower Density, followers/mi/ln	1.1
Vehicle LOS	A		

Segment 24

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	10347
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	198	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	27.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	61.2
Speed Slope Coefficient	3.91570	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.29101	PF Power Coefficient	0.74101
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	1.2
%Improved % Followers	8.2	% Improved Avg Speed	0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	264	1146	2	52.8
2	Tangent	53	-	-	59.7
3	Horizontal Curve	422	881	2	52.8
4	Tangent	317	-	-	59.7
5	Horizontal Curve	264	409	2	39.4
6	Tangent	106	-	-	59.7
7	Horizontal Curve	317	955	2	52.8
8	Tangent	317	-	-	59.7
9	Horizontal Curve	317	573	2	46.1
10	Horizontal Curve	264	409	2	39.4
11	Tangent	792	-	-	59.7
12	Horizontal Curve	422	955	2	52.8
13	Tangent	211	-	-	59.7
14	Horizontal Curve	475	477	2	46.1
15	Tangent	264	-	-	59.7
16	Horizontal Curve	475	318	2	39.4
17	Tangent	211	-	-	59.7
18	Horizontal Curve	264	573	2	46.1

19	Tangent	422	-	-	59.7
20	Horizontal Curve	950	637	2	46.1
21	Tangent	475	-	-	59.7
22	Horizontal Curve	211	1910	2	59.3
23	Tangent	1531	-	-	59.7
24	Horizontal Curve	581	395	2	39.4
25	Tangent	422	-	-	59.7

Vehicle Results			
Average Speed, mi/h	53.0	Percent Followers, %	32.2
Segment Travel Time, minutes	2.22	Follower Density, followers/mi/ln	1.1
Vehicle LOS	A		

Segment 25

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2112
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	5.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	201	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.77	Total Trucks, %	27.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

Intermediate Results			
Segment Vertical Class	3	Free-Flow Speed, mi/h	56.4
Speed Slope Coefficient	8.28232	Speed Power Coefficient	0.59983
PF Slope Coefficient	-1.37709	PF Power Coefficient	0.76466
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	1.4
%Improved % Followers	7.5	% Improved Avg Speed	0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	1056	573	2	46.1
2	Tangent	898	-	-	54.3
3	Horizontal Curve	158	716	2	46.1

Vehicle Results			
Average Speed, mi/h	49.6	Percent Followers, %	33.3
Segment Travel Time, minutes	0.48	Follower Density, followers/mi/ln	1.2
Vehicle LOS	A		

Segment 26

Vehicle Inputs			
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Segment Type		Passing Constrained	Length, ft	1373	
Lane Width, ft		12	Shoulder Width, ft	6	
Speed Limit, mi/h		55	Access Point Density, pts/mi	0.0	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		201	Opposing Demand Flow Rate, veh/h	-	
Peak Hour Factor		0.77	Total Trucks, %	27.00	
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)	0.12	
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h	61.8	
Speed Slope Coefficient		3.85935	Speed Power Coefficient	0.41674	
PF Slope Coefficient		-1.37334	PF Power Coefficient	0.74488	
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln	1.4	
%Improved % Followers		7.1	% Improved Avg Speed	0.0	
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	845	716	2	46.1
2	Tangent	211	-	-	60.3
3	Horizontal Curve	317	477	2	46.1
Vehicle Results					
Average Speed, mi/h		48.3	Percent Followers, %	34.0	
Segment Travel Time, minutes		0.32	Follower Density, followers/mi/ln	1.3	
Vehicle LOS		A			
Segment 27					
Vehicle Inputs					
Segment Type		Passing Zone	Length, ft	2112	
Lane Width, ft		12	Shoulder Width, ft	6	
Speed Limit, mi/h		55	Access Point Density, pts/mi	0.0	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		201	Opposing Demand Flow Rate, veh/h	316	
Peak Hour Factor		0.77	Total Trucks, %	27.00	
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)	0.12	
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h	61.8	
Speed Slope Coefficient		3.65464	Speed Power Coefficient	0.51204	
PF Slope Coefficient		-1.27830	PF Power Coefficient	0.79682	
In Passing Lane Effective Length?		Yes	Total Segment Density, veh/mi/ln	1.1	
%Improved % Followers		6.6	% Improved Avg Speed	0.0	

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	264	477	2	46.1
2	Tangent	106	-	-	60.7
3	Horizontal Curve	158	716	2	46.1
4	Tangent	317	-	-	60.7
5	Horizontal Curve	211	955	2	52.8
6	Tangent	1056	-	-	60.7

Vehicle Results			
Average Speed, mi/h	57.0	Percent Followers, %	30.0
Segment Travel Time, minutes	0.42	Follower Density, followers/mi/ln	1.0
Vehicle LOS	A		

Segment 28

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5545
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	201	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.77	Total Trucks, %	27.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	61.8
Speed Slope Coefficient	3.91233	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.27720	PF Power Coefficient	0.76868
In Passing Lane Effective Length?	Yes	Total Segment Density, veh/mi/ln	1.1
%Improved % Followers	5.3	% Improved Avg Speed	0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2112	-	-	60.3
2	Horizontal Curve	528	1614	8	60.3
3	Horizontal Curve	264	286	10	32.6
4	Horizontal Curve	528	462	2	46.1
5	Tangent	106	-	-	60.3
6	Horizontal Curve	317	523	2	46.1
7	Tangent	264	-	-	60.3
8	Horizontal Curve	264	716	2	46.1
9	Tangent	1162	-	-	60.3

Vehicle Results			
Average Speed, mi/h	56.1	Percent Followers, %	31.1
Segment Travel Time, minutes	1.12	Follower Density, followers/mi/ln	1.1
Vehicle LOS	A		

Segment 29

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1637
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	3.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	201	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.77	Total Trucks, %	27.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

Intermediate Results			
Segment Vertical Class	2	Free-Flow Speed, mi/h	59.6
Speed Slope Coefficient	5.15345	Speed Power Coefficient	0.46488
PF Slope Coefficient	-1.45112	PF Power Coefficient	0.73999
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	1.2
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	370	1430	10	57.8
2	Tangent	845	-	-	57.8
3	Horizontal Curve	422	2139	9	57.8

Vehicle Results			
Average Speed, mi/h	57.8	Percent Followers, %	35.8
Segment Travel Time, minutes	0.32	Follower Density, followers/mi/ln	1.2
Vehicle LOS	A		

Segment 30

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	8712
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	201	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.77	Total Trucks, %	27.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	61.2
Speed Slope Coefficient	3.90654	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.28128	PF Power Coefficient	0.75312
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	1.1
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	422	1186	10	59.3
2	Tangent	53	-	-	59.7
3	Horizontal Curve	422	1658	9	59.7
4	Tangent	317	-	-	59.7
5	Horizontal Curve	686	751	2	52.8
6	Tangent	106	-	-	59.7
7	Horizontal Curve	158	318	2	39.4
8	Tangent	792	-	-	59.7
9	Horizontal Curve	1690	2292	2	59.7
10	Tangent	634	-	-	59.7
11	Horizontal Curve	739	1146	2	52.8
12	Tangent	158	-	-	59.7
13	Horizontal Curve	634	955	2	52.8
14	Tangent	106	-	-	59.7
15	Horizontal Curve	845	1146	2	52.8
16	Tangent	106	-	-	59.7
17	Horizontal Curve	686	955	2	52.8
18	Tangent	158	-	-	59.7

Vehicle Results			
Average Speed, mi/h	56.5	Percent Followers, %	31.8
Segment Travel Time, minutes	1.75	Follower Density, followers/mi/ln	1.1
Vehicle LOS	A		

Segment 31

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3643
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	2.9

