

FY 2014-2017

Transportation Improvement Program

For the Twin Cities Area Transportation Study **(TwinCATS)**



July 2013

Prepared by the
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<http://www.swmpc.org/TwinCATS.asp>

The preparation of this report has been financed in part through grants from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation, under the State Planning and Research Program, Section 505 and Metropolitan Planning Program, Section 104(f) of Title 23, U.S. Code. The contents of this report do not necessarily reflect the official views or policy of the U.S. Department of Transportation.

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List of Acronyms Used in this Document

BR.....	Business Route
CO.....	Carbon Monoxide
FAE.....	Federal Aid Eligible
FHWA.....	Federal Highway Administration
FTA.....	Federal Transit Administration
FY.....	Fiscal Year
GPA.....	General Programs Account
IN.....	Indiana
LRP.....	Long Range Plan
MAB.....	Metropolitan Area Boundary
MACOG.....	Michiana Area Council of Governments
MCD.....	Minor Civil Division
MDOT.....	Michigan Department of Transportation
MI.....	Michigan
MPO.....	Metropolitan Planning Organization
NAAQS.....	National Ambient Air Quality Standards
TWINCATS.....	Twin Cities Area Transportation Study
NB.....	North Bound
NO ₂	Nitrogen Dioxide
O ₃	Ozone
Pb.....	Lead
PM2.5.....	Breathable Particle Matter 2.5 Microns
PM10.....	Breathable Particle Matter 10 Microns
SB.....	South Bound
SIP.....	State Implementation Plan
SO ₂	Sulfur Dioxide
STIP.....	State Transportation Improvement Program
SWMPC.....	Southwest Michigan Planning Commission
TAC.....	Technical Advisory Committee
TIP.....	Transportation Improvement Program
U.S. EPA.....	United States Environmental Protection Agency

This document regularly refers to other files and forms located on the Southwest Michigan Planning Commission (SWMPC) website, www.swmpc.org. Any information found on the website can also be obtained by contacting the SWMPC at:

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I. Introduction

Overview of the Transportation Improvement Program (TIP)

Federal legislation (CFR 450.324) tells us that the metropolitan transportation planning process shall include development of a transportation improvement program (TIP) for the metropolitan planning area by the Metropolitan Planning Organization (MPO), in cooperation with the State and public transit operators.

This TIP must do the following:

- **Time Period:** Cover a period of no less than four years. This TIP covers fiscal years (FY) 2014-2017 (October 1, 2013 – September 30, 2017).
- **Updated:** Be updated at least every four years,
- **Expiration:** The TIP expires when the FHWA/FTA approval of the STIP expires
- **Clean Air Act Requirements:** Nonattainment and maintenance areas subject to conformity requirements. However, since this plan will be submitted to FHWA and FTA after July 2013 and with the partial revocation of the 1997 NAAQS, conformity analysis will not take place with this document.
- **Approval:** be approved by the MPO and the Governor.
- **Fiscal Constraint:** The TIP shall be financially constrained by year, and include a financial plan that demonstrates which projects can be implemented using current revenue sources and which projects are to be implemented using proposed revenue sources.
- **Funded Projects:** Only projects for which construction and operating funds can reasonably be expected to be available may be included.

The TIP shall:

- Include all transportation projects (including pedestrian walkways, transit, bicycle transportation facilities, and transportation enhancement projects) within the metropolitan planning area proposed for funding under title 23 U.S.C. and the Federal Transit Act;
- Be consistent with the Long Range Transportation Plan (LRP);
- Include all regionally significant transportation projects for which Federal Highway Administration (FHWA) or the Federal Transit Administration (FTA) approval is required, whether or not the projects are to be funded with title 23 U.S.C. or Federal Transit Act funds;
- Include, for information purposes in air quality non-attainment and maintenance areas, all regionally significant transportation projects proposed, whether funded with federal or non-federal funds.

All projects that fit into the categories above shall include:

- Sufficient descriptive material (i.e. type of work, termini, length, etc.) to identify the project or phase as well as to permit air quality analysis in accordance with the U.S. EPA conformity requirements;
- Estimated total cost;
- The amount of federal funds proposed to be obligated during each program year;
- The proposed source of the recipient/sub-recipient and State and local agencies responsible for carrying out the project;
- In areas with Americans with Disabilities Act required paratransit and key station plans, identification of those projects which will implement the plans.

Projects proposed for FHWA and/or FTA funding that are not considered by the State and MPO to be of appropriate scale for individual identification in a given program year may be grouped by function, geographic area, and work type using applicable classifications. These projects are called General Program Accounts (GPA).

In air quality non-attainment and maintenance areas, classifications must be consistent with the exempt project classifications contained in the U.S. EPA conformity requirements.

TwinCATS Project Selection and Prioritization Procedure

This process has been delayed to handle the additional obligation authority that was released to the MPOs in February 2013.

Table 1. Timeline of TIP Development

12/17/2012	Online TIP project application approved by committee
2/1-3/1/2013	MPO Staff drafted TIP document
2/6/2013	TIP Project Application released, and Call for Projects submitted to
2/25/2013	Project Applications due; MPO Staff compile project information
3/1/2013	Project Selection Subcommittee Meeting
3/18/2013	Policy Committee approves TIP Project list being sent out for public comment
3/18/2013-3/28/2013	Public Comment Period on TIP Project list
4/15/2013	Policy Committee approves TIP project list
5/20/2013	Policy Committee approves final TIP
7/2013	2014-2017 TIP submitted for approval by MDOT and FHWA

Amendment to the TIP

The TIP may be amended at any time consistent with the procedures established in federal legislation. The agency responsible for the project proposed to be added to the TIP will fill out a TIP Amendment Form, which can be found in Appendix D and at http://www.swmpc.org/TwinCATS_tipapp.asp. Public involvement procedures outlined in the Participation Plan, which can be found online at <http://www.swmpc.org/participation.asp> or by contacting the SWMPC, shall be utilized. In some cases, the TIP may be amended administratively, as described in Section VII: Amendment Procedures.

Relationship to the Statewide Transportation Improvement Program (STIP)

After approval by the MPO and the Governor, the TIP shall be included without modification, directly or by reference, in the STIP program, except that in non-attainment and maintenance areas, a conformity finding by the FHWA and the FTA must be made before it is included in the STIP. After approval by the MPO and the Governor, a copy shall be provided to the FHWA and the FTA. The state shall notify the MPO when a TIP including projects under the jurisdiction of these agencies has been included in the STIP.

Action Required by FHWA/FTA

The FHWA and FTA must jointly find that each metropolitan TIP is based on a continuing, comprehensive transportation process carried on cooperatively by the state, MPO, and transit operator in accordance with the provisions of 23 U.S.C. 134 and Section 8 of the Federal Transit Act (49 U.S.C. app. 1607). This finding shall be based on the self-certification statement submitted by the State and MPO under Section 450.334 and upon other

reviews as deemed necessary by the FHWA and FTA.

If the TIP is found to conform to the STIP, the Governor/MPO shall be notified of the joint finding. After the FHWA and the FTA find the TIP to be in conformance, the TIP shall be incorporated, without modification, into the STIP directly or by reference.

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II. TwinCATS Overview

Study Area

The Twin Cities Area Transportation Study (TwinCATS) metropolitan area boundary (MAB) for the urban transportation planning activities includes:

- City of Benton Harbor
- City of Bridgman
- City of St. Joseph;
- Village of Grand Beach*
- Village of Michiana*
- Village of Shoreham
- Village of Stevensville
- Benton Charter Township
- Lake Charter Township
- Lincoln Charter Township
- Royalton Township
- St. Joseph Charter Township
- Sodus Township.

A map of the TwinCATS area can be found on the next page.

*The Villages of Grand Beach and Michiana were the most recent additions to the TwinCATS MPO. Because the MPO boundary is not contiguous, this area is called the TwinCATS satellite. These villages have been designated by the U.S. Census as being a part of the Northern Indiana Regional Planning Commission (NIRPC) urbanized area and therefore needing transportation planning. However, because this portion of the NIRPC urbanized area is located in Michigan, the SWMPC and NIRPC entered into an agreement that SWMPC would provide transportation planning services to the Grand Beach/Michiana area. To make a decision whether to put this area in with the TwinCATS urbanized area or the Niles-Buchanan-Cass-Area Transportation Study (TWINCATS), the characteristics of both urbanized areas were reviewed. It was decided that the Grand Beach/Michiana area would be a satellite of TwinCATS, not TWINCATS, because of the similar characteristics with TwinCATS (located on Lake Michigan). It is suspected that this area will expand with the 2010 U.S. Census due to the addition of the new Four Winds Casino in New Buffalo.

