

**2050 Long Range Transportation Plan
Financial Summary**

Financial Outlook

Establishing MPO Transportation Plan fiscal forecasts for a 20 plus year planning horizon in today’s transportation environment is a challenging endeavor. Though federal transportation funds have historically been authorized through six-year legislative cycles, in recent years passing long term bills has proven to be a challenge. On November 15, 2021, the Infrastructure Investment and Jobs Act (IIJA), authorizing about \$660 billion for transportation programs over fiscal years 2022 through 2026, was signed into law. The IIJA represented a significant increase in funding when compared to previous transportation bills; though a significant portion of the funds were allocated to competitive grants.

Consistent with federal transportation regulations, MVRPC has developed planning level “year of expenditure” revenue projections and cost estimates through the year 2050. MVRPC projections include Federal, State, and local sources. These projections represent MVRPC’s outlook on available future transportation program funding. MVRPC is projecting average growth in transportation program revenue at 2.0% and average project inflation at 2.3%. Inflation factors are calculated using the March 2025 - Congressional Budget Office, “Long-Term Budget Outlook: 2025 to 2055 for Consumer Price Index estimates for all urban consumers for FY 2025 and beyond. Revenue is projected at 2.0% per year using the actual average growth included in the IIJA for FY 2023-2025 for U.S. DOT formula programs.

The Ohio Department of Transportation (ODOT), a key transportation stakeholder and project implementer in the MVRPC Region, develops short term year of expenditure project cost and revenues for its statewide programs and projects and those costs are used for funded projects in the Long Range Transportation Plan. ODOT’s recently updated Access Ohio 2045 includes a financial need assessment but no long term financial revenue forecast.

MVRPC also worked closely with the regional transit agencies and financial forecasts were provided by each agency in year of expenditure dollars for the same periods.

For each mode, the costs of the 2025 through 2050 plan projects are balanced against projected revenues and, following the IIJA requirements, are expressed in year of expenditure dollars. The fiscal constraint for each transportation mode is summarized in Table 1.

**Table 1 — Fiscal Constraint of the 2050 LRTP Projects
(in millions of Year of Expenditure dollars)**

Project Type	Total Revenues	Total Cost	Total Revenues – Total Cost
Highway Maintenance/Reconstruction	\$4,372.08	\$4,372.08	0.00 (Fiscally Constrained)
Highway Operational/Safety/Capacity *	\$2,672.02	\$2,236.38	+\$435.63 (Fiscally Constrained)
Highway Interstate Widening Projects	\$761.87	\$761.87	0.00 (Fiscally Constrained)
Transit	\$3,319.02	\$3,318.45	+\$0.57 (Fiscally Constrained)
Ridesharing/Air Quality	\$22.75	\$22.75	0.00 (Fiscally Constrained)
Bikeway/Pedestrian	\$8.29	\$8.29	0.00 (Fiscally Constrained)

Source: MVRPC; * Does not include Interstate widening projects

Table 2 – Project Types in TIP/LRTP Analysis

Maintenance/Reconstruction	Capacity/Operational/Safety
Simple Resurfacing (no widening)	Resurfacing/Reconstruction (includes new lanes)
Reconstruction (no widening)	Intersection Widening/Improvements
Guardrail and Pavement Markers	Signal Improvements (including interconnects)
Bridge Repair/ Replacement (no additional width or lanes)	Curve Relocations/Elimination
Minor widening (shoulders)	Bridge Replacement or Realignment (on new alignment, new lanes)
Street Maintenance	Bikeways (widen curb lanes or separate paths)
Sign Upgrades	Other Safety Upgrades (which modify road profile or geometry)

Source: MVRPC

The next step in the revenue forecasting process was to determine how much of the total local revenue would be available for the maintenance versus capacity improvement projects. According to MVRPC’s annual survey data, the Region is expending approximately 81% of its roadway expenditures on maintenance and 19% on capacity type improvements for projects not programmed in the TIP.