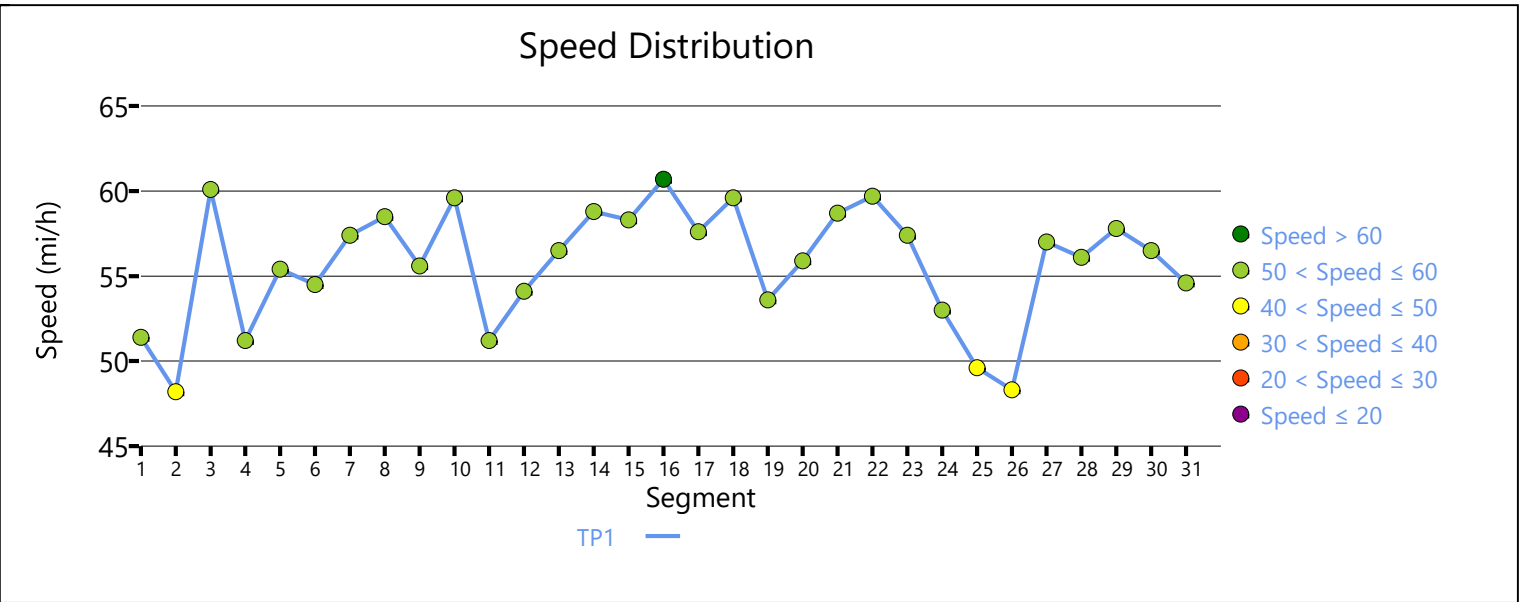
Demand and Capacity			
Directional Demand Flow Rate, veh/h	201	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.77	Total Trucks, %	27.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

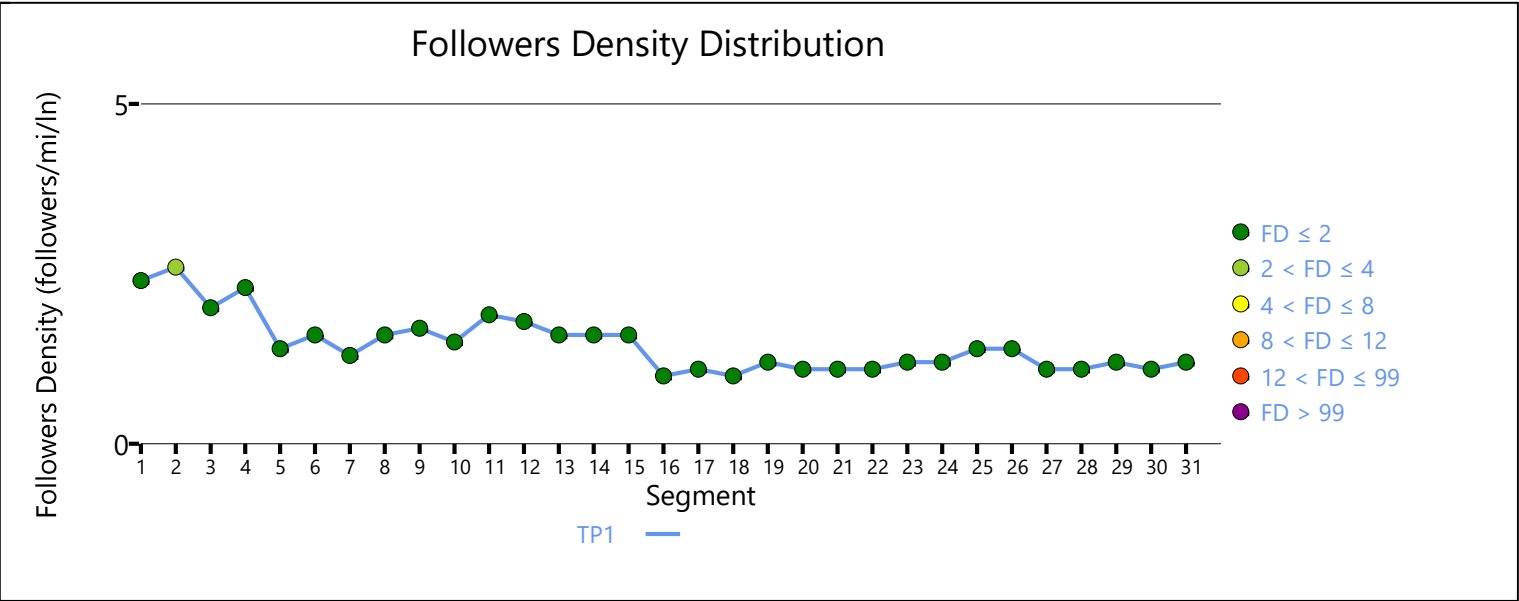
Intermediate Results			
Segment Vertical Class	2	Free-Flow Speed, mi/h	59.5
Speed Slope Coefficient	5.33842	Speed Power Coefficient	0.47210
PF Slope Coefficient	-1.35637	PF Power Coefficient	0.75518
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	1.2
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	686	-	-	57.7
2	Horizontal Curve	898	955	2	52.8
3	Tangent	211	-	-	57.7
4	Horizontal Curve	634	955	2	52.8
5	Tangent	422	-	-	57.7
6	Horizontal Curve	792	955	2	52.8

Vehicle Results			
Average Speed, mi/h	54.6	Percent Followers, %	33.3
Segment Travel Time, minutes	0.76	Follower Density, followers/mi/ln	1.2
Vehicle LOS	A		

Facility Results		
T	Follower Density, followers/mi/ln	LOS
1	1.4	A





HCS7 Two-Lane Highway Report

Project Information

Analyst		Date	3/7/2024
Agency		Analysis Year	2024
Jurisdiction		Time Analyzed	
Project Description	OR 42 - OR 542 to Coquille east UGB (WB)	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	5070
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	490	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.84	Total Trucks, %	24.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.29

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.7
Speed Slope Coefficient	3.89958	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.28215	PF Power Coefficient	0.76844
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	4.8
%Improved % Followers	0.0	% Improved Avg Speed	0.0

