

TFMS - Segment Forecast Report

Username	Email	Script Import Date	Script Version	Model Version
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Forecast Summary

Project ID	Project Name	Opening Year	Design Year
122689	TUS IR 77 23.40	2028	2048

Project Description

Installation of new median cable barrier along I-77. Project includes removing the existing raised median and updating the existing drainage structures.

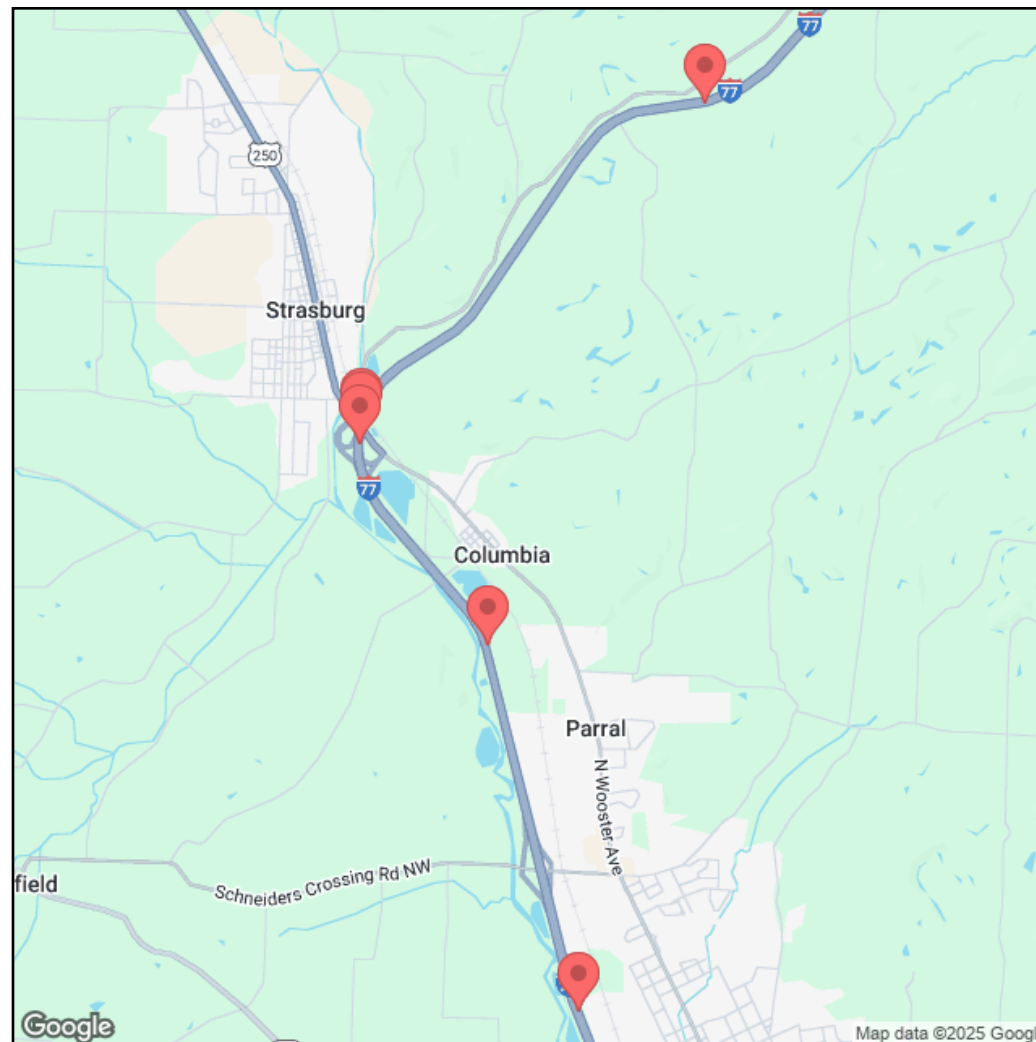
*Users of this data need to be aware that there are limitations to the forecasts generated by this product that make it suitable only for roadway design projects which are low risk.

