

TFMS - Segment Forecast Report

Username	Email	Script Import Date	Script Version	Model Version
hailey.robey	hailey.robey@dot.ohio.gov	4/14/2020 5:30:19 PM	2020.001	2024.1900

Forecast Summary

Project ID	Project Name	Opening Year	Design Year
122791	ALL-501-2.81	2029	2049

Project Description

Construct a single-lane roundabout at SR 501 and Fort Amanda Road.

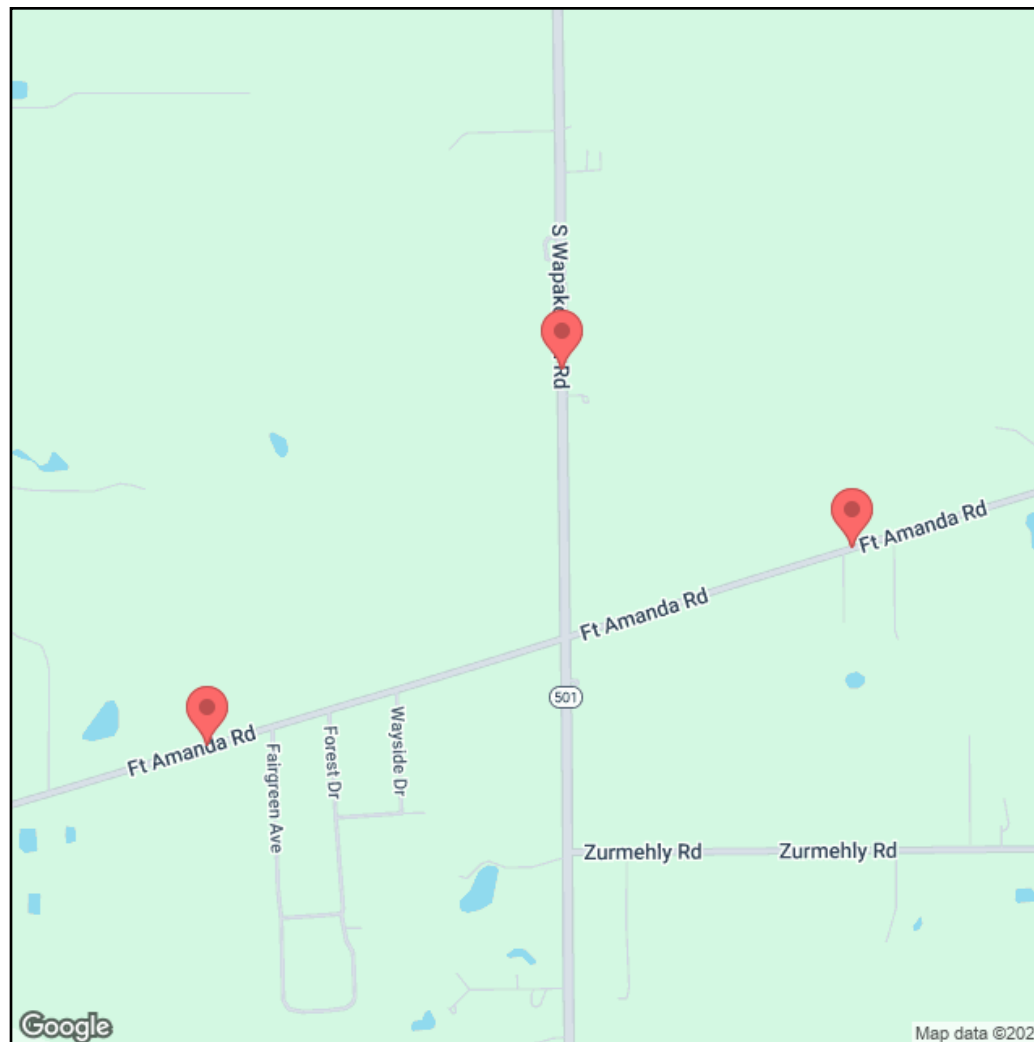
*Users of this data need to be aware that there are limitations to the forecasts generated by this product that make it suitable only for roadway design projects which are low risk.

