

Appendix A

Financial Revenue Methodology

ERPC Metropolitan Planning Organization



Financial Revenue Methodology Appendix

Financial Resources Forecast and Fiscal Constraint Analysis for the Erie Regional Planning Commission 2050 Long Range Transportation Plan Update

Introduction

This information provided in this appendix was developed as a planning tool to estimate the availability of funding for future projects in the Erie Regional Planning Commission (ERPC) coverage area. This will allow the *2050 Long Range Transportation Plan Update* to meet compliance with Federal Highway Administration requirements for financial resources forecasting and fiscal constraints analysis. The data provided in this appendix will be utilized to demonstrate that the proposed transportation improvements (motorized and non-motorized) can be provided within the 25-year period of the plan (2025-2050).

Financial Revenue Methodology

The purpose of this *Financial Resources Forecast* is to determine the availability of resources that will fund transportation improvements in the ERPC area for fiscal years 2025 through 2050. Good financial forecasting requires a look at both past trends and assumptions regarding future funding. As recent events as noted previously have made the process of predicting future funding trends more challenging, the following assumptions will be applied to the forecasts of funding for projects:

- Forecasted revenues are based on actual or projected FY2025 allocations;
- Federal funding through the Highway Trust Fund will remain viable and will continue over the forecast period per the FAST Act that was signed into law in December 2015;
- ODOT will keep allocating funds with the same methodology used previously;
- Allocations based on population utilize 2020 US Census figures;
- Factors such as population, lane miles, vehicle miles traveled, bridge deck area, crash rates, etc. will be assumed to remain consistent over plan period;
- Local funding to meet match requirements will remain consistent.

The transportation systems budget for the county is made up of federal, state, local and private revenue sources. Federal guidelines require that the transportation plan be “fiscally constrained” in that the forecasted revenues over the planning period match the costs of identified transportation system improvements.

Financial Forecasting of Revenue Sources

This section provides the formulas and data used to base the potential revenue sources from the typical public funding programs that are utilized to fund transportation projects within the ERPC area. As the planning period of the projects is for 25 years, total revenues available were calculated for 25 years of funding based on annual funding available in FY2026 that was projected outward over the next 25 years. The following data was utilized for calculation purposes to assist in determining ERPC’s area for their fair share of funding:

Population Data for the following geographic areas:

- ERPC MPO Population = 100,603
- ERPC Population in D2 District = 18,979
- ERPC Population in D3 District = 81,624
- ODOT District 2 Population = 823,068
- ODOT District 3 Population = 965,536
- Ohio Population (OPOP) = 11,774,683

ERPC Fair Share Calculations of Typical Funding Sources:

Following are commonly used calculations for determining the fair share of funding for a MPO area. Some funding sources are based on formula distributions, whereas others are more competitive type sources.

ERPC Sub-Allocated Forecasted Funds

(0% annual increase assumed, based on ODOT Financial Summary Report –January, 2025)

Year	Yearly Allocation	\$0	←Carry Over
2025	\$1,122,890	\$1,122,890	
2026	\$1,636,562	\$1,636,562	
2027	\$1,636,562	\$1,636,562	
2028	\$1,636,652	\$1,636,652	
2029	\$1,636,562	\$1,636,562	
2030	\$1,636,562	\$1,636,562	
2031	\$1,636,562	\$1,636,562	
2032	\$1,636,562	\$1,636,562	
2033	\$1,636,562	\$1,636,562	
2034	\$1,636,562	\$1,636,562	
2035	\$1,636,562	\$1,636,562	TOTAL (10 yrs) = \$20,857,270
2036	\$1,636,562	\$1,636,562	
2037	\$1,636,562	\$1,636,562	
2038	\$1,636,562	\$1,636,562	
2039	\$1,636,562	\$1,636,562	
2040	\$1,636,562	\$1,636,562	TOTAL (15 yrs) = \$8,182,810
2041	\$1,636,562	\$1,636,562	
2042	\$1,636,562	\$1,636,562	
2043	\$1,636,562	\$1,636,562	
2044	\$1,636,562	\$1,636,562	
2045	\$1,636,562	\$1,636,562	TOTAL (20 yrs) = \$8,182,810
2046	\$1,636,562	\$1,636,562	
2047	\$1,636,562	\$1,636,562	
2048	\$1,636,562	\$1,636,562	
2049	\$1,636,562	\$1,636,562	
2050	\$1,636,562	\$1,636,562	TOTAL (25 yrs) = \$8,182,810