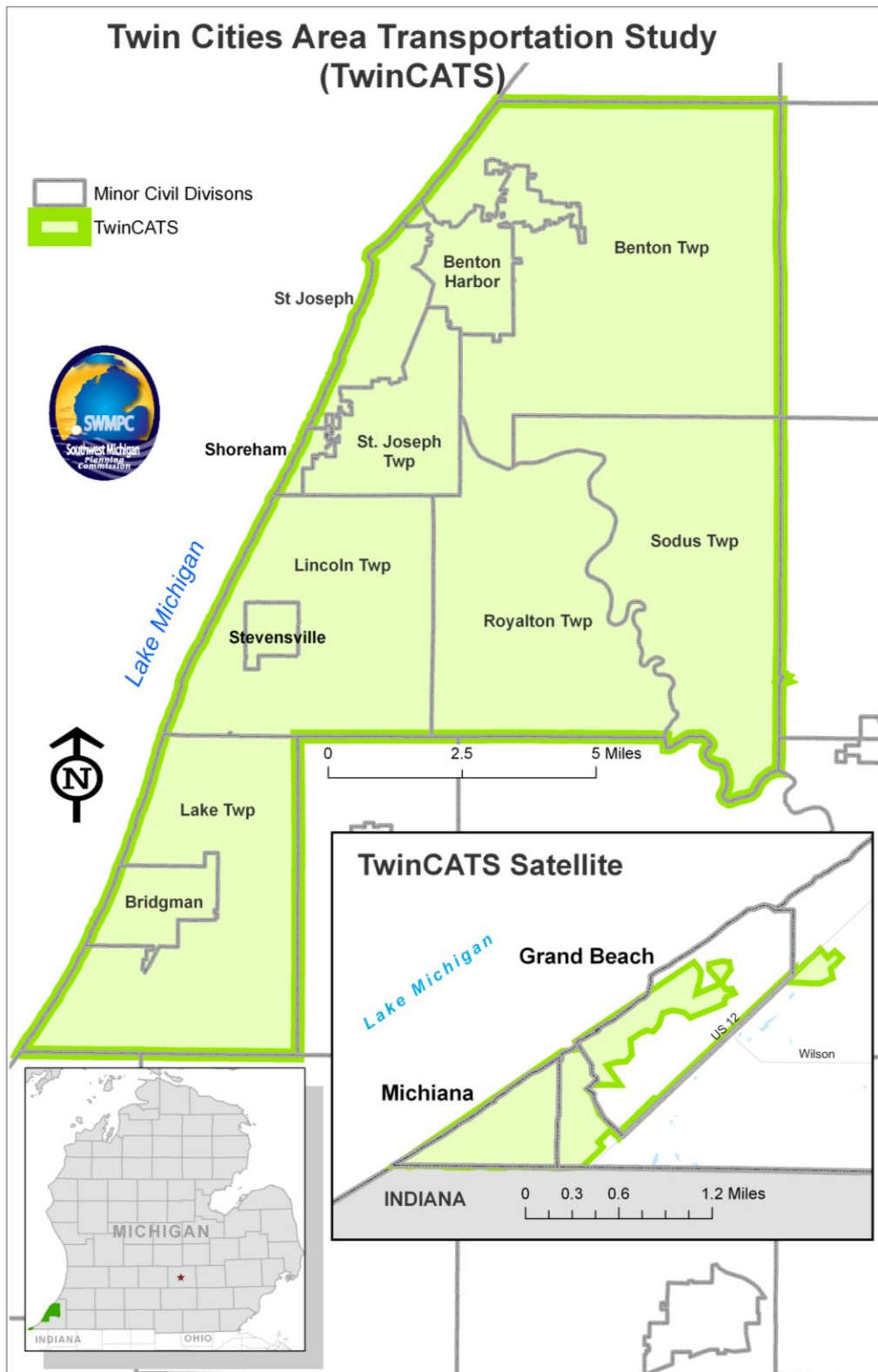
Agencies responsible for projects in the TwinCATS area include:

- City of Benton Harbor
- City of St. Joseph
- City of Bridgman
- Village of Grand Beach
- Village of Michiana
- Village of Shoreham
- Village of Stevensville
- Berrien County Road Commission
- Twin Cities Area Transportation Authority
- Michigan Department of Transportation (MDOT) is responsible for all state highway projects.

Townships do not receive Act 51 funding and therefore work with the Road Commission to develop and

implement road projects.

Map 1: TwinCATS Urbanized Area



MPO TIP Financial Plan

Introduction

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 means 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 a very 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.

Part I. 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 important 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 TWINCATS 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.

Surface Transportation Program (STP): Funds 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 TWINCATS 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): Funds 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 TWINCATS MPO, local agencies are eligible to apply for these funds as stated above.

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 nonmotorized 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: Funds can be used for a number of activities to improve the transportation system environment, including (but not limited to) nonmotorized 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. TWINCATS share of this funding is approximately \$43,000 in FY 2014, and will be distributed to local agencies on a competitive basis.

Base and Assumptions Used in Forecast Calculations of Federal Highway Funds

Each year, the targets (amount Southeast Michigan is expected to receive) are calculated for each of these programs, based on federal apportionment documentation and state law. Targets can vary from year to year due to factors including how much funding was actually received by the Highway Trust Fund, the authorization (the annual transportation funding spending ceiling), and the appropriation (how much money is actually approved to be spent). 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 1 contains the federal transportation revenue projections for the 2014-2017 TIP.

Table 1. Federal Highway Transportation Revenue Projections for the 2014-2017 TIP

FY	STP	CMAQ Funds	TOTAL
2014	\$821,634.48	\$578,210.29	\$1,399,844.77
2015	838,067.16	\$578,210.29	1,416,277.45
2016	854,828.50	\$578,210.29	\$1,433,038.79
2017	871,925.67	\$578,210.29	1,450,135.96
TOTAL:	\$3,386,455.81	\$2,312,841.16	\$5,699,296.97

Part II. 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 2011.¹ 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,

¹ Michigan Dept of Transportation, *Annual Report, Michigan Transportation Fund, Fiscal Year Ending September 30, 2011* (MDOT Report 139), Schedule A.

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.²

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 match funding comes 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 Southeast Michigan provides an overall distribution total for the region. That amount was \$389.6 million in FY 2011.

The Financial Work predicted an increase of 0.4 percent in state revenues for fiscal years 2014 through 2017. Table 2 shows the amount of MTF funding cities, villages, and road commissions in Southeast Michigan are projected to receive during the four-year TIP period, based on the agreed-upon rates of increase.

Table 2. Projected MTF Distribution to Act-51 Agencies for Highway Use, FY 2014 through FY 2017 (Millions of Dollars)

2014	2015	2016	2017	Total
\$394.33	\$395.91	\$397.49	\$399.08	\$1,586.80

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.

Part IV. Highway Funding Forecast—Local Funding

² Act 51 of 1951, Section 10(1)(j).

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 are significant and there are very few communities within the MPO that have dedicated revenue collected from an assessment on property taxes. There are four jurisdictions with dedicated sources of funds for transportation, they are outlined below. There are no millages in Cass County but there are 4 jurisdictions in Berrien County that have dedicated millages for transportation:

- Lincoln Charter Township has a .25 mill rate. This generates approximately \$155,800 a year for transportation projects. The millage is for six years.
- Royalton Township has a 1.0 mill rate. This generates approximately \$245,000 a year for transportation projects. The millage rate is for six years.
- Sodus Township has a 2 mill rate. This generates approximately \$125,000 year for transportation projects. The millage is for 4 years.
- The City of St. Joseph dedicates 1 mill to streets and that comes from the 12.5 mill general operating millage. It generates approximately \$450,000 each year. There is no expiration since this comes from the general operating millage for the City.
-

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, 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 \$430,400 a year (Total was 2,152,000 in local commitments from 2010-2014). It's highly unlikely that there will be increases in local funding over the four-year TIP period. The total local commitment expected if all projects FY 2014-2017 were funded would be \$ 4,437,749. As not all projects will be funded, we can expect that for the total STP allocation given to the TwinCATS STP funds and 20% of that coming to the program in the form of local match of some kind that we can project the following:

Table:

<i>Funding Years</i>	<i>STP Funds</i>	<i>Local Match for STP Dollars</i>
2014	\$821,634.48	164,326.89
2015	838,067.16	167,613.43
2016	854,828.50	170,965.70
2017	871,925.67	174,385.13

It should be noted that the 20% match is for the total project costs, and that these estimates are not based on total project costs but only the 20% of the federal funds provided.

Part V. 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.³ 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 fund 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. 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 important 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 be 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.

³ FHWA Office of Innovative Program Delivery. “Project Finance: An Introduction” (FHWA, 2012).

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, are 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.⁴ 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 than it paid out in operations costs, maintenance costs, and the initial payment to the government.

Part VI. 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 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 TwinCATS planning area and details the method used to estimate these costs.

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).⁵ About 22.8 percent of the lane miles in the state

⁴ http://www.fhwa.dot.gov/ipd/p3/defined/design_build_finance_operate.htm.

⁵ Michigan Department of Transportation. *FY 2011-2014 State Transportation Improvement Program* (January 2012), p. 9.

trunkline system are located in Southeast Michigan. Assuming a roughly equal per-lane-mile operations and maintenance cost, MDOT should spend approximately \$136.4 million in Southeast Michigan on these activities 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 surveys of county road commissions. By determining the total lane mileage of all roads and total lane mileage of federal-aid eligible road under each respondent's jurisdiction, it was possible to derive an estimated local per lane-mile operations and maintenance expenditure. This was then applied to the total lane mileage of federal-aid eligible roads in Southeast Michigan to get a region-wide total for FY 2011 (the last completed fiscal year at the time of survey). 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 4.

Table 4. Projected Available Highway Operations and Maintenance (O&M) Funding, Federal-Aid Eligible Roads, FY 2014 through FY 2017 (Millions of Dollars).

FY	Estimate
2014	\$231.15
2015	\$232.07
2016	\$233.00
2017	\$233.93
TOTAL	\$930.15

Part VII. 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) are 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.

Table 5 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. This is a summary. To see the detailed table, refer to Appendix A.

Table 5. Summary Fiscal Constraint Demonstration (Highway) for the FY 2014 through FY 2017 TIP (Millions of Dollars).