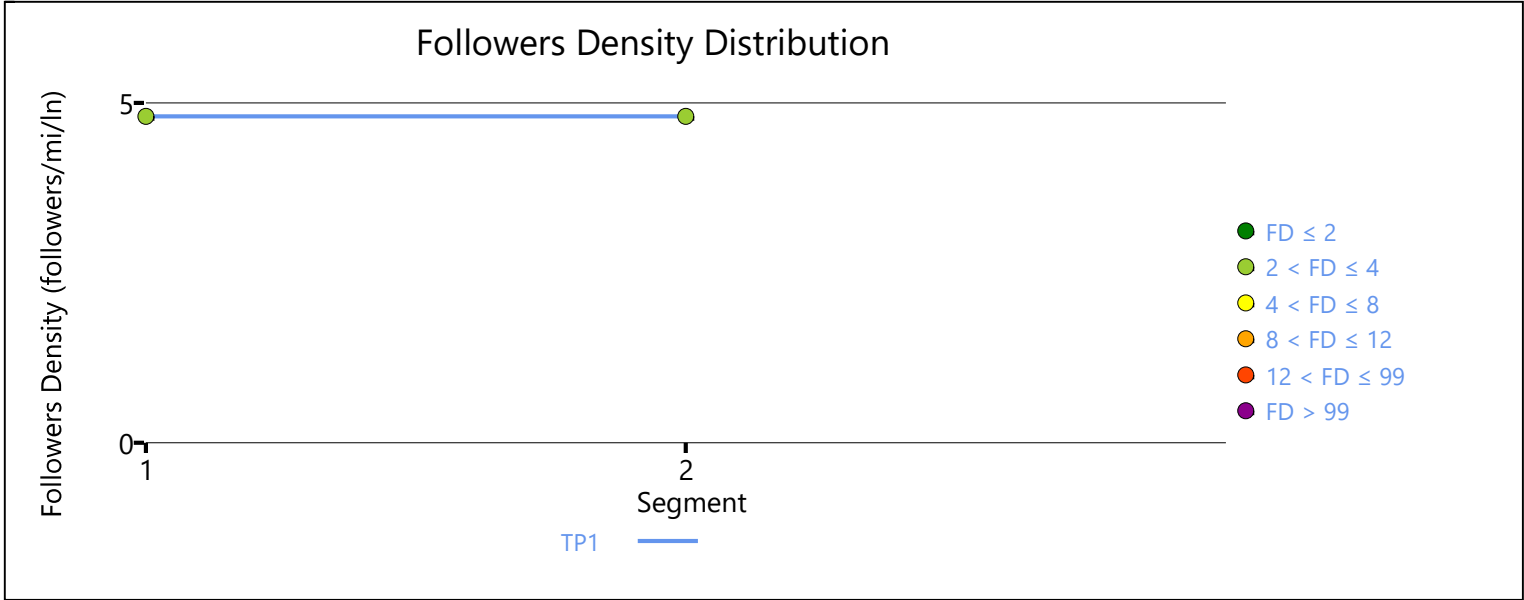
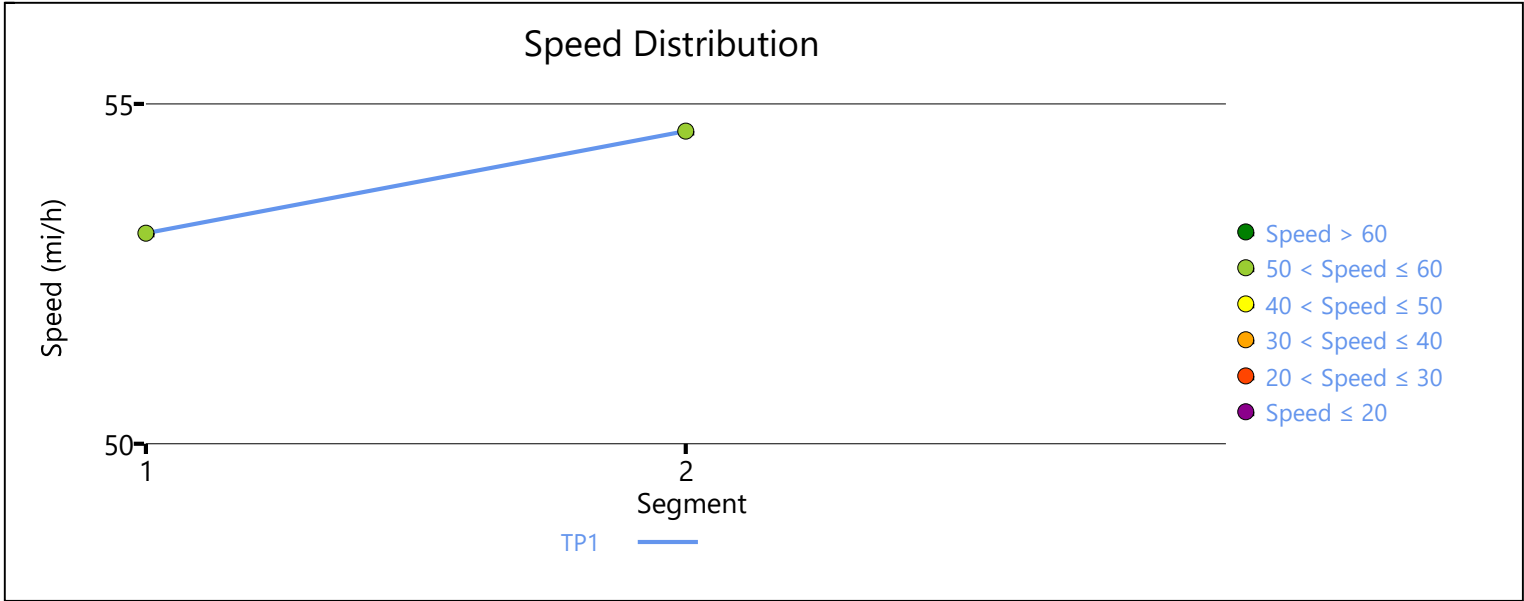
Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	370	477	2	45.9
2	Tangent	370	-	-	59.0
3	Horizontal Curve	845	1146	2	52.5
4	Tangent	53	-	-	59.0
5	Horizontal Curve	106	1433	2	58.6
6	Tangent	211	-	-	59.0
7	Horizontal Curve	739	1433	2	58.6
8	Tangent	211	-	-	59.0
9	Horizontal Curve	1056	716	2	45.9
10	Horizontal Curve	845	955	2	52.5
11	Tangent	264	-	-	59.0

Vehicle Results

Average Speed, mi/h	53.1	Percent Followers, %	52.4
Segment Travel Time, minutes	1.09	Follower Density, followers/mi/ln	4.8

Vehicle LOS		C			
Segment 2					
Vehicle Inputs					
Segment Type		Passing Constrained		Length, ft	
Lane Width, ft		12		Shoulder Width, ft	
Speed Limit, mi/h		55		Access Point Density, pts/mi	
Demand and Capacity					
Directional Demand Flow Rate, veh/h		470		Opposing Demand Flow Rate, veh/h	
Peak Hour Factor		0.94		Total Trucks, %	
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)	
Intermediate Results					
Segment Vertical Class		2		Free-Flow Speed, mi/h	
Speed Slope Coefficient		5.31035		Speed Power Coefficient	
PF Slope Coefficient		-1.41505		PF Power Coefficient	
In Passing Lane Effective Length?		No		Total Segment Density, veh/mi/ln	
%Improved % Followers		0.0		% Improved Avg Speed	
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	1162	955	2	52.5
2	Tangent	898	-	-	57.3
Vehicle Results					
Average Speed, mi/h		54.6		Percent Followers, %	
Segment Travel Time, minutes		0.43		Follower Density, followers/mi/ln	
Vehicle LOS		C			
Facility Results					
T	Follower Density, followers/mi/ln			LOS	
1	4.8			C	



HCS7 Two-Lane Highway Report

Project Information

Analyst	R XO	Date	3/7/2024
Agency		Analysis Year	2024
Jurisdiction		Time Analyzed	
Project Description	OR 42 - Myrtle Point east UGB to OR 542 (EB)	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	2060
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	385	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.94	Total Trucks, %	24.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.23

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.9
Speed Slope Coefficient	3.87657	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.33961	PF Power Coefficient	0.75546
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	3.3
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	898	-	-	59.6
2	Horizontal Curve	1162	955	2	52.6

Vehicle Results

Average Speed, mi/h	55.6	Percent Followers, %	47.9
Segment Travel Time, minutes	0.42	Follower Density, followers/mi/ln	3.3
Vehicle LOS	B		