ODOT District 2 Allocation Funds Summary

(2% annual increase assumed, based on ODOT projections, as provided by District 2)

	Year	Yearly Allocation	Time Periods	Totals
	2026	\$82,123,000	Annual Growth Rate =	1.02
	2027	\$68,163,000		
	2028	\$70,445,000		
	2029	\$73,657,000		
	2030	\$75,133,000		
	2031	\$76,609,000		
Projected	2032	\$78,141,180		
Projected	2033	\$79,704,004		
Projected	2034	\$81,298,084		
Projected	2035	\$82,924,045		
			TOTAL (10 yrs) =	\$768,197,313
Projected	2036	\$84,582,526		
Projected	2037	\$86,274,177		
Projected	2038	\$87,999,660		
Projected	2039	\$89,759,654		
Projected	2040	\$91,554,847		
			TOTAL (15 yrs) =	\$440,170,863
Projected	2041	\$93,385,944		
Projected	2042	\$95,253,662		
Projected	2043	\$97,158,736		
Projected	2044	\$99,101,910		
Projected	2045	\$101,083,949		
			TOTAL (20 yrs) =	\$485,984,200
Projected	2046	\$103,105,628		
Projected	2047	\$105,167,740		
Projected	2048	\$107,271,095		
Projected	2049	\$109,416,517		
Projected	2050	\$111,604,847		
			TOTAL (25 yrs) =	\$536,565,826

D2 Average Annual Allocation for 2026 - 2035 Period:	X	ERPC Population in D2	=	ERPC Fair Share of D2 Funding
		D2 Population		
\$76,819,731		2.30588%		\$1,771,375

D2 Average Annual Allocation for 2035 - 2040 Period:	X	ERPC Population in D2	=	ERPC Fair Share of D2 Funding
		D2 Population		
\$88,034,173		2.30588%		\$2,029,967

D2 Average Annual Allocation for 2041 - 2045 Period:	X	ERPC Population in D2	=	ERPC Fair Share of D2 Funding
		D2 Population		
\$97,196,840		2.30588%		\$2,241,247

D2 Average Annual Allocation for 2045 - 2050 Period:	X	ERPC Population in D2	=	ERPC Fair Share of D2 Funding
		D2 Population		
\$107,313,165		2.30588%		\$2,474,518

ODOT District 3 Allocation Funds Summary

(2% annual increase assumed, based on ODOT projections, as provided by District 3)

	Year	Yearly Allocation	Time Periods	Totals
	2026	\$88,615,000	Annual Growth Rate =	1.02
	2027	\$91,401,000		
	2028	\$89,964,000		
	2029	\$93,081,000		
	2030	\$94,945,000		
	2031	\$96,810,000		
Projected	2032	\$98,746,200		
Projected	2033	\$100,721,124		
Projected	2034	\$102,735,546		
Projected	2035	\$104,790,257		
			TOTAL (10 yrs) =	\$961,809,128
Projected	2036	\$106,886,063		
Projected	2037	\$109,023,784		
Projected	2038	\$111,204,259		
Projected	2039	\$113,428,345		
Projected	2040	\$115,696,912		
			TOTAL (15 yrs) =	\$556,239,362
Projected	2041	\$118,010,850		
Projected	2042	\$120,371,067		
Projected	2043	\$122,778,488		
Projected	2044	\$125,234,058		
Projected	2045	\$127,738,739		
			TOTAL (20 yrs) =	\$614,133,202
Projected	2046	\$130,293,514		
Projected	2047	\$132,899,384		
Projected	2048	\$135,557,372		
Projected	2049	\$138,268,519		
Projected	2050	\$141,033,890		
			TOTAL (25 yrs) =	\$678,052,679

D3 Average Annual Allocation for 2026 - 2035 Period:	X	ERPC Population in D3	=	ERPC Fair Share of D3 Funding
		D3 Population		
\$96,180,913		8.45375%		\$8,130,894

D3 Average Annual Allocation for 2035 - 2040 Period:	X	ERPC Population in D3	=	ERPC Fair Share of D3 Funding
		0.0845375		
\$111,247,872		8.45375%		\$9,404,617

D3 Average Annual Allocation for 2041 - 2045 Period:	X	ERPC Population in D3	=	ERPC Fair Share of D3 Funding
		D3 Population		
\$122,826,640		8.45375%		\$10,383,457

D3 Average Annual Allocation for 2045 - 2050 Period:	X	ERPC Population in D3	=	ERPC Fair Share of D3 Funding
		D3 Population		
\$135,610,536		8.45375%		\$11,464,176

