

# FY2026-2029 WestPlan MPO Transportation Improvement Plan

Published May 2025



This report was produced by the West Michigan Metropolitan Transportation Planning Program (WestPlan) with the cooperation of the governments in Muskegon and Northern Ottawa counties, the Michigan Department of Transportation, the Federal Highway Administration, and the Federal Transit Administration.

## WESTPLAN MPO

**Kim Arter**, WestPlan Policy Committee Chair

**Robert Monetza**, WestPlan Policy Committee Vice Chair

**Erin Kuhn**, WMSRDC Executive Director

## PROJECT STAFF

**Joel Fitzpatrick**, Transportation Planning Director

**Brian Mulnix**, Program Manager

**Lauryn Blake**, Planner

**Jack Grice**, Planner/GIS Technician

## MISSION STATEMENT

*The West Michigan Shoreline Regional Development Commission is a federal and state designated regional planning and development agency serving 120 local governments in Lake, Mason, Muskegon, Newaygo, and Oceana counties. The Commission's mission is to "promote and foster regional development in West Michigan through cooperation amongst local governments and regional partners." The general regional goal of the West Michigan Shoreline Regional Development Commission is to provide assistance to member local governments in addressing regional and public policy issues, especially as they pertain to planning and development.*

## Contents

<b>CHAPTER 1: Introduction</b>	<b>1</b>
<b>CHAPTER 2: Financial Analysis</b>	<b>3</b>
Introduction	3
Sources of Transportation Funding	3
Cooperative Revenue Estimation Process	3
Part A: Highway Funding	4
Part B: Transit Funding	12
<b>CHAPTER 3: Consultation and Public Involvement</b>	<b>15</b>
Introduction	15
Public Involvement	15
Public Participation Mailing List	16
Public Participation in the TIP Process	16
Consultation Process	17
Stakeholder Identification	17
Summary of Comments	17
Conclusion	17
<b>CHAPTER 4: Demographic Information</b>	<b>21</b>
Demographic Analysis	21
Results & Discussion	21
Conclusions	23
<b>CHAPTER 5: Performance Measures (FY2026-2029 TIP)</b>	<b>31</b>
Safety Performance Measures	32
National Performance Program: NHPP/NFPP/CMAQ	34
System and Freight Reliability Performance Measures	35
Congestion Mitigation and Air Quality Performance Measures	35
Public Transportation	45
Transit Safety	49
Project Selection for the FY 2026-2029 TIP	50
<b>CHAPTER 6: Air Quality Conformity</b>	<b>53</b>
Statewide Air Quality Conformity Information	55

## *Table of Figures*

Figure 1: Map of WestPlan MPO.....	2
Figure 2: Consulted Agencies .....	19
Figure 3: Consultation Email .....	20
Figure 4: WestPlan MPO .....	24
Figure 5: TIP Projects & Married Populations .....	25
Figure 6: TIP Projects & Birth Rates .....	26
Figure 7: TIP Projects & Elderly Populations.....	27
Figure 8: TIP Projects & Low Income Populations .....	28
Figure 9: TIP Projects & Minority Populations .....	29
Figure 10: TIP Projects & Disabled Populations.....	30
Figure 11: Performance Measures and Targets.....	31
Figure 12: Michigan State Safety Targets - Calendar Year 2025 .....	32
Figure 13: FY2023-2026 TIP Specific Safety Related Projects .....	32
Figure 14: State of Michigan Pavement and Bridge Condition Targets (WestPlan MPO Supported) .....	36
Figure 15: FY 2026-2029 TIP Projects .....	38
Figure 16: CMAQ Projects.....	39
Figure 17: PASER Rating System.....	40
Figure 18: 2024 PASER Rating Summary for Muskegon County .....	41
Figure 19: 2024 Muskegon County PASER Ratings .....	42
Figure 20: 2024 PASER Rating Summary for Ottawa County .....	43
Figure 21: 2024 Ottawa County PASER Ratings .....	44
Figure 22: Transit Asset Management Targets (For MDOT's Section 5311 and 5310 subrecipients) .....	46
Figure 23: Transit State of Good Repair Targets for 2025.....	47
Figure 24: FY2026-2029 Transit Projects.....	48
Figure 25: MATS Safety Performance Targets .....	49
Figure 26: Harbor Transit Safety Performance Targets.....	49
Figure 27: WestPlan Project Selection Form.....	51
Figure 28: Air Pollution Sources .....	53
Figure 29: Transportation Pollutants and Precursor Emissions .....	54
Figure 30: Transportation Nonattainment, Maintenance, Limited and Orphan Areas by Pollutant in Michigan.....	58