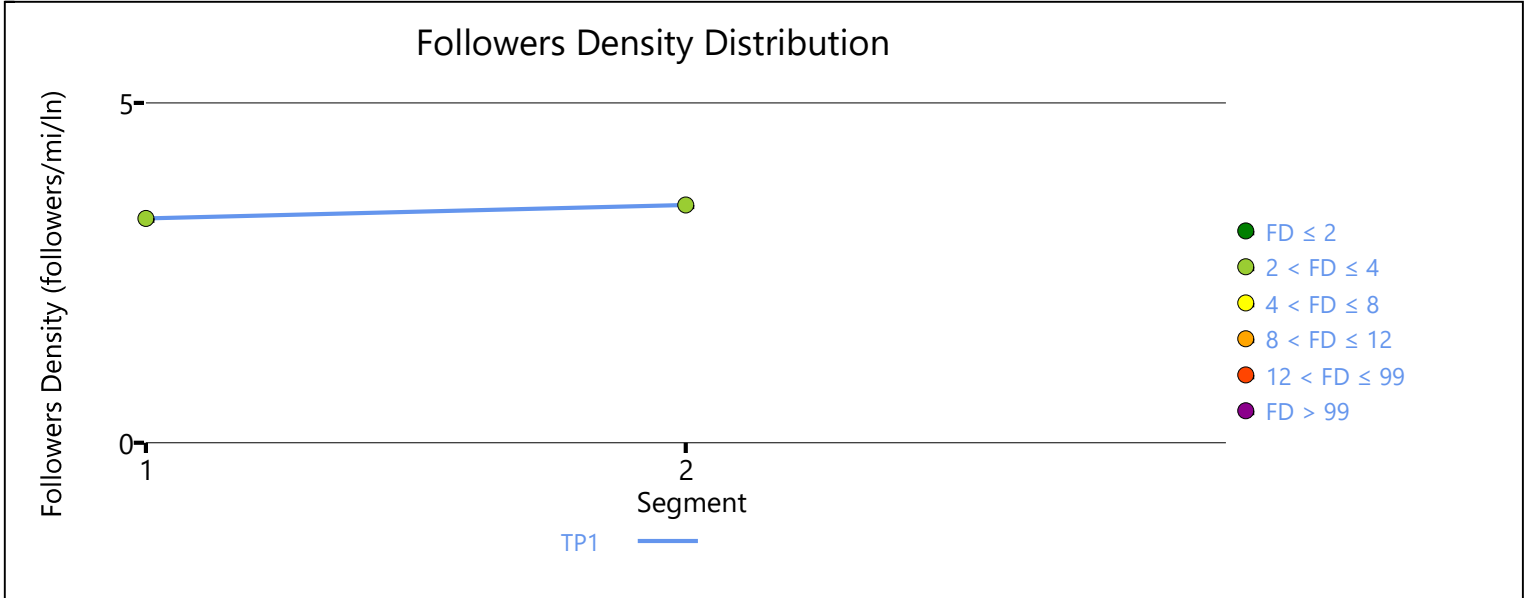
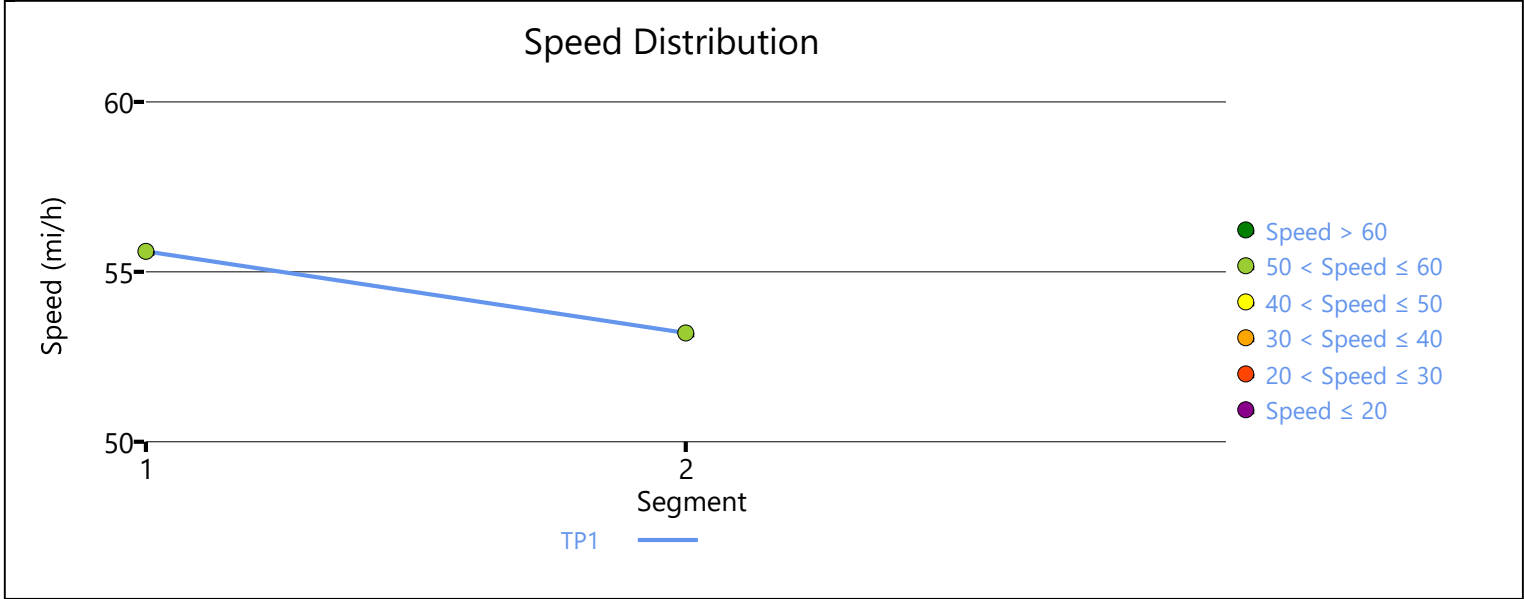
Segment 2

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	5070
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.0

Demand and Capacity

Directional Demand Flow Rate, veh/h		401	Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.84	Total Trucks, %		24.00
Segment Capacity, veh/h		1700	Demand/Capacity (D/C)		0.24
Intermediate Results					
Segment Vertical Class		1	Free-Flow Speed, mi/h		61.7
Speed Slope Coefficient		3.89958	Speed Power Coefficient		0.41674
PF Slope Coefficient		-1.28215	PF Power Coefficient		0.76844
In Passing Lane Effective Length?		No	Total Segment Density, veh/mi/ln		3.5
%Improved % Followers		0.0	% Improved Avg Speed		0.0
Subsegment Data					
#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	264	-	-	59.3
2	Horizontal Curve	845	955	0	52.6
3	Horizontal Curve	1056	716	0	46.0
4	Tangent	211	-	-	59.3
5	Horizontal Curve	739	1433	0	58.8
6	Tangent	264	-	-	59.3
7	Horizontal Curve	53	1433	0	58.8
8	Tangent	53	-	-	59.3
9	Horizontal Curve	845	1146	0	52.6
10	Tangent	370	-	-	59.3
11	Horizontal Curve	370	477	2	46.0
Vehicle Results					
Average Speed, mi/h		53.2	Percent Followers, %		47.0
Segment Travel Time, minutes		1.08	Follower Density, followers/mi/ln		3.5
Vehicle LOS		B			
Facility Results					
T	Follower Density, followers/mi/ln			LOS	
1	3.5			B	



HCS7 Two-Lane Highway Report

Project Information

Analyst	R XO	Date	3/6/2024
Agency		Analysis Year	2024
Jurisdiction		Time Analyzed	
Project Description	OR 42 - Lampa Ln to Coquille west UGB (EB)	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	12040
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.8

Demand and Capacity

Directional Demand Flow Rate, veh/h	691	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.96	Total Trucks, %	14.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.41

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.8
Speed Slope Coefficient	3.96134	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.30162	PF Power Coefficient	0.72605
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	7.8
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1426	-	-	58.6
2	Horizontal Curve	898	573	2	46.0
3	Tangent	845	-	-	58.6
4	Horizontal Curve	1426	1432	2	58.5
5	Tangent	53	-	-	58.6
6	Horizontal Curve	792	955	2	52.5
7	Tangent	158	-	-	58.6
8	Horizontal Curve	475	1146	2	52.5
9	Tangent	53	-	-	58.6
10	Horizontal Curve	422	955	2	52.5
11	Tangent	2112	-	-	58.6
12	Horizontal Curve	1320	955	2	52.5
13	Tangent	53	-	-	58.6
14	Horizontal Curve	845	1910	2	58.5

