

## TFMS - Segment Forecast Report

Username	Email	Script Import Date	Script Version	Model Version
Jzickafoose	Joshua.Zickafoose@dot.ohio.gov	4/14/2020 5:30:19 PM	2020.001	2023.1900

## Forecast Summary

Project ID	Project Name	Opening Year	Design Year
110561	JAC-327-13.58	2026	2046

## Project Description

Bridge replacement on state Route 327 in Jackson County.

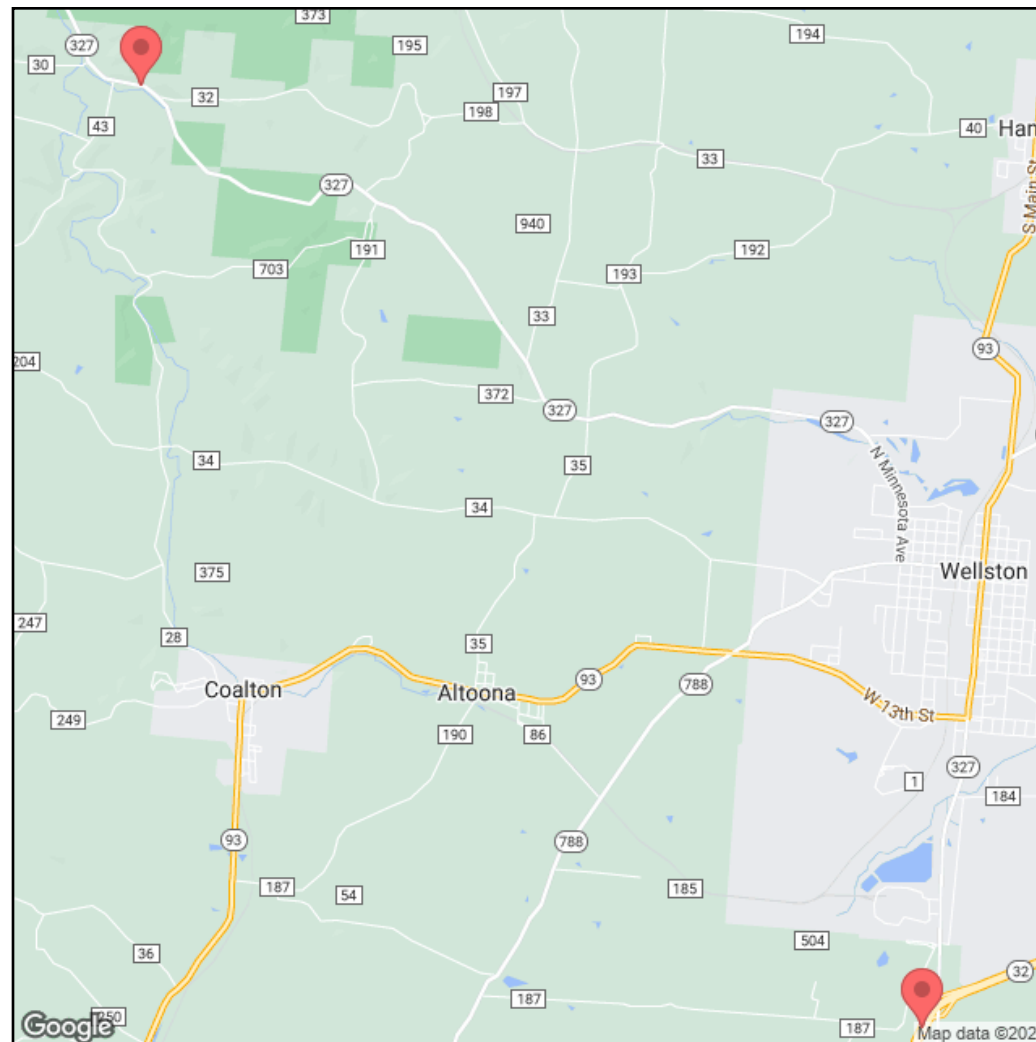
\*Users of this data need to be aware that there are limitations to the forecasts generated by this product that make it suitable only for roadway design projects which are low risk.