(This page intentionally left blank)

## ***CHAPTER 1: Introduction***

This document serves as the official Transportation Improvement Program (TIP) for the West Michigan Metropolitan Transportation Planning Program (WestPlan). The current boundary of the Metropolitan Planning Organization (MPO) includes all of Muskegon County, the Cities of Grand Haven and Ferrysburg, the Village of Spring Lake, as well as Grand Haven, Spring Lake, Crockery, and Robinson townships in Ottawa County. This TIP covers the period from Fiscal Year 2026 to Fiscal Year 2029 (October 1, 2025, to September 30, 2029).

The TIP is developed through a collaborative process involving federal, state, and local officials, and it serves as the final step in the transportation planning process. Its main purpose is to identify programs and projects to receive federal funding, in compliance with federal regulations set by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA), for the upcoming four-year period.

Projects are chosen from the 2050 Metropolitan Transportation Plan (MTP) based on factors such as need, local initiative, and requirements outlined in the Infrastructure Investment and Jobs Act (IIJA). Additional project selection considerations include safety, security, and available funding. The TIP is updated every three years and amended as needed. Along with road and transit projects that incorporate safety elements, WestPlan committees have also approved several projects aimed primarily at improving safety. Notable examples include various Safe Routes to School initiatives and non-motorized trail projects with significant safety features.

The TIP is a key component of the "3C" planning process (Continuous, Comprehensive, and Cooperative). It is developed through ongoing collaboration between local and state governments to improve the regional transportation system. The TIP is comprehensive in that it addresses all modes of transportation, and it reflects a cooperative effort among local, state, and federal officials to collectively identify priorities and needs.

### **WestPlan Area**

Under the IIJA, the Metropolitan Planning Area (MPA) for WestPlan must encompass at least the current urban area and the surrounding area expected to become urban within the next twenty years. This boundary defines the geographic area covered by the Transportation Improvement Program process.

In 2023, WestPlan took action to revise the urban area boundary to include the updated census boundaries from the 2020 Census. According to Section 101(A) of Title 23, U.S. Code of Federal Regulations (23 U.S.C. 101), the urban area is defined as any place with a population of 5,000 or more, including the urbanized area as determined by the U.S. Census Bureau. The regulations allow states, in cooperation with local officials, to adjust and define urban area boundaries that encompass urbanized regions. An urbanized area includes one or more central cities along with adjacent densely settled territories (the urban fringe) with a combined population of at least 50,000 people. The urban fringe consists of contiguous areas with a population density of at least 1,000 persons per square mile. These boundaries are reviewed and adjusted every ten years based on the decennial census.

The urban area boundaries play a critical role in determining where transportation and mass transit funding can be allocated. STP Rural funds are designated for use outside of the urban area, while STP MPO funds are allocated to urban areas but may also be used in rural areas within the MPA.

The map displayed in **Figure 1** below depicts the WestPlan Metropolitan Planning Area.

**Figure 1: Map of WestPlan MPO**



## CHAPTER 2: Financial Analysis

### Introduction

The WestPlan FY2026-2029 Transportation Improvement Program (TIP) is a four-year scheduling document containing the projects that are to be obligated to implement the surface transportation policies contained in the WestPlan 2050 Metropolitan Transportation Plan (MTP). The TIP project list is required to be *fiscally constrained*; that is, the cost of projects programmed in the FY2026-2029 TIP cannot exceed the amount of funding *reasonably expected to be available* for surface transportation projects during the period covered by the FY2026-2029 TIP. This financial plan is the section of the TIP documenting the methods 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 estimates the cost of operating and maintaining the transportation system in the WestPlan MPO area during the four-year period covered by the TIP.

### Sources of Transportation Funding

The basic sources of transportation funding in Michigan are motor fuel taxes and vehicle registration fees. Motor fuel is taxed at both the federal and state levels, the federal government at 18.4¢ per gallon on gasoline and 24.4¢ per gallon on diesel fuel, and the State of Michigan at 31.0¢ per gallon on both gasoline and diesel fuel which began on January 1, 2025. Michigan also charges sales tax on motor fuel, but this funding is not applied to transportation. These motor fuel taxes are levied on a per-gallon basis. 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 any excise tax, unless the tax is adjusted to compensate for inflation.