15	Tangent	1162	-	-	58.6
Vehicle Results					
Average Speed, mi/h		56.1	Percent Followers, %		63.0
Segment Travel Time, minutes		2.44	Follower Density, followers/mi/ln		7.8
Vehicle LOS		C			
Bicycle Results					
Percent Occupied Parking		0	Pavement Condition Rating		4
Flow Rate Outside Lane, veh/h		691	Bicycle Effective Width, ft		24
Bicycle LOS Score		7.40	Bicycle Effective Speed Factor		4.79
Bicycle LOS		F			
Facility Results					
T	Follower Density, followers/mi/ln			LOS	
1	7.8			C	

HCS7 Two-Lane Highway Report

Project Information

Analyst		Date	3/7/2024
Agency		Analysis Year	2024
Jurisdiction		Time Analyzed	
Project Description	OR 42 - Coquille west UGB to Lampa Ln (WB)	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	12040
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.8

Demand and Capacity

Directional Demand Flow Rate, veh/h	844	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.96	Total Trucks, %	14.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.50

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	61.8
Speed Slope Coefficient	3.96134	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.30162	PF Power Coefficient	0.72605
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	1162	-	-	58.3
2	Horizontal Curve	845	1910	2	58.3
3	Tangent	53	-	-	58.3
4	Horizontal Curve	1320	955	2	52.4
5	Tangent	2112	-	-	58.3
6	Horizontal Curve	422	955	2	52.4
7	Tangent	53	-	-	58.3
8	Horizontal Curve	475	1146	2	52.4
9	Tangent	158	-	-	58.3
10	Horizontal Curve	792	955	2	52.4
11	Tangent	53	-	-	58.3
12	Horizontal Curve	1426	1432	2	58.3
13	Tangent	845	-	-	58.3
14	Horizontal Curve	898	573	2	45.9

15	Tangent	1426	-	-	58.3
Vehicle Results					
Average Speed, mi/h		55.9	Percent Followers, %		68.4
Segment Travel Time, minutes		2.45	Follower Density, followers/mi/ln		10.3
Vehicle LOS		D			
Facility Results					
T	Follower Density, followers/mi/ln			LOS	
1	10.3			D	

HCS7 Two-Lane Highway Report

Project Information

Analyst		Date	4/14/2024
Agency		Analysis Year	2024
Jurisdiction		Time Analyzed	
Project Description	Brooking south UGB to CA border	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	6230
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	6.8

Demand and Capacity

Directional Demand Flow Rate, veh/h	940	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.93	Total Trucks, %	24.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.55

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	60.2
Speed Slope Coefficient	3.83193	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.28831	PF Power Coefficient	0.76237
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	6230	-	-	56.6

Vehicle Results

Average Speed, mi/h	56.6	Percent Followers, %	70.7
Segment Travel Time, minutes	1.25	Follower Density, followers/mi/ln	11.7
Vehicle LOS	D		

Segment 2

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	1742
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	6.1

Demand and Capacity

Directional Demand Flow Rate, veh/h	940	Opposing Demand Flow Rate, veh/h	-
-------------------------------------	-----	----------------------------------	---

Peak Hour Factor	0.93	Total Trucks, %	24.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.55

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	59.1
Speed Slope Coefficient	4.88071	Speed Power Coefficient	0.46256
PF Slope Coefficient	-1.45026	PF Power Coefficient	0.73818
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	12.9
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1742	-	-	54.6

Vehicle Results

Average Speed, mi/h	54.6	Percent Followers, %	75.0
Segment Travel Time, minutes	0.36	Follower Density, followers/mi/ln	12.9
Vehicle LOS	E		

Segment 3

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	422
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	12.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	952	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	24.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.56

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	58.8
Speed Slope Coefficient	3.69437	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.40521	PF Power Coefficient	0.73669
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	12.8
%Improved % Followers	0.0	% Improved Avg Speed	0.0

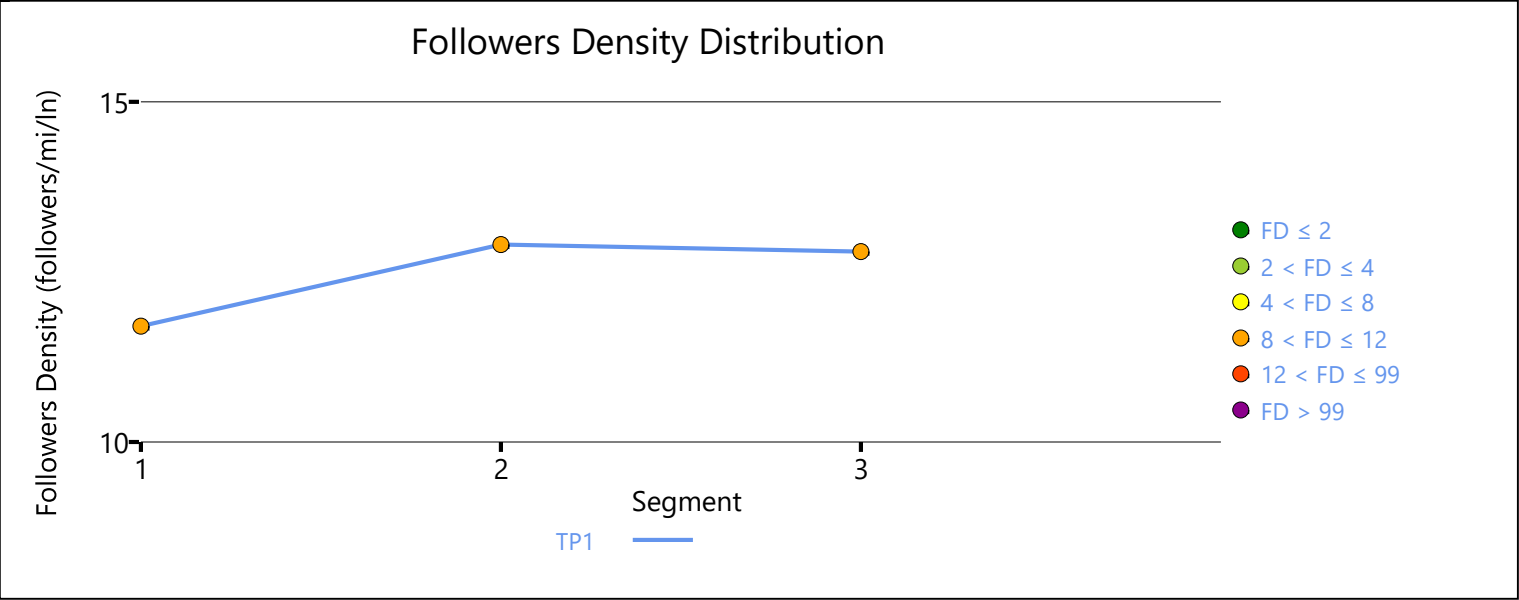
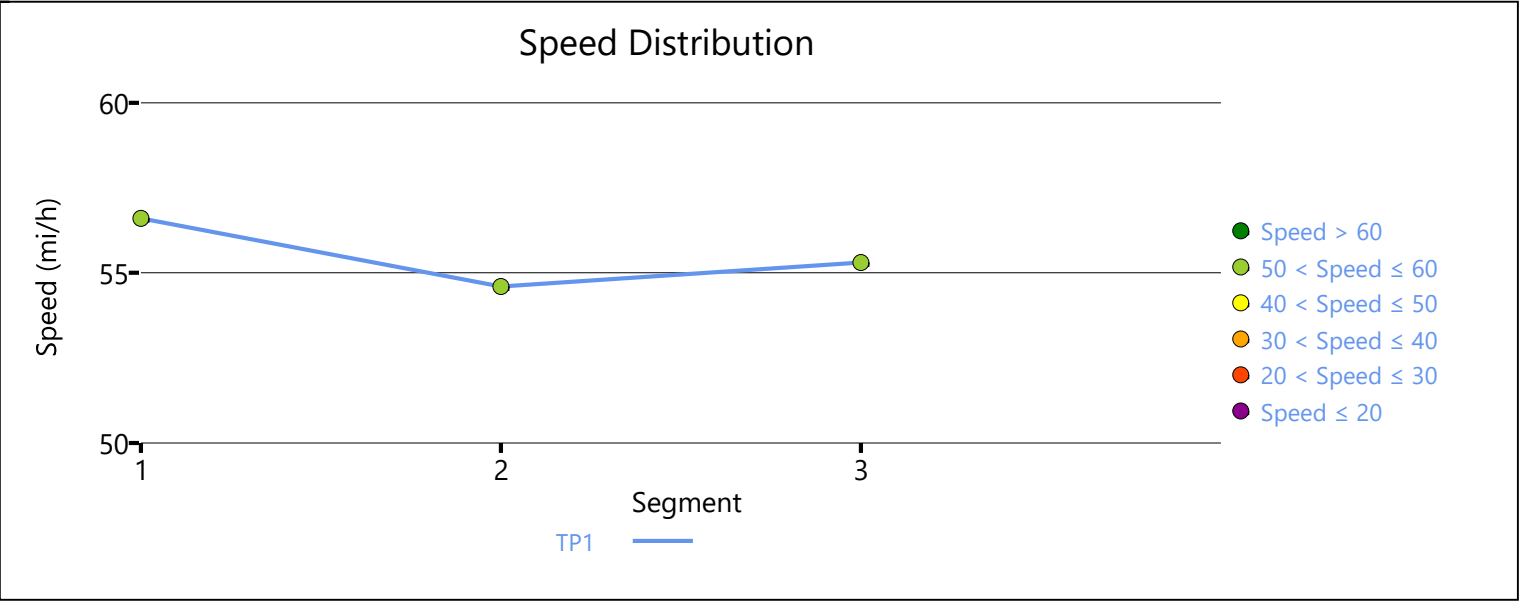
Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	422	-	-	55.3