The combined District 2 and District 3 Fair Share Funding for the ERPC MPO Population can be found in the table below:

ERPC Fair Share of District Funding Summary		
2026-2035	=	\$9,902,268
2035-2040	=	\$11,434,584
2041-2045	=	\$12,624,704
2046-2050	=	\$13,938,694

Surface Transportation Program – County Engineer (STP-C)

The calculation of an annual fair share for the ERPC area is shown below:

Surface Transportation Program - County Engineer (STP-C)				
An estimated \$14,000,000 per year is available for STP-C funded projects.				
A commonly used formula to estimate the fair share for a MPO area includes the following:				
STP-C Average Annual Allocation	X	<u>ERPC Population</u> Ohio Population	=	ERPC Fair Share of STP-C Funding
\$14,000,000	X	0.008544009	=	\$119,616
To be conservative, the annual ERPC fair share of STP-C funding was held constant over the next 25 years, and no growth increases were applied.				

Fair Share Calculation for ERPC Area of STP-C Funds

The forecasts in funding for each time period are shown below:

Available funding for Short-Term (2026-2035)	\$1,196,161
Available funding for Mid-Term (2036-2040)	\$598,081
Available funding for Mid/Long -Term (2041-2045)	\$598,081
Available funding for Long -Term (2045 -2050)	\$598,081

Transportation Review Advisory Council (TRAC)

The calculation of an annual fair share for the ERPC area is shown below:

As available funding fluctuates each year, an estimate of \$276,825,000 was calculated using the average of the 2020-2023 total Major New Construction Programs list

A commonly used formula to estimate the fair share for a MPO area includes the following:

TRAC Average Annual Allocation	X	<u>ERPC Population</u> <u>Ohio Population</u>	=	ERPC Fair Share of TRAC Funding
211,600,000	X	0.008544009	=	\$1,807,912

Given these funds are very competitive, an adjustment of 30% less of the calculated TRAC funding would be more realistic in that it would reflect that these funds would not be awarded or applied to every year.

\$1,265,539

To be conservative, the annual ERPC fair share of TRAC funding was held constant over the next 25 years, and no growth increases were applied.

Fair Share Calculation for ERPC Area of TRAC Funds

The forecasts in funding for each time period are shown below:

Available funding for Short-Term (2026-2035)	\$12,655,386
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Available funding for Mid-Term (2036-2040)	\$6,327,693
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Available funding for Mid/Long -Term (2041- 2045)	\$6,327,693
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Available funding for Long -Term (2045 -2050)	\$6,327,693
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Safety Program Funds

The calculation of an annual fair share for the ERPC area is shown below:

Safety Funding				
An estimated \$185,000,000 per year is available for Safety funded projects.				
A commonly used formula to estimate the fair share for a MPO area includes the following:				
Ohio's Annual Safety Allocation	X	<u>ERPC Population</u> Ohio Population	=	ERPC Fair Share of Safety Funding
\$185,000,000	X	0.008544009	=	\$1,580,642
To be conservative, the annual ERPC fair share of HSIP funding was held constant over the next 25 years, and no growth increases were applied.				

Fair Share Calculation for ERPC Area of HSIP Funds

The forecasts in funding for each time period are shown below:

Available funding for Short-Term (2026-2035)	\$15,806,417
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Available funding for Mid-Term (2036-2040)	\$7,903,209
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Available funding for Mid/Long -Term (2041- 2045)	\$7,903,209
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Available funding for Long -Term (2045 -2050)	\$7,903,209
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Ohio Safe Routes To School Program Funds

The calculation of an annual fair share for the ERPC area is shown below:

Safe Routes To Schools Funding (SRTS)				
An estimated \$5,000,000 per year is available for Safety funded projects.				
A commonly used formula to estimate the fair share for a MPO area includes the following:				
Ohio's Annual SRTS Allocation	X	<u>ERPC Population</u> <u>Ohio Population</u>	=	ERPC Fair Share of SRTS Funding
\$5,000,000	X	0.008544009	=	\$42,720
To be conservative, the annual ERPC fair share of SRTS funding was held constant over the next 25 years, and no growth increases were applied.				