The State of Michigan also collects annual vehicle registration fees when motorists purchase license plates or tabs. This is a crucial source of transportation funding for the state. Currently, slightly less than one-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 FY2026-2029 TIP is a complex process. It relies on several 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 metropolitan planning organizations (MPOs) and agencies responsible for the administration of federally funded highway and transit planning activities throughout the state, formed the Financial Work Group (FWG) to develop a statewide standard forecasting process. FWG is comprised of members from the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), the Michigan Department of Transportation (MDOT), transit agencies, and MPOs, including WestPlan. 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.

Federal-aid surface transportation is divided into two parts: Highway funding, which is administered by the Federal Highway Administration (FHWA) and transit funding, administered by the Federal Transit Administration (FTA). The following sections discuss each separately.

## Part A: Highway Funding

### Sources of Federal Highway Funding

Receipts from federal motor fuel taxes (plus some other taxes related to trucks) are deposited in the federal 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 the Infrastructure Investment and Jobs Act (IIJA). Through this law, Michigan receives approximately \$1.4 billion in federal-aid highway funding annually. This funding is apportioned in the form of several programs designed to accomplish different objectives, such as road repair, bridge repair, safety, and congestion mitigation. A brief description of the major funding sources is listed on the next two pages.

***National Highway Performance Program (NHPP):*** This funding is used to support conditions 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), but also include certain locally owned roads classified as **principal arterials**. This funding is used on state-owned highways.

***Surface Transportation Block Grant Program (STBG):*** Funds construction, reconstruction, rehabilitation, resurfacing, restoration, preservation, and/or operational improvements to federal-aid highways and replacement, preservation, and other improvements to bridges on public roads. Michigan's STBG apportionment from the federal government is split, with slightly more than half allocated to areas of the state based on population and half that can be used throughout the state. A portion of STBG funding is reserved for rural areas. STBG can also be flexed (transferred) to capital 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.

***Congestion Mitigation and Air Quality Improvement (CMAQ):*** Intended to reduce emissions from transportation-related sources. There is currently an emphasis on certain projects that reduce particulate matter (PM), but funds can also be used for traffic signal retiming, actuations, and interconnects; installing dedicated turn lanes; roundabouts; travel demand management (TDM) such as ride share and vanpools; transit; and non-motorized projects that divert non-recreational travel from single-occupant vehicles.

***Transportation Alternatives Program (TAP):*** Funds can be used for a number of activities to improve the transportation system environment, such as non-motorized projects, preservation of historic transportation facilities, outdoor advertising control, vegetation management in rights-of-way, and the planning and construction of projects that improve the ability of students to walk or bike to school. Funds are split between the state and various urbanized areas based on population.

***Carbon Reduction Program (CRP):*** These funds encompass various eligible activities aimed at reducing transportation emissions defined as carbon dioxide (CO<sub>2</sub>) emissions from on-road highway sources. Funds may also be used to promote sustainable transportation practices. Funds are split between the state and various urbanized areas based on population.

***Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT):*** Funds provided to make surface transportation more resilient to natural hazards, including sea level rise, flooding, extreme weather events, and other natural disasters through support of planning activities, resilience improvements, community resilience and evacuation routes, and at-risk coastal infrastructure. Available as both a core formula program and as a discretionary grant.

***Other Federal-Aid Highway Funds:*** In addition to the core federal-aid highway funds described above, there are other federal-aid funds for highway infrastructure. With the exception of the Rail-Highway Crossings and National Highway Freight programs, which are apportioned to the states each year, the other programs are competitive funds that states, or local agencies apply for directly from the U.S. Department of Transportation (USDOT). Other Federal-Aid Highway Funds include, but are not limited to:

- ***Rail-Highway Grade Crossings:*** Intended to reduce hazards at rail-highway grade crossings. MDOT selects and manages these projects statewide. These projects may be located on trunkline or local roads. Since this is a statewide program, individual MPOs cannot forecast the amount of Rail-Highway Crossings funding that will be used in their service area over the life of the FY 2026-2029 TIP.
- ***National Highway Freight Program:*** Intended to improve freight movement on the National Highway Freight Network (NHFN). Michigan works with its regional planning partners, including MPOs, to determine which highways will be included in the state's NHFN. Each state is required to have a State Freight Plan to use NHFP funding. This is a state program operated on a statewide basis by MDOT.
- ***Earmark Funding:*** Earmarks are transportation projects selected by members of Congress and placed in federal surface transportation and/or funding authorization bills. If these bills are enacted into law, funding for these projects is made available to states or local communities to implement the specific earmark project as described in the law. This was a common practice until FY 2013, when a new law was enacted. There is still a balance of unspent earmark funding, but this is being used by states and local communities as it becomes available for repurposing (reprogramming to a new use).