Segment Information

Segment ID	LRS ID	BMP	EMP	Length	Latitude	Longitude
1955561	STUSIR00077**C	23.377	25.028	1.651	-81.4990350274333	40.5383708469152
1955565	STUSIR00077**C	25.028	27.569	2.541	-81.5086773144824	40.5678301734624
1955570	STUSIR00077**C	27.569	27.720	0.151	-81.5221931214016	40.583915918625
1955571	STUSIR00077**C	27.720	27.729	0.009	-81.5220440759976	40.5850696141621
1955572	STUSIR00077**C	27.729	27.755	0.026	-81.5219808068942	40.5853189272022
1955574	STUSIR00077**C	27.755	33.240	5.485	-81.4856341997294	40.6113691497267

Forecast Information

Segment ID	2028 AADT	2048 AADT	DHV-30	K%	D%	T24%	TD%
1955561	40,000	44,000	4,800	11.0	50.0	18	20
1955565	41,500	45,500	5,500	12.0	50.0	18	10
1955570	32,000	36,000	4,500	12.5	51.9	18	9
1955571	31,500	34,000	4,200	12.5	51.9	17	9
1955572	32,000	34,500	4,300	12.5	51.9	17	9
1955574	32,000	36,500	4,600	12.5	51.9	18	9



Definitions:

- o AADT – Annual Average Daily Traffic
- o DHV30 – Design Hour Volume for 30th highest hour of the year
- o $DHV30 = K * AADT$
- o K % – Design Hour Factor
- o D % – Peak Direction Factor
- o T24 % – Percent Daily Trucks
- o TD % – Percent Design Hour Trucks

Forecast Segment ID	Route	BMP	EMP
1955561	STUSIR00077**C	23.377	25.028

Forecast

Year	K%	T24 % (Existing)	PA AADT	PA Method	PA Growth Rate %	PA Calculated Rate %
2050	◆ 11.0	13	36,000	Model	0.200	0.200
AADT	D%	TD % (Existing)	BC AADT	BC Method	BC Growth Rate %	BC Calculated Rate %
44,200	◆ 50.0	15	8,200	Model	2.100	2.100

◆ K/D factors from TCDS were used.

Regression

Method Number	PA AADT	BC AADT	AADT
4	30,451	1,129	31,580

95% Confidence Min/Max

PA Min	PA Max	BC Min	BC Max	Year
-14332	70229	-10079	8564	2050

Method Number	PA Growth %	BC Growth %	PA Drop Count	BC Drop Count	PA AADT	BC AADT	PA Adjustment	PA Adjustment
1	0.34	-2.93	0	0	36,949	900	37,026	1,093
2	0.97	-2.00	5	5	45,233	2,796	42,787	2,411
3	-1.04	-3.92	0	0	22,613	-692	24,430	-306
4	-0.38	-2.91	5	5	31,069	1,324	30,451	1,129
5	-1.20	-4.38	0	0	20,978	-1,405	22,931	-960
6	-0.61	-3.47	5	5	28,774	465	28,328	335

Adjustment Info

ID	Adjustment Methods Name	Model vs Count AADT	Adjusted AADT	Model vs Count BC	Adjusted BC	PA Growth Rate %	BC Growth Rate %
1	DIF	-13,028	45,011	-2,066	8,564	0.28	2.34
2	RAT	0.75	43,552	0.72	7,627	0.22	1.68
3	MRAT	1.11	43,699	1.45	7,919	0.20	1.89
4	RAF		44,355		8,241	0.24	2.11
Adjust Method AADT		Adjust Method BC		Selected PA Growth Rate %		Selected BC Growth Rate %	
Average		Average		0.200		2.100	

