

12. FINANCIAL SUMMARY AND ANALYSIS

Federal law requires that transportation plans be constrained to available revenues. Estimated costs of projects and programs in this plan are constrained to revenue projections through 2035. This chapter explains sources of revenues and methods used to project future revenues for the planning period to demonstrate financial constraint.

Procedures for this analysis have been developed and agreed to by MDOT, Michigan MPO's and the FHWA, subject to locally justified modifications. A task force of MDOT, MPO and FHWA staff developed agreed on procedures (with input from transit operators) for cooperative development of revenue forecasts and financial constraint procedures.

Sources of Transportation Funding

Federal Funds

Developing and maintaining the nation's transportation system is primarily financed by user fees. Federal gasoline and diesel fuel taxes (trucks also contribute federal use and sales taxes) are deposited in the federal Highway Trust Fund and distributed to states through programs authorized in federal law. Most federal highway funds come from the following programs: Interstate Maintenance, National Highway System (NHS), Surface Transportation Program (STP), Safety and the Highway Bridge Replacement and Rehabilitation Program (BRRP). Some STP funds are earmarked for Transportation Enhancement programs.

State Funding

State user fees include per gallon taxes on gasoline and diesel fuel and vehicle registration fees based on vehicle weight or value. State user fees are deposited in the Michigan Transportation Fund (MTF) and, after several deductions, are distributed to the State Trunkline Fund or counties, cities and villages.

Local Funding

Michigan does not permit local communities to assess gasoline taxes. County vehicle registration fees are enabled, but have not been approved anywhere in Michigan. MTF allocations account for most local transportation revenue. Local communities receive federal funds administered by MDOT and may fund local transportation improvements with general funds, millages, general obligation bonds, contributions from other local governments, tax increment financing and special assessment districts. In recent years, private funds have been a growing source of transportation financing. This typically involves developers paying for access drives, turn lanes or roads to new developments.

Total estimated state, local and federal revenue in the Tri-County region for roads in 2010 is over \$153 million. Applying an annual growth factor assumption of 4.89% beginning in 2012 (as determined by MDOT), the total revenue for highway related programs from 2010 to 2035 is over 3.7 billion dollars. An additional 253 million dollars

in revenue is assumed for transit projects based on estimates provided by local transit properties, which they have forecasted based on historical patterns. This brings the total transportation revenue assumption to \$3,917,163,100. Some of these revenues must be used to maintain and operate the system. The remainder is used for capital projects and public transit operations.

Federal regulations require a financially constrained transportation plan. Table 12-1 demonstrates available revenue by funding source and estimated yearly revenues from federal, state and local sources. The table shows region-wide totals for combined state and local programs. Breakdowns of expenditures by program, category and funding source are shown in tables that follow. Figure 12-1 shows revenue by program category over life of the plan. Some categories (such as preserve and improve-expand) are under represented since projects in categories like the Transportation Economic Development Fund Category D (TEDFD) and bridges can be both preserve projects and bridge projects. The pie chart shows relative proportions various programs receive based on historic revenue trends. Future plans may allocate specific percentages of revenue to particular categories.

Exact amounts of federal funds the area receives in a given year are unpredictable. Funding levels fluctuate yearly and are set by congressional action. Historical trends were used to prepare future projections. For this plan, current annual amounts were used, plus assumed increases of 4.89 percent per year beginning in 2012, following a flat 2010 and 2011. Based on these assumed annual growth percentages, revenues have been apportioned in periods (2010, 2011-2014, 2015-2018, 2019-2025, 2026-2030 and 2031-2035) and average revenue per period is identified.

Table 12-1 also shows estimated annual expenditures determined by MDOT and TCRPC by jurisdiction, program and funding source, and also shows anticipated revenues. Rows in the table show programs by local and state jurisdiction through which various federal, state and locally-raised revenues are available. Columns show funding sources. Federal funding sources are shown by major category (*e.g., Interstate Maintenance, National Highway System, Bridge, Congestion Mitigation/Air Quality and Surface Transportation Program*). The Michigan Transportation Fund (MTF) receives receipts from state fuel taxes or vehicle registration fees and distributes them by formula to MDOT, counties and cities for roads. "Local/Private Funds" come from various sources, including the Michigan Economic Development Fund, existing bonds, general funds, assessments and millages. Rows for transit in the table are Federal Transit Administration programs. Columns break down spending by federal, state (Comprehensive Transportation Fund) and local components.