## **Base and Assumptions Used in Forecast Calculations of Federal Highway Funds**



At least every two years, allocations are calculated for each of these programs, based on federal apportionments and *rescissions* (nationwide downward adjustments of highway funding from what was originally authorized) and state law. Targets can vary from year to year due to factors including actual vs. estimated receipts of the Highway Trust Fund, authorization (the annual transportation funding spending ceiling), and the appropriation (how much money is approved to be spent). Allocations for FY2026, as released by MDOT on July 24, 2024, are used as the baseline for this FY2026-2029 TIP financial forecast. The Financial Work Group of the MTPA developed an assumption, for planning purposes, that the amount of federal-aid highway funds received will increase by 2% each year during the FY2026-2029 TIP period.

### **Sources of Highway Funding Generated at the State Level**

There are two main sources of state highway funding, the state motor fuel tax and vehicle registration fees. The state law governing the collection and distribution of state highway revenue is Public Act 51 of 1951, commonly known simply as *Act 51*. All revenue from the motor fuel tax and vehicle registration fees 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 is removed, approximately ten percent of the remainder is deposited in the Comprehensive Transportation Fund (CTF) for transit. The remaining funds are then split between the Michigan Department of Transportation (MDOT), county road commissions, and municipalities (incorporated cities and villages) in a proportion of 39.1 percent, 39.1 percent, and 21.8 percent, respectively.<sup>1</sup>

Several years ago, major changes to the State of Michigan's surface transportation revenue collection were enacted. Beginning January 1, 2017, these changes included increasing motor fuel tax rates on gasoline and diesel annually by the lesser of the U.S. inflation rate or 5 percent, increasing vehicle registration fees, one-time by an average of 20% and redirecting up to \$600 million of income tax revenues from the General Fund to the Michigan Transportation Fund (highways).

When these changes took full effect in the 2020-21 state fiscal year, MTF revenues were anticipated to increase to over \$4 billion annually. The financial impact of COVID-19 shutdowns resulted in less than expected collections. MDOT Cash Receipts in the 2021-22 state fiscal year totaled \$3.537 billion. Cash Receipts in the 2022-23 state fiscal year totaled \$3.681 billion.

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 rights-of-way, paying the electric bill for streetlights and traffic signals, etc.), MTF funds are local community and county road agencies' main source for funding these items. Most federal transportation funding must be matched so that each project's cost is a maximum of approximately 80% federal aid funds and a minimum of 20% non-federal matching funds. In Michigan, most match funding comes from the MTF. Finally, federal funding cannot be used on local public roads, such as subdivision streets, or other roads not designated as federal-aid eligible. 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

---

<sup>1</sup> Act 51 of 1951, Section 10(1)(j).

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-Generated Highway Funds**

State-generated funding for highways (i.e. MTF funding) only needs to be shown in the TIP if it is in a project that also contains federal-aid funding or is non-federally funded but of regional significance. Therefore, most state-generated funding for highways that are distributed to MDOT and to the counties, cities, and villages of the state through the Act 51 formulas is not shown in the TIP. The total amount of MTF funding available each year can be projected. If the amount of MTF funding for highways shown in the TIP does not exceed the total projected MTF funding available, it is assumed that state-generated funding shown in the FY2026-2029 TIP is constrained to reasonably available revenues.

Michigan has two state funded programs distributed to counties by formula. These programs are Transportation Economic Development Fund (TEDF) Category C and TEDF Category D. The state money in these programs is separate from the state MTF money that is distributed to the cities, villages, and county road commissions each year. These funds are distributed to urban and rural counties as defined in Act 51. In the WestPlan MPO area, the distribution of each funding source is:

- TEDF Category C: Congestion mitigation in designated urban counties. *There are no designated urban counties in the WestPlan MPO area.*
- TEDF Category D: All-season road network in rural counties. *In the WestPlan MPO area, this includes Muskegon County.*

Four additional TEDF categories (A, B, E, and F) are 100% state-funded programs that are competitively awarded by the state. Projects using these funds do not have to be in the TIP unless they are being supplemented with federal-aid highway funding by the awardee, or the project is considered regionally significant.