Method 1 - 4 Volume

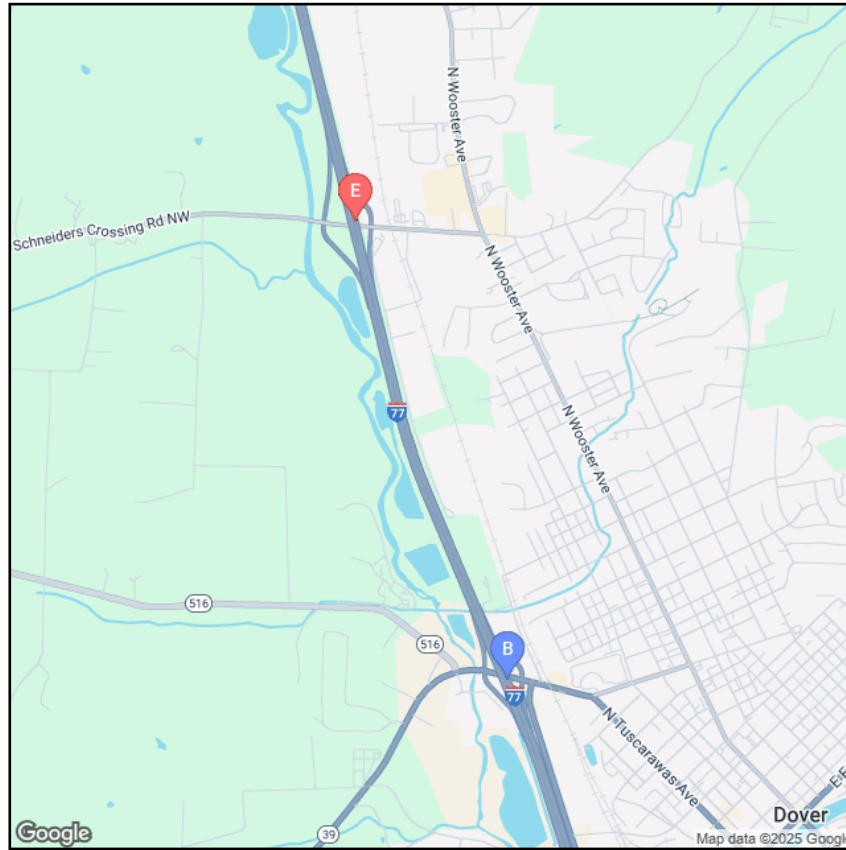
PA Min Volume	PA Max Volume	BC Min Volume	BC Max Volume	Total Min Volume	Total MaxVolume
35780	36447	7627	8564	43407	45011

Process Flag:	Adjusted model to counts with process per ODOT 255 spreadsheet
Comment:	No Comment

Historical Count

Year	All	Cars	Trucks
2010	34,550	27,980	6,570
2013	41,880	35,159	6,720
2014	42,089	35,334	6,754
2017	43,803	36,941	6,860
2020	33,470	28,986	4,484
* 2023	39,164	33,917	5,247

* Pivot Point



Segment ID	LRS ID	BMP	EMP	Length	Yr 2028 AADT	Yr 2048 AADT	DHV30	K %	D %	T24 %	TD %
1955561	STUSIR00077**C	23.377	25.028	1.651	40,000	44,000	4800	11.0	50.0	18	20

Forecast Segment ID	Route	BMP	EMP
1955565	STUSIR00077**C	25.028	27.569

Forecast

Year	K%	T24 % (Existing)	PA AADT	PA Method	PA Growth Rate %	PA Calculated Rate %
2050	◆ 12.0	14	37,000	Model	0.200	0.200
AADT	D%	TD % (Existing)	BC AADT	BC Method	BC Growth Rate %	BC Calculated Rate %
45,500	◆ 50.0	7	8,500	Model	2.000	2.000

◆ K/D factors from TCDS were used.

Regression

Method Number	PA AADT	BC AADT	AADT
2	35,423	1,390	36,813

95% Confidence Min/Max

PA Min	PA Max	BC Min	BC Max	Year
-22355	84975	-16803	15844	2050

Method Number	PA Growth %	BC Growth %	PA Drop Count	BC Drop Count	PA AADT	BC AADT	PA Adjustment	PA Adjustment
1	-0.37	-3.56	0	0	29,870	-216	31,435	216
2	0.05	-2.77	3	3	35,572	1,463	35,423	1,390
3	-0.30	-3.87	0	0	30,549	-711	32,071	-248
4	-999999.00	-999999.00	0	0				
5	-999999.00	-999999.00	0	0				
6	-999999.00	-999999.00	0	0				

