

2035 FINANCIAL RESOURCES FORECAST

AKRON METROPOLITAN AREA TRANSPORTATION STUDY
806 CITICENTER BUILDING
146 SOUTH HIGH STREET
AKRON, OHIO 44308

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This report was prepared by the Akron Metropolitan Area Transportation Study (AMATS) in cooperation with the U.S. Department of Transportation, the Ohio Department of Transportation, and the Village, City and County governments of Portage and Summit Counties and Chippewa Township in Wayne County. The contents of this report reflect the views of AMATS, which is responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official view and policies of the Ohio and/or U.S. Department of Transportation. This report does not constitute a standard, specification or regulation.

Introduction

The Financial Resources Forecast projects funding levels expected to be available within the AMATS area between now and 2035. These projections will be used to develop a financially constrained Regional Transportation Plan known as *Transportation Outlook 2035*. The term “financially constrained” means that the anticipated revenues are sufficient to cover the costs of proposed investments or projects. The Plan must prioritize transportation needs based on the projected availability of funds to remain financially constrained.

All funding references in this forecast are denoted in year of expenditure dollars. Projects that will be recommended in the Plan will also be listed in year of expenditure dollars. With the consideration of inflation, revenues expressed in year of expenditure dollars are always larger numbers than constant current dollars. For example, the revenue needed to cover a project’s cost that is scheduled in the later years of the Plan will be more than the revenue needed to cover that same project’s cost if it were earlier in the Plan.

Developing a financial forecast that covers such an extended timeframe is a challenging task, especially considering current economy uncertainty. Thus, assumptions were developed and a financial forecast was completed in consultation with the Ohio Department of Transportation (ODOT), area transit operators and AMATS local member communities.

Federal Legislation

Congress passed Moving Ahead for Progress in the 21st Century, also known as MAP-21, on July 5, 2012. This transportation bill guarantees funding for highway, highway safety and transit projects through the end of September 2014. MAP-21 eliminates earmarks and consolidates funding into four core programs: National Highway Performance System program, Surface Transportation Program, Highway Safety Improvement Program, and CMAQ program – plus metropolitan planning.

MAP-21 continues to emphasize fixing the existing transportation system before expanding it. It also encourages alternative forms of transportation such as public transit, pedestrian and bicycle facilities. Due to the newness of MAP-21, there is little known about how previous funding sources are being consolidated. Therefore, AMATS has collaborated with ODOT in order to use historic data to forecast the federal and state available funding between now and 2035.

Funding Programs

The following is a brief list of the federal transportation funding programs. The percentage listed after each program is the typical portion of a project eligible for federal funds. The remaining percentage must be covered by state or local funds. Please note these categories are based on the previous transportation bill (SAFETEA-LU) due to limited information on MAP-21. These programs will be consolidated under MAP-21.

Federal and State

- National Highway System (NHS) – 80%
- Interstate Maintenance (IM) – 90%
- Surface Transportation Program (STP) – 80%
- Transportation Alternatives (TA) – 80%
- Highway Safety Improvement Program (HSIP) – 90%
- Bridge Replacement and Rehabilitation (BR) – 80%
- Congestion Mitigation/Air Quality (CMAQ) – 80%

Transit

- FTA Section 5307 Urbanized Area Formula Program – 80%
- FTA Section 5309 Transit Capital Investment Program -80%
- FTA Section 5310 Elderly and Disabled Program – 80%

Revenue Sources

Federal

The federal Highway Trust Fund provides the revenue for both highway and transit funding programs. Taxes on gasoline and diesel fuels are the main source of income for the Trust Fund. Currently the federal gasoline tax is 18.4 cents per gallon and 24.4 cents per gallon on diesel.

State

Federal funds are not the only source of revenue for implementing transportation projects in the AMATS area. In order to receive federal funding, a matching of state or local dollars must be included, which is typically 10-20%. State or local entities sponsoring a project will provide the funding needed to match federal dollars. State funds are generated from the state fuel tax. The state collects a fuel tax which is 28 cents per gallon for gasoline or diesel. ODOT receives approximately 60% of the fuel tax revenue. The remaining 40% is shared by counties, municipalities, townships, and other state agencies. Some projects are solely funded with state and/or local funds (i.e. they do not include any federal funding).

Local – Highway

As mentioned above, local funds are often needed to match federal or state funding for a project. However, local funds can also be used as stand-alone funds for projects such as resurfacings. As described above, counties, municipalities, and townships receive a portion of their funds from state fuel taxes. The Ohio Bureau of Motor Vehicles (BMV) also collects license plate registration fees and permissive taxes dedicated to transportation funding. These fees and taxes are distributed back to locals as well. Finally, locals can also use general revenue funds. General funds are acquired differently for each community and vary greatly from year to year; therefore, they were not estimated in this report.

