MPO FINANCIAL PLAN

The Transportation Improvement Program (TIP) is the list of road and transit projects that communities and agencies plan to implement over a four-year period. That list is required to be fiscally constrained; that is, the cost of projects programmed in the TIP cannot exceed the amount of funding "reasonably expected to be available" during that time. The financial plan is the section of the TIP that documents the method used to calculate funds reasonably expected to be available and compares this amount to proposed projects to demonstrate that the TIP is fiscally constrained. The financial plan also identifies the costs of operating and maintaining the transportation system in the Niles-Buchanan-Cass Area Transportation Study.

SOURCES OF TRANSPORTATION FUNDING

The basic sources of transportation funding are motor fuel taxes and vehicle registration fees. Both the federal government and the State of Michigan tax motor fuel, the federal government at $0.184 per gallon on gasoline and $0.244 per gallon on diesel and Michigan at $0.19 per gallon on gasoline and $0.15 per gallon on diesel. Michigan also charges sales tax on motor fuel, but this funding is not applied to transportation. The motor fuel taxes are excise taxes, which mean that they are a fixed amount per gallon. The amount collected per gallon does not increase when the price of gasoline or diesel fuel increases. Over time, inflation erodes the purchasing power of the motor fuel tax.

The State of Michigan also collects annual vehicle registration fees when motorists purchase license plates or tabs. This is an important source of transportation funding for the state. Currently, roughly half of the transportation funding collected by the state is in the form of vehicle registration fees.

Cooperative Revenue Estimation Process

Estimating the amount of funding available for the four-year TIP period is a complex process. It relies on a number of factors, including economic conditions, miles travelled by vehicles nationwide and in the State of Michigan, and federal and state transportation funding received in previous years. Revenue forecasting relies on a combination of data and experience and represents a "best guess" of future trends.

The revenue forecasting process is a cooperative effort. The Michigan Transportation Planning Association (MTPA), a voluntary association of public organizations and agencies responsible for the administration of transportation planning activities throughout the state, formed the Financial Working Group (FWG) to develop a statewide standard forecasting process. FWG is comprised of members from the Federal Highway Administration (FHWA), the Michigan Department of Transportation (MDOT), transit agencies, and metropolitan planning organizations. It represents a cross-section of the public agencies responsible for transportation planning in our state. The revenue assumptions in this financial plan are based on the factors formulated by the FWG and approved by the MTPA. They are used for all TIP financial plans in the state.

HIGHWAY FUNDING FORECAST-FEDERAL

Sources of Federal Highway Funding

Federal transportation funding comes from motor fuel taxes (mostly gasoline and diesel). Receipts from these taxes are deposited in the Highway Trust Fund (HTF). Funding is then apportioned to the states. Apportionment is the distribution of funds through formulas in law. The current law governing these apportionments is Moving Ahead for Progress in the 21st Century (MAP-21). Under this law, Michigan receives approximately $1 billion in federal transportation funding annually. This funding is apportioned through a number of programs designed to accomplish different objectives, such as road repair, bridge repair, safety, and congestion mitigation. A brief description of the major funding sources follows.

National Highway Performance Program (NHP): This funding is used to support condition and performance on the National Highway System (NHS) and to construct new facilities on the NHS. The National Highway System is the network of the nation's most significant highways, including the Interstate and US highway systems. In Michigan, most roads on the National Highway System are state trunk lines (i.e., "I-," "US-," and "M-"roads). , However, MAP-21 expanded the NHS to include all principal arterials (the most important roads after freeways), whether state- or locally-owned. As a result of this change the NATS area will receive a small allocation of NHPP funds of roughly $13,000 a year. However, it should be noted that as of March 2013 all NHPP eligible roadways in the study area are MDOT controlled roadways. This may change if the classification of some roadways in the NATS urban area changes. This review will take place in the summer of 2013, after the TIP has been submitted.

Surface Transportation Program (STP): STP funds are designed for construction, reconstruction, rehabilitation, resurfacing, restoration, preservation, or operational improvements to federal-aid highways and replacement, preservation, and other improvements to bridges on public roads. Michigan's STP apportionment from the federal government is evenly split, half to areas of the state based on population and half that can be used in any area of the state. In FY 2014, Michigan's STP apportionment is estimated to be $269.8 million. The NATS region will receive approximately $488,696 which will be used by cities, villages, and the county road commissions. STP funds can also be flexed (transferred) to transit projects.

Highway Safety Improvement Program (HSIP): HSIP funds are intended to correct or improve a hazardous road location or feature or address other highway safety problems. Projects can include intersection improvements, shoulder widening, rumble strips, improving safety for pedestrians, bicyclists, or disabled persons, highway signs and markings, guardrails, and other activities. The State of Michigan retains all Safety funding and uses a portion on the state trunk line system, distributing the remainder to local agencies through a competitive process. Michigan's statewide FY 2014 estimated Safety apportionment is $64.5 million. While there is no specific allocation goes directly to the NATS MPO, local agencies are eligible to apply for these funds as stated above.

Congestion Mitigation and Air Quality Improvement (CMAQ): CMAQ funds are intended to reduce emissions from transportation-related sources. MAP-21 has placed an emphasis on diesel retrofits, but funds can also be used for traffic signal retiming, actuations, and interconnects; installing dedicated turn lanes; roundabouts; travel demand management such as rideshare and vanpools; transit; and non-motorized projects that divert non-recreational travel from single-occupant vehicles. CMAQ funds come to the MPO by means of a countywide allocation, since the MPO does not encompass the entire county. Therefore, there are CMAQ funds for projects in Berrien and Cass Counties that can be utilized for projects within the MPO. For FY 2014 Berrien County received an allocation of $578,210 and Cass County received $176,329. The distribution of the county funds are decided at publicly held county meetings, where all transit and road projects are discussed and voted upon.

Transportation Alternatives Program: TAP funds can be used for a number of activities to improve the transportation system environment, including (but not limited to) non-motorized projects, preservation of historic transportation facilities, outdoor advertising control, vegetation management in rights-of-way, and the planning and construction of projects that improve the ability of students to walk or bike to school. The statewide apportionment for Transportation Alternatives is estimated to be $26.4 million in FY 2014. The funding will then be split, 50 percent being retained by the state and 50 percent to various areas of the state by population, much like the STP distribution. NATS share of this funding is approximately $43,000 in FY 2014, and will be distributed to eligible applicants on a competitive basis.

BASE AND ASSUMPTIONS USED IN FORECAST CALCULATIONS OF FEDERAL HIGHWAY FUNDS

Each year, the targets (amount NATS is expected to receive) are calculated for each of these programs, based on federal apportionment documentation and state law. Targets for fiscal year 2013, as provided by MDOT, are used as the baseline for the forecast. The Financial Work Group of the MTPA developed a two percent per year federal revenue growth rate for the FY 2014 through FY 2017 TIP period. If targets for each of fiscal years 2014-2017 are known (such as CMAQ), those amounts were used without adjustment. While this is less than the five percent growth rate over the past 20 years, the decrease in motor fuel consumption (due to less driving and higher-MPG vehicles) and the economic downturn and restructuring experienced by the nation in general and Michigan in particular made assumptions based on long-term historical trends unusable. Table 44 contains the federal transportation revenue projections for the 2014-2017 TIP.