Adjustment Info

ID	Adjustment Methods Name	Model vs Count AADT	Adjusted AADT	Model vs Count BC	Adjusted BC	PA Growth Rate %	BC Growth Rate %
1	DIF	-11,787	46,252	-1,818	8,810	0.27	2.24
2	RAT	0.77	44,932	0.75	7,986	0.22	1.68
3	MRAT	1.11	45,065	1.45	8,243	0.20	1.85
4	RAF		45,659		8,527	0.24	2.04
Adjust Method AADT		Adjust Method BC		Selected PA Growth Rate %		Selected BC Growth Rate %	
Average		Average		0.200		2.000	

Method 1 - 4 Volume

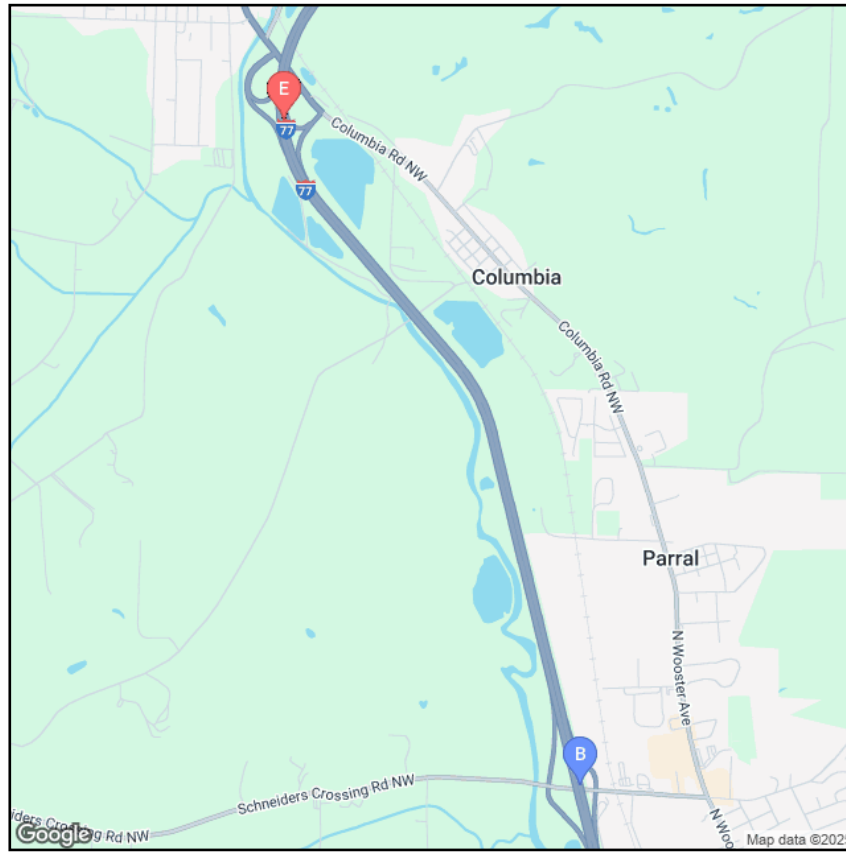
PA Min Volume	PA Max Volume	BC Min Volume	BC Max Volume	Total Min Volume	Total MaxVolume
36822	37442	7986	8810	44808	46252

Process Flag:	Adjusted model to counts with process per ODOT 255 spreadsheet
Comment:	No Comment

Historical Count

Year	All	Cars	Trucks
2015	41,025	34,461	6,564
2017	42,312	35,542	6,770
2020	35,403	30,660	4,743
* 2023	40,405	34,911	5,494

* Pivot Point



Segment ID	LRS ID	BMP	EMP	Length	Yr 2028 AADT	Yr 2048 AADT	DHV30	K %	D %	T24 %	TD %
1955565	STUSIR00077**C	25.028	27.569	2.541	41,500	45,500	5500	12.0	50.0	18	10

Forecast Segment ID	Route	BMP	EMP
1955570	STUSIR00077**C	27.569	27.720

Forecast

Year	K%	T24 % (Existing)	PA AADT	PA Method	PA Growth Rate %	PA Calculated Rate %
2050	◆ 12.5	14	30,000	Model	0.400	0.400
AADT	D%	TD % (Existing)	BC AADT	BC Method	BC Growth Rate %	BC Calculated Rate %
36,500	◆ 51.9	7	6,500	Model	2.000	2.000

◆ K/D factors from TCDS were used.