Local – Transit

Transit receives its local funds through sales tax, passenger fares, advertising and local contracts. These funds can be used to pay for transit projects or as a match for federal funding.

Ohio Turnpike

The Ohio Turnpike is a self sustained entity. The majority of Ohio Turnpike commission's revenue comes from tolls. Other revenue sources include special toll permits, concessions, fuel tax allocations, and investments. These funds are used to cover all expansion and operating expenses of the turnpike.

Forecast Methodology

As mentioned above, AMATS collaborated with ODOT to develop fiscal projections. Historic data was used to forecast funding for: Federal and state (highway), local (highway), turnpike, and federal and local (transit). Any "one-time" funding such as stimulus funds or TIGER grants were not included due to their uncertainty from year to year. The following general assumptions have been made in developing the forecast:

- Highway Trust Fund (with possible transfers from the general fund) will remain viable to fund federal programs
- Existing federal and state funding programs will remain (at least in some similar form)
- Revenue for local match for federal and state programs will be available

The general forecast methodology included a two-step process. The first step was to determine the base year amount by calculating an average from historic data. The second step was to project growth rates through the life of the long range plan.

Federal and State – Highway

ODOT provided historical data for federal and state fund expenditures between 2000 and 2011 for the AMATS area which includes Summit and Portage Counties, and Chippewa Township of Wayne County. This data included specifically encumbered transportation projects within that timeframe. AMATS compiled this historic data for federal and state funds and listed them in Table 1 on page 5. An average for those years was calculated and is included at the bottom of the table.

The growth rates used to project federal and state funding were based on the "moderate growth" assumption from the *ODOT Business Plan 2010-2011*. The moderate growth scenario specified a 3% yearly increase for federal funds and a variable rate from 0.5% to 1% to 0% for state funds. These growth rates were applied to the historical average and compounded to determine the financial forecast projections for short, medium, and long term years of the Plan. These are shown in Table 2 on page 6. The federal forecast is projected to be approximately \$2 billion and the state is projected to be approximate \$741 million.

Local – Highway

Historical data from the BMV for license plate registration fees and permissive taxes was obtained for 2007 to 2011. Historic fuel tax data distributed to the counties, municipalities, and townships was obtained for 2006 to 2011, given that the first full year of the current \$0.28 per gallon tax rate was 2006. Table 1 shows a listing of this data along with the historical average. The growth rates used to forecast local funding were assumed to be a conservative 1% per year.

The historical averages for the BMV and fuel columns in Table 1 were added to obtain the overall local average on Table 2. The 1% was applied to that historical average and compounded to determine the 2035 financial forecast. The local highway forecast is projected to be approximately \$1.4 billion, as shown on Table 2.

Ohio Turnpike

The Ohio Turnpike portion of the funding was determined from the Ohio Turnpike Commission’s Annual Reports. The expenses for “maintenance of roadway and structures” and “traffic control, safety, patrol and communications” were added together to estimate the cost of maintaining the turnpike. The total for each year from 2002 to 2011 is listed in Table 1 along with the resulting historical average.

Given that the Ohio Turnpike is a self sustained entity, AMATS assumed a growth rate that would generate at least the amount needed to maintain the Ohio Turnpike as shown in the *Highway Preservation Needs* report (July 2012). A growth rate of 3.5% was used to obtain such an amount. Any funds remaining in the Turnpike forecast after maintenance costs are removed cannot be used on other roadways. The Ohio Turnpike forecast is projected to be approximately \$264 million between now and 2035. See Table 2 for details.

Table 1: Highway Funds spent by Fiscal Year by Category

Year	Federal*	State**	Local - BMV	Local - Fuel	Turnpike
2000	\$36,063,522	\$16,137,631	-	-	-
2001	\$52,382,529	\$20,164,427	-	-	-
2002	\$21,671,830	\$19,879,692	-	-	\$5,831,058
2003	\$40,450,690	\$50,709,242	-	-	\$6,137,780
2004	\$46,447,427	\$26,433,352	-	-	\$6,369,564
2005	\$107,667,654	\$32,906,593	-	-	\$6,934,647
2006	\$74,389,290	\$42,818,680	-	\$24,468,070	\$6,605,415
2007	\$98,927,450	\$37,309,147	\$25,895,296	\$25,110,709	\$7,597,905
2008	\$51,126,935	\$28,650,251	\$25,681,261	\$25,381,673	\$7,707,988
2009	\$53,193,034	\$55,025,786	\$25,303,440	\$23,091,204	\$7,439,751
2010	\$50,857,185	\$16,034,415	\$25,305,709	\$25,003,068	\$7,635,228
2011	\$46,659,980	\$12,618,551	\$25,782,170	\$24,298,561	\$7,411,722
Average	\$56,653,127	\$29,890,647	\$25,593,575	\$24,558,881	\$6,967,106