### **Base and Assumptions Used to Forecast TEDF Programs**

Funding targets for TEDF Category C and Category D funds for fiscal years FY2026 through FY2029 were released by MDOT on July 24, 2024. TEDF Category C and Category D projects programmed in the TIP are constrained to the targets provided, plus any carryforward of the state portion of these programs.

### **State-Administered Programs that Use both Federal-Aid and State Funding**

Local Bridge is an important program with both federal and state funding components. It is funded through a portion of the state motor fuel tax. It is supplemented with the Surface Transportation Block Grant Program (STBG) funding retained by the state, as well as Bridge Formula Program (BFP) funding authorized through IIJA. The Local Bridge program is competitive, with funds being awarded by Local Bridge Committees in each of the MDOT planning regions.

Since the Local Bridge program is competitively awarded, only those Local Bridge projects that have already been awarded for use in fiscal years FY2026 through FY2029 are shown. Therefore, Local Bridge projects are fiscally self-constrained.

### **Sources of Locally Generated 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. This makes it difficult to determine how much local funding is being spent on roads in the WestPlan MPO area. Additionally, special assessment districts and millages generally have finite lives, so an accurate figure for local transportation funding would require knowledge of all millages and special assessment districts in force during each year of the TIP period, which is difficult to achieve. It is therefore assumed that locally generated funding shown in the FY2026-2029 TIP is constrained to reasonably available revenues.

### **State Trunkline Funding**

The State of Michigan maintains an extensive network of highways across the state and within the WestPlan MPO area. Each highway with an **I-**, **M-**, or **US-** designation (e.g. US-31, I-96, M-120), is part of this network, which is known as the **State Trunkline System**. The portion of the State Trunkline System in the WestPlan MPO area is comprised of over 107 lane-miles of highway, hundreds of bridges and culverts, signs, traffic signals, safety barriers, sound walls, and other capital that must be periodically repaired, replaced, reconstructed, or renovated. The agency responsible for the State Trunkline System is the Michigan Department of Transportation (MDOT). MDOT has provided the WestPlan MPO with a list of projects planned for the portion of the trunkline system within the WestPlan MPO area over the FY2026-2029 TIP period. As a matter of standard operating procedure, it is assumed that the trunkline project list provided to the WestPlan MPO (and similar lists provided to the other MPOs in the state) is constrained to reasonably available revenues.

### **Innovative Financing Strategies--Highway**

Several innovative financing strategies have been developed over the past two decades to help stretch limited transportation dollars. Some are purely the 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 must demonstrate *maintenance of effort* when using toll credits—in other words, each state must show that the toll money is being used for transportation purposes and that it is not reducing its 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 four highway bridge crossings and one tunnel crossing between Michigan and Ontario. Toll credits have also helped to partially mitigate highway-funding shortfalls in Michigan, since sufficient non-federal funding has frequently been unavailable in past years to match all the federal funding apportioned to the state.

***State Infrastructure Bank (SIB):*** Established in most states, including Michigan.<sup>2</sup> 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 with a 25-year loan period to public entities such as regional planning commissions, state agencies, transit agencies, railroads, and economic development corporations. Private and nonprofit corporations developing publicly

---

<sup>2</sup> FHWA Office of Innovative Program Delivery. “Project Finance: An Introduction” (FHWA, 2012).

owned facilities may also apply.

***Transportation Infrastructure Finance and Innovation Act (TIFIA):*** This nationwide program 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 credit of the federal government to fund finance projects at far more favorable terms than they would otherwise be able to do on their own. Repayment of TIFIA funding 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.

***Bonding:*** Bonding is a form of borrowing where the borrower issues (sells) IOUs for portions of the debt it is incurring, called *bonds*, to willing purchasers of the debt. The borrower is then obligated to repay lenders (bondholders) the principal and an agreed-upon rate of interest over a specific time. The amount of interest a bond issuer (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. 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 that could otherwise pay for future projects must instead be reserved for paying the bonds' principal and interest. Michigan's Act 51 law requires that funding for the payment of bonds and other debts be taken off the top of motor fuel tax and vehicle registration receipts collected before the distribution of funds for other transportation purposes. Therefore, the advantages of completing a project more quickly need to be carefully weighed with the disadvantages of reduced resources in future years.

***Advance Construct/Advance Construct Conversion:*** This strategy allows a community or agency to build a transportation project with its own funds (advance construct) and then be reimbursed with federal-aid funds for the federal share of the project 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 construction allows for the construction of highway projects before federal funding is available; however, the agency must be able to build the project using its own resources up front and then be able to wait for federal reimbursement in a later year.