Regression

Method Number	PA AADT	BC AADT	AADT
2	30,352	6,211	36,563

95% Confidence Min/Max

PA Min	PA Max	BC Min	BC Max	Year
-2834	44481	3228	7703	2050

Method Number	PA Growth %	BC Growth %	PA Drop Count	BC Drop Count	PA AADT	BC AADT	PA Adjustment	PA Adjustment
1	0.60	1.49	0	0	31,513	5,808	31,290	5,944
2	0.47	1.73	4	5	29,706	6,207	30,352	6,211
3	0.05	1.58	0	0	26,914	5,928	27,284	6,048
4	0.05	1.86	4	5	26,241	6,389	27,284	6,368
5	-0.77	1.15	0	0	20,308	5,378	21,339	5,553
6	-0.32	1.43	5	5	25,067	5,839	24,634	5,873

Adjustment Info

ID	Adjustment Methods Name	Model vs Count AADT	Adjusted AADT	Model vs Count BC	Adjusted BC	PA Growth Rate %	BC Growth Rate %
1	DIF	-4,205	36,575	-935	6,689	0.41	2.14
2	RAT	0.88	35,932	0.82	6,246	0.38	1.76
3	MRAT	1.15	36,017	1.47	6,389	0.37	1.88
4	RAF		36,296		6,539	0.39	2.01

Adjust Method AADT	Adjust Method BC	Selected PA Growth Rate %	Selected BC Growth Rate %
Average	Average	0.400	2.000

Method 1 - 4 Volume

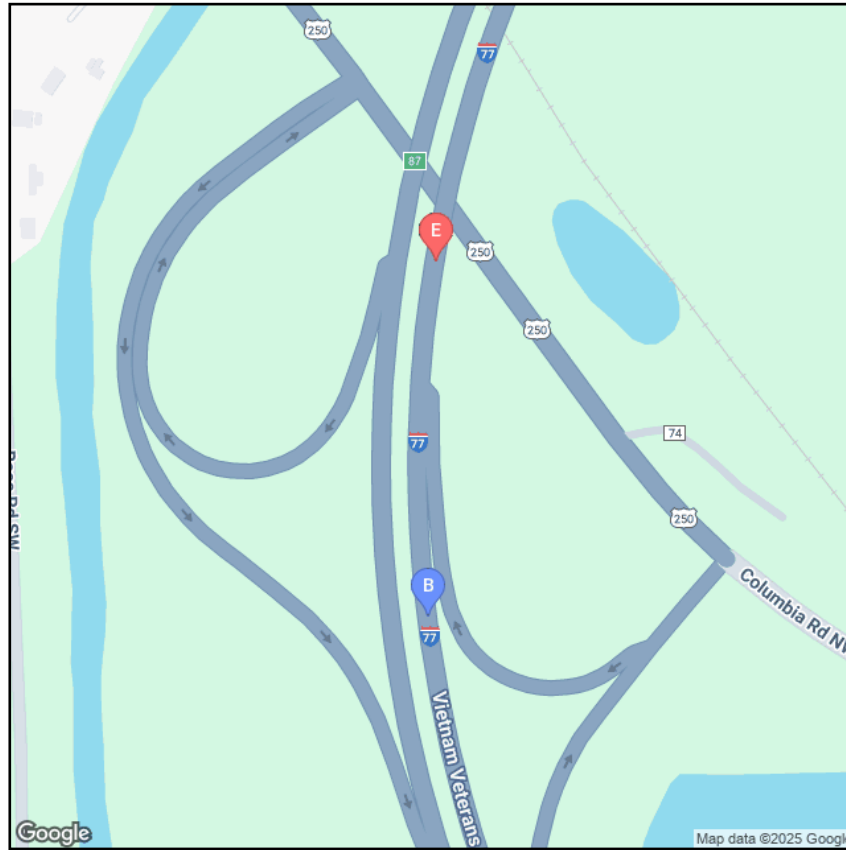
PA Min Volume	PA Max Volume	BC Min Volume	BC Max Volume	Total Min Volume	Total Max Volume
29628	29886	6246	6689	35874	36575