*Federal funds include Garvee Bonds

**State funds include state bonds

Table 2: Highway Funding Level Projections for 2012 to 2035

Term	Year	Federal	Growth Rate	State	Growth Rate	Local	Growth Rate	Turnpike	Growth Rate
	Average	\$56,653,127	N/A	\$29,890,647	N/A	\$50,152,456	N/A	\$6,967,106	N/A
Short	2012	\$58,352,721	3%	\$30,040,100	0.5%	\$50,653,981	1%	\$7,210,955	3.5%
	2013	\$60,103,302	3%	\$30,340,501	1%	\$51,160,520	1%	\$7,463,338	3.5%
	2014	\$61,906,402	3%	\$30,643,906	1%	\$51,672,126	1%	\$7,724,555	3.5%
	2015	\$63,763,594	3%	\$30,950,345	1%	\$52,188,847	1%	\$7,994,914	3.5%
	2016	\$65,676,501	3%	\$30,950,345	0%	\$52,710,735	1%	\$8,274,736	3.5%
	2017	\$67,646,796	3%	\$30,950,345	0%	\$53,237,843	1%	\$8,564,352	3.5%
Medium	2018	\$69,676,200	3%	\$30,950,345	0%	\$53,770,221	1%	\$8,864,104	3.5%
	2019	\$71,766,486	3%	\$30,950,345	0%	\$54,307,923	1%	\$9,174,348	3.5%
	2020	\$73,919,481	3%	\$30,950,345	0%	\$54,851,003	1%	\$9,495,450	3.5%
	2021	\$76,137,065	3%	\$30,950,345	0%	\$55,399,513	1%	\$9,827,791	3.5%
	2022	\$78,421,177	3%	\$30,950,345	0%	\$55,953,508	1%	\$10,171,764	3.5%
	2023	\$80,773,813	3%	\$30,950,345	0%	\$56,513,043	1%	\$10,527,776	3.5%
	2024	\$83,197,027	3%	\$30,950,345	0%	\$57,078,173	1%	\$10,896,248	3.5%
	2025	\$85,692,938	3%	\$30,950,345	0%	\$57,648,955	1%	\$11,277,616	3.5%
Long	2026	\$88,263,726	3%	\$30,950,345	0%	\$58,225,444	1%	\$11,672,333	3.5%
	2027	\$90,911,638	3%	\$30,950,345	0%	\$58,807,699	1%	\$12,080,865	3.5%
	2028	\$93,638,987	3%	\$30,950,345	0%	\$59,395,776	1%	\$12,503,695	3.5%
	2029	\$96,448,156	3%	\$30,950,345	0%	\$59,989,734	1%	\$12,941,324	3.5%
	2030	\$99,341,601	3%	\$30,950,345	0%	\$60,589,631	1%	\$13,394,270	3.5%
	2031	\$102,321,849	3%	\$30,950,345	0%	\$61,195,527	1%	\$13,863,070	3.5%
	2032	\$105,391,505	3%	\$30,950,345	0%	\$61,807,483	1%	\$14,348,277	3.5%
	2033	\$108,553,250	3%	\$30,950,345	0%	\$62,425,557	1%	\$14,850,467	3.5%
	2034	\$111,809,847	3%	\$30,950,345	0%	\$63,049,813	1%	\$15,370,233	3.5%
	2035	\$115,164,143	3%	\$30,950,345	0%	\$63,680,311	1%	\$15,908,192	3.5%
Total		2,008,878,205		740,981,759		1,366,313,365		264,400,674	

Federal – Transit

The federal funds received by METRO and PARTA between 2000 and 2011 are listed in Table 3 on page seven. These historic values were used to calculate an average amount, shown at the bottom of Table 3. Stimulus and other “one-time” funds were not included in historical data because they are not indicative of future funding. Therefore, 2009 totals were adjusted to remove any stimulus funds impacting the projects in that year. Also, \$20 million was subtracted from the PARTA total in 2010, to negate the TIGER grant they received that year.

The growth rates used to forecast federal transit funding were assumed to be 1% in the short term and then 2% until 2035. The METRO and PARTA averages were combined and the growth rate was applied to the historical average and compounded to determine the total cumulative 2035 forecast of available funds. The federal transit forecast is projected to be approximately \$359 million. The yearly projections of federal transit funding are listed on Table 4 on page eight.

Local – Transit

The majority of METRO and PARTA’s funding comes from local sources. Most of the local funds come from county-wide sales tax and passenger bus fares; however some of the funds also come from other sources such as advertising and local contracts. Averages for METRO were calculated from 2009 to 2011 due to a sales tax increase in 2008. Averages for PARTA were calculated from 2008 to 2011 due to a sales tax increase in 2007. This data can be found on Table 3 along with the averages.