Table 44 - Federal Highway Transportation Revenue Projections

FY	STP	NHPP	CMAQ Funds Berrien (Cass)	TAP	Total
2014	$488,696	$13,029	$578,210 $(176,329)	$43,398	$1,123,335 $(721,453)
2015	$498,470	$13,290	$578,210 $(192,817)	$44,266	$1,134,237 $(748,845)
2016	$508,439	$13,555	$578,210 $(192,817)	$45,152	$1,145,358 $(759,965)
2017	$518,608	$13,826	$578,210 $(192,817)	$46,055	$1,156,700 $(771,308)
TOTAL:	$2,014,214	$53,702	$2,312,841 $(769,782)	$178,873	$4,549,631 $(3,016,572)

Cass County allocation of funds added to total

HIGHWAY FUNDING FORECAST—STATE FUNDING

Sources of State Highway Funding

There are two main sources of state highway funding, the state motor fuel tax and vehicle registration fees. The motor fuel tax, currently set at 19 cents per gallon on gasoline and 15 cents per gallon on diesel, raised approximately $937.5 million in fiscal year 2011.[21] Like the federal motor fuel tax, this is also an excise tax that doesn't increase as the price of fuel increases, so over time, inflation erodes the purchasing power of these funds. Approximately $855.9 million in additional revenue is raised through vehicle registration fees when motorists purchase their license plates or tabs each year. The state sales tax on motor fuel, which taxes both the fuel itself and the federal tax, is not deposited in the Michigan Transportation Fund. Altogether, approximately $1.9 billion was raised through motor fuel taxes, vehicle registrations, heavy truck fees, interest income, and miscellaneous revenue in FY 2011.

The state law governing the collection and distribution of state highway revenue is Public Act 51 of 1951, commonly known as "Act 51." All revenue from these sources is deposited into the Michigan Transportation Fund (MTF). Act 51 contains a number of complex formulas for the distribution of the funding, but essentially, once funding for certain grants and administrative costs are removed, 10 percent of the remainder is deposited in the Comprehensive Transportation Fund (CTF) for transit. The remaining funds are then split between the State Trunkline Fund, administered by MDOT, county road commissions, and municipalities in a proportion of 39.1 percent, 39.1 percent, and 21.8 percent, respectively.[22]

[21] Michigan Dept of Transportation, Annual Report, Michigan Transportation Fund, Fiscal Year Ending September 30, 2011 (MDOT Report 139), Schedule A.

[22] Act 51 of 1951, Section 10(1)(j).

MTF funds are critical to the operation of the road system in Michigan. Since federal funds cannot be used to operate or maintain the road system (items such as snow removal, mowing grass in the right-of-way, paying the electric bill for streetlights and traffic signals, etc.), MTF funds are local communities' and road commissions' main source for funding these items. Most federal transportation funding must be matched with 20 percent non-federal revenue. In Michigan, most matching funds come from the MTF. Finally, federal funding cannot be used on local public roads, such as subdivision streets. Here again, MTF is the main source of revenue for maintenance and repair of these roads.

Funding from the MTF is distributed statewide to incorporated cities, incorporated villages, and county road commissions, collectively known as "Act 51 agencies." The formula is based on population and public road mileage under each Act 51 agency's jurisdiction.

BASE AND ASSUMPTIONS USED IN FORECAST CALCULATIONS OF STATE HIGHWAY FUNDS

The base for the financial forecast of state funding is the FY 2011 distribution of MTF funding as found in MDOT Report 139. This report details distribution of funding to each eligible Act 51 agency in the state. Adding all of the distributions to cities, villages, and county road commissions in the NATS area an overall distribution total can be derived for the region. That amount that Berrien County Act 51 agencies can plan to receive in the NATS area was $10,914,931.04 million in FY 2011 and for Cass County it was $4,217,738.86.

The Financial Work predicted an increase of 0.4 percent in state revenues for fiscal years 2014 through 2017. Table 45 shows the amount of MTF funding cities, villages, and road commissions in the NATS area that are projected to receive during the four-year TIP period, based on the agreed-upon rates of increase.

Table 45 - Projected MTF Distribution to Act-51 Agencies for Highway Use

2014	2015	2016	2017	Total
$15,314,989	$15,376,249	$15,437,754	$15,499,505	$61,628,497

State funding is projected to grow much more slowly than federal funding during the four-year TIP period. This will have two effects on the region's highway funding: First, available funding for operations and maintenance of the highway system will most likely not keep pace with the rate of inflation, leaving less money for a growing list of maintenance work. Secondly, the federal highway funding will grow at a greater rate than non-federal money to match it. For those federal transportation sources requiring match, this means that some funding will go unused, despite the demand.

HIGHWAY FUNDING FORECAST—LOCAL FUNDING

Sources of Local Highway Funding

Local highway funding can come from a variety of sources, including transportation millages, general fund revenues, and special assessment districts. Locally-funded transportation projects that are not of regional significance are not required to be included in the TIP. Local funding support for projects in the TIP is significant and there are very few communities within the MPO that have dedicated revenue collected from an assessment on property taxes. There are no communities within the MPO that have dedicated transportation revenue.

BASE AND ASSUMPTIONS USED IN FORECAST CALCULATIONS OF LOCAL HIGHWAY FUNDS

The current TIP covers fiscal years 2011 through 2014. The current TIP, plus FY 2010 from the previous TIP, were queried for all projects with funding codes indicating that local funding was or will be used. Local funds programmed by transit agencies were removed, as were advance construct funds. Advance construct (AC) means the agency uses its own money to build the project, and then pays itself back in a future year with federal funding. Because of the way AC projects are shown in the TIP, counting them exaggerates the amount of local funding actually used. When this was done, the five-year annual average of local funding totaled about $180,975.60 a year with total local funding for the 2010-2014 period totaling approximately $904,878.00. It's highly unlikely that there will be increases in local funding over the four-year TIP period. For the projects currently listed in the 2014-2017 TIP there will be approximately 486,412 in the form of local funding. Table 46 highlights the total local match amount for the currently programmed projects.

Table 46 - Local Match for Road Projects

NATS Funding Years	Road Projects with Local Match
2014	$107,993
2015	$111,754
2016	$142,265
2017	$124,400
Total	$486,412

DISCUSSION OF INNOVATIVE FINANCING STRATEGIES-HIGHWAY

A number of innovative financing strategies have been developed over the past two decades to help stretch limited transportation dollars. Some are purely public sector; others involve partnerships between the public and private sectors. Some of the more common strategies are discussed below.

Toll Credits: This strategy allows states to count funding they earn through tolled facilities (after deducting facility expenses) to be used as "soft match," rather than using the usual cash match for federal transportation projects. States have to demonstrate "maintenance of effort" when using toll credits—in other words, they must show that the toll money is being used for transportation purposes and that they're not reducing their efforts to maintain the existing system by using the toll credit program. Toll credits have been an important source of funding for the State of Michigan in the past because of the three major bridge crossings and one tunnel crossing between Michigan and Ontario. Toll credits have also helped to partially mitigate the funding crisis in Michigan, since insufficient non-federal funding is available to match all of the federal funding apportioned to the state.

State Infrastructure Bank (SIB): Established in a majority of states, including Michigan.[23] Under the SIB program, states can place a portion of their federal highway funding into a revolving loan fund for transportation improvements such as highway, transit, rail, and intermodal projects. Loans are available at 3 percent interest and a 25-year loan period to public entities such as political subdivisions, regional planning commissions, state agencies, transit agencies, railroads, and economic development corporations. Private and nonprofit corporations developing publicly owned facilities may also apply. In Michigan, the maximum per-project loan amount is $2 million. The Michigan SIB had a balance of approximately $12 million in FY 2011.

Transportation Infrastructure Finance and Innovation Act (TIFIA): This nationwide program, significantly expanded under MAP-21, provides lines of credit and loan guarantees to state or local governments for development, construction, reconstruction, property acquisition, and carrying costs during construction. TIFIA enables states and local governments to use the borrowing power and creditworthiness of the United States to finance projects at far more favorable terms than they would otherwise be able to do on their own. Repayment of TIFIA funding to the federal government can be delayed for up to five years after project completion with a repayment period of up to 35 years. Interest rates are also low. The amount authorized for the TIFIA program in FY 2014 nationwide is $1.0 billion.

Bonding: Bonding is borrowing, where the borrower agrees to repay lenders the principal and interest. Interest may be fixed over the term of the bond or variable. The amount of interest a borrower will have to pay depends in large part upon its perceived credit risk; the greater the perceived chance of default, the higher the interest rate. In order to bond, a borrower must pledge a reliable revenue stream for repayment.