Local revenue estimates for highway programs in Table 12-3 are from TCRPC staff research. Approximately \$40.4 million in 2008 highway revenues came from the MTF (based on Act 51 legislation) funded by state gas taxes. Additional local revenue sources totaling \$3,637,692 for 2008 were estimated by contact with major local

Figure 12-1: Financial Allocation Assumptions

2010-2035 Revenue Available for Tri-County Transportation

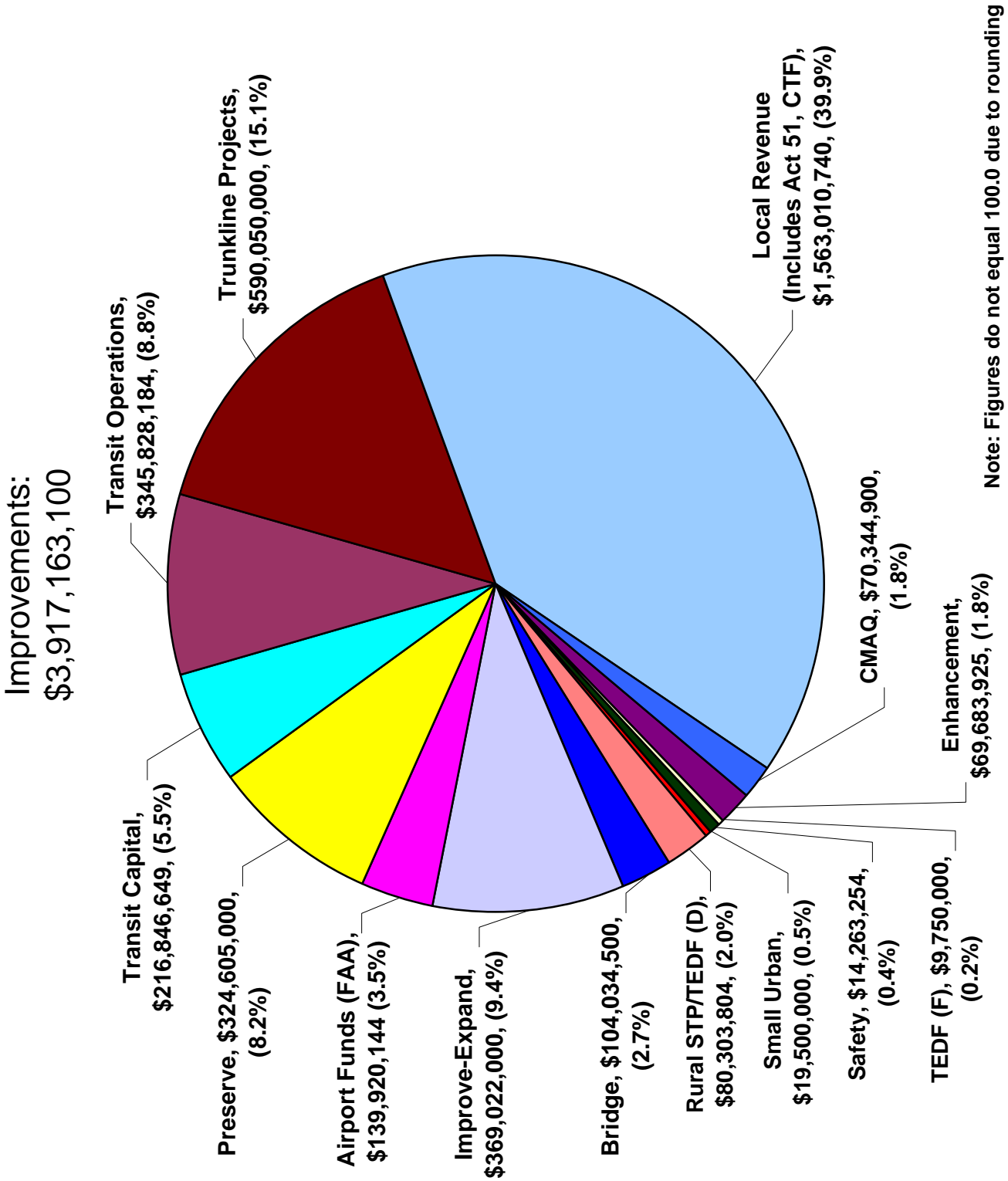


Table 12-1: ESTIMATED FEDERAL REVENUE AVAILABLE BY PROGRAM CATEGORY AS COMPARED WITH PROPOSED FEDERAL COST, 2010-2035#

	2010 Revenue	Proposed Cost	2011-2014 Revenue	Proposed Cost	2015-2018 Revenue	Proposed Cost	2019-2025 Revenue	Proposed Cost	2026-2030 Revenue	Proposed Cost	2031-2035 Revenue	Proposed Cost	2010-2035 Revenue	Proposed Cost
Urban STP	4425.6	4388.0	19043.6	19043.6	23050.8	13169.1	52616.8	25905.3	49935.8	12834.8	63399.0	13429.6	212434.0	93158.4
Small Urban	750.0	750.0	3000.0	830.9	3000.0	796.4	5250.0	0.0	3750.0	0.0	3750.0	0.0	19500.0	2377.3
Rural STP/D	1672.7	882.0	7197.6	2551.0	8712.1	0.0	19886.5	0.0	18873.3	0.0	23961.7	0.0	80303.8	3433.0
Enhancement	1566.3	1433.7	6739.7	0.0	8157.9	0.0	17753.4	0.0	16023.3	0.0	19443.3	0.0	69683.9	1433.7
Safety/HRRR	258.4	120.8	1649.9	650.0	1571.1	0.0	3154.4	0.0	2981.6	0.0	3590.1	0.0	13205.5	770.8
Local Bridge **	3601.0	3601.0	11219.4	4591.2	11675.9	0.0	25409.2	0.0	22990.3	0.0	29188.7	0.0	104084.5	8192.2
TEDF (F)	375.0	375.0	1500.0	1407.8	1500.0	0.0	2625.0	0.0	1875.0	0.0	1875.0	0.0	9750.0	1782.8
CMAQ	1647.8	0.0	7091.0	0.0	8182.9	0.0	17807.7	0.0	16112.5	0.0	19502.9	0.0	70344.9	0.0
NHS	266.0	266.0	31051.5	7425.0	42783.0	0.0	77980.5	0.0	70556.8	0.0	85403.5	257188.6***	308041.3	264879.6
IM	33263.4	33263.4	0.0	0.0	0.0	0.0	11527.9	0.0	750.0	0.0	0.0	0.0	45541.3	33263.4
STP (F)	9847.4	9847.4	2703.3	2703.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12550.7	12550.7
Combined Subtotal														
NHS/IM/STP***	43376.8	43376.8	33754.8	10128.3	42783.0	0.0	89508.4	0.0	71306.8	0.0	85403.5	257188.6	366133.3	310693.7
MDOT ("M")/##	14316.9	14316.9	13025.6	13025.6	8549.5	8549.5	14666.8	14666.8	10448.8	10448.8	87523.8	87523.8	148531.4	69761.4
MDOT Bridge	6134.4	6134.4	2098.9	2098.9	10424.7	0.0	0.0	0.0	17765.7	0.0	21504.0	0.0	57927.7	8233.3
Other ###	11707.0	11707.0	42271.4	42271.4	67751.5	67751.5	55568.3	55568.3	55419.5	55419.5	45510.1	45510.1	278227.8	278227.8
Highway Total	89831.9	87085.6	148591.9	96598.7	195359.4	90266.5	304246.5	96140.4	287482.6	78703.1	403652.1	403652.1	1430126.8	778084.4
FTA Section 5307	5391.1	5391.1	21564.3	21564.3	21564.3	21564.3	37737.5	37737.5	26955.4	26737.5	26955.3	26955.3	140167.8	140167.8
Section 5309	960.0	960.0	762.2	762.2	3977.9	7074.4	7074.4	7074.4	5637.6	5637.6	6344.1	6344.1	24756.2	24756.2