Vehicle Results

Average Speed, mi/h	55.3	Percent Followers, %	74.2
Segment Travel Time, minutes	0.09	Follower Density, followers/mi/ln	12.8
Vehicle LOS	E		

Facility Results		
T	Follower Density, followers/mi/ln	LOS
1	12.0	E



APPENDIX B. CRASH DATA ANALYSIS (DRAFT)

The project team conducted a comprehensive analysis of the existing safety performance of the Passing Lanes Study facilities. The following sections summarize the key findings relating to crash trends and identification of segments for Highway Safety Manual (HSM) segments.

OVERVIEW

Crash data on the study segments was obtained from ODOT for the most recent five years of available data (2017 to 2021). From 2017 to 2021, a total of 1,094 crashes took place on the study segments, with 934 crashes on US 101 segments (114.86 miles) and 160 crashes on OR 42 segments (27.66 miles). **Table 1** shows the most common crash types.

TABLE 1: MOST COMMON CRASH TYPES

CRASH TYPE	NUMBER OF CRASHES (ANY SEVERITY)	PERCENT OF CRASHES (ANY SEVERITY)	NUMBER OF F&SI CRASHES*	PERCENT OF F&SI CRASHES*
FIXED OBJECT	537	49.1%	33	42.3%
REAR END	164	15.0%	7	9.0%
TURNING	110	10.1%	9	11.5%
ANIMAL	108	9.9%	3	3.8%
SIDESWIPE – MEETING	46	4.2%	5	6.4%
OVERTURN	43	3.9%	1	1.3%
SIDESWIPE – OVERTAKING	23	2.1%	0	0.0%
HEAD-ON	20	1.8%	15	19.2%
ANGLE	17	1.6%	3	3.8%
NON-COLLISION/OTHER**	26	2.4%	2	2.6%
TOTAL	1,094	100%	78	100%

* F&SI = Fatal or Serious Injury crash

** Non-collision/Other crashes include parked car crashes, pedestrian crashes, and crashes resulting from malfunctions such as load shifts or tire failures.

The most common crash type was fixed object (49.1%), followed by rear end (15.0%) and turning (10.1%). Of the 78 fatal and serious injury crashes, the most common crash types were fixed object (42.3%), head-on (19.2%), and turning (11.5%).

HIGH-CRASH LOCATIONS

For the purposes of this study, high-crash locations were initially identified using heat maps and percent of passing-related crashes. Crashes involving bicyclists and pedestrians were also examined.

HEAT MAPS

Heat maps are a representation of crash data that shows the frequency of crashes. Locations with a higher number of reported crashes show darker red colors on the map, allowing for visual identification of high-crash locations. **Figure 1** shows heat maps for each segment along the corridor. As shown, there are at least five high-crash locations along each segment.

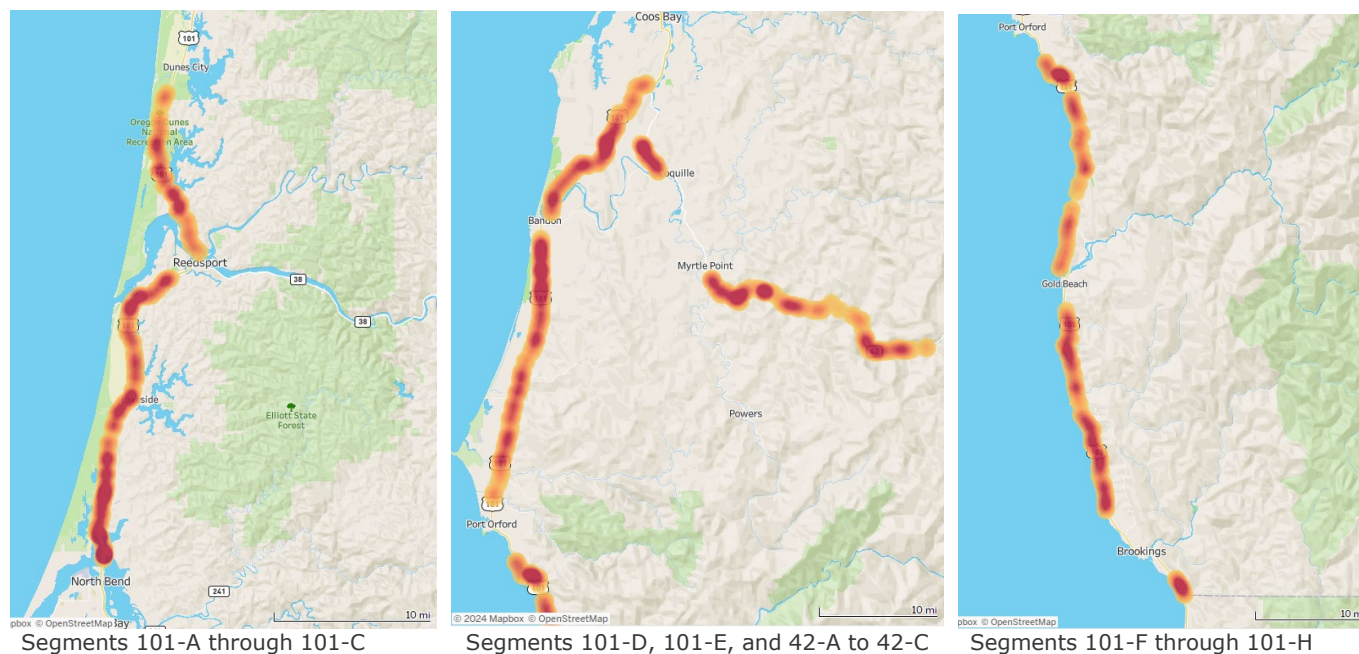


FIGURE 1: HIGH-CRASH LOCATIONS

PASSING-RELATED CRASHES

Table 2 shows the total number of crashes and the number of passing-related crashes on each segment, while **Figure 2** shows this data visually. Crashes were flagged as passing-related if:

- Crash type was sideswipe – meeting or sideswipe – overtaking.
- Vehicle action was coded as “PASSING.”
- Driver error was coded as “PAS WRNG.”