Process Flag:	Adjusted model to counts with process per ODOT 255 spreadsheet
Comment:	No Comment

Historical Count

Year	All	Cars	Trucks
2008	26,437	23,247	3,190
2011	28,283	25,081	3,200
2014	30,987	27,262	3,724
2017	32,912	29,174	3,738
2020	27,624	23,958	3,666
* 2023	31,166	26,930	4,236

* Pivot Point



Segment ID	LRS ID	BMP	EMP	Length	Yr 2028 AADT	Yr 2048 AADT	DHV30	K %	D %	T24 %	TD %
1955570	STUSIR00077**C	27.569	27.720	0.151	32,000	36,000	4500	12.5	51.9	18	9

Forecast Segment ID	Route	BMP	EMP
1955571	STUSIR00077**C	27.720	27.729

Forecast

Year	K%	T24 % (Existing)	PA AADT	PA Method	PA Growth Rate %	PA Calculated Rate %
2050	◆ 12.5	14	29,000	Model	0.200	0.200
AADT	D%	TD % (Existing)	BC AADT	BC Method	BC Growth Rate %	BC Calculated Rate %
34,700	◆ 51.9	7	5,700	Model	1.300	1.300

◆ K/D factors from TCDS were used.

Regression

Method Number	PA AADT	BC AADT	AADT
2	30,352	6,211	36,563

95% Confidence Min/Max

PA Min	PA Max	BC Min	BC Max	Year
-2834	44481	3228	7703	2050

Method Number	PA Growth %	BC Growth %	PA Drop Count	BC Drop Count	PA AADT	BC AADT	PA Adjustment	PA Adjustment
1	0.60	1.49	0	0	31,513	5,808	31,290	5,944
2	0.47	1.73	4	5	29,706	6,207	30,352	6,211
3	0.05	1.58	0	0	26,914	5,928	27,284	6,048
4	0.05	1.86	4	5	26,241	6,389	27,284	6,368
5	-0.77	1.15	0	0	20,308	5,378	21,339	5,553
6	-0.32	1.43	5	5	25,067	5,839	24,634	5,873

Adjustment Info

ID	Adjustment Methods Name	Model vs Count AADT	Adjusted AADT	Model vs Count BC	Adjusted BC	PA Growth Rate %	BC Growth Rate %
1	DIF	13,710	33,476	1,743	5,454	0.15	1.06
2	RAT	1.79	35,291	1.70	6,305	0.28	1.81
3	MRAT	1.13	35,079	1.49	6,026	0.29	1.57
4	RAF		34,278		5,740	0.22	1.32
Adjust Method AADT		Adjust Method BC		Selected PA Growth Rate %		Selected BC Growth Rate %	
Average		Average		0.200		1.300	