Funding	2014		2015		2016		2017	
	Avail	Prog	Avail	Prog	Avail	Prog	Avail	Prog
STPU	\$64.85	\$64.85	\$66.15	\$66.15	\$67.48	\$67.48	\$68.82	\$68.82
STPR	\$3.35	\$3.35	\$3.42	\$3.42	\$3.49	\$3.49	\$3.56	\$3.56
NHPP	\$8.17	\$8.17	\$8.33	\$8.33	\$8.50	\$8.50	\$8.67	\$8.67
TEDF	\$15.02	\$15.02	\$15.18	\$15.18	\$15.35	\$15.35	\$15.52	\$15.52
CMAQ	\$21.35	\$21.35	\$21.35	\$21.35	\$21.35	\$21.35	\$21.35	\$21.35
Bridge	\$10.14	\$10.14	\$12.55	\$12.55	\$12.81	\$12.81	\$13.06	\$13.06
HSIP	\$4.05	\$4.05	\$4.13	\$4.13	\$4.22	\$4.22	\$4.30	\$4.30
TAP	\$5.10	\$5.10	\$5.20	\$5.20	\$5.31	\$5.31	\$5.41	\$5.41
TOTAL	\$132.03	\$132.03	\$136.32	\$136.32	\$138.48	\$138.48	\$140.69	\$140.69
Net Balance*	\$0.00		\$0.00		\$0.00		\$0.00	

*Net Balance = Available funding less cost of programmed projects. A positive net balance means that available funding exceeds programmed project cost; a negative balance means that programmed project costs exceed available funding; and a zero net balance indicates that programmed project costs equal available funding.

Part VIII. 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.⁶ 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.

⁶ <http://www.fhwa.dot.gov/highwaytrustfund/index.htm>.

Here are brief descriptions of some of the most common federal transit programs.

Section 5307: This is the largest single source 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. [MORE HERE](#)

Section 5310, Elderly and Persons with Disabilities: Funding for projects to benefit seniors and disabled persons when service is unavailable or insufficient and transit access projects for disabled persons exceeding Americans with Disabilities Act (ADA) requirements. Section 5310 incorporates the former New Freedom program. The State of Michigan allocates its funding on a per-project basis.

Section 5311, Non-Urbanized Area Formula Grant: Funds for capital, operating, and rural transit planning activities in areas under 50,000 population. 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 TWINCATS MPO that would be eligible for these funds are Berrien Bus, and Buchanan Dial A Ride.

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.

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.

In addition to these funding sources, transit agencies can also apply for Surface Transportation Program and Congestion Mitigation and Air Quality Improvement (CMAQ) program funds. In the planning area, buses are routinely approved for replacements in the CMAQ programs in Berrien and Cass Counties. ,

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 6 shows the federal transit forecast for the FY 2014-17 TIP period.

Table 6. Federal Transit Revenue Projections for the 2014-2017 TIP (Millions of Dollars).

FY	Sec 5307	Sec 5310 (Sen/Dsbl'd)	Sec 5311 (Rural) Op	Sec 5337 State of Good Repair	Sec 5339 Bus & Bus Facilities	CMAQ (Local Transit)	Total
2014	\$52.24	\$4.01	\$0.85	\$1.05	\$5.58	\$7.99	\$71.73
2015	\$54.20	\$4.16	\$0.89	\$1.09	\$5.79	\$8.67	\$74.80
2016	\$56.23	\$4.31	\$0.92	\$1.13	\$6.01	\$8.67	\$77.28
2017	\$58.34	\$4.47	\$0.95	\$1.17	\$6.24	\$8.67	\$79.85
Total	\$221.01	\$16.95	\$3.62	\$4.44	\$23.62	\$34.01	\$303.66

Part IX. 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, is 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.⁷ 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 2011.⁸

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 Southeast Michigan received in FY 2011. The amount stayed constant in FYs 2012 and 2013. However, funding is adjusted upward by 3.75 percent for state match and 0.37% 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 Southeast Michigan transit agencies are shown in Table 7, broken down by state match and state operating.

Table 7. State Transit (CTF) Revenue Projections for the 2014-2017 TIP (Millions of Dollars).

FY	Sec 5307 State	State Match for JARC- Type Projects	Sec 5310 (Sen/Dsbl'd) Cap State	Sec 5339 Bus & Bus Facilities (State)	Local Bus Operating (addl. CTF)	Total
2014	\$7.89	\$2.41	\$0.67	\$0.93	\$97.63	\$109.54
2015	\$8.19	\$2.50	\$0.69	\$0.97	\$101.25	\$113.60
2016	\$8.50	\$2.59	\$0.72	\$1.00	\$104.99	\$117.81
2017	\$8.82	\$2.69	\$0.75	\$1.04	\$108.88	\$122.17

⁷ Hamilton, William E. *Act 51 Primer* (House Fiscal Agency, February 2007), p. 4.

⁸ MDOT Report 139 for 2011, Schedule A.

Total	\$33.40	\$10.20	\$2.82	\$3.94	\$412.75	\$463.11
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The third column of Table 7, 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.

Part X. 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.

Who collects what: fares, millages, general funds, I need that here

Berrien Bus
TCATA

Base and Assumptions Used in Forecast Calculations of Local Transit Funds

The base amounts for farebox, general fund transfers, and millages are derived from SEMCOG’s annual TIP Survey. Area transit agencies (AATA, BWATC, DDOT, Detroit Transportation Corporation (People Mover), Livingston Essential Transportation Services, and SMART) are asked about the amount spent for capital and operations in the previous year (Lake Erie Transit reports through SMART). Presuming that transit agencies spend all money that they receive each year, these data can be used for revenue projections as well. In addition, the agencies provide data on other miscellaneous funding, such as advertising and contracts.

As a follow-up, questionnaires were sent to each of the transit agencies with the latest TIP Survey data. Agencies were asked to verify the accuracy of the survey data and also their estimate for rates of change in these sources over time. Their responses form the basis of Table 8. Since none of the agencies had projected rates of increase, it was assumed that the amount of local funding would remain stable throughout the FY 2014-17 TIP period. The local amounts include farebox receipts, general fund transfers, millages, and miscellaneous income.

Table 8. Local Transit Revenue Projections for the 2014-2017 TIP (Millions of Dollars).

FY	Amount
2014	\$182.95
2015	\$182.95
2016	\$182.95
2017	\$182.95
Total:	\$731.81

Part XI. 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.⁹

Part XII. 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 SEMCOG’s annual TIP Surveys. The five-year average (FY 2007 through FY 2011) split is 13.2 percent capital and 86.8 percent operations for the transit agencies surveyed in Southeast Michigan. It is assumed that this basic split will continue for the FY 2014-FY 2017 TIP period. 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 9 shows the amounts estimated to be available for transit capital and operations during the FY 2014-FY 2017 TIP period.

Table 9. Anticipated Amounts to be Expended on Transit Capital and Transit Operations for the 2014-2017 TIP (Millions of Dollars).

FY	Capital	Operations	Total
2014	\$48.08	\$316.14	\$364.22
2015	\$49.02	\$322.33	\$371.35
2016	\$49.90	\$328.14	\$378.04
2017	\$50.82	\$334.16	\$384.98
Total:	\$197.81	\$1,300.77	\$1,498.58

Part XIII. 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

⁹ FHWA Office of Innovative Program Delivery at http://www.fhwa.dot.gov/ipd/finance/tools_programs/federal_aid/matching_strategies/toll_credits.htm.

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) are 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 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.

Table 10 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 B.

Table 10. Summary Fiscal Constraint Demonstration (Transit) for the FY 2014 through FY 2017 TIP (Millions of Dollars).

FY	Available Federal	Programmed Federal	Available State	Programmed State	Available Local	Programmed Local
2014	\$71.73	\$71.73	\$109.54	\$109.54	\$182.95	\$182.95
2015	\$74.80	\$74.80	\$113.60	\$113.60	\$182.95	\$182.95
2016	\$77.28	\$77.28	\$117.81	\$117.81	\$182.95	\$182.95
2017	\$79.85	\$79.85	\$122.17	\$122.17	\$182.95	\$182.95
Total	\$303.66	\$303.66	\$463.11	\$463.11	\$731.81	\$731.81

Part XIV. 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 2023.¹⁰ 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.

Analysis of the funding and needs specific to Southeast Michigan by SEMCOG indicates that [INSERT REMAINDER OF SECTION AFTER ANALYSIS IS COMPLETED].

DRAFT

¹⁰Rick Olson, State Representative, 55th District. *Road and Bridge Funding Recommendations*. Link in story in the *Ann Arbor News* entitled “Rick Olson hopeful Michigan Legislature will address \$1.4B road funding gap in 2012,” 29 December 2011.

Table . Fiscal Year 2014-2017 TIP Projects

Proposed Fiscal Year for Project Funding	Submitting Agency	Name of Project	Indicate project limits (e.g. Fair St to First St)	Length in miles	What is the primary work type for this project?	Federal Cost (1000s)	State Cost (1000s)	Local Cost (1000s)
2014	MDOT	I-94 WB	On I-94 WB from Red Arrow Highway (Exit 16) for 7.4 miles northeasterly to 0.5 miles northeast of Puetz Road. I-94 WB exit and entrance ramps at Exit 16 and Exit 22. extensions.	7.391	Restore and Rehabilitate	45	5	0
2014	Village of Shoreham	Brown School Road	Lakeshore Drive, east to CSX railroad tracks	0.3	Reconstruct	400	0	99
2014	Berrien County Road Commission	Brown School Road	St. Joseph Township ! from Cleveland Avenue West to Village of Shoreham	0.3	Resurface	119	0	31
2014	Berrien County Road Commission	Hollywood Road	Hollywood Road: M-63 to 500 feet south of Glenlord; and Palladium Drive: Hollywood Road to 1000 feet west; and Maiden La	1.3	Restore & rehabilitate	286	0	0
2015	MDOT	I-94	Urban: Empire Road over I-94, 1.7 mile E of Benton Harbor. Rural: Carmody Road over I-94, 2.3 miles E of I-196. County Line Road over I-94, 8.6 miles E of I-196	2.643	Bridge - other	511	57	0
2015	MDOT	US-31	at Napier Avenue	0.000	Roadside Facility		2	0