## Segment Information

Segment ID	LRS ID	BMP	EMP	Length	Latitude	Longitude
1844802	SJACSR00032**C	16.815	17.182	0.367	-82.5394099876754	39.0858220582911
1845022	SJACSR00327**C	13.179	19.183	6.004	-82.6222547051753	39.1632603983984

## Forecast Information

Segment ID	2026 AADT	2046 AADT	DHV-30	K%	D%	T24%	TD%
1844802	11,000	12,000	1,300	10.5	50.5	12	8
1845022	450	450	70	14.7	62.0	8	3



### 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
1844802	SJACSR00032**C	16.815	17.182

## Forecast

Year	K%	T24 % (Existing)	PA AADT	PA Method	PA Growth Rate %	PA Calculated Rate %
2050	◆ 10.5	12	11,000	Average	0.500	0.500
AADT	D%	TD % (Existing)	BC AADT	BC Method	BC Growth Rate %	BC Calculated Rate %
12,400	◆ 50.5	8	1,400	Model	0.500	0.500

◆ K/D factors from TCDS were used.

## Regression

Method Number	PA AADT	BC AADT	AADT
2	12,361	1,434	13,795

95% Confidence Min/Max

PA Min	PA Max	BC Min	BC Max	Year
6419	20185	-363	3410	2050

Method Number	PA Growth %	BC Growth %	PA Drop Count	BC Drop Count	PA AADT	BC AADT	PA Adjustment	PA Adjustment
1	1.15	1.33	0	0	12,803	1,728	12,604	1,702
2	1.06	0.56	4	2	12,342	1,444	12,361	1,434
3	1.74	1.93	0	0	14,609	1,964	14,184	1,909
4	1.74	1.93	4	4	14,394	1,904	14,185	1,908
5	1.35	-0.45	0	0	13,459	1,049	13,145	1,082
6	1.73	0.12	4	4	14,353	1,227	14,147	1,282

## 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	7,258	10,809	1,100	1,401	-0.05	0.47
2	RAT	3.06	10,872	8.94	2,691	-0.51	4.19
3	MRAT	1.01	10,872	2.17	1,995	-0.25	2.18
4	RAF		10,840		1,698	-0.15	1.32
Adjust Method AADT		Adjust Method BC		Selected PA Growth Rate %		Selected BC Growth Rate %	
Difference		Difference		-0.100		0.500	

## Method 1 - 4 Volume

PA Min Volume	PA Max Volume	BC Min Volume	BC Max Volume	Total Min Volume	Total MaxVolume
8181	9408	1401	2691	9582	12099

Process Flag: Adjusted model to counts with process per ODOT 255 spreadsheet

Comment: No Comment

## Historical Count

Year	All	Cars	Trucks
2007	9,750	8,660	1,090
2010	8,580	7,750	830
2013	9,360	8,161	1,198
2016	11,219	9,830	1,388
2019	10,659	9,561	1,098
* 2022	10,778	9,539	1,239

\* Pivot Point



Segment ID	LRS ID	BMP	EMP	Length	Yr 2026 AADT	Yr 2046 AADT	DHV30	K %	D %	T24 %	TD %
1844802	SJACSR00032**C	16.815	17.182	0.367	11,000	12,000	1300	10.5	50.5	12	8

Forecast Segment ID	Route	BMP	EMP
1845022	SJACSR00327**C	13.179	19.183

Forecast

Year	K%	T24 % (Existing)	PA AADT	PA Method	PA Growth Rate %	PA Calculated Rate %
2050	◆ 14.7	5	400	Average	● -1.300	0.000
AADT	D%	TD % (Existing)	BC AADT	BC Method	BC Growth Rate %	BC Calculated Rate %
440	◆ 62.0	2	40	Model	3.400	3.400

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

◆ K/D factors from TCDS were used.