Fair Share Calculation for ERPC Area of SRTS Funds

The forecasts in funding for each time period are shown below:

Available funding for Short-Term (2026-2035)	\$427,200
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Available funding for Mid-Term (2036-2040)	\$213,600
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Available funding for Mid/Long -Term (2041- 2045)	\$213,600
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Available funding for Long - Term (2041 - 2045)	\$213,600
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County Highway Safety Program

The calculation of an annual fair share for the ERPC area is shown below:

County Highway Safety Program

An estimated \$21,000,000 per year is available for County Highway Safety Program Projects

A commonly used formula to estimate the fair share for a MPO area includes the following:

STP-C Average Annual Allocation	X	<u>ERPC Population</u> <u>Ohio Population</u>	=	ERPC Fair Share of County Highway Safety Funding
\$21,000,000	X	0.008544009	=	\$179,424

To be conservative, the annual ERPC fair share of County Highway Safety funding was held constant over the next 25 years, and no growth increases were applied.

Fair Share Calculation for ERPC Area of County Highway Safety Program Funds

The forecasts in funding for each time period are shown below:

Available funding for Short-Term (2021-2030)	\$1,794,242
Available funding for Mid-Term (2031-2035)	\$897,121
Available funding for Mid/Long -Term (2036 - 2040)	\$897,121
Available funding for Long - Term (2041 - 2045)	\$897,121

County Local Bridge Funds

The calculation of an annual fair share for the ERPC area is shown below:

County Local Bridge Program

An estimated \$34,000,000 per year is available for County Local Bridge funded projects.

A commonly used formula to estimate the fair share for a MPO area includes the following:

Ohio's Annual CEAO Bridge Allocation	X	<u>ERPC Population</u> Ohio Population	=	ERPC Fair Share of County Bridge Funding
\$34,000,000	X	0.008544009	=	\$290,496

To be conservative, the annual ERPC fair share of County Local Bridge funding was held constant over the next 25 years, and no growth increases were applied.

Fair Share Calculation for ERPC Area of County Local Bridge Funds

The forecasts in funding for each time period are shown below:

Available funding for Short-Term (2026-2035)	\$2,904,963
Available funding for Mid-Term (2036-2040)	\$1,452,482
Available funding for Mid/Long -Term (2041-2045)	\$1,452,482
Available funding for Long - Term (2041 - 2045)	\$1,452,482

Municipal Bridge Program Funds

The calculation of an annual fair share for the ERPC area is shown below:

Municipal Bridge Program

An estimated \$11,500,000 per year is available for Municipal Bridge funded projects.

A commonly used formula to estimate the fair share for a MPO area includes the following:

Ohio's Annual Municipal Bridge Allocation	X	<u>ERPC Population</u> Ohio Population	=	ERPC Fair Share of Municipal Bridge Funding
\$11,500,000	X	0.008544009	=	\$98,256

To be conservative, the annual ERPC fair share of Municipal Bridge funding was held constant over the next 25 years, and no growth increases were applied.

Fair Share Calculation for ERPC Area of Municipal Bridge Program Funds

The forecasts in funding for each time period are shown below:

Available funding for Short-Term (2026-2035)	\$982,561
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Available funding for Mid-Term (2036-2040)	\$491,281
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Available funding for Mid/Long -Term (2041-2045)	\$491,281
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Available funding for Long - Term (2041 - 2045)	\$491,281
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ODOT provides an additional \$20 Million in funding for major bridge preventative maintenance through the Local Major Bridge Program. Currently, no bridges in the planning region qualify for the program.

Federal Transit Agency Funds

The calculation of projections of transit funds for the Sandusky Transit System is provided below. A growth rate of 2% of annual funds was utilized to project funds. No Carry Over of funds was assumed.

ERPC MPO / Sandusky Transit System

(Does not include operating Funds)

Carry Over = None
Assumed

Year	Yearly Allocation	
2026	\$414,358	Annual Growth Rate = 1.02
2027	\$426,788	
2028	\$435,324	
2029	\$444,030	
2030	\$452,911	
2031	\$461,969	
2032	\$471,208	
2033	\$480,633	
2034	\$490,245	
2035	\$500,050	
TOTAL (10 yrs) =		\$4,577,516
2036	\$510,051	TOTAL (15 yrs) =
2037	\$520,252	
2038	\$530,657	
2039	\$541,270	
2040	\$552,096	
TOTAL (15 yrs) =		\$2,654,327
2041	\$563,138	TOTAL (20 yrs) =
2042	\$574,400	
2043	\$585,888	
2044	\$597,606	
2045	\$609,558	
TOTAL (20 yrs) =		\$2,930,591
2046	\$621,750	TOTAL (25 yrs) =
2047	\$634,185	
2048	\$646,868	
2049	\$659,806	
2050	\$673,002	
TOTAL (25 yrs) =		\$3,235,610

2.0% funding increase per year assumed

Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant

The BUILD program, previously known as the Rebuilding American Infrastructure with Sustainability and Equity (RAISE) discretionary grant, was established under the American Recovery and Reinvestment Act of 2009 and operated under annual appropriations acts until authorized in November 2021.