						8		
2015	City of St. Joseph	Botham Avenue Reconstruction Project	Botham Avenue - Niles Avenue (M-63) to Morton Avenue	0.3	Reconstruct	423		1,017
2015	MDOT	I-94	Urban: Empire Road over I-94, 1.7 mile E of Benton Harbor. Rural: Carmody Road over I-94, 2.3 miles E of I-196. County L	2.6	Bridge - other	1611	179	0
2015	Berrien County Road Commission	Marquette Woods Road Resurfacing, St. Joseph Ave to Roosevelt Rd	St. Joseph Ave. East to Roosevelt Rd.	0.5	Restore & rehabilitate	399	0	100
2016	MDOT	I-94 WB	On I-94 WB from Red Arrow Highway (Exit 16) for 7.4 miles northeasterly to 0.5 miles northeast of Puetz Road. I-94 WB exit and entrance ramps at Exit 16 and Exit 22. extensions.	7.391	Restore and Rehabilitate	11,655	1,295	0
2016	MDOT	US-31	at Napier Avenue	0.000	Roadside Facility	63	14	0
2016	City of St. Joseph	Botham Avenue Reconstruction Project	Botham Avenue - Niles Avenue (M-63) to Morton Avenue	0.3	Reconstruct	200	0	0
2016	Berrien County Road Commission	Shawnee Road Jericho to Date	Jericho to Date	0.5	Resurface	368	0	81
2016	City of Benton Harbor	Colfax Avenue Resurfacing	May St to Britain Ave	0.8	Resurface	272	0	68
2017	Berrien County Road	John Beers Road: Hollywood Road	Hollywood Road thence West 0.51 Miles to West Township	0.5	Resurface	184	0	41

	Commission	West to Township Line	Line					
2017	Berrien County Road Commission	Hilltop Road	St. Joseph Township ! M-63 to CSX Railroad	0.6	Miscellaneous	131	0	29
2014	Berrien	TCATA	Public Transportation	Transit operations	Bus operations	680	704	446
2014	Berrien	TCATA	New Line haul	Transit operations	Commuter Route	106	106	0
2014	Berrien	TCATA	Expanded Hours	Transit operations	Provide fixed route service during times beyond the normal systems service hours	87	0	0
2014	Berrien	TCATA	Mobility Manager	Transit operations	Mobility Manager to coordinate transportation needs for the disable passengers	75	0	0

Table 6. Illustrative List of Projects

Proposed Fiscal Year for Project Funding	Submitting Agency	Name of Project	Indicate project limits (e.g. Fair St to First St)	Length in miles	What is the primary work type for this project?	Federal Cost (1000s)	State Cost Proposed (1000s)	Local Cost Proposed (1000s)
Illustrative	City of Benton Harbor	Broadway Avenue Resurfacing	Pipestone Avenue to Empire Avenue	0.8	Resurface	250	0	50
Illustrative	City of Bridgman	Red Arrow Highway	South City limits to North City limits.	1.7	Resurface	727	0	182
Illustrative	Berrien County Road Commission	Hollywood Road: Marquette Woods Road to Glenlord Road	Marquette Woods Road to Glenlord Road	1.1	Restore & rehabilitate	798	0	177
Illustrative	Berrien County Road Commission	Shawnee Road	City of Bridgman to Jericho Road	0.5	Resurface	368	0	82
Illustrative	Berrien County Road Commission	Marquette Woods Road Resurfacing	Cleveland Ave. to Washington Ave.	0.5 mi	Restore and Rehabilitate	353	0	88
Illustrative	City of Benton	Pipestone avenue	50 South of Main St to	0.6	Resurface	288	0	72

	Harbor	Resurfacing	Britain Avenue					
Illustrative	City of Saint Joseph	Lakeview Avenue Resurfacing Project	Lakeview Avenue - Hilltop Road to West Highland Avenue.	0.4	Resurface	421	0	196
Illustrative	Berrien County Road Commission	John Beers Road: Hollywood to Scottdale	Hollywood Road to Scottdale Road	1.1	Restore & rehabilitate	393	0	87
Illustrative	Berrien County Road Commission	Lincoln Avenue	St. Joseph Charter Township: M-63 to Maiden Lane	1.5	Resurface	131	0	29
Illustrative	Berrien County Road Commission	Shawnee Date to Holden	Date to Holden	0.5	Resurface	368	0	82
Illustrative	City of St. Joseph	Wallace Avenue Reconstruction Project	Wallace Avenue - Lakeshore Drive (I94-BL) to South State Street.	0.4	Reconstruct	601	0	825
Illustrative	City of St. Joseph	Hilltop Road Resurfacing Project	Hilltop Road - Lakeshore Drive (I94-BL) to CSX Railroad Tracks.	0.3	Resurface	266	0	124

Illustrative	City of St. Joseph	Langley Avenue Resurfacing Project	Langley Avenue - Pearl Street to Napier Avenue	0.8	Resurface	681	0	317
Illustrative	City of St. Joseph	Water Street Reconstruction Project	Water Street - State Street to Vine Street.	0.1	Reconstruct	200	0	213
Illustrative	Berrien County Road Comission	Marquette Woods Road Resurfacing	Roosevelt Rd. to Cleveland Ave.	0.5	Restore and Rehabilitate	345	0	86

IV. Air Quality Analysis

1990 Federal Clean Air Act Amendments

The 1990 Federal Clean Air Act Amendments (CAAA) identified six pollutants for which air quality standards were established: Ozone (O₃), carbon monoxide (CO), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), “respirable” or breathable particulate matter (PM), and lead (Pb). Each one of these pollutants has benchmark levels that are considered allowable for public exposure. Beyond those benchmark levels, the air quality for that constituent pollutant is considered dangerous. The EPA has termed these national standards as “national ambient air quality standards,” or NAAQS. Transportation contributes to four of the six criteria pollutants: O₃, CO, PM, and NO₂. Ozone is formed when volatile organic compounds (VOC) and oxides of nitrogen (NO_x) combine with sunlight and high temperatures. One way to reduce the amount of Ozone is to reduce the amount of VOC and NO_x which are produced in the region. VOC and NO_x emissions originate, in part, from highway motor vehicles and can be reduced by decreasing congestion such as ridesharing and/or providing for alternatives to the automobile, such as public transit.

In addition to establishing benchmark levels of exposure to pollutants, the CAAA of 1990 required that transportation plans and TIPs in non-attainment areas demonstrate “conformity” to the State Implementation Plan (SIP), which is intended to ensure that the state meets the National Ambient Air Quality Standards (NAAQS). In other words, transportation projects, such as the construction of highways and transit rail lines cannot be Federally funded or approved unless they are consistent with state air quality goals. In addition, transportation projects must not cause or contribute to new violations of the air quality standards, worsen existing violations, or delay attainment of air quality standards.

Changes to the federal clean air act

- In 1997, the standard for fine breathable particulate matter (PM) was increased to 2.5 microns (PM_{2.5}), and a more rigorous 8-hour ozone testing standard replaced the previous 1-hour ozone testing standard. In 2001, the U.S. Supreme Court upheld the constitutionality of the new EPA standards. Upon implementation of the new standards, Cass County (including parts of the TWINCATS area) was found to be in “non-attainment” for 8-hour ozone, meaning that the benchmark level for ozone was exceeded by the average measurement within the 8-hour testing period.
- On May 16, 2007, the EPA approved a request from the State of Michigan to redesignate Cass County, among others, to attainment of the 8-hour ozone NAAQS. While the redesignation changes Cass County’s area non-attainment status to attainment-maintenance, air quality conformity procedures were followed in the 2035 LRP.
- March 12, 2008, the EPA announced a new primary 8-hour ozone standard of 0.075 parts per million (ppm), down from the previous .085 ppm.

- May 21, 2012, Federal Register notice, (77FR 30160), revoked the 1997 ozone standard for transportation conformity purposes only.

Impact to state of michigan and TwinCATS study area

In a letter dated April 30, 2012 from Lisa P. Jackson from the U.S. Environmental Protection Agency to Governor Rick Snyder stated that “I am pleased to inform you that no areas in Michigan violate the 2008 standards or contribute to a violation of the ozone standards in a nearby area. As a result, the EPA is designation all of Michigan “unclassifiable/attainment.” APPENDIX ITEM ____ According to an MDOT Office Memorandum from Pete Porciello dated June 14, 2012 (APPENDIX ITEM ____), “After July 2013, conformity analysis will no longer need to be demonstrated unless new designations of nonattainment occur. The next time standards will be revised will be in 2013 or early 2014. Conformity requirements for nonattainment areas would begin within 1 year after the standard is published for any areas that are in nonattainment (sometime before 2015). Michigan is in attainment for the following national ambient air quality standards,”

- Nitrogen Dioxide,
- Carbon Monoxide,
- Particulate Matter less than 10 microns (PM 10),
- Lead (Pb)
- Sulfur Dioxide (SO₂)

Correspondence from Andy Pickard, FHWA Transportation Planning Team Leader, to Dave Wresinski, MDOT Director stated that the May 21, 2012 Federal Register notice only partially revoked the 1997 ozone standard, and that those area’s in nonattainment or maintenance status for the 1997 standard has not changed. However, MPOs, such as TWINCATS, that have long range transportation plans and transportation improvement programs due in 2013 that were previously classified nonattainment are exempt from demonstrating conformity if updated plans are due or approved after July 20, 2013. Therefore, TWINCATS does not need to demonstrate air quality conformity or perform an air quality analysis for this 2013-2040 long range transportation plan update. (APPENDIX ITEM ____)

Source to be footnoted

<http://www.gpo.gov/fdsys/pkg/FR-2012-05-21/html/2012-11605.htm>

<http://www.epa.gov/oms/>

VI. Environmental Justice

Environmental Justice (EJ) is a federal directive (Executive Order 12898, enacted in 1994) requiring all federal programs to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects as the result of its programs, policies, and activities on minority populations and low-income populations. Populations that require special consideration include historically marginalized groups such as African Americans, Asian Americans, Hispanic or Latino Americans, Native Americans and low-income households.