The final step involved using inflation rates to adjust cost and revenues beyond the TIP years, to year of expenditure dollars for the three LRTP periods (2030), (2031-2040), and (2041-2050). After consulting several sources (National Highway Construction Cost Index, U.S. Office of Management and Budget) and finding similar long term inflationary trends, MVRPC used the latest, March 2025 - Congressional Budget Office, “Long-Term Budget Outlook:2025 to 2055 for Consumer Price Index for all urban consumers for FY 2025 and beyond. (2.3 percent per year) to project inflation into the future. This resulted in inflation factors of 1.12, 1.27, and 1.59 for the mid-years of the Plan periods (2030), (2031-2040), and (2041-2050). A few projects outside the TIP years were not inflated because their cost estimates reflect ODOT’s Ellis and are already inflated according to ODOT guidelines. These projects are identified in Chapter 5 as TIP: NF and YP.

A similar process was applied to calculate revenue growth using a 2.0 percent per year growth factor which resulted in inflation factors of 1.10, 1.23, and 1.50 for the mid-years of the Plan periods (2030), (2031-2040), and (2041-2050). Revenue forecasts were based on actual year to year growth for the IJJA for FFY 2023-2025 in Ohio.

In summary, Table 3 presents the result of the total revenue forecast of \$7,043.07 million, followed by Table 4 and Table 5, which show the breakdown of the total revenue forecast by funding sources for the 2050 LRTP in maintenance / reconstruction (\$4,372.08 million) and capacity / operational / safety improvements (\$2,672.02 million) projects. The revenue sources listed in Tables 3 through 5 do not include transit operating (FTA Section 5307, 5311, ODOT, or local), transit capital (FTA Section 5307, 5311, 5337, 5339, ODOT, or local), or bikeway/pedestrian projects.

**Table 3 – 2050 Forecasted Revenues for All Improvement Types by Funding Source
(in millions of 2025 / Year of Expenditure dollars)**

General Source	Specific Source		Revenues					For Full 25 Year Plan
			Four Year (2026-2029)	Annual Average	Short Term Plan (2026-2030)	Medium Term Plan (2031-2040)	Long Term Plan (2041-2050)	
ODOT/MPO Controlled Funds	Federal	Various Sources	381.03	104.98	486.01	1,049.75	1,049.75	2,585.51
	State	State Match (Includes 100%)	113.45	24.41	137.86	244.13	244.13	626.11
	Other (Local/OPWC/Issue 1 as match to State/Federal)		73.33	24.89	98.22	248.88	248.88	595.97
Ohio Public Works (LTIP and Issue 1)	Ohio Public Works Commission		64.00	16.00	80.00	160.00	160.00	400.00
	Local Match		16.00	4.00	20.00	40.00	40.00	100.00
100% Local, Private, Other			178.50	44.63	223.13	446.25	446.25	1,115.63
Subtotal	Federal		381.03	104.98	486.01	1,049.75	1,049.75	2,585.51
	State		177.45	40.41	217.86	404.13	404.13	1,026.11
	Local, Other		267.83	73.51	341.34	735.13	735.13	1,811.59
Total (2025 Dollars)			826.31	218.90	1,045.21	2,189.00	2,189.00	5,423.21
Total (Year of Expenditure Dollars)			826.31	-	1,067.10	2,692.47	3,283.50	7,043.07

Source: MVRPC



**Table 4 – 2050 Forecasted Revenues for Maintenance/Reconstruction by Funding Source
(in millions of 2025 / Year of Expenditure dollars)**