[23] FHWA Office of Innovative Program Delivery. "Project Finance: An Introduction" (FHWA, 2012).

For example, this can be the toll receipts from a new transportation project. In the case of general obligation bonds, future tax receipts are pledged.

States are allowed to borrow against their federal transportation funds, within certain limitations. While bonding provides money up front for transportation projects, it also means diminished resources in future years, as funding is diverted from projects to paying the bonds' principal and interest. Michigan transportation law requires money for the payment of bond and other debts is taken off the top before the distribution of funds for other purposes. Therefore, the advantages of completing a project more quickly need to be carefully weighed with the disadvantages of reduced resources in future years.

Advance Construct/Advance Construct Conversion: This strategy allows a community or agency to build a transportation project with its own funds (advance construct) and then be reimbursed with federal funds in a future year (advance construct conversion). Tapered match can also be programmed, where the agency is reimbursed over a period of two or more years. Advance construct allows for the construction of highway projects before federal funding is available; however, the agency must be able to build the project with its own resources and then be able to wait for federal reimbursement in a later year.

Public-Private Partnerships (P3): Funding available through traditional sources, such as motor fuel taxes, is not keeping pace with the growth in transportation system needs. Governments are increasingly turning to public-private partnerships (P3) to fund large transportation infrastructure projects. An example of a public-private partnership is Design/Build/Finance/Operate (DBFO). In this arrangement, the government keeps ownership of the transportation asset, but hires one or more private companies to design the facility, secure funding, construct the facility and operate it, usually for a set period of time. The private-sector firm is repaid most commonly through toll revenue generated by the new facility.[24] Sometimes, as in the case of the Chicago Skyway and the Indiana Toll Road, governments grant exclusive concessions to private firms to operate and maintain already-existing facilities in exchange for an up-front payment from the firm to the government. The firm then operates, maintains, and collects tolls on the facility during the period of the concession, betting that it will collect more money in tolls then it paid out in operations costs, maintenance costs, and the initial payment to the government.

HIGHWAY OPERATIONS AND MAINTENANCE

Construction, reconstruction, repair, and rehabilitation of roads and bridges are only part of the total cost of the highway system. It must also be operated and maintained. *Operations and maintenance* is defined as those items necessary to keep the highway infrastructure functional for vehicle travel, other than the construction, reconstruction, repair, and rehabilitation of the infrastructure. Operations and maintenance includes items such as snow and ice removal, pothole patching, rubbish removal, maintaining the right-of way, maintaining traffic signs and signals, clearing highway storm drains, paying the electrical bills for street lights and traffic signals, and other similar activities, and the personnel and direct administrative costs

[24] http://www.fhwa.dot.gov/ipd/p3/defined/design_build_finance_operate.htm.

necessary to implement these projects. These activities are as vital to the smooth functioning of the highway system as good pavement.

Federal transportation funds cannot be used for operations and maintenance of the highway system. Since the TIP only includes federally-funded transportation projects (and non-federally-funded projects of regional significance), it does not include operations and maintenance projects. While in aggregate, operations and maintenance activities *are* regionally significant, the individual projects do not rise to that level. However, federal regulations require an estimate of the amount of funding that will be spent operating and maintaining the federal-aid eligible highway system over the FY 2014 through FY 2017 TIP period. This section of the Financial Plan provides an estimate for NATS planning area and details the method used to estimate these costs.

Tables 47-48 highlights the total lane miles (the miles of federal aid eligible roads multiplied by the total number of lanes) for the system, which is helpful in understanding how many miles of federal aid eligible miles are in the study area and what communities are responsible for.

Table 47 - Federal Aid Eligible Lane Miles

Federal Aid System	Federal Aid Lane Miles
State Trunkline	228.331
Local Federal Aid Roads	277.702
All Federal Aid Eligible	506.033

Source: Roadsoft

Table 48 - Federal Aid Miles by Jurisdiction

Jurisdiction	Total State Trunkline Miles	Total Local Federal Aid Eligible Miles	Total Federal Aid Eligible Miles
Bertrand Twp	25.42	16.247	41.667
Buchanan	0	6.056	6.056
Buchanan Twp	0	18.848	18.848
Edwardsburg	0	0.888	0.888
Howard Twp	12.929	17.06	29.989
Mason Twp	6.455	8.665	15.12
Milton Twp	10.779	16.911	27.69
Niles	6.05	10.669	16.719
Niles Twp	36.789	23.537	60.326
Ontwa Twp	10.23	13.934	24.164
Total	108.652	132.815	241.467

Source: Roadsoft

According to *Michigan's FY 2011-2014 State Transportation Improvement Program*, approximately $599.3 million will be available statewide for operations and maintenance costs in FY 2014 for the state trunk line highway system (roads with "I-," "US-," and "M-" designations).[25] About 228.331 lane miles of the state trunkline system are located the NATS region. Assuming an allocation of $6,500 per lane mile for the operations and maintenance cost, MDOT should spend approximately $1,482,000 in the NATS region in FY 2014. Since MDOT's operations and maintenance funding comes from state motor fuel taxes (the Michigan Transportation Fund), the agreed-upon rate of increase for state funds (0.4 percent annually) was applied to derive the operations and maintenance costs for FYs 2015, 2016, and 2017.

Local communities' and agencies' costs to operate and maintain their portions of the federal-aid highway system were estimated through discussions with the local agencies on an agreed upon average. This was then applied to the total lane mileage of federal-aid eligible roads in the NATS region. The assumption in this case is that local communities and agencies are spending every available operations and maintenance dollar, so funds expended equal funds available. Much of local agencies' operations and maintenance funding comes from the Michigan Transportation Fund, so the agreed-upon rate of increase for state funds (0.4 percent annually) was applied to derive the operations and maintenance costs for FYs 2014 through 2017. MDOT and local operations and maintenance funding available was then brought together for a regional total. This is summarized in Table 49.

[25] Michigan Department of Transportation. *FY 2011-2014 State Transportation Improvement Program* (January 2012), p. 9.

Table 49 - Projected Available Highway Operations and Maintenance Funding

FY	MDOT Estimate	Local Estimate
2014	$1,482,000	$1,110,808
2015	$1,487,928	$1,155,240
2016	$1,493,879	$1,201,449
2017	$1,499,854	$1,249,506
TOTAL	$5,963,661	$4,717,003

MPO staff received information from the Cass County Road Commission for the lane mile cost of the federal aid system in the amount of $2,175. Staff also received information from the Berrien County Road Commission for their portion of the federal aid system and their amount was $8,000 a mile. As this is only an estimate of the costs, a rate of $4,000 per lane mile was applied to the local estimate calculation.

HIGHWAY COMMITMENTS AND PROJECTED AVAILABLE REVENUE

The TIP must be fiscally constrained; that is, the cost of projects programmed in the TIP cannot exceed revenues "reasonably expected to be available" during the four-year TIP period. Funding for core programs such as NHP, STP, HSIP, and CMAQ are expected to be available to the region based on historical trends of funding from earlier, similar programs in past federal surface transportation laws. Likewise, state funding from the Michigan Transportation Fund (MTF) and the hybrid state/federal programs, are also expected to be available during the FY 2014 through FY 2017 TIP period. Funds from other programs are generally awarded on a competitive basis and are therefore impossible to predict. In these cases, projects are not amended into the TIP until proof of funding availability (such as an award letter) is provided. Funds from federal competitive programs are not included in the revenue forecast.

All federally-funded projects must be in the TIP. Additionally, any non-federally-funded but regionally significant project must also be included. In these cases, project submitters demonstrate that funding is available and what sources of non-federal funding are to be utilized.

Projects programmed in the TIP are known as *commitments*. As mentioned previously, commitments cannot exceed funds reasonably expected to be available. Projects must also be programmed in year of expenditure dollars, meaning that they must be adjusted for inflation to reflect the estimated purchasing power of a dollar in the year the project is expected to be built. The MTPA/Financial Work Group has decided on an annual inflation rate of 3.3 percent for projects over the TIP period. This means that a project costing $100,000 in FY 2014 is expected to cost $103,300 in FY 2015, $106,709 in FY 2016, and $110,230 in FY 2017. Since the amount of federal funds available is only expected to increase by 0.86 percent in 2014 and then 2 percent per year thereafter, and state funds by only 0.4 percent per year over the four-year TIP period, this means that less work can be done each year with available funding. Within the NATS region, all projects accommodated for inflation from the submitting agency.