In addition to the general EJ mandate, the US DOT published its own Order (5610.2) in the Federal Register on April 15, 1997. This Order requires the incorporation of EJ principles in all US DOT programs, policies and activities. The US DOT integrates the goals of the Executive Order through a process developed within the framework of existing requirements, primarily the National Environmental Policy Act of 1969 (NEPA), Title VI of the Civil Rights Act of 1964 (to ensure that no person is excluded from participation in, denied the benefits of, or is subjected to, discrimination).

Within the TwinCATS area, efforts are undertaken to ensure that transportation system improvements that are implemented do not have disproportionately negative effects on minority and low-income populations. In addition, system investments must provide for an equitable distribution of benefits to areas that are traditionally underrepresented in the planning process. Transportation projects may bring new benefits in terms of greater connectivity to destinations and faster, safer travel. At the same time, these projects can also bring new concerns with increased noise, air pollution, or impediments during construction processes. In order to ensure that transportation investments in the TwinCATS equitably benefit on all of the region's diverse populations, and that they do not have a disproportionately adverse impact on any of these populations, SWMPC undertook procedures listed in the methodology section below.

Methodology to Identify Environmental Justice Populations

In June of 2007, SWMPC revisited its procedures for identifying TwinCATS EJ Populations. Staff turned to representatives from MDOT to determine the procedures used at the state level for EJ analysis. The methodology described below outlines the procedures used for TwinCATS EJ analysis and parallels what is being used by the State of Michigan.

Minority group population numbers were assembled from the following 2010 US Census sources:

1. Total Population (Summary File 1, Table 1);
2. Black or African American alone (Summary File 1, P3);
3. American Indian and Alaskan Native alone (Summary File 1, P3);
4. Asian alone (Summary File 1, P3); and
5. Hispanic or Latino (Summary File 1, P5).

All but Hispanic or Latino population numbers were drawn from populations of one race. Since the US Census does not consider Hispanic or Latino to be a race designation, there will be, by definition, individuals who identified themselves as two or more races within the Hispanic or Latino designation.

Low-income population numbers were drawn from the following 2011 American Community Survey (ACS) sources:

1. Population for whom poverty status is determined (ACS 2007-2011 5-Year Estimates, Table S1701) and

2. Population for whom annual income was below poverty level (ACS 2007-2011 5-Year Estimates, Table S1701).

The 2010 US Census did not include a “long form”, where questions about income had been had been asked in Census 2000 and prior decennial census datasets. Instead, the American Community Survey, which helps the Census Bureau collect data continuously, now measures income in its questionnaire. 5-Year Estimates were used because they provide a large enough sample for the Census Bureau to report data at the Census Block Group level in our region. Census Block Groups are also the smallest geographic summary area for which race and poverty data are available. At the block group level, individual concentrations of population can be more carefully identified.

To determine whether a census block group constituted an “EJ area”, SWMPC calculated the percentage of the total population in each census block group that belonged to each of the designated EJ groups. The percentage of the population that belonged to each EJ group was then compared to the proportion of the overall population of Michigan that the group constitutes. SWMPC then created maps for each of the EJ groups, shading areas where the concentration of that particular EJ group was higher than the proportion that the group represents of the state of Michigan’s overall population.

For example, people who identify as African American made up 14.6% of the total population of Michigan. The Environmental Justice analysis map of the African-American population would show shading for those block groups that had greater than 14.6% of their population who identified as African American.

The EJ maps were then overlaid with the 2014-2017 TIP and LRTP project location information to determine potential impacts to EJ populations. These maps can be found in Appendix K.

Conclusion

After reviewing the EJ maps with the project locations, it has been determined that there will be no adverse effects on EJ targeted populations and that EJ populations have not been excluded from the benefits to be derived from projects in their area.

Project-Level Environmental Justice Analysis

When a project is submitted, the applicant must fill out the TIP Project Application form (available from http://swmpc.org/TwinCATS_tipapp.asp). In the fall of 2009, the project application was revised and approved by the TWINCATS committees. A new section was added for Environmental Justice. When the application is submitted, the SWMPC staff review the application for completeness and raise any concerns regarding the application to the submitting agency.

The questions asked on the application in the Environmental Justice section are:

1. Will this project reduce travel time to jobs/training, medical and social services and food for the population in census designated EJ areas?
2. Is this project located in a census-designated EJ area?
3. Were outreach materials and public meetings made accessible to encourage participation from EJ populations?
4. Did EJ populations submit comments?

SWMP staff relay their concerns and/or any public concerns raised about the environmental justice of a project to the TWINCATS committees before the project is approved. Any new TIP project is also plotted on the Environmental Justice maps (shown below) and made available to the committee members and the public before the project is approved. This allows the TWINCATS committee members to determine:

1. Whether a new project will have adverse impacts on an EJ area; and
2. Whether the resources for transportation projects are being distributed equitably to EJ areas.

Conclusion

After reviewing the project applications and the EJ maps with the project locations, it has been determined that there will be no adverse effects on EJ targeted populations and that EJ populations have not been excluded the benefits of receiving projects in their area.

DRAFT

VI. Public Involvement and Consultation

Public Involvement

Consultation

Previous transportation legislation, SAFETEA-LU, required that MPOs use a consultation process, which is a separate and discrete process from the general public participation process, this process was continued with MAP-21 legislation. This process is meant as a way to better consider the needs of consulted agencies and to eliminate or minimize conflicts with other agencies' plans. By consulting with agencies in this manner during the development of this plan, these groups can compare potential project lists and maps with other natural and resource inventories. The MPO will be able to compare the Draft LRP to any documents received and make adjustments as necessary to achieve great compatibility. Legislation suggests that contacts with State, local, Indian Tribes, and private agencies responsible for the following areas be contacted:

- Economic growth and development
- Environmental protection
- Airport operators
- Freight movement
- Land use management
- Natural resources
- Conservation
- Historical preservation
- Human service transportation providers

Because the SWMPC is both a regional planning agency and a MPO, relationships with agencies responsible for cultural, land use, and environmental planning are already established. The SWMPC has a wide range of planning expertise which regularly cross-cuts with transportation planning. Expanding the scope of transportation planning to ensure the inclusion of the range of stakeholders and partners will only enhance the quality of the region's transportation plans and projects.

Agencies with which the SWMPC requested consultation were sent the following in the mail:

1. A letter explaining the transportation planning consultation process according to MAP-21 legislation.
2. The TWINCATS role in this process.

3. A draft list of 2040 LRP proposed transportation projects.
4. A map displaying proposed projects.
5. Directions on how they might provide their input.

The Consultation List is presented in **Table _____** :

Table _____ Consultation Contact List

Abonmarche Consultants, Inc.		Benton Harbor	Michigan
Area Agency on Aging Region VI		St Joseph	Michigan
Berrien Bus		Berrien Springs	Michigan
Berrien Co. Community Development		St. Joseph	Michigan
Berrien Co. Community Development		St. Joseph	Michigan
Berrien County	Road Commission	Benton Harbor	Michigan
Berrien County	Parks & Recreation	St. Joseph	Michigan
Berrien County	Administration	St. Joseph	Michigan
Berrien County	Health Department	Benton Harbor	Michigan
Berrien County Board of Commissioners		St. Joseph	Michigan
Berrien County Conservation District		Berrien Springs	Michigan
Berrien County Drain Commissioner		St. Joseph	Michigan
Berrien County Historical Association		Berrien Springs	Michigan
Berrien County Planning Commission		St. Joseph	Michigan
Berrien County Public Transit		Berrien Springs	Michigan
Berrien Regional Education Service Agency		Berrien Springs	Michigan
Bertrand Township		Buchanan	Michigan
Brandywine Public Schools		Niles	Michigan

Buchanan Community Schools		Buchanan	Michigan
Buchanan Dial a Ride		St. Joseph	Michigan
Buchanan Township		Buchanan	Michigan
CARE-A-VAN		Coloma	Michigan
Cass County	Public Works	Cassopolis	Michigan
Cass County	Road Commission	Cassopolis	Michigan
Cass County	Planning Commission	Cassopolis	Michigan
Cass County	Parks and Recreation	Cassopolis	Michigan
Cass County	Conservation District	Cassopolis	Michigan
Cass County	Board of Commissioners	Cassopolis	Michigan
Cass County	Water Resource Commission	Cassopolis	Michigan
Cass County	Planning Commission	Cassopolis	Michigan
Cass County	Administration	Cassopolis	Michigan
Cass County Council on Aging		Cassopolis	Michigan
Cass County Historical Commission	c/o Cass District Library	Cassopolis	Michigan
Cass County Transportation Authority		Cassopolis	Michigan
Cassopolis/Vandalia Chamber of Commerce		Cassopolis	Michigan
City of Buchanan		Buchanan	Michigan
City of Niles		Niles	Michigan
City of Niles	Dept of Public Works	Niles	Michigan
Consumer's Energy Inc		Covert	Michigan