General Source	Specific Source		Revenues					
			Four Year (2026-2029)	Annual Average	Short Term Plan (2026-2030)	Medium Term Plan (2031-2040)	Long Term Plan (2041-2050)	For Full 25 Year Plan
ODOT/MPO Controlled Funds	Federal	Various Sources	205.72	56.68	262.39	566.76	566.76	1,395.91
	State	State Match (Includes 100%)	61.25	13.18	74.43	131.80	131.80	338.04
	Other (Local/OPWC/Issue 1 as match to State/Federal)		39.59	13.44	53.03	134.37	134.37	321.76
Ohio Public Works (LTIP and Issue 1)	Ohio Public Works Commission		51.96	12.99	64.95	129.90	129.90	324.76
	Local Match		12.99	3.25	16.24	32.48	32.48	81.19
100% Local, Private, Other			144.92	36.23	181.16	362.31	362.31	905.78
Subtotal	Federal		205.72	56.68	262.39	566.76	566.76	1,395.91
	State		113.21	26.17	139.39	261.71	261.71	662.80
	Local, Other		197.51	52.92	250.42	529.15	529.15	1,308.73
Total (2025 Dollars)			516.44	135.76	652.20	1,357.62	1,357.62	3,367.44
Total (Year of Expenditure Dollars)			516.44	-	665.78	1,669.87	2,036.43	4,372.08

Source: MVRPC

Table 5 – 2050 Forecasted Revenues for Operational/Safety/Capacity Improvements by Funding Source (in millions of 2025 / Year of Expenditure dollars)

General Source	Specific Source		Revenues					
			Four Year (2026-2029)	Annual Average	Short Term Plan (2026-2030)	Medium Term Plan (2031-2040)	Long Term Plan (2041-2050)	For Full 25 Year Plan
ODOT/MPO Controlled Funds	Federal	Various Sources	175.31	48.30	223.61	482.99	482.99	1,189.59
	State	State Match (Includes 100%)	52.20	11.23	63.43	112.32	112.32	288.08
	Other (Local/OPWC/Issue 1 as match to State/Federal)		33.74	11.45	45.19	114.51	114.51	274.20
Ohio Public Works (LTIP and Issue 1)	Ohio Public Works Commission		12.04	3.01	15.05	30.10	30.10	75.24
	Local Match		3.01	0.75	3.76	7.52	7.52	18.81
100% Local, Private, Other			33.70	8.43	42.13	84.26	84.26	210.64
Subtotal	Federal		175.31	48.30	223.61	482.99	482.99	1,189.59
	State		64.24	14.24	78.48	142.42	142.42	363.32
	Local, Other		70.45	20.63	91.08	206.29	206.29	503.66
Total (2025 Dollars)			310.00	83.17	393.17	831.70	831.70	2,056.56
Total (Year of Expenditure Dollars)			310.00	-	401.49	1,022.99	1,247.54	2,672.02

Source: MVRPC

Due to the high cost and the state and national significance of interstate widening projects (I-70, I-75, and I-71 corridors), the financial resources that have been historically available to the Region are not sufficient to implement these type of high cost/high impact projects. As a result, MVRPC is primarily relying on financial resources from outside the Region to implement interstate projects and it is expected that all such projects will receive funding through Ohio’s Transportation Review Advisory Council (TRAC). Table 6 documents the costs of these projects in year of expenditure dollars.

Table 6 – 2050 Forecasted Cost and Revenues for Interstate Widening Projects (in millions of Year of Expenditure dollars)

Program	Short Term Plan (2026-2030)	Medium Term Plan (2031-2040)	Long Term Plan (2041-2050)	For Full 25 Year Plan
Cost/Revenue	106.27	296.85	358.75	761.87

Transit Service

Greater Dayton Regional Transit Authority (GDRTA)

The long range planning process used by GDRTA is based upon strategic plan priorities, as well as federal directives. This planning process has led to the current transit system and has also assisted in the development of the 2050 LRTP. GDRTA provides approximately 6 million passenger-trips per year through an extensive network of fixed routes, covering nearly 700 miles of directional roadways. Further, GDRTA's Transit Centers, located throughout Montgomery County, connect the central city and the suburban areas with bus services at centralized locations. The following assumptions were made in developing the GDRTA Long Range Transportation Plan project lists, costs, and revenues:



Service Configuration

- Service area is likely to remain the same, however funding constraints could result in service alterations or reductions.
- RTA will continue to operate as a multiple transit center/transfer system.
- RTA will pursue dual-mode vehicle technology for service extensions off existing electric trolley wire.
- RTA is in compliance with ADA and will continue to work with human services transportation coordination efforts.
- Annual vehicle hours and vehicle miles will slightly decrease.
- Annual ridership will likely remain steady.
- Average fare will slightly increase.