***Public-Private Partnerships (P3):*** Funding available through traditional sources, such as motor fuel taxes, is not keeping pace with the growth in transportation system needs. Governments are increasingly turning to public-private partnerships (P3) to fund large transportation infrastructure projects. An example of a public-private partnership is Design/Build/Finance/Operate (DBFO). In this arrangement, the government keeps ownership of the transportation assets, but hires one or more private companies to design the facility, secure funding, construct the facility, and then operate it, usually for a set period. The private-sector firm is repaid mostly through toll revenue generated by the new facility.<sup>3</sup>

### **Operations and Maintenance of the Federal-Aid Highway System**

---

<sup>3</sup> [http://www.fhwa.dot.gov/ipd/p3/defined/design\\_build\\_finance\\_operate.htm](http://www.fhwa.dot.gov/ipd/p3/defined/design_build_finance_operate.htm)

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* include those items necessary to keep the highway infrastructure functional for vehicle travel, other than the construction, reconstruction, repair, and rehabilitation of the infrastructure. Examples include, but are not limited to, snow and ice removal, pothole patching, rubbish removal, maintaining rights-of-way, maintaining traffic signs and signals, clearing highway storm drains, paying the electrical bills for streetlights 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-aid highway funds cannot be used for operations and maintenance. Since the TIP only includes federally funded capital highway projects (and non-federally funded capital highway projects of regional significance), it does not include operations and maintenance expenses. 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 FY2026-2029 TIP period. This section of the Financial Plan provides an estimate of the cost of operations and maintenance in the WestPlan MPO area and details the method used in the estimation.

MDOT Grand Region estimates that its operations and maintenance costs were approximately \$10,000 per lane-mile in FY2026. Using the FY2026 estimate of \$4.4 million as a baseline, costs were increased 4% per year over the life of the FY2026-2029 TIP to adjust for inflation (also known as *year of expenditure* adjustment—see **Year of Expenditure (Inflation) Adjustment for Project Costs** section below) to provide a total of \$18,684,441 estimated operations and maintenance costs on the state trunkline system in the WestPlan MPO area from FY2026 through FY2029.

Local Act-51 Road agencies (county road commissions, incorporated cities, and incorporated villages) are responsible for operating and maintaining the roads they own, including those roads they own that are designated as part of the federal-aid system. The main source of revenue available to these agencies to operate and maintain the roads is the Michigan Transportation Fund (MTF). The estimate of available funding assumes that each lane-mile of road in the system has approximately equal operations and maintenance cost. There are 845 lane miles of locally owned road on the federal-aid network in the WestPlan MPO area. Therefore, applying the per-lane-mile cost of maintenance derived from MDOT Grand Region's FY2026 estimate to the number of lane-miles of locally owned federal-aid eligible road in the WestPlan MPO area yields an annual maintenance cost of \$8.45 million in the base year of FY2026, or a total of \$35,152,000 over the life of the FY2026-2029 TIP, adjusted for year of expenditure.

Finally, adding together the trunkline and locally owned per-lane mile costs yields an estimated total of \$12,850,000 in the base year of FY2026 for operations and maintenance costs on the entire federal-aid system in the WestPlan MPO area, or a total of \$53,836,441 over the life of the FY2026-2029 TIP, adjusted for year of expenditure.

## **Highway Commitments and Projected Available Revenue**

The FY2026-2029 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 relevant plan period. MDOT issued each MPO in the state, including the WestPlan MPO, a local program allocations table covering the years of the FY2026-2029 TIP. These allocations specify what is reasonably expected to be available to local agencies in the Surface Transportation Block Grant (STBG) -Urban and -Rural Program, National Highway Performance Program, Carbon Reduction, CMAQ, Transportation Economic Development (TEDF) Category C Program, and the TEDF Category D Program. Projects using these funds are constrained to the amounts in the allocations table, plus any funding from the *state* TEDF Category C or Category D Programs.

Funds for projects that are competitively awarded are reasonably expected to be available only after they have been officially awarded. This includes all Safety, TAP, and Bridge projects. The only projects using these funds in the TIP are those that have already been awarded. Therefore, these projects are self-constrained to available revenue.

Appendix A shows a list of all approved projects with funding sources for the FY2026-2029 TIP.