Section 5311	1453.8	1453.8	5815.4	5815.4	5815.4	5815.4	10176.9	10176.9	7269.2	7269.2	7269.2	7269.2	37800.0	37800.0
Other Transit*	299.7	299.7	1198.3	1198.3	1198.3	1198.3	2097.5	2097.5	1498.1	1498.1	1498.1	1498.1	7788.6	7788.6
Transit Total	8104.6	8104.6	29340.2	29340.2	32555.9	32555.9	57086.1	57086.1	41360.3	41360.3	42066.7	42066.7	210512.6	210512.6
MTF (Cities and Villages) &	14688.2	14688.2	58752.8	58752.8	58752.8	58752.8	102817.4	102817.4	73441.0	73441.0	73441.0	73441.0	381893.2 &&	381893.2
MTF (Counties) &	25721.3	25721.3	102885.2	102885.2	102885.2	102885.2	180049.1	180049.1	126606.5	126606.5	126606.5	126606.5	664753.8 &&	668753.8
Bonds, general funds, general assessments, millages & CTF &	23231.0	23231.0	104853.3	104853.3	126916.6	126916.6	289703.3	289703.3	274942.2	274942.2	349064.4	349064.4	1248731.8 &&	1165012.0
	1750.7	1750.7	5699.1	5699.1	6758.3	6758.3	11727.2	11727.2	9034.7	9034.7	8693.3	8693.3	42669.3	43369.3
GRAND TOTAL	163327.7	160581.4	421980.6	398129.3	523228.2	418135.3	945629.6	737523.5	812867.3	604087.8	1003530.0	1003530.0	3917163.1	3321987.3

Assumes 4.89% increase annually for most categories following a flat 2010 and 2011; no change assumed in Small Urban and TEDF(F). Trunkline categories are grown from an average of 2005-2008 anticipated allocation. Also refer to footnote (***) below.

These are State of Michigan funds (non-federal)

All other federal funding sources, including GPAs, Congressional High Priority projects, and locally funded projects.

* All other federal transit funding sources including JARC, New Freedom and Section 5303 Capitol (if awarded)

** Wide variations sometimes occur in the amount of bridge money awarded by region in this statewide funding.

*** MDOT allocates NHS, IM, STP Flexible and MDOT Bridge dollars on a statewide basis, and wide variations sometimes occur from year to year and from region to region. The original revenue assumptions (Table 12-2) for these programs were determined based on historic allocations from 2005-2008 which were modest for the Tri-County region. Projects identified in the Plan and their costs as itemized in this financial table are based on MDOT commitments of available statewide funding. The 2031-2035 cost is for upgrade of US-127 in Clinton County and will be funded through accrued revenues over the course of this Plan.

& These categories include all revenues needed to match federal dollars, in addition to costs for management and operations maintenance.

&& Assuming that project costs will ultimately correspond to available revenues, match for highway projects will be required in the amount of \$209,354,050, and will generally come from these revenue sources.