Fleet Changes — RTA anticipates a fleet size as follows:

- Electric Trolleys – 45;
- Diesels 30' to 40' – 120;
- Small Connect Vehicles 75; and
- Contingency 35' to 40'' Diesels – remain at 20.

Capital Needs — Fleet Replacement

- Electric trolley buses will be replaced every 18-20 years;
- Diesel buses will be replaced every 10-12 years; and
- Demand response vehicles will be replaced every 8-10 years.

Electric Trolleybus Infrastructure — Continued maintenance of substation and overhead distribution system.

Other

- Utility vehicle fleet to be replaced several times over the 2026-2050 period;
- Vehicle equipment;
- Upgrades to our facilities and hubs;
- Office/shop equipment;
- Capitalized leases;
- Planning projects; and
- Community projects.

Operating Costs

- Annual operating costs: held constant and adjusted for inflation; and

The capital program, costs and revenues, and sources of revenues for 2026-2050 are presented in detail in Tables 7 and 8. The expenditures were adjusted to year of expenditure dollars based on an average of 2.3 percent per year in all years for operating costs. Capital costs were adjusted based on the expected increase in spending in the project area an average of 2.3 percent per period.

**Table 7 — GDRTA 2050 LRTP Costs and Revenues
(in millions of Year of Expenditure dollars)**

Program	Short Term Plan (2026-2030)	Medium Term Plan (2031-2040)	Long Term Plan (2041-2050)	For Full 25 Year Plan
Total Cost	524.32	1,152.73	1,422.96	3,100.01
- Capital Costs	124.79	203.56	231.44	559.79
- Operating/Maintenance Costs	399.53	949.17	1,191.52	2,540.22
Total Revenues	524.32	1,152.73	1,422.96	3,100.01
- Specified Revenues	520.72	1,144.17	1,412.22	3,077.11
- Local Reserve Funds	3.6	8.56	10.74	22.90

Source: GDRTA

Table 8 — GDRTA 2050 LRTP Sources of Revenues (in millions of Year of Expenditure dollars)

Sources	Short Term Plan (2026-2030)	Medium Term Plan (2031-2040)	Long Term Plan (2041-2050)	For Full 25 Year Plan
Total Capital Funds	124.79	203.56	231.45	559.80
<i>Federal Funds</i>				
- FTA 5307	60.04	77.31	159.79	297.14
- FTA 5337	33.04	72.04	11.87	116.95
- FTA Other	6.75	13.5	13.5	33.75
<i>ODOT Capital</i>	0	0	0	0.00
<i>GDRTA Capital Funds</i>	24.96	40.71	46.29	111.96
Total Operating/Maintenance Funds	399.53	949.17	1,191.51	2,540.21
<i>Local</i>				
- Passenger Revenue	47.05	111.77	140.31	299.13
- Local Sales Tax	235.39	559.23	702.01	1,496.63
- Local Other (interest, misc.)	5.32	12.64	15.87	33.83
<i>Federal</i>				0.00
- Federal 5307	58.45	138.86	174.32	371.63
- Federal 5337	39	92.67	116.33	248.00
- Federal Other	10.71	25.45	31.95	68.11
<i>GDRTA Reserve Funds</i>	3.61	8.55	10.72	22.88
Grand Total - Revenue Sources	524.32	1,152.73	1,422.96	3,100.01

Source: GDRTA

Greene County Transit Board (Greene CATS Public Transit)

The agency provides a combination of traditional demand responsive and flex routes operating five days a week. It is wheelchair accessible and serves a mix of fare-paying and contract riders. The transit service area is Greene County with trips to neighboring counties on a limited basis. In addition, the Greene County Transit Board works with local social services agencies through its Mobility Management Program to help coordinate social services transportation and to provide a wider range of transportation options to riders.