### **Year of Expenditure (Inflation) Adjustment for Project Costs**

Federal regulations require that, before being programmed in the TIP, the cost of each project is adjusted to the expected inflation rate (known as year of expenditure, or YOE) in the year in which the project is programmed, as opposed to the cost of the project in present-day dollars, as mentioned in the section entitled **Operations and Maintenance of the Federal-Aid Highway System**, above. As with the projection of available funding, the projected rate of inflation is determined in a cooperative process between MDOT and MTPA. All local road agencies use the same 4% annual inflation rate as MDOT to determine YOE costs. As an example, if a project costs \$750,000 in the first year of the TIP, the same project is projected to cost \$843,648 in the fourth year of the TIP, at a 4% YOE rate. This is done to provide a more realistic estimate of a project’s cost at different points in time. Because of the constant pressure of inflation on all goods and services in the economy, it is preferable to build a project as close to the present day as possible; thus, the attraction of bonding as a funding strategy (see the **Innovative Financing Strategies—Highway** section above). This also demonstrates the fundamental problem facing infrastructure funding—the rate of inflation (standardized at 4% for MDOT and local agencies) is higher than the expected growth in tax revenues (standardized at 2%). Transit projects have a different inflation rate that reflects the different goods and services necessary to operate transit systems, as opposed to road networks.

### **Demonstration of Fiscal Constraint of the FY2026-2029 TIP —Highway Projects**

This financial plan is required to show that the cost of highway projects in the FY2026-2029 TIP does not exceed the amount reasonably expected to be available to fund those projects. This is known as a *demonstration of fiscal constraint* and is also required for transit projects (see below). Appendix A of this financial plan compares the amount of funding from each of the federal, state, and local highway funding sources programmed in TIP highway projects to the amount of highway funding source expected to be available in each year of the FY2026-2029 TIP period. The table in Appendix A demonstrates that the FY2026-2029 TIP is fiscally constrained for highway—the amount programmed using each highway funding source does not exceed the amount reasonably expected to be available from that highway funding source in any of the four years of the TIP.



## Part B: Transit Funding

### Sources of Federally Generated Transit Funding

Federally generated revenue for transit comes from federal motor fuel taxes, just as it does for highway projects. Some of the federal motor fuel tax collected nationwide is deposited in the Mass Transit Account of the Highway Trust Fund (HTF). Federal-aid transit funding is like federal-aid highway funding in that there are several core programs where money is distributed on a formula basis and other programs that are competitive in nature. Here are brief descriptions of some of the most common federal-aid transit programs.

***Section 5307 Urbanized Area Formula Grants:*** This is the largest single source of transit funding that is apportioned to transit agencies in Michigan. Section 5307 funds can be used for capital projects (such as bus purchases and facility renovations), transit planning, and projects eligible under the former Section 5316 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 in urbanized areas with populations less than 200,000. One percent of the 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. Each State's share of a multi-state urbanized area was calculated based on the percentage of population attributable to the States in the UZA, as determined by the 2020 Census. Urbanized areas of 200,000 population or larger receive their own apportionment directly from FTA. Apportionments for areas between 50,000 and 199,999 population are allocated to each urbanized area by FTA and distributed by MDOT to transit agencies in these urbanized areas. In the WestPlan MPO area, the Muskegon Area Transit System (MATS) and the Harbor Transit Multi-Modal Transportation System (Harbor Transit) receive Section 5307 funding.

***Section 5310, Enhanced Mobility of Seniors & Individuals with Disabilities:*** Funding for traditional projects to meet the transportation needs of older adults and people with disabilities when transportation service is unavailable, insufficient, or inappropriate to meet these needs. Section 5310 incorporates activities from the former Section 5317 New Freedom program exceeding the Americans with Disabilities Act (ADA) requirements. Urbanized areas in the state with populations over 200,000 receive an apportionment of Section 5310 funding directly from the federal government. The State of Michigan allocates funding in remaining areas of the region on a per-project basis, and the Grand Rapids urbanized area where the urban transit recipient has designated MDOT to continue the funding allocation.

***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 fifteen percent of its Section 5311 funding on intercity bus transportation. The State of Michigan operates this program on a continuation basis.

***Section 5337, State of Good Repair Grants:*** Funding to state and local government 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 is distributed via a formula accounting for vehicle revenue miles and directional route miles; fifty percent is based on ratios of past funding received. The Detroit Transportation Corporation (People Mover) is currently the only recipient of Section 5337 funding in the State of Michigan.