Table 12-2: Estimated Federal Revenue Available by Program Category (Highways) #, ##

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YEAR	Urban STP	Small Urban	Rural STP/D	Enhancement	Safety	Local Bridge	TEDF (F)	CMAQ	TEDF (A)	HPP	NHS	IM	STP (F)	MDOT "M"	MDOT Bridge	TOTAL
2010	4,425,583	750,000	1,672,700	1,566,260	258,440	3,601,002	375,000	1,647,883	1,762,400	4,639,120	7,216,105	1,066,900	243,000	11,363,416	2,943,475	43,551,284
2011-2014	19,043,646	3,000,000	7,197,600	6,739,744	1,649,900	11,219,398	1,500,000	7,090,974	7,283,751	19,962,513	31,051,494	4,590,957	1,045,650	48,983,772	12,666,014	183,025,413
2015-2018																
(Remainder of 2011-2018 conformity period)	23,050,823	3,000,000	8,712,100	8,157,926	1,571,000	11,675,888	1,500,000	8,182,917	8,751,577	23,036,553	35,833,127	5,297,920	1,206,673	56,526,809	14,616,461	211,119,874
2019-2025	52,616,773	5,250,000	19,886,500	17,753,364	3,154,400	25,409,188	2,625,000	17,807,749	19,045,273	50,132,384	77,980,419	11,529,386	2,625,978	126,623,438	31,803,489	464,248,341
2026-2030	49,935,812	3,750,000	18,873,300	16,023,291	2,981,600	22,980,302	1,875,000	16,112,500	17,232,215	45,559,916	70,556,890	10,431,823	2,375,994	116,721,264	28,780,411	424,000,318
2031-2035	63,389,028	3,750,000	23,961,700	19,443,340	3,590,100	29,168,722	1,875,000	19,502,902	20,853,229	54,304,582	85,403,525	12,826,891	2,875,955	33,825,119	34,636,405	369,051,998
TOTAL	212,471,665	19,500,000	80,303,900	69,683,925	13,205,540	104,084,500	9,750,000	70,344,925	74,933,445	198,035,068	308,041,560	4,554,377	10,373,250	394,063,818	125,651,255	1,694,997,228

Growth assumption: Annual growth factor: 4.89%
 (all categories are flat through 2011)

Transit revenue forecasts are being prepared independently with assistance of transit properties.

Most program areas require a local/state match (typically an 80-20% split). These assumptions identify potential federal revenues.

* MDOT has provided a forecast revenue summary for the categories "Preserve" and "CI and New Roads" (expansion projects) that is broken down by different time periods. General comparisons show the MDOT summary to significantly exceed the TCRPC revenue forecasts. MDOT's "Preserve" revenue assumptions for 2009-2035 is \$1,084,100,000. MDOT's CI and New Road forecast assumes no revenues through 2023, but \$308,300,000 from 2024-2035.

Explanation of Acronyms	
STP:	Surface Transportation Program
D:	Transportation Economic Development Fund, Category D
TEDF (F):	Transportation Economic Development Fund, Category F
TEDF (A):	Transportation Economic Development Fund, Category A
HPP:	Congressional High Priority Project (earmark)
NHS:	National Highway System
IM:	Interstate Maintenance
MDOT "M":	State Funds committed to trunk lines

jurisdictions, and are assumed to grow by 4.89% annually beginning in 2012. Since most federal funding programs require local match (typically 20%), Table 12-1 shows local revenue left after match obligations based on 2010 program levels.

Local transit revenues consist of farebox revenues, local millages, advertising and other sources as provided by individual transit properties. Local transit revenues supplement federal capital and operating programs funded by the Federal Transit Administration (FTA) and Comprehensive Transportation Funds (CTF), through MDOT from state gas taxes.

Table 12-1 indicates currently identified or planned projects are financially constrained over the life of the plan.

Important points in interpreting summary data from these tables follow.

1. The plan deals with fiscal years, not calendar years. As such, this report summarizes planned expenditures for October 1 to September 30. Fiscal Year 2010 began on October 1, 2009.
2. The plan must list all projects with federal funds and all regionally significant projects regardless of funding source. All known highway and transit projects and revenues are shown in these tables.
3. Projects with expenditures in the tables are identified by funding source in Chapter 13. Some projects may be grouped into General Program Accounts (GPA's) consistent with state/federal agreements and local practice. These categories include local Safety, Capital Preventative Maintenance (bridge and highway) and preliminary engineering (for preserve projects only). Local safety, bridge and enhancement projects are not in GPA's because TCRPC establishes regional priorities for those projects subject to local review and action.
4. Expenditures for programs without specific projects in this document will be amended into the plan as projects are identified.

Description of programs listed in the tables follow. Local highway programs include:

5. **Transportation Management Areas Program** - The TMA program is a federal set aside of STP funds for areas of population greater than 200,000. This includes urbanized areas of Ann Arbor, Detroit, Flint, Grand Rapids, Lansing/East Lansing, South Bend (Niles) and Toledo (City of Monroe) that spill over into Michigan. In Michigan the TMA set aside is reserved for road projects in local jurisdictions.
6. **Small Metropolitan Planning Organizations Program** - The Small MPO Program is funded with a non-mandatory set aside of federal STP funds for areas

of population between 50,000 and 200,000. These include urbanized areas of Battle Creek, Bay City, Benton Harbor/St. Joseph, Holland/Zeeland, Jackson, Kalamazoo, Muskegon, Port Huron and Saginaw. The 2000 Census added South Lyons/Howell/Brighton, Monroe, and Elkhart, Indiana (adjacent portions in Michigan) to Small MPO areas.