The following assumptions were made in developing the Greene CATS Public Transit project lists, expenses, and revenues for the 2050 LRTP:

- Short term increase of 5307 Urban Transit funding through Cares Act Funding
- Reduction in 5307 Urban Transit funding due to change of classification from Urban to Rural because of the 2020 Census
- Continued use of available 5307 Urban Transit funding through Dayton UZA split allocation agreement
- Increased Ohio of Department of Transportation Urban Transit formula funding
- Begin applying for and receiving 5311 Rural Transit funds through Ohio Department of Transportation SFY 2025
- No dedicated source of local revenue
- Periodic small increases in fares
- Weekday Service only
- Continue to provide contract service for local social service agencies; and
- Continue Mobility Management Program

**Table 9 — Greene CATS Public Transit 2050 LRTP Expenses
(in millions of Year of Expenditure dollars)**

Program	Short Term Plan (2026-2030)	Medium Term Plan (2031-2040)	Long Term Plan (2041-2050)	For Full 25 Year Plan
Capital Costs	2.28	4.57	4.57	11.44
-Bus Purchase	2.25	4.50	4.50	11.25
-Shop/Office Purchase	0.03	0.07	0.07	0.09
Operating/Maint. Costs	17.04	39.66	48.59	105.29
Total (YoE dollars)	19.32	44.23	53.18	116.73

Source: Greene CATS

**Table 10 — Greene CATS Public Transit 2050 LRTP Revenues
(in Millions of Year of Expenditure dollars)**

Program	Short Term Plan (2026-2030)	Medium Term Plan (2031-2040)	Long Term Plan (2041-2050)	For Full 25 Year Plan
- FTA formula	9.72	22.42	27.26	59.40
- Federal Other	0.10	-	-	0.10
- ODOT Assistance	2.12	5.04	6.33	3.48
- Fares/Contracts	6.49	15.41	19.35	41.25
- Local Support	0.58	1.18	1.30	3.06
Total (YoE dollars)	19.01	44.05	54.24	117.29

Source: Greene CATS

Miami County Transit System

Miami County Transit System provides demand responsive transit services within the geographic area of Miami County. The County anticipates continued increases in benefits for local human service organizations. Many of these organizations have the opportunity to utilize Miami County Transit as a method of expanding existing programs.

The Miami County Commissioners plan to utilize a combination of federal, state, and local funds to financially support the program and its capital requirements as shown in Tables 11 and 12.

**Table 11 — Miami County Transit 2050 LRTP Costs
(in millions of Year of Expenditure dollars)**

Program	Short Term Plan (2026-2030)	Medium Term Plan (2031-2040)	Long Term Plan (2041-2050)	For Full 25 Year Plan
Total Capital Costs	1.32	3.13	3.94	8.39
- Small Buses – 75 (3/year)	1.27	3.03	3.81	8.11
- Shop/Office Equipment	0.02	0.03	0.05	0.10
- Security Equipment	0.03	0.07	0.08	0.18
Total Operating/Maint. Costs	7.66	18.20	22.85	48.71
Total	8.98	21.33	26.79	57.10

Source: Miami County Transit

**Table 12 — Miami County Transit 2050 LRTP Revenues
(in millions of Year of Expenditure dollars)**

Program	Short Term Plan (2026-2030)	Medium Term Plan (2031-2040)	Long Term Plan (2041-2050)	For Full 25 Year Plan
FTA Formula	3.74	8.88	11.16	23.78
FTA Discret. (1 bus/year)	0.34	0.81	1.01	2.16
ODOT Capital (1 bus/year)	0.34	0.81	1.01	2.16
ODOT Assistance	0.71	1.68	2.11	4.50
Fares, Contract Rev., Misc.	2.06	4.89	6.14	13.09
Local Support	1.78	4.25	5.36	11.39
Total	8.98	21.33	26.79	57.11