Regression

Method Number	PA AADT	BC AADT	AADT
1	159	23	182

95% Confidence Min/Max

PA Min	PA Max	BC Min	BC Max	Year
-297	596	-129	95	2050

Method Number	PA Growth %	BC Growth %	PA Drop Count	BC Drop Count	PA AADT	BC AADT	PA Adjustment	PA Adjustment
1	-2.17	0.34	0	0	195	28	159	23
2	-2.67	-0.51	5	4	110	18	102	18
3	-2.18	-1.87	0	0	193	13	157	10
4	-2.78	-1.87	5	4	96	9	90	10
5	-2.40	-9.01	0	0	166	-33	133	-32
6	-3.00	-6.46	5	4	69	-20	65	-17

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	-233	390	-21	49	-0.56	4.76
2	RAT	0.65	402	0.50	35	-0.33	2.38
3	MRAT	0.95	402	1.67	41	-0.38	3.40
4	RAF		396		45	-0.47	4.08
Adjust Method AADT		Adjust Method BC		Selected PA Growth Rate %		Selected BC Growth Rate %	
Ratio		Model Ratio		-0.400		3.400	

Method 1 - 4 Volume

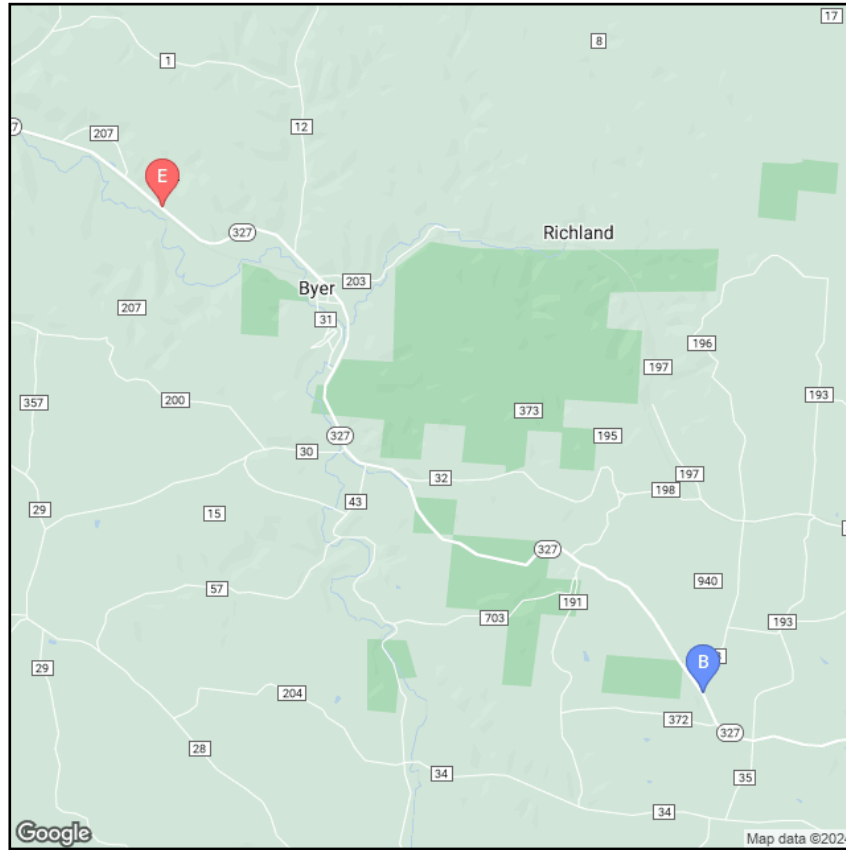
PA Min Volume	PA Max Volume	BC Min Volume	BC Max Volume	Total Min Volume	Total MaxVolume
341	367	35	49	376	416

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

Historical Count

Year	All	Cars	Trucks
2007	590	570	20
2010	560	540	20
2013	542	509	32
2016	535	492	42
2019	535	517	18
* 2022	425	404	21

\* Pivot Point



Segment ID	LRS ID	BMP	EMP	Length	Yr 2026 AADT	Yr 2046 AADT	DHV30	K %	D %	T24 %	TD %
1845022	SJACSR00327**C	13.179	19.183	6.004	450	450	70	14.7	62.0	8	3