Consumers Power Company		Kalamazoo	Michigan
Cornerstone Alliance		Benton Harbor	Michigan
Department of Human Services	Berrien County	Benton Harbor	Michigan
Department of Human Services	Cass County	Cassopolis	Michigan
Disability Network of SW MI - Berrien/Cass		St Joseph	Michigan
Edwardsburg Chamber of Commerce		Edwardsburg	Michigan
Edwardsburg Public Schools		Edwardsburg	Michigan
Federal Highway Administration	Michigan Division	Lansing	Michigan
Fernwood Botanical Gardens		Niles	Michigan
Four Flags Area Chamber of Commerce		Niles	Michigan
Friends of Harbor Country Trails			Michigan
Friends of the McCoy's Creek Trail		Buchanan	Michigan
Friends of the St Joseph River		Athens	Michigan
Greater Niles-Buchanan	Committee on Aging	Buchanan	Michigan
Howard Township		Niles	Michigan
Lake Michigan College	Bertrand Crossing	Niles	Michigan
Lewis Cass ISD		Cassopolis	Michigan
Mason Township		Edwardsburg	Michigan
MDEQ	Air Quality Division	Lansing	Michigan
MDEQ	Head Quarters	Lansing	Michigan
MDEQ	Surface Water Quality Division	Plainwell	Michigan
MDEQ Kalamazoo	Water Division	Kalamazoo	Michigan
MDOT	Coloma TSC	Benton Harbor	Michigan
MDOT	Southwest Region	Kalamazoo	Michigan
MDOT	Intermodal Section	Lansing	Michigan

MDOT	Urban/Public Transportation	Lansing	Michigan
MDOT	Statewide Planning	Lansing	Michigan
MDOT	Multi-Modal Transportation Services Bureau	Lansing	Michigan
MDOT	Bureau of Transportation Planning	Lansing	Michigan
MDOT	Non-Motorized Transportation	Lansing	Michigan
MDOT	Passenger Trans Division	Lansing	Michigan
Merritt Engineering Inc		Stevensville	Michigan
MI Dept of Agriculture	Environmental Stewardship Division	Lansing	Michigan
MI Dept of Agriculture & Rural Development		Lansing	Michigan
MI Dept of Natural Resources	Lansing	Lansing	Michigan
MI Dept of Natural Resources	Plainwell	Plainwell	Michigan
Michiana Area Council of Governments		South Bend	Michigan
Michigan Association of Railroad Passengers		Livonia	Michigan
Michigan Economic Develop Corp		Lansing	Michigan
Michigan House 59th District		Lansing	Michigan
Michigan House 78th District		Lansing	Michigan
Michigan House 79th District		Lansing	Michigan
Michigan Senate 21st District	Lansing Office	Lansing	Michigan
Michigan Works	Benton Harbor	Benton Harbor	Michigan
Milton Township		Niles	Michigan
MSU Extension	Berrien County	Benton Harbor	Michigan
MSU Extension	Cass County	Cassopolis	Michigan

National Railroad Passenger Corp		Niles	Michigan
Natural Resources Conservation Service	Berrien County	Berrien Springs	Michigan
Natural Resources Conservation Service	Cass County	Cassopolis	Michigan
Niles Charter Township		Niles	Michigan
Niles Dial A Ride Transportation		Niles	Michigan
Niles Public Schools		Niles	Michigan
Ontwa Township		Edwardsburg	Michigan
Pokagon Band of Potawatomi Indians		Dowagiac	Michigan
Preserve the Dunes		Riverside	Michigan
South Bend Regional Airport		South Bend	Michigan
Southwest MI Econ Growth Alliance		Niles	Michigan
Southwest Michigan Community Action Agency		Benton Harbor	Michigan
Southwest Michigan Land Conservancy		Portage	Michigan
Southwestern Michigan College		Dowagiac	Michigan
Southwestern Michigan College	Niles Area Campus	Niles	Michigan
State Historic Preservation Office	Preserve America	Lansing	Michigan
SW MI Home Builders Association		Berrien Springs	Michigan
The Nature Conservancy		Comstock Park	Michigan
Transpo		South Bend	Indiana
Van Buren/Cass District Health Dept.		Hartford	Michigan
Village of Edwardsburg		Edwardsburg	Michigan
Wightman & Associates, Inc		Benton Harbor	Michigan

VII. Amendment Procedures

There are many circumstances that necessitate amending the Transportation Improvement Program, such as changes in project scope, cost, local match situation, or work schedules. Amendments can include adding a new project, deleting a project, amending a project or administratively amending (modifying) a project. For additions, deletions, and amendments, there are public involvement requirements to be followed, as outlined in the SWMPC Public Participation Plan. This plan can be found at http://swmpc.org/TwinCATS_docs.asp or <http://swmpc.org/participation.asp>. This process includes:

- Environmental justice analysis;
- Air conformity analysis if applicable;
- A seven-day public comment period;
- Recommendation for approval by the TWINCATS Technical Advisory Committee;
- Final approval by the TWINCATS Policy Committee;
- Submission of the TIP amendment request by SWMPC staff to MDOT;
- Approval of the request by MDOT and submission to FHWA and/or FTA;
- Approval of the request by FHWA and/or FTA.
- After the amendment is processed, the amended TIP table will be made available online at http://swmpc.org/TwinCATS_docs.asp.

Any questions from MDOT, FHWA, and/or FTA must be addressed by staff and committee members before the request can be approved. Beginning October 1, 2010, MDOT is using a schedule of six times per year for approval of TIP amendment requests.

There are cases in which SWMPC staff may administratively amend (modify) the TIP based on local request. Project details such as minor changes in project costs, scope, termini, technical descriptions, and funding source may be approved administratively by SWMPC staff. TIP amendment procedures will be decided on a case-by-case basis, and at its discretion, SWMPC staff may elect to follow a full TIP amendment process. The list of examples below indicates places where SWMPC staff discretion to approve amendments is specifically granted. This list is not comprehensive in that it may not be possible to always determine in advance the particular circumstance for any given project. A consultation process may be appropriate to determine how to apply this guidance in any given situation. Staff shall report any actions to TWINCATS at the earliest opportunity following the action.

Administrative amendments by staff are expressly permitted in the following cases:

- Projects that are subject to MDOT's selection authority and identified with SWMPC priorities on the Illustrative List maybe be moved administratively to the main body of the TIP upon selection by MDOT.
- Projects may be postponed within the TIP provided that financial constraint is maintained. In such cases, if additional balances are the outcome, the Project Selection Subcommittee will be convened at the earliest convenience to consider any projects that may be ready for advancement.
- Implementing agencies may request to move a project forward, in place of another, provided that that the one moved forward is already in the approved TIP and the TIP remains fiscally constrained.
- Funding source may be changed where there is no impact on another agency's projects or funds.

- Changes that reflect increased local or non-federal share may be made to a total project cost for the convenience of, and at the request of the local agency, including matching ratios or non-federal eligible costs.
- MDOT general program account funding levels may be changed.
- Minor clarifications of scope or project technical descriptions where needed to advance an approved project.
- Adjustments to project scheduling for projects already contained in an approved TIP which do not impact other agencies' projects or funds.
- To correct errors or omissions in the event that a previously approved project must be added to the TIP, particularly when projects roll over from one TIP to the next, provided such action does not impact other agencies' projects or funds.
- Minor modifications to the TIP transit element (including, but not limited to, adding or deleting line items, increasing or decreasing costs, changing quantities or shifting funds from one line item to another) may be made administratively by staff on request provided that the amendment will involve currently available or anticipated FTA funds and will not negatively impact another local road or transit agency project.
- Unless otherwise required by law (such as a conformity requirement) a Congressionally designated earmark or high priority project may be amended into the TIP once authorization has been signed into law.

The following examples of project types and cases must always be referred to the full TIP amendment process, unless they involved changes as provided above:

- Any addition of a new project not previously reviewed or prioritized by the Policy Committee.
- Actions which may have an adverse impact on another agency's projects or funding.
- Any major change of scope which increases capacity through the addition of a new road or lane. Minor widening such as shoulders, passing bays, turnouts, or intersection modifications will not be considered major capacity improvements.
- Major changes in cost which may impact financial constraint, local matching share, or adversely impact another agency's projects or funding programs.
- Any major state or local infrastructure project changes which will have a potential for broad or compelling adverse impacts on any local jurisdiction, the natural environment, or the traveling public. Adding or deleting projects determined to be non-exempt from conformity analysis shall be treated as full TIP amendments.
- Any removal of a major capacity improvement project from the current TIP shall be treated using the same process as for addition of a similar project in order to assure that financial constraint and public participation requirements are met.

These general policies may be reviewed and amended from time to time and are intended to be flexible to accommodate special circumstances not foreseen at this writing. When doubt exists about the circumstances in any given case, a consultation process should be used to obtain guidance on interpreting the circumstance.