Table 50 is known as a fiscal constraint demonstration. The demonstration is provided to the Michigan Department of Transportation, Federal Highway Administration, and Federal Transit Administration in order to show that the cost of planned projects does not exceed the amount of funding reasonably expected to be available over the FY 2014 through FY 2017 TIP period.

0 - Highway Fiscal Constraint Demonstration

NATS	2014		2015		2016		2017	
Funding	Avail	Prog	Avail	Prog	Avail	Prog	Avail	Prog
STP	488,696	488,219	498,470	498,923	508,439	$525,834	518,608	561,004
NHPP	13,029	0.00	13,290	$0.00	13,555	$0.00	13,826	0.00
CMAQ rien County (Cass ounty)**	578,210 (176,329)	453,000 (176,329)	578,210 (192,817)	126,000 (192,817)	578,210 (192,817)	$459,000 $(192,817)	578,210 (192,817)	550,000 (192,817)
TAP	43,398	0.00	44,266	0.00	45,152	$0.00	46,055	0.00
TOTAL	1,299,662	1,117,548	1,327,053	817,740	1,338,173	$1,177,651	1,349,516	1,303,821
t Balance*	182,114		509,313		160,522		45,695	

lance = Available funding less cost of programmed projects. A positive net balance means that available funding exceeds programmed pro
negative balance means that programmed project costs exceed available funding; and a zero net balance indicates that programmed pro
ual available funding.

MPO does not encompass either the Berrien or Cass County as a whole the CMAQ funds are county wide allocation and some of the funds
the MPO but not all in the form of road projects and transit projects.

e NATS region being considered a Transportation Management Area (TMA) due to its relationship with the South Bend and Elkhart Ind
ed areas, NHPP and TAP funds were allocated to the region. The newness of the program has not allowed the region to fully expend
und to date, but are working with FHWA, FTA, and MDOT to ensure that the funds are fully programmed throughout the TIP years.
, the total Berrien County CMAQ funds have not been fully allocated to do, an August 2013 meeting has been called to fully program
nds.

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TRANSIT FINANCIAL FORECAST—FEDERAL

Sources of Federal Transit Funding

Federal Revenue for transit comes from federal motor fuel taxes, just as it does for highway projects. Some of the motor fuel tax collected from around the country is deposited in the Mass Transit Account of the Highway Trust Fund (HTF). As of the start of fiscal year 2012 (October 1, 2011), the balance of the federal Mass Transit Account was $7.32 billion.[26] Federal transit funding is similar to federal highway funding in that there are several core programs where money is distributed on a formula basis and other programs that are competitive in nature. Here are brief descriptions of some of the most common federal transit programs.

Section 5307: This is one of the larger sources of transit funding that is apportioned to Michigan. Section 5307 funds can be used for:

- Capital projects
- Transit planning
- Projects eligible under the former Job Access Reverse Commute (JARC) program (intended to link people without transportation to available jobs).
- Some of the funds can also be used for operating expenses, depending on the size of the transit agency.
- One percent of funds received are to be used by the agency to improve security at agency facilities.

Distribution is based on formulas including population, population density, and operating characteristics related to transit service. Urbanized areas of 200,000 population or larger receive their own apportionment. As with the NATS area, the Michiana Area Council of Governments is the recognized recipient of the transit funds for the urbanized area and the apportionment goes to MACOG first then is apportioned to Niles Dial A Ride. Areas between 50,000 and 199,999 population are awarded funds by the governor from the governor's apportionment. In the NATS area, MACOG and South Bend TRANSPO are the designated recipients for the Indiana portion of the UZA; Niles is the designated recipient for the Michigan portion. Per an MOU, each year when congress apportions the funds, MACOG prepares a distribution table. Representatives from TRANSPO and from Niles convene to discuss and split the bus portion of the apportionment. A letter is signed and forwarded to MACOG. Because the Niles system is so much smaller than TRANSPO, the agreement has typically been based on Niles DART's funding needs, with TRANSPO accepting the remaining portion.

Section 5310, Elderly and Persons with Disabilities: This program is intended to enhance mobility for seniors and persons with disabilities by providing funds for programs to serve the special needs of transit-dependent populations beyond traditional public transportation services and Americans with Disabilities Act

[26] http://www.fhwa.dot.gov/highwaytrustfund/index.htm.

(ADA) complementary paratransit services. Section 5310 incorporates the previous New Freedom Program and Elderly and Disabled Program. Operating assistance is also now available under this program.

Section 5311, Non-Urbanized Area Formula Grant: Funds for capital, operating, and rural transit planning activities in areas under population 50,000. Activities under the former JARC program (see Section 5307 above) in rural areas are also eligible. The state must use 15 percent of its Section 5311 funding on intercity bus transportation. The State of Michigan operates this program on a competitive basis. Areas in the NATS MPO that would be eligible for these funds are Berrien Bus, Cass County Public Transit, and Buchanan Dial A Ride. While Cass County Public Transportation is part of the MPO area, such a small portion of the urbanized area is in the MPO that the 5311 funds for this agency are listed in the State Transportation Improvement Program.

Section 5337, State of Good Repair Grants: Funding to state and local governmental authorities for capital, maintenance, and operational support projects to keep fixed guideway systems in a state of good repair. Recipients will also be required to develop and implement an asset management plan. Fifty percent of Section 5337 funding will be distributed via a formula accounting for vehicle revenue miles and directional route miles; fifty percent is based on ratios of past funding received. Currently, the NATS region is not eligible for these funds.

Section 5339, Bus and Bus Facilities: Funds will be made available under this program to replace, rehabilitate, and purchase buses and related equipment, as well as construct bus-related facilities. Each state will receive $1.25 million, with the remaining funding apportioned to transit agencies based on various population and service factors.

Congestion Mitigation and Air Quality Improvement (CMAQ): Intended to reduce emissions from transportation-related sources. MAP-21 has placed an emphasis on diesel retrofits, but funds can also be used for traffic signal retiming, actuations, and interconnects; installing dedicated turn lanes; roundabouts; travel demand management such a ride share and vanpools; transit; and non-motorized projects that divert non-recreational travel from single-occupant vehicles. CMAQ funds come to the MPO by means of a countywide allocation, since the MPO does not encompass the entire county. Therefore, there are CMAQ funds for projects in Berrien and Cass Counties that can be utilized for projects within the MPO. For FY 2014 Berrien County will receive an allocation of $578,210 and Cass County received $176,329. The distribution of the county funds are decided at publicly held county meetings, where all transit and road projects are discussed and voted upon.

BASE AND ASSUMPTIONS USED IN FORECAST CALCULATIONS OF FEDERAL TRANSIT FUNDS

The base for the federal portion of the transit financial forecast is the amount of federal funding each transit agency received in the region in FY 2013, the first year of MAP-21. Given the extra obligation authority available at the state level, the MTPA rates of increase were used for FY 2014, rather than the lower MAP-21 factor (1.38 percent). Table 51 shows the federal transit forecast for the FY 2014-17 TIP period.