TABLE 2: CRASH DATA OVERVIEW AND PASSING-RELATED CRASHES

SEGMENT	LENGTH (MILES)	TOTAL CRASHES (2017-2021)	TOTAL PASSING RELATED CRASHES (2017-2021)	PERCENT PASSING RELATED *
101-A	12.48	92	12	13.0%
101-B	7.90	79	6	7.6%
101-C	11.83	201	19	9.5%
101-D	15.63	125	10	8.0%
101-E	21.61	164	12	7.3%
101-F	22.91	105	5	4.8%
101-G	20.91	148	17	11.5%
101-H	1.59	20	1	5.0%
42-A	2.28	21	5	23.8%
42-B	1.35	8	0	0.0%
42-C	24.03	131	10	7.6%
ALL SEGMENTS	142.52	1094	97	8.9%

* **Bold values** indicate percentages of passing-related crashes higher than average.

As shown in **Table 2**, the average percentage of passing-related crashes along all study segments is 8.9%. Four segments experienced an above-average percentage of passing related crashes: 101-A, 101-C, 101-G, and 42-A.

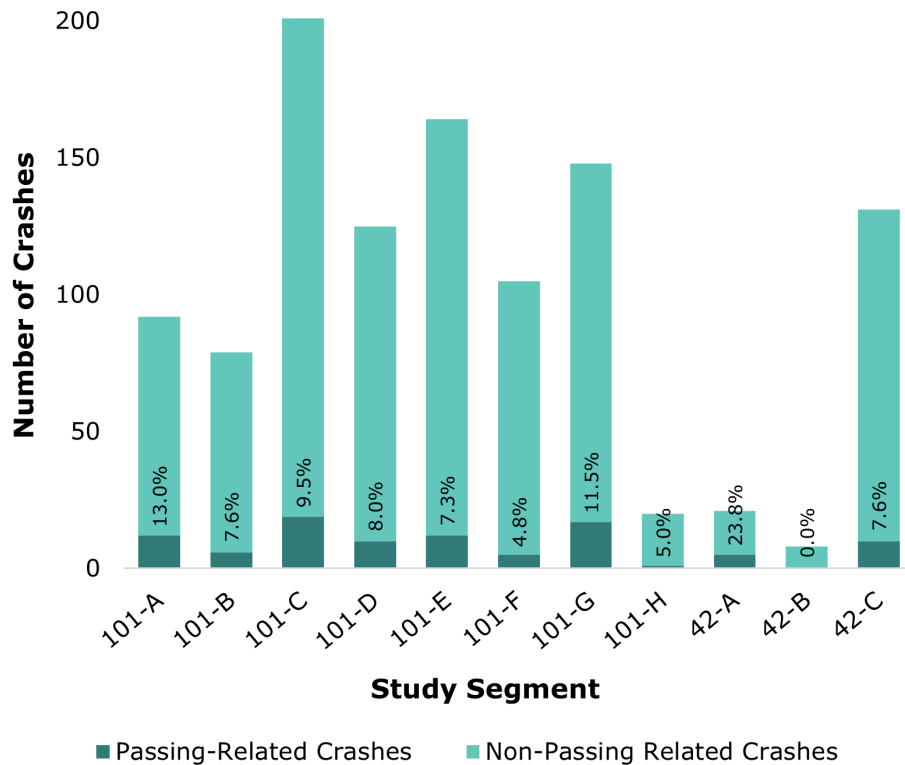


FIGURE 2: PERCENTAGE OF PASSING-RELATED CRASHES BY STUDY SEGMENT

PEDESTRIAN-INVOLVED CRASHES

There were four pedestrian-involved crashes from 2017 to 2021. One crash was passing-related.

- In 2017, a pedestrian crash resulting in minor injury occurred just south of Sundown Road between the Samuel H. Boardman State Scenic Corridor and Brookings (Segment 101-G). The crash was a sideswipe-meeting roadway departure crash flagged as passing-related. A car heading north struck a stalled car in the roadway, subsequently striking a pedestrian in the roadway. The crash occurred in clear, dry, and dark conditions.
- In 2018, a pedestrian crash resulting in minor injury occurred at the intersection of US 101 and Marine Way near Shorewood (Segment 101-C). A semitruck traveling north through the intersection struck an eastbound pedestrian crossing US 101. The crash occurred at dawn on a cold, dry day.
- In 2019, there was a fatal pedestrian crash near the Winchuck State Recreation Site driveway just north of the Winchuck River Bridge (Segment 101-H). A car heading south struck a pedestrian in the roadway. Both alcohol and drug impairment were listed as contributing factors. Conditions were clear and dry. The crash occurred in clear, dry, and dark conditions.
- In 2020, there was a fatal pedestrian crash at the intersection of US 101 and Two Mile Lane south of Bandon (Segment 101-E). A car traveling south through the intersection struck a

pedestrian on the road shoulder. Inattention, alcohol impairment, and drug impairment were listed as contributing circumstances. The crash occurred in dark and wet conditions.

BICYCLE-INVOLVED CRASHES

From 2017 to 2021, there were five bicycle-involved crashes. Two of the five crashes were passing-related.

- In 2018, a fatal bicycle crash occurred on a segment near Whaleshead Beach (Segment 101-G). A car traveling north struck a bicyclist crossing US 101 between intersections. The crash report listed drug impairment as a contributing factor. The crash occurred on a clear, dry day.
- In 2019, a bicycle crash resulting in minor injury occurred at the intersection of US 101 and the Humbug Mountain State Park campground driveway (Segment 101-F). A car traveling south struck a southbound bicyclist turning left into the driveway. The crash occurred on a clear, dry day.
- In 2019, there was a bicycle crash resulting in serious injury near Meyers Creek Vista Point (Segment 101-G). The crash was passing-related and occurred when a southbound car struck a southbound bicyclist turning left on a horizontal curve. The crash occurred on a clear, dry day.
- In 2020, there was a bicycle crash resulting in minor injury south of Lakeside near Beaver Loop Road (Segment 101-C). The crash was passing-related and occurred when a southbound car struck a southbound bicyclist traveling on the road. The crash occurred on a clear, dry day.
- In 2020, a fatal bicycle crash occurred near Shorewood (Segment 101-C). The crash was a rear end that involved roadway departure. A car traveling north struck a bicyclist heading north on the road shoulder. Inattention (cell phone use), alcohol impairment, and drug impairment were listed as contributing factors. The crash occurred on a clear, dry day.

SAFETY ANALYSIS METHODOLOGY

To pinpoint specific locations along a segment that might have a safety concern, the eleven study segments were divided into smaller segments ranging between 0.25 miles and 2 miles. Depending on the length of the study segment, each one was divided into 15 to 31 safety-specific subsegments; only three study segments were divided into three or less subsegments. Most of these subsegments are consistent with the operational analysis subsegments, with some differences to prevent splitting clusters of crashes.

The goal of the existing conditions safety analysis is to identify segments for Highway Safety Manual (HSM) predictive analysis and perform predictive analysis to act as a baseline safety condition to compare with future scenarios in later tasks. Segments were identified using two methods: SPIS sites and critical crash rates.

ODOT SAFETY PRIORITY INDEX SYSTEM

The Safety Priority Index System (SPIS) is a ranking system developed by ODOT to identify and compare locations with safety problems on state highways. SPIS scores are developed based upon crash frequency, crash severity, and rate for a 0.10 mile or variable length segment along the state highway over a rolling three-year window (i.e., every year it is updated with the most recent three years). A prioritized list of the top 15% of statewide SPIS sites is created for each region, and the top 5% are investigated by the five Region Traffic managers' offices.

The percentile rankings are based on the percentage of SPIS scores that are the same or lower than a selected SPIS score. For example, a SPIS score that is higher than 95 percent of all SPIS scores is at the 95th percentile. Similarly, 90th percentile SPIS score is higher than 90 percent of all SPIS scores (i.e., in the top 10 percent), but it is below and not within the top 5 percent (95th percentile) of all SPIS scores.