7. **Transportation Economic Development Fund, Category C Program** - The TEDF-C program is established in state law by set aside of state and federal (Minimum Guarantee) funds for urban congestion relief. Recipients include Kent, Genesee, Macomb, Oakland and Wayne Counties. Lansing is not eligible.
8. **Transportation Economic Development Fund, Category F Program** – These state funds are available for road improvements in federal aid urbanized areas of rural counties in order to provide system continuity with the secondary all-season road system. Typically eligible roads connect with rural all season roads.
9. **The Rural Task Force Program** consists of **Rural STP** and **TEDF-D** programs. The Rural STP program is created by non-mandatory set aside of federal funds. The TEDF-D program is established in state law by set aside of state and federal Minimum Guarantee funds for a rural county system of all-season roads. Recipients include 78 counties that do not receive TEDF-C funds. Nearby counties meet in Rural Task Forces to prioritize transportation investments. These programs are combined in the table since projects are often funded from both sources. In the Tri-County region, the Rural Task Force program is entirely inside TCRPC's Metropolitan Area Boundary and is part of the TCRPC MPO process.
10. **Small Urban Program** - Funded by non-mandatory set aside of federal STP funds for areas between 5,000 and 50,000 population. Approximately 70 cities share this program and submit project requests to the MDOT for selection. Local eligible recipients include St. Johns, Eaton Rapids and the Charlotte-Pottersville and Williamston-Webberville areas.
11. **Local Bridge Program** - Established in state law with state grants from the Michigan Transportation Fund (MTF). Federal funds for off system bridges and federal STP funds are part of the program.
12. **Congestion Mitigation and Air Quality Program (CMAQ)** - CMAQ is a federal program to help states meet requirements of the federal Clean Air Act. Grants are based on applications from state and local agencies. Local agencies and MDOT are eligible.
13. **Transportation Enhancement (TE) Program** - The TE program is funded by set aside of federal STP funds for projects such as bike and pedestrian facilities, streetscape and roadside aesthetic treatments, transportation museums or

historic preservation projects and other eligible activities. Grants are based on applications from state and local agencies or private entities.

14. **Local Rail/Highway Crossing Program** - Rail crossing program funded by statutory set aside of state and federal funds to improve safety at rail/highway crossings.
15. **State Park Access Program (SPA)** - The SPA program is a non-mandatory set aside of federal STP funds to improve local roads that serve state parks.
16. **Recreation Trails Program** - A federal program of improvements for motorized and non-motorized recreational trail users.
17. **Federal Allocations** - Federal allocations for state or local congressionally-designated High Priority Projects, Demonstration projects and discretionary funds by the U.S. Secretary of Transportation. These funds are for a specific project or use. Federal discretionary projects are often not known until the fiscal year received and may need to be amended into the plan.
18. **Local Safety Program** - Local road safety program funded by set aside of federal funds. These projects address immediate safety needs.
19. **High Risk Rural Roads Program** – This federal program is similar to the Local Safety program, and is intended to resolve specific rural safety issues. This can include such things as guard rails or curve realignments.

State trunklines are nearly 10,000 miles of most heavily traveled state roads funded by a pool of state and federal funds available to the MDOT. State trunkline funding programs include:

20. **Rehabilitate and Reconstruction (R&R) Program** - The R & R program improves system condition and ride quality of pavements. It includes resurfacing and reconstructing existing roads without adding capacity.
21. **Trunkline Bridge Program** - Repairs, reconstructs and replaces bridges on the trunkline system and inventory, inspection, analysis or emergency repair.
22. **Capital Preventative Maintenance Program for Highways and Bridges** - The CPM program extends life of pavement through use of moderately priced fixes early in a pavement's lifecycle. This prevents costly future repairs.
23. **Passing Relief Lanes** - Adds passing lanes on two lane trunklines with limited sight distance.

24. **Capacity Improvements** – Funds widening, resurfacing or reconstructing of roads to relieve urban congestion and improve service along the most important commercial thoroughfares.
25. **New Roads** - Constructs new roads on new alignments to improve system continuity, relieve congestion and continue Michigan's economic vitality.
26. **Preliminary Engineering** - Funds preliminary studies, surveys, drafting and engineering work necessary to develop road projects.
27. **Highway Safety Program** - The trunkline safety program covers improvements such as: signals, signing, pavement marking, guardrail and intersection improvements. The highway safety program is funded by set aside of federal funds.
28. **State Rail/Highway Crossing Program** - The rail crossing program is funded by statutory set aside of state and federal funds to improve safety at rail/highway crossings.
29. **Weigh Station Program** - Funds improvements to truck weigh stations on trunklines.
30. **Roadside Program** - Provides funds for landscaping, rest area and non-motorized facilities.
31. **Sewer Separation Program** - Funds MDOT participation in local sewer separation projects, such as an ongoing project in Lansing.