Method 1 - 4 Volume

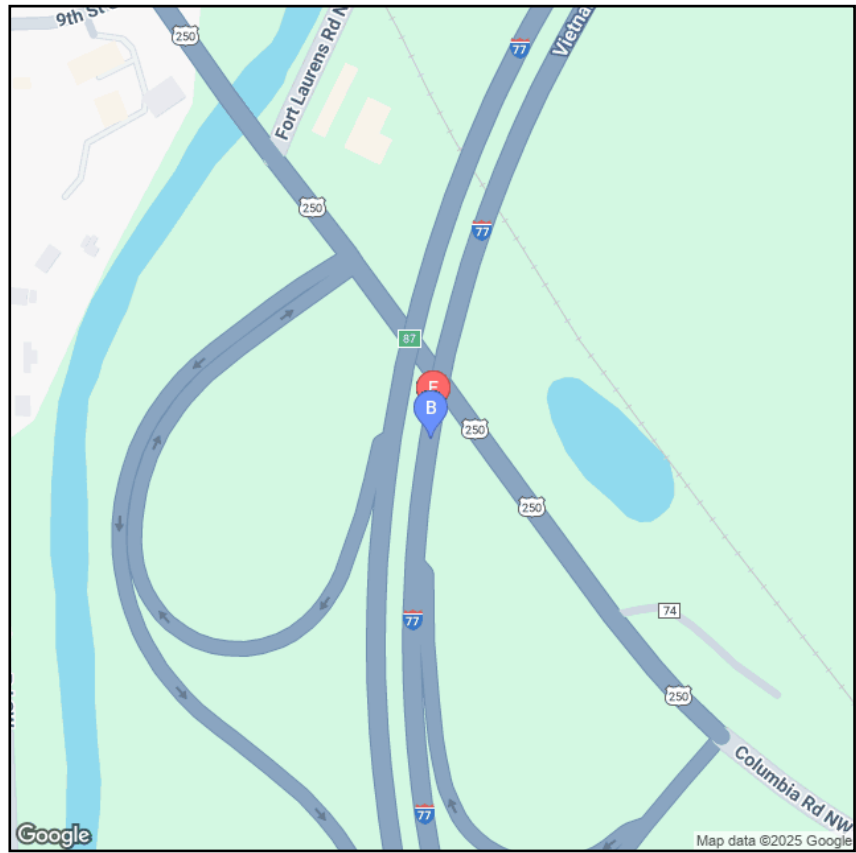
PA Min Volume	PA Max Volume	BC Min Volume	BC Max Volume	Total Min Volume	Total MaxVolume
28022	29053	5454	6305	33476	35358

Process Flag:	Adjusted model to counts with process per ODOT 255 spreadsheet
Comment:	No Comment

Historical Count

Year	All	Cars	Trucks
2008	26,437	23,247	3,190
2011	28,283	25,081	3,200
2014	30,987	27,262	3,724
2017	32,912	29,174	3,738
2020	27,624	23,958	3,666
* 2023	31,166	26,930	4,236

* Pivot Point



Segment ID	LRS ID	BMP	EMP	Length	Yr 2028 AADT	Yr 2048 AADT	DHV30	K %	D %	T24 %	TD %
1955571	STUSIR00077**C	27.720	27.729	0.009	31,500	34,000	4200	12.5	51.9	17	9

Forecast Segment ID	Route	BMP	EMP
1955572	STUSIR00077**C	27.729	27.755

Forecast

Year	K%	T24 % (Existing)	PA AADT	PA Method	PA Growth Rate %	PA Calculated Rate %
2050	◆ 12.5	14	29,000	Model	0.300	0.300
AADT	D%	TD % (Existing)	BC AADT	BC Method	BC Growth Rate %	BC Calculated Rate %
34,800	◆ 51.9	7	5,800	Model	1.400	1.400

◆ K/D factors from TCDS were used.

Regression

Method Number	PA AADT	BC AADT	AADT
2	30,352	6,211	36,563

95% Confidence Min/Max

PA Min	PA Max	BC Min	BC Max	Year
-2834	44481	3228	7703	2050

Method Number	PA Growth %	BC Growth %	PA Drop Count	BC Drop Count	PA AADT	BC AADT	PA Adjustment	PA Adjustment
1	0.60	1.49	0	0	31,513	5,808	31,290	5,944
2	0.47	1.73	4	5	29,706	6,207	30,352	6,211
3	0.05	1.58	0	0	26,914	5,928	27,284	6,048
4	0.05	1.86	4	5	26,241	6,389	27,284	6,368
5	-0.77	1.15	0	0	20,308	5,378	21,339	5,553
6	-0.32	1.43	5	5	25,067	5,839	24,634	5,873

Adjustment Info

ID	Adjustment Methods Name	Model vs Count AADT	Adjusted AADT	Model vs Count BC	Adjusted BC	PA Growth Rate %	BC Growth Rate %
1	DIF	10,449	34,075	1,674	5,563	0.22	1.16
2	RAT	1.50	35,542	1.65	6,429	0.30	1.92
3	MRAT	1.14	35,361	1.52	6,133	0.32	1.66
4	RAF		34,718		5,848	0.27	1.41