VIII. Results of Prior Funding

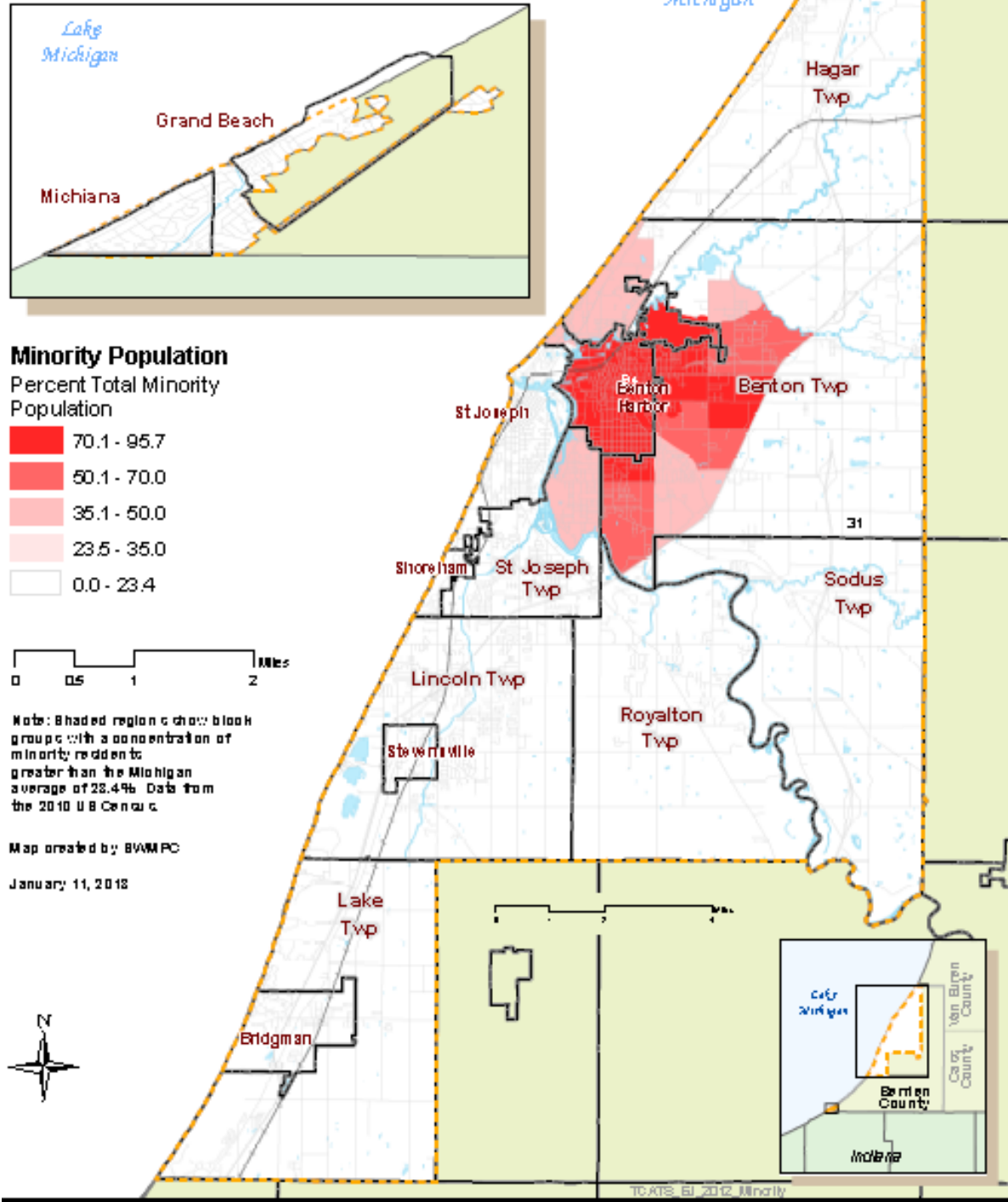
Fiscal year 2009 obligated funds can be seen at <http://swmpc.org/programs23746042.asp>. Please visit the TWINCATS website for information on the current year projects at

http://swmpc.org/fy_10_TwinCATS.asp.

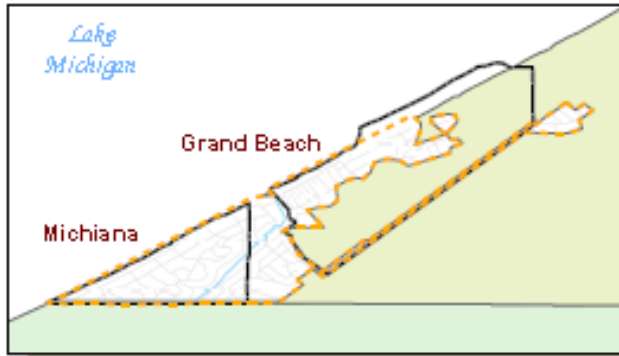
APPENDIX A – Environmental Justice Maps

Map _____ : Environmental Justice - Minority Population

**Twin Cities Area Transportation Study (TwinCATS)
2013 Public Participation Plan
EJ Analysis - Total Minority Population**

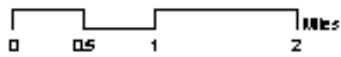
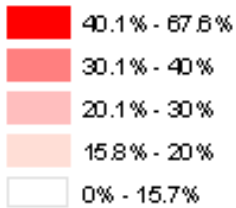


**Twin Cities Area Transportation Study (TwinCATS)
2013 Public Participation Plan
EJ Analysis - Low Income Population**



Low Income Population

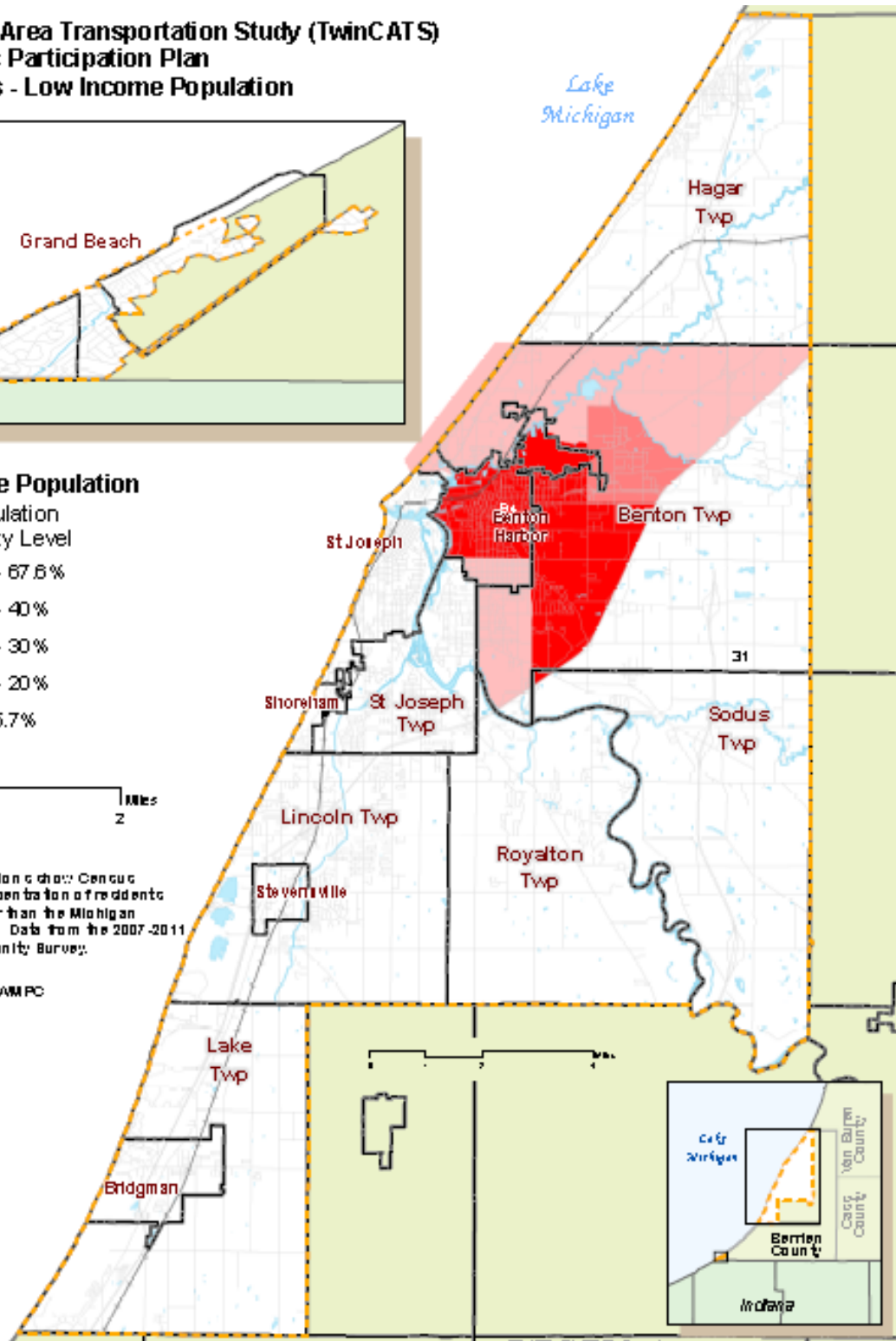
Percent Population Below Poverty Level



Note: Shaded regions show Census Tracts with a concentration of residents in poverty greater than the Michigan average of 16.7%. Data from the 2007-2011 American Community Survey.