The basic structure of federal transit programs, which fund public transportation are listed below and require similar matching ratios to highway programs. Transit programs include:

32. **Transit Section 5307 Capital** (formerly Section 9 Capital) - The Section 5307 Capital program provides formula funds to acquire capital items in urbanized areas and planning. There may be a large influx of expenditures of these funds in certain years to replace bus fleets or provide for other periodic capital needs.
33. **Transit Section 5307 Operating** (formerly Section 9 Operating) - Provides operating assistance to local transit agencies. Federal funds are not eligible for operating expenses in urban areas greater than 200,000 population. These funds may not be used for operations in the Lansing urbanized area. However, certain capitalized operations items (such as replacement engines, for example) may be eligible by federal regulation.

34. **Transit Section 5309** (formerly Section 3) - Provides discretionary capital assistance for projects not covered by other federal capital programs. Provides capital funding for fixed guideway modernization, new systems, or bus and bus related projects. Funding by this program is through a grant application process.
35. **Transit Section 5310 Capital** - Provides capital equipment to private nonprofit organizations or public transit agencies that coordinate specialized transportation services for seniors and persons with disabilities. Funds are obtained by grant application.
36. **Transit Section 5311 Operating** - Provides operating assistance and training to local public transit agencies in areas with populations of less than 50,000 and capital grants for intercity facilities and equipment. Funding for operating assistance is provided as a percentage of eligible costs, not to exceed 50 percent of net eligible costs.
37. **State Transit Operating Assistance** (Comprehensive Transportation Fund) - The Michigan Department of Transportation provides operating assistance to area transit agencies.
38. **State Transit Capital Assistance** (Comprehensive Transportation Fund)—The Michigan Department of Transportation provides assistance for purchase of capital equipment by local transit agencies.
39. **Job Access/Reverse Commute (JARC) Program** - Program to increase transit service to employment opportunities.
40. **Over-the-Road Bus Program** - Provides funds to help operators of over-the-road bus service.
41. **New Freedom** – The New Freedom formula grant program aims to provide tools to overcome existing barriers facing Americans with disabilities seeking employment and full participation in society. This program seeks to expand mobility options available to this population by providing capital and operating expenses for new services designed to assist individuals with disabilities.

Michigan Transportation Fund

Michigan collects taxes and fees from a number of transportation related sources, including fuel taxes and vehicle registration fees. These revenues comprise the Michigan Transportation Fund (MTF). After portions of this fund are taken off the top, including a 10 percent set aside for transit (the Comprehensive Transportation Fund, or CTF), the remainder of the MTF is distributed by formula established in Michigan's Act 51. This formula includes population and public road mileage. MDOT and county road commissions each get approximately 39 percent. The remainder goes to cities and villages. No revenues go directly to townships. Township roads are under jurisdiction

of the respective county road commissions. Table 12-3 shows MTF funds distributed in the Tri-County area by jurisdiction in 2008.

Table 12 – 3: MICHIGAN TRANSPORTATION FUND REVENUES BY JURISDICTION

MICHIGAN TRANSPORTATION FUND REVENUES BY JURISDICTION, 2008

Clinton County		Eaton County		Ingham County	
Road Commission	\$5,846,314	Road Commission	\$7,406,648	Road Commission	\$12,466,354
DeWitt	\$278,000	Bellevue	\$94,165	Dansville	\$32,497
Eagle	\$12,897	Charlotte	\$498,590	East Lansing	\$2,479,178
Elsie	\$78,368	Dimondale	\$84,922	Lansing	\$8,204,473
Fowler	\$69,179	Eaton Rapids	\$346,304	Leslie	\$146,185
Maple Rapids	\$48,630	Grand Ledge	\$432,672	Mason	\$438,690
Ovid	\$101,398	Mulliken	\$42,804	Stockbridge	\$77,007
St. Johns	\$497,087	Olivet	\$110,401	Webberville	\$113,483
Westphalia	\$63,374	Potterville	\$126,408	Williamston	\$204,305
		Sunfield	\$44,667		
		Vermontville	\$64,564		
TOTAL	\$6,995,247	TOTAL	\$9,252,145	TOTAL	\$24,162,172
GRAND TOTAL	\$40,409,564				

Source: Act 51 reports

MTF funds are the primary source local jurisdictions use as local match (generally 20 percent) for federal funds. MTF funds are also the principle funding sources for most maintenance and operations (routine maintenance) performed at the local level.

Local Revenues

Many jurisdictions rely exclusively on Michigan Transportation Funds for routine maintenance activities. Some jurisdictions historically have used other sources, including community development block grants, interest, roadway utility permits and the community's general fund.

Local road agencies in 2008 spent \$39,980,501 on operations and maintenance according to Act 51 reports. This is augmented by approximately \$10 million in maintenance and operations expenses by MDOT on the trunkline system, meaning that nearly \$50 million is committed annually to operations and maintenance of the system. Based on 5186 miles of roadway regionwide, this means that approximately \$9,641 is spent per mile for maintenance and operations.