Table 51 - Federal Transit Revenue Projections

NATS FY	Sec 5307	Sec 5310 (Sen/Dsbld)	Sec 5311 (Rural) Op	Sec 5339 Bus & Bus Facilities*	CMAQ Funds Berrien (Cass)	Total
2014	$182,484	0	$44,607	0	$578,210 $(176,329)	$807,301 $(405,420)
2015	$185,002	0	$45,222	0	$578,210 $(192,817)	$808,434 $(423,041)
2016	$187,555	0	$45,846	0	$578,210 $(192,817)	$811,611 $(462,218)
2017	$190,143	0	$46,479	0	$578,210 $(192,817)	$814,832 $(429,439)
Total	$745,184	0	$182,154	0	$2,312,841 $(769,782)	$3,240,179 $(1,697,120)

TRANSIT FINANCIAL FORECAST—STATE

Sources of State Transit Funding

The majority of state-level transit funding is derived from the same source as state highway funding, the state tax on motor fuels. Act 51 stipulates that 10 percent of receipts into the MTF, after certain deductions, are to be deposited in a subaccount of the MTF called the Comprehensive Transportation Fund (CTF). This is analogous to the Mass Transit Account of the Highway Trust Fund at the federal level. Additionally, a portion of the state-level auto-related sales tax is deposited in the CTF.[27] Distributions from the CTF are used by public transit agencies for matching federal grants and also for operating expenses. Approximately $157 million was distributed to the CTF in FY 2011.[28]

[27] Hamilton, William E. *Act 51 Primer* (House Fiscal Agency, February 2007), p. 4.
[28] MDOT Report 139 for 2011, Schedule A.

Base and Assumptions Used in Forecast Calculations of State Transit Funds

The base for calculations of state transit funds is the amount transit agencies in the NATS region received in FY 2013. The CTF amounts in the NATS region were not constant from 2011 to 2013 due to the following reasons:

1. In the past, MDOT used toll credits for transit to match capital projects, except for facility and bus projects, which were matched with cash. MDOT no longer uses toll credits to match transit projects.

2. In previous years, Niles DART did not list operating expenses in the TIP. Under SAFETEA-LU, transit agencies in large urban areas (those with over 200,000 people) could not use federal 5307 funds to cover operating expenses. The current legislation, MAP-21, allows for agencies in large UZAs to use some of their 5307 funds for operating expenses, provided that the system runs 100 or fewer buses in fixed route service during peak hours. TRANSPO runs fewer than 100 buses, and the providers within the NATS area do as well, accordingly there is optimism that the NATS providers will be eligible to utilize some of the annual 5307 apportionment to the UZA for operating expenses.

Funding was adjusted upward by 3.75 percent for state match and 0.37 percent for state operating in FY 2014, the first year of the TIP, and then by the same percentage in FYs 2015 through 2017, in accordance with factors determined by the Financial Workgroup and approved by the Michigan Transportation Planning Association. The state-level CTF distributions to the NATS transit agencies are shown in Table 52, broken down by state match and state operating.

Table 52 - State Transit (CTF) Revenue Projections

FY	Sec 5307 State Operating	Sec 5307 Capital	Sec 5311 (Rural) Op State	Sec 5339 Bus & Bus Facilities (State)	Total
2014	$175,647	$30,087	$73,270	0	$279,004
2015	$176,296	$31,215	$73,541	0	$281,052
2016	$176,948	$32,385	$73,813	0	$283,146
2017	$177,610	$33,599	$74,086	0	$285,295
Total	$706,501	$127,286	$294,710	0	$1,128,497

The third column of Table 52, State match for JARC-Type Projects, shows the maximum amount of match that the state will provide to transit agencies using some of their Section 5307 funding for projects eligible under the Job Access and Reverse Commute program. This program was a stand-alone under the old SAFETEA-LU law, but has been folded into the Sec 5307 program under MAP-21. JARC projects are intended to connect persons without an automobile to job opportunities in many parts of the region.

TRANSIT FINANCIAL FORECAST—LOCAL

Sources of Local Transit Funding

Major sources of local funding for transit agencies include farebox revenues, general fund transfers from city governments, and transportation millages.

BASE AND ASSUMPTIONS USED IN FORECAST CALCULATIONS OF LOCAL TRANSIT FUNDS

The base amounts for farebox, general fund transfers, and millages are derived the MDOT Public Transportation Management System from the reconciled 2011. Presuming that transit agencies spend all money that they receive each year, these data can be used for revenue projections as well, which is displayed in Table 53.

Table 53 - Local Transit Revenue Projections

FY	Berrien Bus	Niles DAR	Buchanan DAR	Total
2014	$364,649	$170,541	$105,663	$642,867
2015	$364,649	$170,541	$105,663	$642,868
2016	$364,649	$170,541	$105,663	$640,853
2017	$364,649	$170,541	$105,663	$640,853
Total	$1,458,596	$682,164	$422,652	$2,567,441

Source: Information was gathered from the PTMS data source and the year was the 2011 reconciled report-local revenue and farebox

DISCUSSION OF INNOVATIVE FINANCING STRATEGIES-TRANSIT

Sources of funding for transit are not limited to the federal, state, and local sources previously mentioned. As with highway funding, there are alternative sources of funding that can be utilized to operate transit service. Bonds can be issued (see discussion of bonds in the "Innovative Financing Strategies—Highway" section). The federal government also allows the use of toll credits to match federal funds. Toll credits are earned on tolled facilities, such as the Blue Water Bridge in Port Huron. Regulations allow for the use of toll revenues (after facility operating expenses) to be used as "soft match" for transit projects. Soft match means that actual money does not have to be provided—the toll revenues are used as a "credit" against the match. This allows the actual toll funds to be used on other parts of the transportation system, thus stretching the resources available to maintain the system.[29] However, MDOT is currently not allowing toll credits to be used as match.

[29] FHWA Office of Innovative Program Delivery at http://www.fhwa.dot.gov/ipd/finance/tools_programs/federal_aid/matching_strategies/toll_credits.htm.

TRANSIT CAPITAL AND OPERATIONS

Transit expenditures are divided into two basic categories, capital and operations.

1. *Capital* - refers to the physical assets of the agency, such as buses and other vehicles, stations and shelters at bus stops, office equipment and furnishings, and certain spare parts for vehicles.

2. *Operations* - refers to the activities necessary to keep the system operating, such as driver wages and maintenance costs. Most expenses of transit agencies are operations expenses.

Data on capital and operating costs were derived from the 2014-2017 TIP project requests from all eligible agencies. This did not include Cass County transit as their revenue is listed in the STIP. It is also assumed that the transit agencies are spending all available capital and operations funding, so that the amount expended on these items is roughly equal to the amount available. Table 54 shows the amounts estimated to be available for transit capital and operations during the FY 2014-FY 2017 TIP period.

Table 54 - Anticipated Amounts to be Expended on Transit Capital and Transit Operations

FY	Operations	Capital	Total
2014	$661,640	$226,858	$888,498
2015	$665,800	$332,650	$998,450
2016	$669,640	$137,750	$807,390
2017	$669,640	$196,250	$865,890
Total:	$2,666,720	$893,508	$3,560,223

These tables shows the total project costs for FY 2014-2017 capital and operations with federal, state, and local funds for all of the NATS transit agencies with the exception of Cass County Public Transit.

TRANSIT COMMITMENTS AND PROJECTED AVAILABLE REVENUE

The TIP must be fiscally constrained; that is, the cost of projects programmed in the TIP cannot exceed revenues “reasonably expected to be available” during the four-year TIP period. Funding for core programs such as Section 5307, Section 5339, Section 5310, and Section 5311 are expected to be available to the region based on historical trends of funding from earlier, similar programs in past federal surface transportation laws. Likewise, state funding from the state’s Comprehensive Transportation Fund (CTF), and local sources of revenue such as farebox, general fund transfers, and millages, are also expected to be available during the FY 2014 through FY 2017 TIP period. Funds from other programs are generally awarded on a competitive basis and are therefore impossible to predict. In these cases, projects are not amended into the TIP until proof of funding availability (such as an award letter) is provided. Funds from federal competitive programs are not included in the revenue forecast.

All federally-funded projects must be in the TIP. Additionally, any non-federally-funded but regionally significant project must also be included. In these cases, project submitters demonstrate that funding is available and what sources of non-federal funding are to be utilized.