Segment Information

Segment ID	LRS ID	BMP	EMP	Length	Latitude	Longitude
1874561	CALLCR00011**C	0.000	1.039	1.039	-84.2133675915926	40.6955392358961
1874562	CALLCR00011**C	1.039	1.877	0.838	-84.1962763052834	40.6995079777429
1909997	SALLSR00501**C	2.013	4.358	2.345	-84.2039757738167	40.7031002257533

Forecast Information

Segment ID	2029 AADT	2049 AADT	DHV-30	K%	D%	T24%	TD%
1874561	1,800	1,800	200	12.2	72.1	10	2
1874562	2,300	2,300	300	13.0	51.3	0	0
1909997	3,800	4,000	500	12.5	51.0	2	1



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
1874561	CALLCR00011**C	0.000	1.039

Forecast

Year	K%	T24 % (Existing)	PA AADT	PA Method	PA Growth Rate %	PA Calculated Rate %
2050	◆ 12.2	5	1,700	Average	● -1.500	0.000
AADT	D%	TD % (Existing)	BC AADT	BC Method	BC Growth Rate %	BC Calculated Rate %
1,880	◆ 72.1	1	180	Average	■ 4.000	4.000

● Warning: The growth rate was negative and was capped.

■ Warning: The truck growth rate was exceeded the maximum and was capped at 4.000%

◆ K/D factors from TCDS were used.

Regression

Method Number	PA AADT	BC AADT	AADT
1	371	263	634

95% Confidence Min/Max

PA Min	PA Max	BC Min	BC Max	Year
-1631	2470	-171	709	2050

Method Number	PA Growth %	BC Growth %	PA Drop Count	BC Drop Count	PA AADT	BC AADT	PA Adjustment	PA Adjustment
1	-2.88	7.49	0	0	281	275	371	263
2	-2.74	-999999.00	4	0	414		436	
3	-3.01	-999999.00	0	0	217		315	
4	-3.12	-999999.00	4	0	221		265	
5	-2.68	-999999.00	0	0	377		462	
6	-3.36	-999999.00	4	0	104		155	

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	1,052	1,766	79	99	-0.01	0.51
2	RAT	2.49	1,777	10.48	210	-0.23	5.24
3	MRAT	1.01	1,777	2.41	145	-0.09	2.47
4	RAF		1,772		122	-0.05	1.49

Adjust Method AADT	Adjust Method BC	Selected PA Growth Rate %	Selected BC Growth Rate %
Difference	Difference	0.000	0.500