Adjust Method AADT	Adjust Method BC	Selected PA Growth Rate %	Selected BC Growth Rate %
Average	Average	0.300	1.400

Method 1 - 4 Volume

PA Min Volume	PA Max Volume	BC Min Volume	BC Max Volume	Total Min Volume	Total Max Volume
28512	29228	5563	6429	34075	35657

Process Flag:	Adjusted model to counts with process per ODOT 255 spreadsheet
Comment:	No Comment

Historical Count

Year	All	Cars	Trucks
2008	26,437	23,247	3,190
2011	28,283	25,081	3,200
2014	30,987	27,262	3,724
2017	32,912	29,174	3,738
2020	27,624	23,958	3,666
* 2023	31,166	26,930	4,236

* Pivot Point



Segment ID	LRS ID	BMP	EMP	Length	Yr 2028 AADT	Yr 2048 AADT	DHV30	K %	D %	T24 %	TD %
1955572	STUSIR00077**C	27.729	27.755	0.026	32,000	34,500	4300	12.5	51.9	17	9

Forecast Segment ID	Route	BMP	EMP
1955574	STUSIR00077**C	27.755	33.240

Forecast

Year	K%	T24 % (Existing)	PA AADT	PA Method	PA Growth Rate %	PA Calculated Rate %
2050	◆ 12.5	14	30,000	Model	0.400	0.400
AADT	D%	TD % (Existing)	BC AADT	BC Method	BC Growth Rate %	BC Calculated Rate %
36,600	◆ 51.9	7	6,600	Model	2.100	2.100

◆ K/D factors from TCDS were used.

Regression

Method Number	PA AADT	BC AADT	AADT
2	30,352	6,211	36,563

95% Confidence Min/Max

PA Min	PA Max	BC Min	BC Max	Year
-2834	44481	3228	7703	2050

Method Number	PA Growth %	BC Growth %	PA Drop Count	BC Drop Count	PA AADT	BC AADT	PA Adjustment	PA Adjustment
1	0.60	1.49	0	0	31,513	5,808	31,290	5,944
2	0.47	1.73	4	5	29,706	6,207	30,352	6,211
3	0.05	1.58	0	0	26,914	5,928	27,284	6,048
4	0.05	1.86	4	5	26,241	6,389	27,284	6,368
5	-0.77	1.15	0	0	20,308	5,378	21,339	5,553
6	-0.32	1.43	5	5	25,067	5,839	24,634	5,873

Adjustment Info

ID	Adjustment Methods Name	Model vs Count AADT	Adjusted AADT	Model vs Count BC	Adjusted BC	PA Growth Rate %	BC Growth Rate %
1	DIF	-7,466	37,174	-1,004	6,798	0.47	2.24
2	RAT	0.81	36,012	0.81	6,307	0.38	1.81
3	MRAT	1.16	36,169	1.49	6,469	0.38	1.95
4	RAF		36,671		6,633	0.43	2.10

Adjust Method AADT	Adjust Method BC	Selected PA Growth Rate %	Selected BC Growth Rate %
Average	Average	0.400	2.100

Method 1 - 4 Volume

PA Min Volume	PA Max Volume	BC Min Volume	BC Max Volume	Total Min Volume	Total MaxVolume
29700	30376	6307	6798	36007	37174

Process Flag:	Adjusted model to counts with process per ODOT 255 spreadsheet
Comment:	No Comment

Historical Count

Year	All	Cars	Trucks
2008	26,437	23,247	3,190
2011	28,283	25,081	3,200
2014	30,987	27,262	3,724
2017	32,912	29,174	3,738
2020	27,624	23,958	3,666
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* Pivot Point



Segment ID	LRS ID	BMP	EMP	Length	Yr 2028 AADT	Yr 2048 AADT	DHV30	K %	D %	T24 %	TD %
1955574	STUSIR00077**C	27.755	33.240	5.485	32,000	36,500	4600	12.5	51.9	18	9