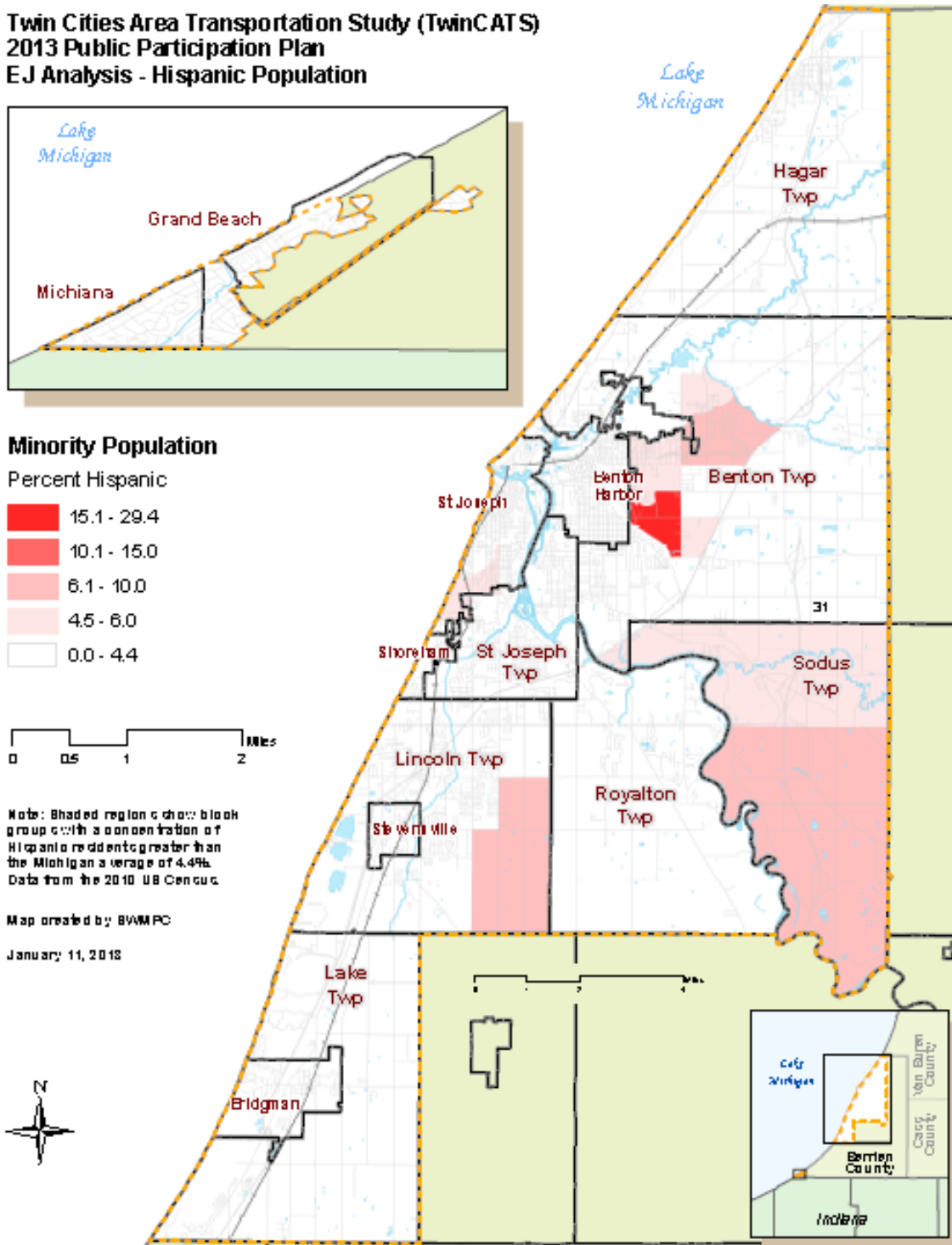
Map created by BWMP

January 11, 2018



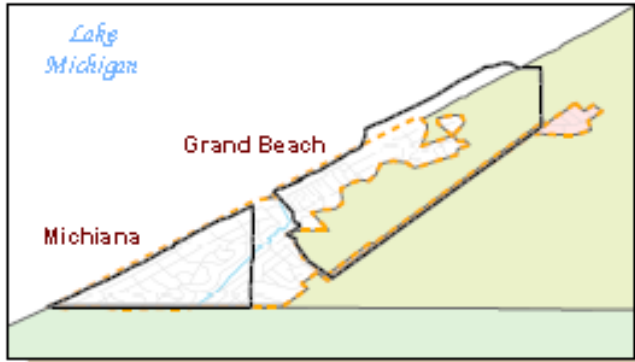
Map _____: Environmental Justice – Hispanic Population

**Twin Cities Area Transportation Study (TwinCATS)
2013 Public Participation Plan
EJ Analysis - Hispanic Population**



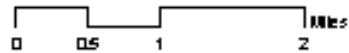
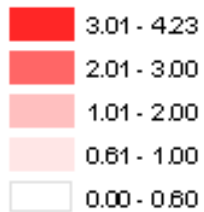
Map _____ : Environmental Justice – American Indian

**Twin Cities Area Transportation Study (TwinCATS)
2013 Public Participation Plan
EJ Analysis - American Indian Population**



Minority Population

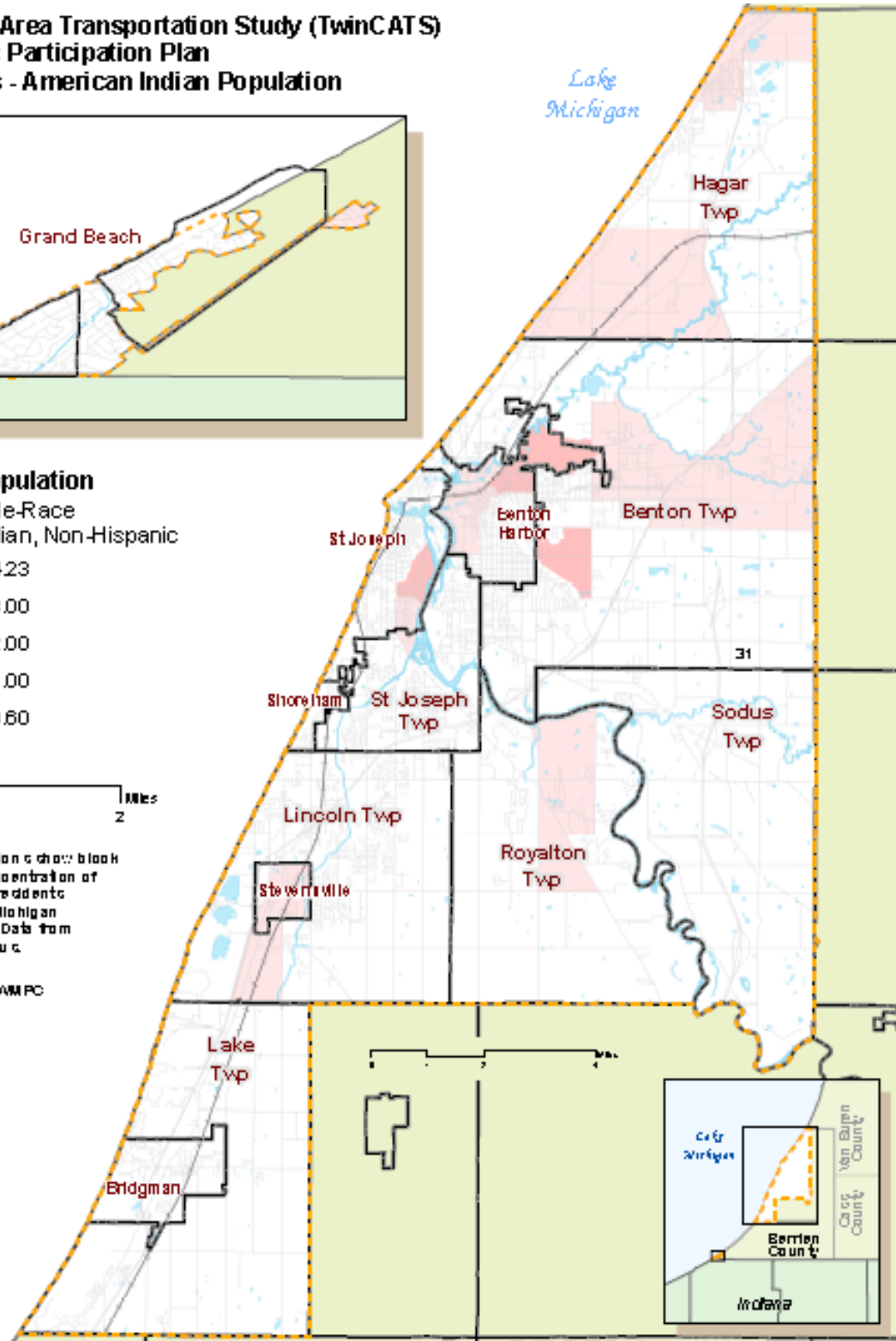
Percent Single-Race
American Indian, Non-Hispanic



Note: Shaded regions show black groups with a concentration of American Indian residents greater than the Michigan average of 0.89%. Data from the 2010 U.S. Census.

Map created by BWMPD

January 11, 2018



APPENDIX B – Public Involvement Notices

APPENDIX C – Consultation Comments Received

Media Contacts

Comments Received

Responses to the public comments and questions were provided by TwinCATS member representatives at the _____ meeting of TwinCATS. At the request of the TWINCATS Technical Advisory Committee, the responses are not included in the published TIP document but were sent to the individuals who made the comments.

APPENDIX D – Resolutions of Approval

APPENDIX E – Self-Certification

**METROPOLITAN TRANSPORTATION
PLANNING PROCESS CERTIFICATION**

(For Nonattainment and Maintenance Areas)

In accordance with 23 CFR 450.334, the Michigan Department of Transportation and the Southwest Michigan Planning Commission, the Metropolitan Planning Organization for the Niles-Buchanan-Cass Michigan Urbanized Area, hereby certify, as part of the STIP submittal, that the transportation planning process is addressing the major issues in the metropolitan planning area and is being conducted in accordance with all applicable requirements of:

- I. 23 U.S.C. 134, 49 U.S.C. 5303, and 23 CFR 450.334;
- II. Sections 174 and 176(c) and (d) of the Clean Air Act, as amended (42 U.S.C 7504 and 7506(c) and (d)) and 40 CFR part 93;
- III. Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d-1) and 49 CFR part 21;
- IV. 49 U.S.C. 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity;
- V. Section 1101(b) of the SAFETEA-LU (Pub. L. 109-59) and 49 CFR part 26 regarding the involvement of disadvantaged business enterprises in USDOT funded projects;
- VI. 23 CFR part 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts;
- VII. The provisions of the Americans with Disabilities Act of 1990 (42 U.S. C. 12101 *et seq.*) and 49 CFR parts 27, 37, and 38;
- VIII. The Older Americans Act, as amended (42 U.S.C. 6101), prohibiting discrimination on the basis of age in programs or activities receiving Federal financial assistance;
- IX. Section 324 of title 23 U.S.C. regarding the prohibition of discrimination based on gender; and
- X. Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and 49 CFR part 27 regarding discrimination against individuals with disabilities.

John Egelhaaf, Executive Director
Southwest Michigan Planning Commission

Susan Mortel, Director
Bureau of Transportation Planning

Date

Date