Source: Miami County Transit

Public Transit Human Services Transportation

The Federal Transit Administration’s Enhanced Mobility for Seniors and Individuals with Disabilities Program (Section 5310) funds projects that meet the needs of older adults and people with disabilities when the transportation services are unavailable, insufficient, or inappropriate to meeting needs. FTA requires all projects selected must be included in a locally developed, coordinated public transit-human services transportation plan. The coordinated plan must be developed and approved through a process that includes participation by older adults, individuals with disabilities, representatives of public, private, and nonprofit transportation and human services providers, and other members of the public.

Financial forecasts for human services transportation are based on annual averages as shown in the current SFY 2026-2029 TIP and are assumed to be in 2025 dollars. Based on the annual averages, three plan periods were forecasted: 2026-2030, 2031-2040, and 2041-2050. Revenue for the periods beyond the TIP were inflated using the expected revenue growth using a 2.0 percent per year growth factor which resulted in inflation factors of 1.10, 1.23, and 1.50 for the mid-years of the Plan periods (2026-2030), (2031-2040), and (2041-2050). As a result the scope of programs and projects will be constrained by available future revenue. The results can be seen in Table 13.

Table 13 — 2050 Forecasted Cost and Revenues for Human Services Transportation
(in millions of 2025 / Year of Expenditure dollars)

Program	Annual Average (2026-2029)	Short Term Plan (2026-2030)	Medium Term Plan (2031-2040)	Long Term Plan (2041-2050)	For Full 25 Year Plan
Total (2025 dollars)	1.36	6.80	13.60	13.60	34.00
Total (YoE dollars)	-	7.48	16.73	20.40	44.61

Source: MVRPC

Alternative Modes and Development Choices

As the Region grows, it is essential to plan a comprehensive transportation system that serves the needs of travelers using all modes of transportation, allowing for reasonable mobility choices for all residents. The 2050 LRTP addresses future transportation needs by including programs and projects that provide alternatives to traditional forms of transportation and thereby aid in curtailing the demand for single occupancy vehicle travel, reducing congestion, harmful emissions, and reliance on petroleum-based products. Alternative modes and development choice strategies can also spur economic development in existing communities, create strong places with a sense of community, and help preserve open space and environmentally sensitive areas.

Financial forecasts for the programs and projects described in this chapter are based on annual averages as shown in the current SFY 2026-2030 TIP and are assumed to be in 2025 dollars. Based on the annual averages, three plan periods were forecasted: 2030, 2031-2040, and 2041-2050. The RIDESHARE and Air Quality programs are proportional to the CMAQ population of the Region and since the Region population is stable no growth in funding is forecasted. The results can be seen in Table 14 below. As a result the scope of programs and projects will be constrained by available future revenue. It is also important to note that MVRPC does not forecast funding for the regional bikeway programs; these programs are funded as revenues become available and since the passing of the Regional Complete Streets Policy in 2011, many roadway projects now include bike and pedestrian elements.

**Table 14 — 2050 Forecasted Cost and Revenues for Alternative Modes
(in millions of 2025 / Year of Expenditure dollars)**

Programs	Cost/Revenues					
	Four Year (2026- 2029)	Annual Average	Short Term Plan (2026- 2030)	Medium Term Plan (2031- 2040)	Long Term Plan (2041- 2050)	For Full 25 Year Plan
RIDESHARE	1.86	0.47	2.35	4.7	4.7	11.75
Air Quality	1.76	0.44	2.20	4.4	4.4	11.00
Bikeway/Pedestrian	8.23	-	8.23	-	-	8.23
Total (2025/YoE)	11.85	--	12.78	9.1	9.1	30.98

Source: MVRPC