In 2022, USDOT awarded \$24,450,000 in grant funds to Erie County for the U.S. 6 Connectivity Corridor from Sandusky to Huron. The grant award is currently programmed for SFY 2026 and is a short-term expansion project.

Fair Share Calculation for ERPC Area of BUILD Funds

Due to the highly competitive nature of these grants, future funds were not considered as forecasted expectations and includes only those funds that have been programmed on existing projects.

Available funding for Short-Term (2026-2035)	\$24,450,000
Available funding for Mid-Term (2036-2040)	\$ -
Available funding for Mid/Long -Term (2041-2045)	\$ -
Available funding for Long - Term (2041 - 2045)	\$ -

Summary of Overall Funding Forecasts

The individual funding forecast calculations and assumptions stated previously were combined to establish the estimated funds available to the ERPC for funding transportation projects in the 2050 Long Range Transportation Plan Update so to determine if the plan is fiscally constrained. The table below summarizes all the funding sources combined.

Funding Source	Total Forecasted Amount for ERPC's Fair Share for Short-Term Period (2026-2035)	Total Forecasted Amount for ERPC's Fair Share for Mid-Term Period (2036-2040)	Total Forecasted Amount for ERPC's Fair Share for Mid/Long-Term Period (2041-2045)	Total Forecasted Amount for ERPC's Fair Share for Long-Term Period (2046-2050)
ERPC Allocation Funding	\$20,857,270	\$8,182,810	\$8,182,810	\$8,182,810
ODOT District Funding	\$99,022,685	\$57,172,918	\$63,123,522	\$69,693,468
STP-C Funding	\$1,196,161	\$598,081	\$598,081	\$598,081
TRAC Funding	\$12,655,386	\$6,327,693	\$6,327,693	\$6,327,693
Safety Funding	\$15,806,417	\$7,903,209	\$7,903,209	\$7,903,209
Safe Routes To Schools Funding	\$427,200	\$213,600	\$213,600	\$213,600
County Highway Safety Funding	\$1,794,242	\$897,121	\$897,121	\$897,121
County Local Bridge Funding	\$2,904,963	\$1,452,482	\$1,452,482	\$1,452,482
Municipal Bridge Funding	\$982,561	\$491,281	\$491,281	\$491,281
Transit Funding	\$4,577,516	\$2,654,327	\$2,930,591	\$3,235,610
Federal BUILD Funding	\$24,500,000			
TOTAL (general transportation funds)	\$184,724,402	\$85,893,521	\$92,120,389	\$98,995,354

Using this information, the funding and time periods were overlaid so as to provide a fiscal analysis to determine if there was adequate funding and that the proposed projects are fiscally constrained. The resulting analysis indicates there is a slight surplus of funding after all of the projects are accounted for in the plan as shown in the table on the following page.

Table 10-1 Recommended Project Funding Summary

Implementation	Total Available	Roadway Preservation and Expansion	Non- Motorized	Total Project Costs	Difference
Short Term (10 Years)	\$180,146,886.00	\$158,935,248.40	\$9,867,022.32	\$168,802,270.71	\$11,344,615.29
Mid Term (10-15 years)	\$83,239,194.00	\$59,476,907.44	\$23,703,591.25	\$83,180,498.69	\$58,695.31
Mid/Long Term (15-20 years)	\$89,189,797.00	\$61,266,647.44	\$18,178,064.56	\$79,444,712.00	\$9,745,085.00
Long Term (20-25 years)	\$95,759,744.00	\$60,013,306.49	\$32,155,059.45	\$92,168,365.95	\$3,591,378.05
Total	\$448,335,621.00	\$339,692,109.77	\$83,903,737.58	\$423,595,847.35	\$24,739,773.65
Total Cost excluding transit					

In summary, based on formulas for determining the ERPC's area fair share of formula funds and competitive funds, the total amount of forecasted potential funds is \$461,733,665 for the next 25 years (or about \$18.4 million per year) that could be available for this 25-year plan. The result is an ending difference of +\$24,739,773 being left over at the end of the 25-year plan period after carry over of funding from each previous time period.