Projects programmed in the TIP are known as *commitments*. As discussed previously, commitments cannot exceed funds reasonably expected to be available. Projects must also be programmed in the year of expenditure dollars, meaning that they must be adjusted for inflation to reflect the expected purchasing power of a dollar in the year the project is expected to be built. The MTPA/Financial Work Group has decided on an annual inflation rate of 3.3 percent for projects over the TIP period. This means that a project costing $100,000 in FY 2014 is expected to cost $103,300 in FY 2015, $106,709 in FY 2016, and $110,230 in FY 2017. Since the amount of federal funds available is only expected to increase by 3.75 percent per year, state match funds by only 3.75 percent per year, and state operating funds by 0.37 percent per year over the four-year TIP period, this means that funding will barely keep pace with inflation. All transit projects submitted were adjusted by the submitting agency.

Table 55 shows the summary financial constraint demonstration for transit. The demonstration is provided to the Michigan Department of Transportation, Federal Highway Administration, and Federal Transit Administration in order to show that the cost of planned projects does not exceed the amount of funding reasonably expected to be available over the FY 2014 through FY 2017 TIP period. To see the detailed fiscal constraint demonstration, refer to Appendix H.

Table 55 - Transit Fiscal Constraint Demonstration

FY	Available Federal Berrien (Cass)	Programmed Federal	Available State	Programmed State	Available Local	Programmed Local
2014	807,301 (405,420)	680,091 (405,420)	279,004	279,004	642,867	642,867
2015	808,434 (423,041)	356,224 (423,041)	281,052	281,052	642,868	642,868
2016	811,611 (462,218)	692,401 (462,218)	283,146	283,146	640,853	640,853
2017	814,832 (429,439)	786,622 (429,439)	285,295	285,295	640,853	640,853
Total	3,240,179 (1,720,118)	2,515,338 (1,720,118)	1,128,497	1,128,497	2,567,441	2,567,441

The total Berrien County CMAQ funds have not been fully allocated. To do so, an August 2013 meeting has been called to fully program these funds.

ANALYSIS OF FUNDING AND NEEDS

While the previous tables have shown fiscal constraint; i.e., that programmed funds do not exceed available revenues, the fact remains that the needs of the transportation system substantially outweigh the funding available to address them. A brief discussion of highway funding illustrates the problem.

On a statewide basis, a study headed by Michigan Rep. Rick Olson found that approximately $1.4 billion was needed annually through 2015 just to maintain the existing highway system. This could be expected to increase in future years to approximately $2.6 billion annually by 2023. Michigan currently receives about $1 billion from the federal government for transportation and raises an additional $2 billion through the MTF. After MTF deductions for administrative services and the Comprehensive Transportation Fund (transit), the state is left with approximately $1.8 billion in state funds, so there is a total of $2.8 billion for highways and bridges. If an additional $1.4 billion is required to keep the system at a minimally acceptable level of service, this indicates that the state only has about two-thirds of the funding necessary just to maintain the existing infrastructure. Any new facilities would, of course, increase the costs of the system to higher levels.

Table 56 displays project information for all of the fiscal years and provides more detailed information regarding funding requests from federal, state, and local sources, project details, year of construction, and the agency responsible for the project. Map 23, highlights the project locations throughout the region. Table 57 lists those projects that were not selected to receive funding during the TIP fiscal years, but will still be listed in the plan in case additional funds are received or if a project that is currently programmed cannot move forward.

Table 56 - TIP Project Listing

Fiscal Year	County	Responsible Agency	Project Name	Limits	Length	Primary Work Type	Project Description	Phase	Advance Construct	Federal Cost ($1000s)	Federal Fund Source	State Cost ($1000s)	State Fund Source	Local Cost ($1000s)	Local Fund Source	Total Phase Cost ($1000s)	MDOT Job No.	Air Quality	Total Cost ($1000s)
2014	BERRIEN	Berrien County	Red Bud Trail, Third St, and Portage Rd	Red Bud Trail from Buchanan City limit to Miller Rd, Third St from Bell Rd to Fort St, and Portage Rd from US-12 to State Line	6.15	Resurface	Hot patching and single seal coat	CON		72	STU			18	CNTY	90000	112104	Exempt	100
2014	CASS	Cass County	Redfield St	Fir to Kline	1.27	Resurface	HMA (hot mix asphalt) structural resurface of existing HMA pavement in poor condition.	CON		166	STU			37	CNTY	203200	112864	Exempt	203
2014	CASS	Cass County	Elkhart Rd	From Redfield to May St.	1.33	Resurface	Partial Milling and Total Resurface	CON	ACC	11	STU					11417	112107	Exempt	175
2014	BERRIEN	MDOT	M-139	(Main Street) over St. Joseph River	0.14	Bridge replacement	Bridge replacement	CON	AC	4,531	BRT	1,133	M			5664000	104152	Exempt	7,188
~~2014~~	~~BERRIEN~~	~~MDOT~~	~~US 31~~	~~at Niles Buchanan Road, northwest quadrant of interchange, Niles Township, Berrien County. Niles Facility. Lot No. 711008~~	~~0~~	~~Roadside Facility~~	~~Expand existing lot to add capacity and mill and resurface existing portion of lot~~	~~PE~~			~~ST~~		~~M~~				~~113932~~	~~NA~~	
2014	BERRIEN	Niles	Seventeenth St	Oak St to Eagle St	0.51	Resurface	Resurface	CON		159	STU			35	CITY	194300	112105	Exempt	233
~~2014~~	~~BERRIEN~~	~~Niles~~	~~Sycamore St~~	~~Thirteenth St to Seventeenth St~~	~~0.49~~	~~Resurface~~	~~Cold mill and resurface, including construction of ADA ramps where required~~	~~CON~~		~~101~~	~~STU~~			~~22~~	~~CITY~~	~~123000~~	~~100024~~	Exempt	148

Fiscal Year	County	Responsible Agency	Project Name	Limits	Length	Primary Work Type	Project Description	Phase	Advance Construct	Federal Cost ($1000s)	Federal Fund Source	State Cost ($1000s)	State Fund Source	Local Cost ($1000s)	Local Fund Source	Total Phase Cost ($1000s)	MDOT Job No.	Air Quality	Total Cost ($1000s)
2014	Berrien	Niles Dial A Ride	Free fare days	Niles area	0	Transit operations	Free Fare Days - This project will allow Dial-A-Ride to offer free fares on its fixed route during ozone action days. Dial-A-Ride will market this idea during the summer months and will announce that it is a free fare day when an ozone action day is declared by the MDNRE. This program will emphasize that people should commute via public	T-ops		2	CM	1	CTF			2500	118114	Exempt	3
2014	BERRIEN	Niles Dial-a-Ride	Maintenance Software	Niles area		Transit maintenance	Purchase maintenance equipment software upgrades	T-Cap		2	5307	1	CTF			2500		Exempt	3
~~2014~~	~~BERRIEN~~	~~Niles Dial-a-Ride~~	~~Parking Lot~~	~~Niles area~~		~~Transit facility~~	~~Fill cracks, reseal, and restripe parking lot and driveway~~	~~T-Cap~~										~~Exempt~~	
2014	BERRIEN	Niles Dial-a-Ride	Preventative Maintenance	Niles area		Transit maintenance	Preventative maintenance	T-Cap		100	5307	16	CTF	9	TRAL	125000		Exempt	125
~~2014~~	~~BERRIEN~~	~~Niles Dial-a-Ride~~	~~Trolley Façade~~	~~Niles area~~		~~Transit maintenance~~	~~Refinish trolley wood façade~~	~~T-Cap~~										~~Exempt~~	
2014	BERRIEN	Niles Dial-a-Ride	Replacement Computers	Niles area		Transit operations	Purchase and install up to 2 replacement office computers, associated software, and monitors	T-Cap		6	5307	1	CTF	1	TRAL	8000		Exempt	8
2014	BERRIEN	Niles Dial-a-Ride	Replacement Bus	Niles area		Transit vehicle additio	Replace one diesel cutaway bus	T-Cap		72	5307	12	CTF	6	TRAL	90338		Exempt	90
2014	BERRIEN	Niles Dial-a-Ride	Operating Assistance	Niles area		Transit operations	Public transit operations	T-Ops		85	5307	174	CTF	167	TRAL	426350		Exempt	426,350
2014	Cass	Rideshare	Countywide	Countywide	0	Miscellaneous	Southwest MI Planning Commission Rideshare Program	EPE		12	CMG	0				12000	116815	Exempt	12
2015	BERRIEN	Berrien County	Range Line Road, Lake Street and Main	Range Line Road from Walton Road North to Twp Line, Lake St from Niles to Cass County, and Main Street from Niles to Cass	5.1	Resurface	Hot mix patching and seal coat	CON		77	STU	0		17	CNTY	94	120689	N	41422
2015	BERRIEN	Berrien County	Madron Lake, North Main and Red Bud Trail	Madron Lake from Warren Woods to Bakertown, N Main from Reed to Glendora, and Red Bud Trail from Miller to Buchanan	5.7	Resurface	Hot mix patching and seal coat	CON		77	STU	0		17	CNTY	94	120690	N	41422
2015	BERRIEN	Niles	Broadway	Fifth to Tenth	0.3	Resurface	Cold Mill and Resurface	CON		100	STU	0		23	CITY	122737	120686	N	122737