All top 10% SPIS sites from 2022, 2021, and 2020 on the study segments are identified below. There are no top 5% SPIS sites.

TABLE 3. SPIS SITES 2022, 2021, 2020

SEGMENT	MILEPOINTS	SPIS 2022	SPIS 2021	SPIS 2020
101-C	229.41 to 229.54	x		
101-D	245.04 to 245.05			x
	252.14 to 252.20	x		
42-C	24.51 to 24.59	x	x	
	28.58 to 28.59	x		

CRASH RATES

Crash rates are another indicator of safety performance that accounts for crash frequency and exposure but does not account for crash severity. The purpose of comparing calculated crash rates with other metrics is to identify sites where crashes occur at a higher frequency than expected.

Crash rates were examined at the study segment level and the safety subsegment level.

STUDY SEGMENT CRASH RATE EVALUATION

Segment crash rates were calculated for each of the eleven study segments. A segment's crash rate is calculated based on crash frequency and vehicle volume, with crash rates for segments given in units of crashes per million vehicle miles traveled (crashes/MVMT). The segment crash rates were then compared to two different metrics:

- **Statewide published crash rate.** Per ODOT's Table II¹, the statewide crash rate is 0.83. Four study segments have crash rates at or above the statewide crash rate.
- **Critical crash rate.** Critical crash rates are statistically adjusted for each segment based on length and exposure (traffic volume) to more accurately compare roadways with different characteristics. Five study segments have crash rates at or above their critical crash rate.

Table 4 shows the results of the study segment crash rate evaluation.

¹ Oregon Department of Transportation Crash Statistics & Reports. 2021 Crash Rate Table II.
https://www.oregon.gov/odot/Data/Documents/Crash_Rate_TableII_2021.pdf

TABLE 4. STUDY SEGMENT CRASH RATE EVALUATION

STUDY SEGMENT INFORMATION					COMPARISON TO STATEWIDE CRASH RATE		COMPARISON TO CRITICAL CRASH RATE	
SEGMENT	LENGTH (MILES)	APPROXIMATE VOLUME (AADT)	NO. OF CRASHES	SEGMENT CRASH RATE	STATEWIDE PUBLISHED CRASH RATE	SEGMENT ABOVE STATE-WIDE?	CRITICAL CRASH RATE	SEGMENT ABOVE CRITICAL?
101-A	12.48	4,800	92	0.84	0.83	Yes	0.61	Yes
101-B	7.90	9,500	79	0.58		No	0.67	No
101-C	11.83	14,000	201	0.66		No	0.67	No
101-D	15.63	9,200	125	0.48		No	0.64	No
101-E	21.61	5,000	164	0.83		Yes	0.59	Yes
101-F	22.91	3,200	105	0.78		No	0.58	Yes
101-G	20.91	4,000	148	0.97		Yes	0.61	Yes
101-H	1.59	8,900	20	0.77		No	0.95	No
42-A	2.28	10,100	21	0.50		No	0.81	No
42-B	1.35	5,000	8	0.65		No	0.79	No
42-C	24.03	3,400	131	0.88		Yes	0.57	Yes

It should be noted that these segments are too long to apply predictive analysis. This table is intended to provide a general overview of the safety performance of all study segments.

HSM SEGMENT CRASH RATE EVALUATION

Subsegment crash rates were evaluated for the entire corridor, a total of 177 subsegments. Out of these, 20 had a calculated crash rate above their critical crash rate. The breakdown of these subsegments is shown below.

- 7 on 42-C
- 2 on 101-A
- 1 on 101-B
- 3 on 101-C
- 2 on 101-D
- 2 on 101-E
- 3 on 101-F

IDENTIFYING SEGMENTS FOR PREDICTIVE ANALYSIS

HIGHWAY SAFETY MANUAL OVERVIEW

The Highway Safety Manual (HSM), published in 2010, is the first national resource that provides quantitative information and methods to evaluate the safety performance of roadways. The predictive method, which is the cornerstone of the HSM, estimates the expected average crash frequency on a segment using a combination of site characteristics and historical crash data.

WHICH HSM SEGMENTS WERE ANALYZED USING PREDICTIVE ANALYSIS?

HSM segments were analyzed using predictive analysis if their calculated crash rate was above their critical crash rate.

HSM SEGMENT ANALYSIS

For each segment, the expected average crash frequency is calculated using a Safety Performance Function (SPF), which is a regression equation developed for a specific type of facility using a national database of information. Each SPF is then adjusted to account for specific site characteristics using Crash Modification Factors (CMFs). CMFs can also be applied to estimate the effectiveness of various countermeasures, including the addition of passing lanes.

The HSM Smart Spreadsheets, which are provided by ODOT², were used to conduct all of the HSM analyses. The output of the HSM Smart Spreadsheets is the expected number of crashes per year for each location. The expected number of crashes for each location was then used to evaluate its relative safety performance and to quantify the effectiveness of relevant countermeasures (including the addition of passing lanes, passing zones, or vehicle turnouts). The assumptions and limitations of the HSM analysis are described below.

Local Calibration Factors

The SPFs and CMFs used in the HSM were derived from a national database of roadways and intersection. As such, the equations need to be calibrated to local conditions to account for differences in driver behavior, weather, and crash reporting thresholds, among other factors. Previous research efforts have developed a set of recommended calibration factors for the State of Oregon, which are outlined in ODOT's Analysis Procedures Manual (APM). For rural two-lane highways, the calibration factor is 0.74.

Limitations and Assumptions

The research used to develop CMFs varies greatly in terms of data quality and analytical procedures. A star-rating is applied to each CMF that indicates the quality of the study that produced the CMF, where 5-stars indicates the highest or most reliable rating. The CMFs that are integrated into the HSM Smart Spreadsheets all have star ratings of three or higher.

² Highway Safety Manual webpage, Oregon Department of Transportation.
<https://www.oregon.gov/odot/Engineering/Pages/HSM.aspx>

HSM EXISTING CONDITIONS RESULTS

A comparison of the historical average number of crashes per year (2017 to 2021) with the expected average number of crashes per year (using the HSM analysis methods under existing conditions) gives an indication of relative safety performance of the study locations.

Table 5 shows the results of the HSM predictive existing conditions analysis. As shown, all of the analyzed subsegments had a higher number of observed crashes than expected, with eight at least twice the number of expected crashes and seven at least 1.5 times the number of expected crashes.

TABLE 5. OBSERVED AND EXPECTED CRASH FREQUENCY, PASSING LANES SUBSEGMENTS

STUDY LOCATION	OBSERVED CRASHES PER YEAR (2017-2021)	EXPECTED CRASHES PER YEAR (HSM)
SEGMENT 42-C		
SC.3.1	1.40	0.66
SC.4.1	3.00	1.30
SC.6.2	3.40	1.60
SC.11.1	1.40	0.70
SC.24.1	1.20	0.50
SC.25.1	1.00	0.50
SC.26.1	1.20	0.50
SEGMENT 101-A		
SD.6.1	1.40	0.81
SD.11.1	2.00	1.12
SEGMENT 101-B		
SE.3.1	5.20	2.90
SEGMENT 101-C		
SF.11.1	6.60	4.40
SF.15.1	2.60	2.30
SF.18.1	7.60	5.90
SEGMENT 101-D		
SG.1.1	2.20	1.91

STUDY LOCATION	OBSERVED CRASHES PER YEAR (2017-2021)	EXPECTED CRASHES PER YEAR (HSM)
SG.9.1	4.40	2.37
SEGMENT 101-E		
SH.1.2	3.00	1.90
SH.3.1	3.00	2.10
SEGMENT 101-F		
SI.5.1	4.80	3.70
SI.10.1	1.60	0.90
SI.18.1	1.60	0.70

BOLD: DENOTES OBSERVED CRASH RATES ABOVE EXPECTED

HIGHLIGHTED IN YELLOW: DENOTES CRASH RATES AT LEAST 1.5 TIMES THE EXPECTED CRASH RATE

HIGHLIGHTED IN RED: DENOTES OBSERVED CRASH RATES AT LEAST TWICE THE EXPECTED CRASH RATE