Transportation revenues statewide are extremely limited. The lack of funding available for major reconstructions or resurfacings puts a premium on local units doing less expensive treatments such as routine maintenance to forestall the need for higher expense projects. The nearly \$10 thousand spent per mile in this region speaks to the commitment to adequately operate and maintain the system.

Operating and Maintenance (O/M) Funds for Local Road Agencies

Federal funding sources in Table 12-1 represent a wide variety of program areas. Federal aid and “other funds” added together constitute total new resources available regionwide by year or periods to 2035. “Other” funds in highway portions of Table 12-1 generally refer to local matching share required from the local community or agency.

Regionwide, federal aid totaling \$14,296,800 is identified for 2010, which requires approximately \$3,574,200 in match. Generally, match is generated from local MTF revenues. Subtracting matching funds from regional MTF allocations of \$40,409,564 leaves \$36,835,364 in MTF revenue available to local transportation agencies for discretionary use, plus any other smaller revenue sources (such as interest or permit fees) which a few communities report.

State MTF funds may be used for either capital or operations/maintenance expenses. Staff research indicates disparity in shares of MTF funds local units use for capital projects. However, this averages about 20 percent, leaving 80 percent of funds available for operations and maintenance. Based on this assumption, Table 12-4 estimates amounts of MTF funding available to local Tri-County governments through the life of the Plan.

Operating and maintaining the existing system is generally the first priority for most transportation agencies. This must be accounted for first to assure continued maintenance of the built system, prior to programming funds for other needs. Regulations require analysis of maintenance and operations costs prior to programming new construction in order to assure the existing system is maintained. Operations and maintenance are always major expense items. Michigan winters, as well as increasing traffic loads, increase challenges faced by all jurisdictions in maintaining the existing system. Staff will continue to research methods to better identify operating and maintenance expenses for the local system and trunkline as well for which limited information is readily available.

Operating and Maintenance (O/M) Funds for the State Trunkline (MDOT) System

MDOT reports spending approximately \$10 million in 2009 on operations and maintenance for its trunkline system within the Tri-County region. This level of spending is anticipated to continue in 2010. Based on projects in the 2010 year of the Plan, MDOT will be spending approximately 14% of its highway budget on operations and maintenance within Clinton, Eaton and Ingham Counties.

Table 12-4: Michigan Transportation Fund for Local Government Operations and Maintenance (O/M)

Table 12-4: MICHIGAN TRANSPORTATION FUND FOR LOCAL GOVERNMENT OPERATIONS AND MAINTENANCE (O/M)
 (Assumes 4.89 percent annual increase in federal funds beginning in 2011. MTF and local funds are assumed to remain constant)

	2010	2011-2014	2015-2018	2019-2025	2026-2030	2031-2035	Total 2010-2035
1 Michigan Transportation Fund (MTF)	\$40,409,564	\$161,638,256	\$161,638,256	\$282,866,948	\$202,047,820	\$202,047,820	\$1,050,648,664
2 Additional Local Funds	\$3,637,692	\$14,550,768	\$14,550,768	\$25,463,844	\$18,188,460	\$18,188,460	\$94,579,992
3 Local Funds Available (lines 1 +2)	\$44,047,256	\$176,189,024	\$176,189,024	\$308,330,792	\$220,236,280	\$220,236,280	\$1,145,228,656
4 Construction (20 percent: line 3 x.2)	\$8,809,451	\$35,237,805	\$35,237,805	\$61,666,158	\$44,047,256	\$44,047,256	\$229,045,731
5 Operations/Maintenance (80 percent: line 3 x .8)	\$35,237,805	\$140,951,219	\$140,951,219	\$246,664,634	\$176,189,024	\$176,189,024	\$916,182,925
6 Federal Revenue Available for Non Trunk Line System (derived from revenue forecasts, Table 12-1)	\$17,989,134	\$77,307,878	\$93,648,184	\$198,952,998	\$182,363,178	\$225,313,862	\$792,304,913
7 Federal Revenue Available for Trunk Line System (derived from revenue forecasts, Table 12-1)	\$14,106,726	\$60,702,399	\$66,779,673	\$154,671,426	\$141,275,545	\$92,681,435	\$533,487,525
Total revenues (lines 3, 6 and 7)	\$76,143,116	\$314,199,301	\$336,616,881	\$661,955,216	\$543,875,003	\$538,231,577	\$2,471,021,094

Source: Act 51 reports

Management and Operations Versus Maintenance and Operating Costs

The previous section has addressed federal requirements to consider adequacy of funding for maintaining and operating the existing system, prior to programming projects for system expansion. Maintenance expenses include routine continuing fixes (such as patching, crack sealing or overlays) to extend service life of the existing system. Operating expenses include things like paying for snow removal, sweeping, and routine overhead expenses for road agency operations. Considering these things—maintenance and operating costs—makes sense in that expenses to maintain the existing system must be accounted for prior to assessing new construction costs. This should be distinguished from another federal planning requirement, which is to consider system management and operations as part of the planning process.