Fiscal Year	County	Responsible Agency	Project Name	Limits	Length	Primary Work Type	Project Description	Phase	Advance Construct	Federal Cost ($1000s)	Federal Fund Source	State Cost ($1000s)	State Fund Source	Local Cost ($1000s)	Local Fund Source	Total Phase Cost ($1000s)	MDOT Job No.	Air Quality	Total Cost ($1000s)
2015	CASS	Cass County	Adamsville Road	Stateline to May	1.5	Restore &	Restore and Rehabilitate with Crush and Shape	CON		246	STU	0		54	CNTY	300	120687	N	41422
2015	Berrien	Niles Dial-A-Ride	Operating Assistance	Niles area		Transit operati	Public transit operations			$ 85,000	5307	$174,000	CTF	$167,350	TRAL	426350		$426,350	426350
2015	Berrien	Niles Dial-A-Ride	Preventive Maintenance	Niles area		Transit mainte nance equipm	Preventive maintenance			$101,000	5307	$ 16,413	CTF	$ 8,837	TRAL	126250		$126,250	126250
2015	Berrien	Niles Dial-A-Ride	Replacement Bus	Niles area		Transit vehicle additio	Replace one cutaway bus			$ 56,000	5307	$ 9,100	CTF	$ 4,900	TRAL	70000		$ 70,000	70000
2015	BERRIE N	Berrien Bus	Rural Operating Funds	Rural portion of NATS MPO area		Transit operati	Public transit operations			$ 23,746	5311	$ 23,746	CTF			47492			$ 47,492
2015	Berrien	City of Buchanan	Bus Replacement	Buchanan area		Transit vehicle rehabili	Replace 2 small cutaway buses with two 2015 or newer cutaway buses			$105,280	CMG	$ 26,320	M			131600		$131,600	131600
2016	BERRIE N	Berrien County	Bertrand, Third and State Line	Bertrand Road from US 31 to St. Joe River, Third St from Fulkerson to State Line, State Line from 3rd to S 11th	5.1	Resurfa ce	Hot mix patching and seal coat	CON		77	STU	0		17	CNTY	94	120685	N	41422
2016	BERRIE N	Berrien County	Galien-Buchanan, Bakertown, Fourth, and Terre Coupe	Galien-Buchanan from Boyle Lake to Bakertown, Bakertown from US-12 to Madron Lake, 4th from Bakertown to Buchanan, Terre	5.5	Resurfa ce	Hot mix patching and seal coat	CON		77	STU	0		17	CNTY	94	120688	N	41422
2016	BERRIE N	Buchanan	Red Bud Trail	South City limit to Front St.	0.5	Resurfa ce	Cold milling and resurfacing of Red Bud Trail a distance of 2,700', including miscellaneous curb and gutter replacement, ADA sidewalk ramps, misc. sub grade under drains, sections of full depth pavement replacement and pavement markings. The roadway through this area is experiencing	CON		254	STU	0		63	CITY	317	120695	N	41422
2016	BERRIE N	MDOT	US-31 NB	at Niles Buchanan Road	0	Roadsid e	Expand and resurface existing carpool lot	CON		45	ST	10	M	0		55	113735		55000
2016	CASS	Cass County	Fir Road	Stateline to Redfield	0.5	Resurfa ce	HMA overlay with shoulders and striping	CON		40	STU	0		9	CNTY	49	120693	N	49000
2016	CASS	Cass County	Fir Road	Redfield to US 12	1	Resurfa ce	HMA overlay with shoulders and striping	CON		18	STU	0		22	CNTY	40490	120694	N	40490