Method 1 - 4 Volume

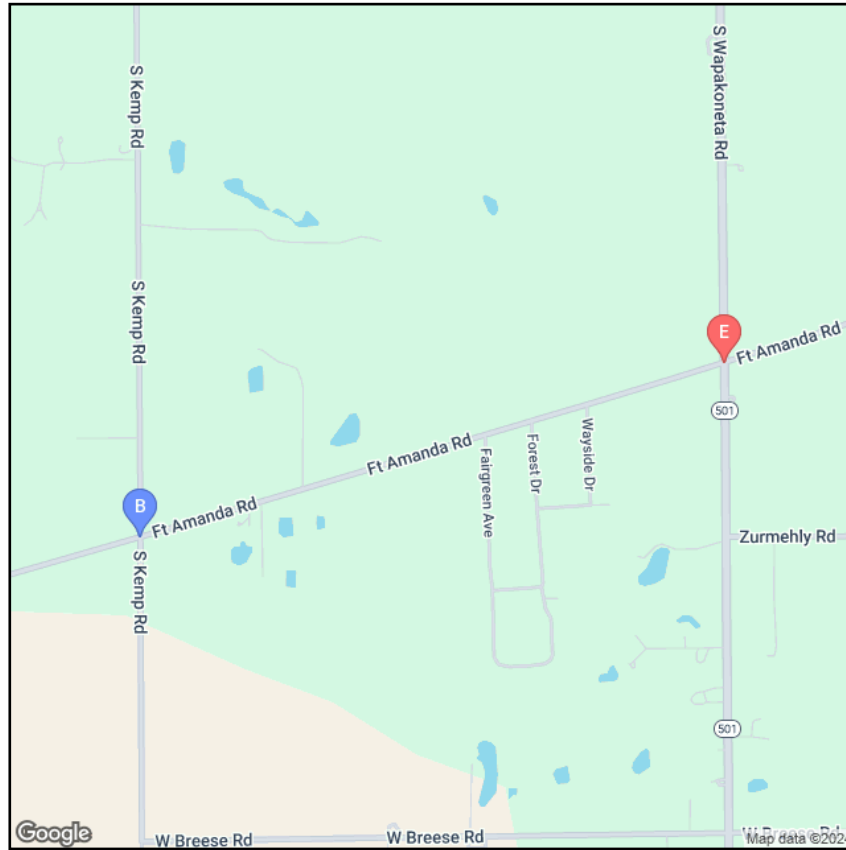
PA Min Volume	PA Max Volume	BC Min Volume	BC Max Volume	Total Min Volume	Total MaxVolume
1567	1667	99	210	1666	1877

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

Historical Count

Year	All	Cars	Trucks
2009	2,239	2,239	
2013	2,120	2,120	
2014	2,152	2,152	
2017	1,665	1,617	48
2020	1,818	1,713	105
* 2023	1,759	1,672	87

* Pivot Point



Segment ID	LRS ID	BMP	EMP	Length	Yr 2029 AADT	Yr 2049 AADT	DHV30	K %	D %	T24 %	TD %
1874561	CALLCR00011**C	0.000	1.039	1.039	1,800	1,800	200	12.2	72.1	10	2

Forecast Segment ID	Route	BMP	EMP
1874562	CALLCR00011**C	1.039	1.877

Forecast

Year	K%	T24 % (Existing)	PA AADT	PA Method	PA Growth Rate %	PA Calculated Rate %
2050	13.0	0	2,300	Average	● -0.500	0.000
AADT	D%	TD % (Existing)	BC AADT	BC Method	BC Growth Rate %	BC Calculated Rate %
2,300	51.3	0	! 0	Model	● -999999.000	0.000

● Warning: The growth rate was negative and was capped.

! Warning: FORECAST TRUCKS ZERO BECAUSE NO TRUCK COUNTS ON SEGMENT

Regression

Method Number	PA AADT	BC AADT	AADT
1	1,393		1,393

95% Confidence Min/Max

PA Min	PA Max	BC Min	BC Max	Year
-2210	3806	0	23	2050

Method Number	PA Growth %	BC Growth %	PA Drop Count	BC Drop Count	PA AADT	BC AADT	PA Adjustment	PA Adjustment
1	-1.42	0.00	0	0	1,383		1,393	
2	-1.58	0.00	4	0	1,180		1,294	
3	-1.73	0.00	0	0	1,166		1,204	
4	-1.61	0.00	4	0	1,160		1,276	
5	-2.34	0.00	0	0	762		834	
6	-1.66	0.00	4	0	1,131		1,249	

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	-286	2,584	-38	23	0.50	0.00
2	RAT	0.89	2,547	0.00		0.47	0.00
3	MRAT	1.13	2,551	1.62	9	0.47	0.00
4	RAF		2,568		16	0.48	0.00

Adjust Method AADT	Adjust Method BC	Selected PA Growth Rate %	Selected BC Growth Rate %
Average	Model Ratio	0.500	0.000