The growth rates used to forecast local transit funding were assumed to be 1% annually through 2035, similar to local highway funding. The METRO and PARTA averages were combined and the growth rate was applied to that historical average and compounded in order to determine the 2035 financial forecast. The local transit funding forecast is projected to be just under \$1.3 billion, as shown on Table 4.

Table 3: Transit Funds spent by Fiscal Year by Category

Year	Federal		Local	
	METRO	PARTA	METRO	PARTA
2000	\$17,016,300	\$842,579	-	-
2001	\$5,820,000	\$737,243	-	-
2002	\$9,071,000	\$1,590,100	-	-
2003	\$12,704,000	\$611,000	-	-
2004	\$9,666,000	\$1,694,530	-	-
2005	\$7,450,000	\$1,316,000	-	-
2006	\$8,071,694	\$2,300,011	-	-
2007	\$8,139,000	\$1,996,296	-	-
2008	\$7,754,182	\$1,977,091	-	\$6,575,726
2009	\$9,200,460	\$1,440,064	\$39,031,117	\$6,308,868
2010	\$6,223,200	\$2,156,280	\$40,492,782	\$6,600,000
2011	\$22,314,464	\$6,486,099	\$42,251,314	\$6,800,000
Average	\$10,285,858	\$1,928,941	\$40,591,738	\$6,571,149

Table 4: Transit Funding Level Projections for 2012 to 2035

Term	Year	Federal	Growth Rate	Local	Growth Rate
	Average	\$12,214,799	N/A	\$47,162,887	N/A
Short	2012	\$12,336,947	1%	\$47,634,516	1%
	2013	\$12,460,316	1%	\$48,110,861	1%
	2014	\$12,584,920	1%	\$48,591,970	1%
	2015	\$12,710,769	1%	\$49,077,889	1%
	2016	\$12,837,877	1%	\$49,568,668	1%
	2017	\$12,966,255	1%	\$50,064,355	1%
Medium	2018	\$13,225,580	2%	\$50,564,998	1%
	2019	\$13,490,092	2%	\$51,070,648	1%
	2020	\$13,759,894	2%	\$51,581,355	1%
	2021	\$14,035,092	2%	\$52,097,168	1%
	2022	\$14,315,794	2%	\$52,618,140	1%
	2023	\$14,602,109	2%	\$53,144,322	1%
	2024	\$14,894,152	2%	\$53,675,765	1%
	2025	\$15,192,035	2%	\$54,212,522	1%
Long	2026	\$15,495,875	2%	\$54,754,648	1%
	2027	\$15,805,793	2%	\$55,302,194	1%
	2028	\$16,121,909	2%	\$55,855,216	1%
	2029	\$16,444,347	2%	\$56,413,768	1%
	2030	\$16,773,234	2%	\$56,977,906	1%
	2031	\$17,108,698	2%	\$57,547,685	1%
	2032	\$17,450,872	2%	\$58,123,162	1%
	2033	\$17,799,890	2%	\$58,704,393	1%
	2034	\$18,155,888	2%	\$59,291,437	1%
	2035	\$18,519,005	2%	\$59,884,352	1%
Totals		359,087,342		1,284,867,940	

Conclusion

MAP-21 provides authorizations for highway, highway safety, and public transportation improvements through September 2014. Beyond this point, funding availability is unknown. Increasing revenues, based on the previously mentioned assumptions and at the annual levels calculated, will provide a conservative estimate of future revenue projections.

Tables 1 and 3 list highway and transit historic data by funding source. Tables 2 and 4 show the resulting forecasted funding by funding source, for highway and transit respectively. It is understood that on a year-by-year basis, the forecasted revenues will vary from the actual revenues. However, over the forecast period these revenues are reasonably expected to be available.

This financial forecast anticipates that \$6 billion in funding from federal, state, and local sources

is reasonably expected to be available for transportation investments in the AMATS area between now and 2035. The totals are summarized in Table 5 below. If additional revenue sources not identified in this forecast become available, they will be added to the forecast.

This financial analysis and forecast will guide the selection of projects to be recommended in *Transportation Outlook 2035* from among numerous “needs” that have been proposed in many prior reports. This process will ensure the effective and efficient use of available financial resources.

Table 5: 2035 Financial Forecast Summary

	Highway	Transit	Total
Federal	\$2,008,878,205	\$359,087,342	\$2,367,965,547
State	\$740,981,759	N/A	\$740,981,759
Local	\$1,366,313,365	\$1,284,867,940	\$2,651,181,305
Turnpike	\$264,400,674	N/A	\$264,400,674
Total	\$4,380,574,004	\$1,643,955,282	\$6,024,529,285