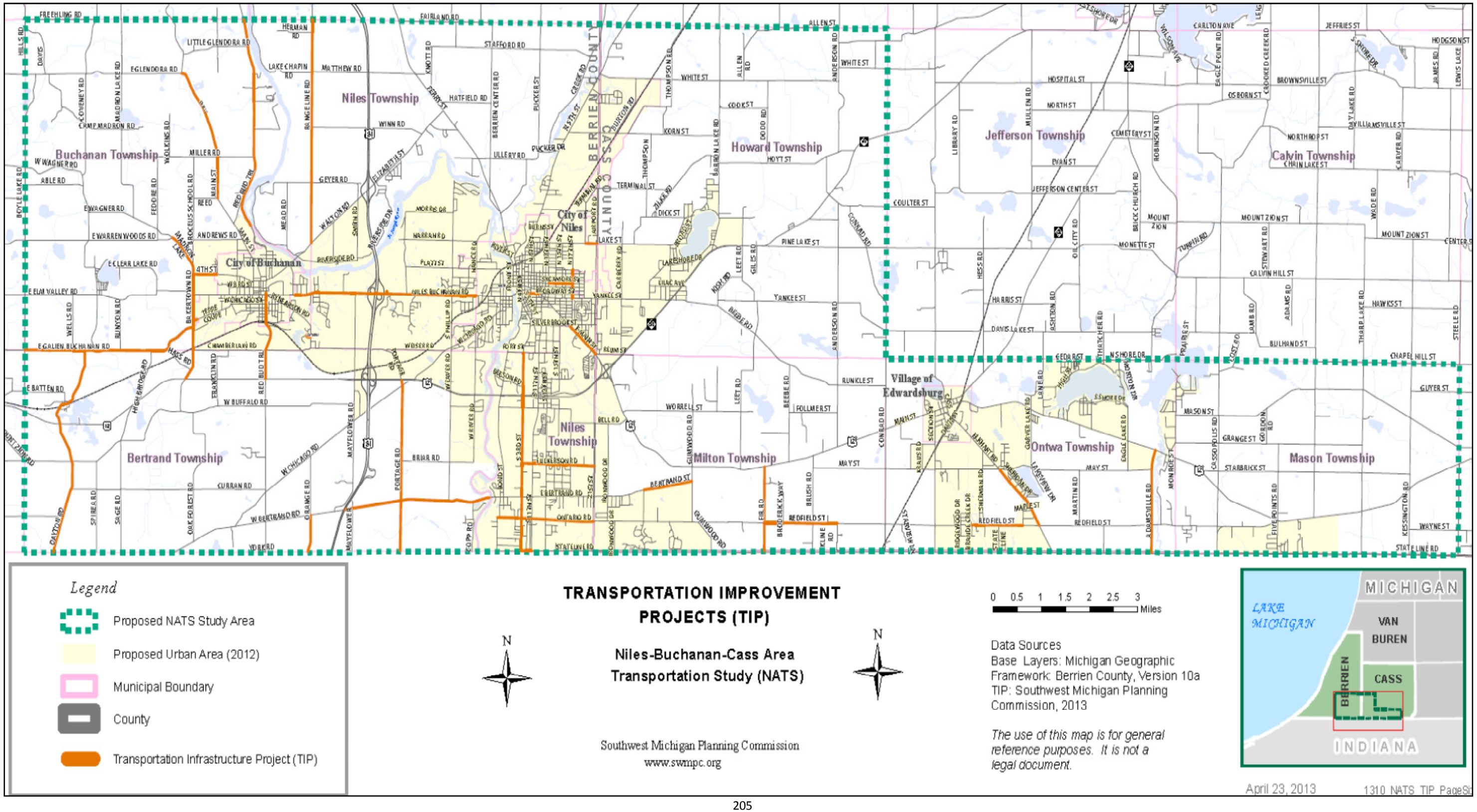
Fiscal Year	County	Responsible Agency	Project Name	Limits	Length	Primary Work Type	Project Description	Phase	Advance Construct	Federal Cost ($1000s)	Federal Fund Source	State Cost ($1000s)	State Fund Source	Local Cost ($1000s)	Local Fund Source	Total Phase Cost ($1000s)	MDOT Job No.	Air Quality	Total Project Cost
2016	CASS	Cass County	Adamsville Road	May Street to US 12	0.4	Restore & Rehabili	Crush and shape	CON		61	STU	0		13	CNTY	74	120696	N	74000
2016	Berrien	Niles Dial-A-Ride	Operating Assistance	Niles area		Transit operations	Public transit operations			$ 85,000	5307	$174,000	CTF	$167,350	TRAL	426350		$426,350	426350
2016	Berrien	Niles Dial-A-Ride	Preventive Maintenance	Niles area		Transit maintenance	Preventive maintenance			$101,000	5307	$ 16,413	CTF	$ 8,837	TRAL	126250		$126,250	126250
2016	Berrien	Niles Dial-A-Ride	Software Upgrades	Niles area		Transit operations	Purchase scheduling software upgrades			$ 2,000	5307	$ 325	CTF	$ 175	TRAL	2500		$ 2,500	2500
2016	Berrien	Niles Dial-A-Ride	Parking Lot	Niles area		Transit facility	Fill crakes, reseal, and restripe parking lot and driveway			$ 7,200	5307	$ 1,170	CTF	$ 630	TRAL	9000		$ 9,000	9000
2016	Berrien	Berrien Bus	Rural Operating Funds	Rural portion of NATS MPO area		Transit operations	Public transit operations			$ 23,746	5311	$ 23,746	M			47492			$ 47,492
2017	Berrien	Berrien County	Dayton, Orange, Third, Fulkerson and Ontario	Dayton from US 12 to State Line; Orange from Bertrand to State Line; 3rd from Bell to Fulkerson; Fulkerson from 3rd to S	5.9	Resurface	Hot mix patching and seal coat	CON		77	STU	0		17	CNTY	94	120683	N	94000
2017	Berrien	Niles	Sycamore St	13th to 17th	0.5	Resurface	resurface	CON		101	STU	0		22	CITY	123	120692	N	123000
2017	CASS	Cass County	Redfield St	Brande Creek to Oak	1.1	Restore & Rehabili	Mill and structural overlay with shoulders and striping	CON		307	STU	0		68	CNTY	375	120691	N	375000
2017	Berrien	Niles Dial-A-Ride	Operating Assistance	Niles area		Transit operations	Public transit operations			$ 85,000	5307	$174,000	CTF	$167,350	TRAL	426350		$426,350	426350
2017	Berrien	Niles Dial-A-Ride	Preventive Maintenance	Niles area		Transit maintenance	Preventive maintenance			$101,000	5307	$ 16,413	CTF	$ 8,837	TRAL	126250		$126,250	126250
2017	Berrien	Niles Dial-A-Ride	Replacement Bus	Niles area		Transit vehicle additio	Replace one cutaway bus			$ 56,000	5307	$ 9,100	CTF	$ 4,900	TRAL	70000		$ 70,000	70000
2017	Berrien	Berrien Bus	Rural Operating Funds	Rural portion of NATS MPO area		Transit operations	Public transit operations			$ 23,746	5311	$ 23,746	M			47492		47492	$ 47,492
2014*	CASS	Cass County	Bertrand Rd	Batchelor Rd to Gumwood Rd	1.04	Resurface	Resurface	CON		81	STU			18	CNTY	99320	112106		99
2015	Berrien	City of Niles Dial-A-Ride	Replacement Tires	Niles area		Transit maintenance	Purchase replacement tires and dispose of old tires			$ 3,840	5307	$ 624	CTF	$ 336	CITY	4800		$ 4,800	4800

Fiscal Year	County	Responsible Agency	Project Name	Limits	Length	Primary Work Type	Project Description	Phase	Advance Construct	Federal Cost ($1000s)	Federal Fund Source	State Cost ($1000s)	State Fund Source	Local Cost ($1000s)	Local Fund Source	Total Phase Cost ($1000s)	MDOT Job No.	Air Quality	Total Cost ($1000s)
2015	Berrien	City of Buchanan	Buchanan Dial-A-Ride	Buchanan area		Transit operations	Three-bus demand-response public transit system serving the City of Buchanan and its environs.			$ 25,821	5311	$ 79,979	CTF	$101,998	CITY	207798		$207,798	207798
2015	Berrien	MDOT	US-31 NB	at Niles Buchanan Road, northwest quadrant of interchange, Niles Township, Berrien County. Niles Facility. Lot No. 711008	0	Roadside facility	Expand existing lot to add capacity and mill and resurface existing portion of lot	PE		6	ST	1	M			7000	113735	62000	
2016	Berrien	City of Buchanan	Buchanan Dial-A-Ride	Buchanan area		Transit operations	Three-bus demand-response public transit system serving the City of Buchanan and its environs.			$ 25,821	5311	$ 79,979	CTF	$101,998	CITY	207798		$207,798	207798
2017	Berrien	City of Buchanan	Buchanan Dial-A-Ride	Buchanan area		Transit operations	Three-bus demand-response public transit system serving the City of Buchanan and its environs.			$ 25,821	5311	$ 79,979	CTF	$101,998	CITY	207798		$207,798	207798
2017	Berrien	Berrien County Road Commission	Niles-Buchanan and Red Bud	Niles-Buchanan Road from Buchanan to Niles and Red Bud from Buchanan to US -12	4.9	Resurface	hot mix asphalt and seal coat	CON		77	Surface Transportation Program (STP)	0		17	Local - County (BCRC)			93952	

Table 57 - Illustrative List of Projects

FY	County	Responsible Agency	Project Name	Limits	Length	Primary Work Type	Project Description Summary	Phase	Advance Construct	Federal Amount	Federal Fund Source	State Amount	Local Amount	Local Fund Source	Total Project Cost
2017	Cass	CCRC	Mason Street	Calvin Center Road to Porter Township Line	3.8	Restore & rehabilitate	HMA Overlay, partial Maintenance partial Structural	CON	No	353,290	STP - Urban Areas > 200,000 Population	0	78,340	Other Local Funds (CCRC)	$ 431,630
2015	Berrien	City of Buchanan	River Street	Enterprise drive to the bridge over the St. Joseph River.	0.2	Resurface	HMA base crushing and shaping and resurfacing of River Street a distance of 1,000', including miscellaneous curb and gutter replacement, and sub grade under drains. The roadway through this area is experiencing moderate transverse cracking and minor sub base failures.	CON	No	$ 135,200	Surface Transportation Program (STP) - Any Area	0	$ 33,800	Local - City (City of Buchanan)	$ 208,300
2015	Cass	CCRC	Bertrand Street	Batchelor Road to Gumwood Road	1	Resurface	HMA Overlay with Shoulders and Striping	CON	No	$ 81,293	STP - Urban Areas > 200,000 Population	0	$ 18,027	Other Local Funds (CCRC)	$ 99,320
2017	Cass	CCRC	Redfield Street	Batchelor Road to Gumwood Road	1	Resurface	HMA Overlay with Shoulders and Striping	CON	No	$ 85,975	STP - Urban Areas > 200,000 Population	0	$ 19,065	Other Local Funds (CCRC)	$ 105,040

Map 23 - 2014-2017 TIP Projects



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