Method 1 - 4 Volume

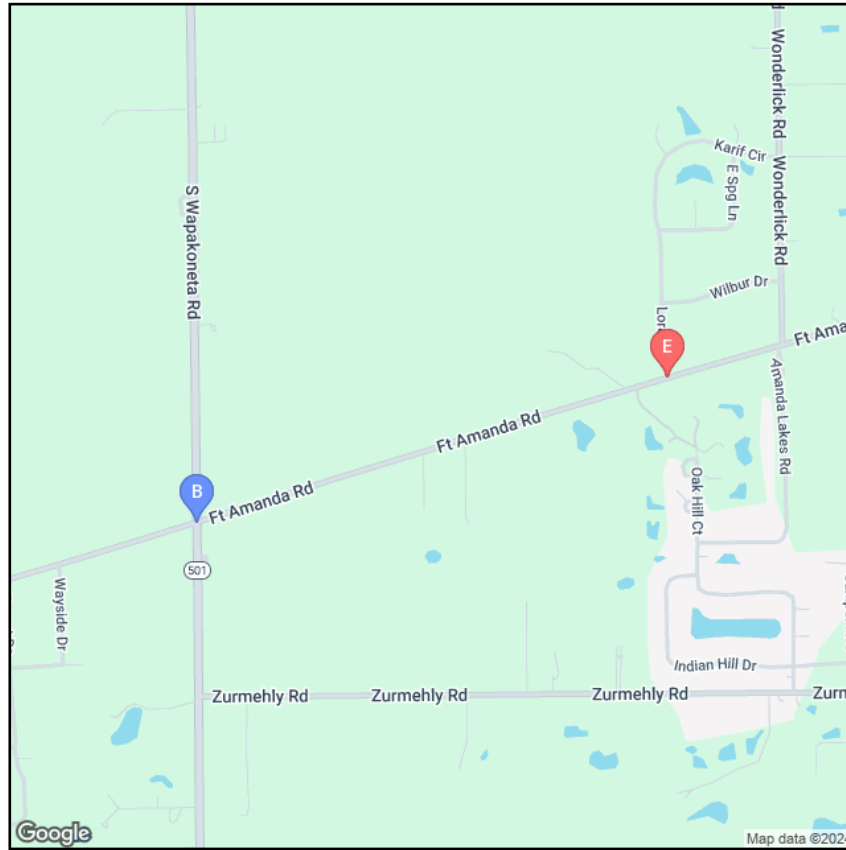
PA Min Volume	PA Max Volume	BC Min Volume	BC Max Volume	Total Min Volume	Total MaxVolume
2542	2561	0	23	2542	2584

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

Historical Count

Year	All	Cars	Trucks
2009	2,638	2,638	
2013	2,498	2,498	
2014	2,535	2,535	
2017	2,826	2,826	
2020	2,075	2,075	
* 2023	2,258	2,258	

* Pivot Point



Segment ID	LRS ID	BMP	EMP	Length	Yr 2029 AADT	Yr 2049 AADT	DHV30	K %	D %	T24 %	TD %
1874562	CALLCR00011**C	1.039	1.877	0.838	2,300	2,300	300	13.0	51.3	0	0

Forecast Segment ID	Route	BMP	EMP
1909997	SALLSR00501**C	2.013	4.358

Forecast

Year	K%	T24 % (Existing)	PA AADT	PA Method	PA Growth Rate %	PA Calculated Rate %
2050	◆ 12.5	2	4,000	Model	0.400	0.400
AADT	D%	TD % (Existing)	BC AADT	BC Method	BC Growth Rate %	BC Calculated Rate %
4,070	◆ 51.0	1	70	Model	0.800	0.800

◆ K/D factors from TCDS were used.