Management (as opposed to “maintenance”) and operations are ongoing activities to improve efficiency and effectiveness of the existing transportation system. Management and operations analysis or tools include corridor studies, microsimulation models, capacity analysis and Congestion Safety Management Systems. Techniques for management and operations vary from using signs, signals and markings to roundabouts, integrated traffic signal systems, traffic calming measures, land use treatments or roadside environment improvements from “building facade to building façade,” or providing safe facilities for transit and non-motorized users. In this age of limited transportation resources, one way to stretch transportation dollars is to improve efficiency and effectiveness of operations and management to be able to accommodate more users on the existing multi-modal transportation system. Management and operations is one of the mandatory planning factors (Chapter 15) and is addressed as a separate program category, or mini-chapter, in Chapter 13 and is distinctively different from maintenance and operating expense.

Survey data gathered by the Regional Growth project (Chapter 2) indicates the public and local elected officials’ least preferred methods to improve the transportation system are to build new roads, widen existing roads or expand the airport. Public and local officials’ top priorities included maintaining access and mobility and improving circulation and operations at intersections. These results are consistent with surveys in other areas and support a conclusion that new strategies or emphasis areas are necessary to address growing congestion. The Management and Operations program category in Chapter 13 discusses a hypothetical roadway corridor and potential management and operations techniques which could be implemented over a ten year period to improve operations, reduce congestion and provide a more liveable community through an integrated multi-modal approach to solving roadway deficiencies.

Since nearly all funding sources may be used to improve management and operations activities, it is important to distinguish these types of treatments from more routine or traditional maintenance and funds traditionally allocated to ongoing administrative operating expenses. Maintenance is a much more day to day activity, consisting of things such as snow plowing, dust control or minor road patching. It is not the same as management and operations strategies to improve efficiency. Based on discussions

with the Long Range Plan Task Force and the Management and Operations Task Force, a program category has been established as a programmatic set aside for some regional transportation funds targeted specifically to management and operations improvements. This has been initiated with a portion of CMAQ funds. Similar to discussion under issues related to the Land Use, Community Development and Other Community Impacts program category, staff developed an initial set of eligible project types and project evaluation criteria, based on strategies, criteria and performance measures contained in the plan. These types of set asides have been applied to give priority to eligible CMAQ projects which support regional land use or management and operations programmatic goals and objectives.

Uncommitted Funds for Future Needs

Table 12-5 identifies committed funds in relation to total revenue for operations and maintenance needs, as well as for various highway programs over the life of the Plan through 2035. This demonstrates that after accounting for committed funds (long range plan projects), there remain uncommitted revenues available for maintaining the system, as well as for future programming needs. Based on the nearly \$2.5 billion in revenue available for operations and maintenance, as derived from Table 12-4, a little over \$1.4 billion is committed to highway projects, or roughly 58%. The balance is available for other purposes, including operations and maintenance. The bottom half of Table 12-5 identifies committed funds as a proportion of revenues in specific program categories. Here, too, there are uncommitted revenues (48.3%) to be programmed at a later time.

Conclusions

The Regional 2035 Transportation Plan is a financially constrained document for each programming period over life of the plan. Table 12-1 indicates that through 2035 accumulated transportation revenues will amount to \$3,917,163,100 compared to expenditures identified at \$3,321,987,300.

Future Steps

In addition to further refining local revenue/expense on maintenance/operating cost estimates, programming in future plan updates may be determined by allocating agreed upon levels of revenue to particular project types based on expected impact on performance measures adopted in this plan. For example, a set percentage of funds might be allocated or reserved for preserve projects based on plan goals and objectives or on previous TCRPC practice. Additionally, consideration will be given to specifically allocating some funding to new program categories such as Land Use, Community Development and other Community Impacts, in order to direct future funds specifically to support goals of the Regional Growth project and of the Regional 2035 Transportation Plan.

Table 12-5:

2010-2035 Uncommitted Highway Revenues (Federal)

Regional 2010-2035 Highway Revenues (Federal)
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	Total Revenue	Committed Funds		Uncommitted (Revenue Available)	
Operations & Maintenance	\$ 2,471,021,094*	\$ 1,430,126,800*	57.9%	\$ 1,040,894,294*	42.1%

**Total revenues for this item include all federal highway dollars in addition to Act 51 (Michigan Transportation Fund/MTF) and other local sources. Committed funds (federal highway revenues) are subtracted to derive available funding for operations and maintenance through 2035.*

	Total Revenue	Committed Funds		Uncommitted (Revenue Available)	
Urban Surface Transportation Program (STP)	\$ 212,434,000	\$ 93,158,400	(43.9%)	\$ 119,275,600	(56.1%)
Trunkline	\$ 424,061,000	\$ 318,927,000	(75.2%)	\$ 105,134,000	(24.8%)
Other Federal Revenues	\$ 1,063,993,500	\$ 467,330,700	(43.9%)	\$ 596,622,800	(56.1%)
TOTAL	\$ 1,700,488,500	\$ 879,456,100	(51.7%)	\$ 821,032,400	(48.3%)

This table shows that 51.7% of federal highway revenues through 2035 are committed to specific Plan projects. The remaining 48.3% (\$821,032,400) is available for unspecified preserve projects.