Regression

Method Number	PA AADT	BC AADT	AADT
2	4,620	55	4,675

95% Confidence Min/Max

PA Min	PA Max	BC Min	BC Max	Year
2216	5751	-131	252	2050

Method Number	PA Growth %	BC Growth %	PA Drop Count	BC Drop Count	PA AADT	BC AADT	PA Adjustment	PA Adjustment
1	0.92	-0.70	0	0	4,504	42	4,537	47
2	1.00	-0.19	3	4	4,556	58	4,620	55
3	0.88	-0.57	0	0	4,460	45	4,499	49
4	1.21	-0.57	3	4	4,784	51	4,823	49
5	0.35	0.26	0	0	3,880	59	3,977	62
6	0.12	-1.66	4	4	3,679	32	3,751	32

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	878	4,019	21	69	0.32	0.70
2	RAT	1.31	4,120	1.56	75	0.41	1.09
3	MRAT	1.11	4,109	1.29	73	0.41	0.96
4	RAF		4,064		71	0.36	0.83

Adjust Method AADT	Adjust Method BC	Selected PA Growth Rate %	Selected BC Growth Rate %
Average	Average	0.400	0.800

Method 1 - 4 Volume

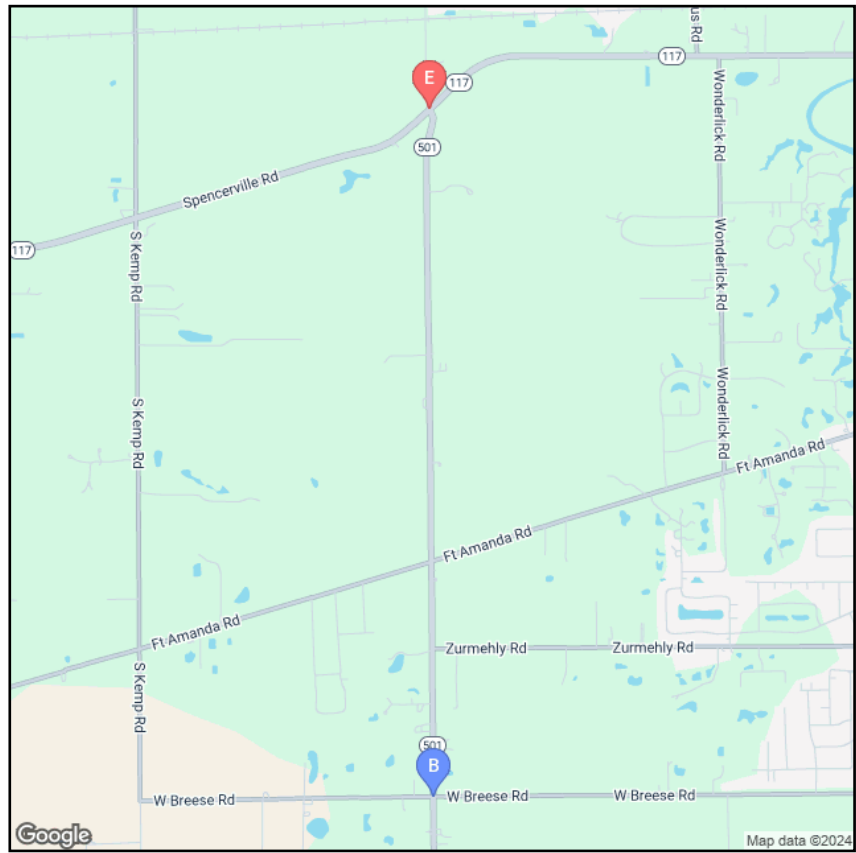
PA Min Volume	PA Max Volume	BC Min Volume	BC Max Volume	Total Min Volume	Total MaxVolume
3950	4045	69	75	4019	4120

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

Historical Count

Year	All	Cars	Trucks
2008	3,150	3,090	60
2011	3,160	3,100	60
2014	3,632	3,564	67
2017	3,320	3,290	30
2020	3,507	3,445	62
* 2023	3,696	3,638	58

* Pivot Point



Segment ID	LRS ID	BMP	EMP	Length	Yr 2029 AADT	Yr 2049 AADT	DHV30	K %	D %	T24 %	TD %
1909997	SALLSR00501**C	2.013	4.358	2.345	3,800	4,000	500	12.5	51.0	2	1