**Section 5339 (a), Buses and Bus Facilities Formula Program:** Funds are made available under this program to replace, rehabilitate, and purchase buses and related equipment, as well as construct bus-related facilities. Each state receives two fixed amounts, amount apportioned to state governors for urbanized areas 50,000 to 199,999 in population and amount for state/territory allocation respectively. These amounts are sub-allocated by MDOT to the agencies in these urbanized areas based on their percentage of Section 5307 allocation and to the rural areas based on the project priority as determined by MDOT. Amounts apportioned to state governors for urbanized areas 50,000 to 199,999 in population are received directly by transit agencies in these areas. In addition to formula allocation, this program includes two discretionary components: the Bus and Bus Facilities Discretionary Program (5339(b)) and the Low or No Emissions Bus Discretionary Program 5339(c). Section 5339(b) Bus and Bus Facilities Competitive Program and Section 5339(c) Low or No Emission Grant Program are distributed by FTA with Notice of Funding Opportunities.

**Flex Funding.** In addition to these funding sources, transit agencies can also apply for Surface Transportation Block Grant Program, Transportation Alternatives Program (TAP), Carbon Reduction Program (CRP), and Congestion Mitigation and Air Quality Improvement (CMAQ) program funds based on the geographic location of the transit agency.

#### **Base and Assumptions Used in Forecast Calculations of Federal Transit Funds**

Each year, the Federal Transit Administration (FTA) issues funding apportionments for states, urbanized areas, and/or individual transit agencies, depending on the regulations for the federal-aid transit funding source in question. Transit agencies use this apportionment information to estimate the amount of federal-aid funding they will receive each year, under the general oversight of MDOT's Office of Passenger Transportation (OPT). Current statewide procedures are to consider the federal amounts programmed into the FY2026-2029 TIP by each transit agency to be constrained to reasonably expected available revenues.

#### **Sources of State-Generated Transit Funding**

Most state-level transit funding is derived from the same source as state highway funding, the state tax on motor fuels and vehicle registration fees. Act 51 stipulates that ten percent of receipts into the MTF, after certain deductions, are to be deposited in a subaccount of the MTF called the Comprehensive Transportation Fund (CTF).<sup>4</sup> This is like the Mass Transit Account of the Federal Highway Trust Fund. Additionally, a portion of the state-level auto-related sales tax is deposited in the CTF.<sup>5</sup> Distributions from CTF are used by public transit agencies for matching federal grants and for operating expenses.

#### **Base and Assumptions Used in Forecast Calculations of State Transit Funds**

MDOT OPT provides each transit agency with estimates of how much CTF funding it will receive and specifies the purpose(s) for which it can be used. For example, some distributed funds are used for local bus operating, while others are used to match federal funding, and yet other CTF funds can be used for a variety of other purposes. In keeping with the general procedures for federal transit funds, the state-generated transit funding amounts programmed into the FY2026-2029 TIP by each agency are constrained to reasonably expected available revenues.

---

<sup>4</sup> However, funding raised through enactment of the transportation laws mentioned earlier cannot be used for public transit, so this will most likely require adjustments to maintain the ten percent rule in Act 51.

<sup>5</sup> Hamilton, William E. *Act 51 Primer* (House Fiscal Agency, February 2007), p. 4.

### **Sources of Locally Generated Transit Funding**

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

### **Base and Assumptions Used in Forecast Calculations of Local Transit Funds**

Locally generated transit funding amounts programmed into the FY2026-2029 TIP by each agency is constrained to reasonably expected available revenues.

### **Innovative Financing Strategies--Transit**

Sources of funding for transit are not limited to the federal, state, and local sources previously discussed. As with highway funding, there are alternative sources of funding that can be utilized for transit capital and operating costs. 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 at 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 in other parts of the transportation system, thus stretching the resources available to maintain the system.<sup>6</sup>

### **Transit Capital and Operations**

Transit expenditures are divided into two basic categories, capital and operations. *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. *Operations* refer to the activities necessary to keep the system operating, such as drivers’ wages and maintenance costs. Most transit agency expenses are usually operating expenses.

### **Demonstration of Fiscal Constraint of the FY2026-2029 TIP —Transit Projects**

This financial plan is required to show that the cost of transit projects in the FY2026-2029 TIP does not exceed the amount expected to be available to fund those projects. This is known as a *demonstration of fiscal constraint* and is also required for highway projects (see above). The table in Appendix B of this financial plan compares the amount of funding from each of the federal, state, and local transit funding sources programmed in TIP transit projects to the amount of each transit funding source reasonably expected to be available in each year of the FY2026-2029 TIP period. The table in Appendix B demonstrates that the FY2026-2029 TIP is fiscally constrained for transit—the amount programmed using each transit funding source does not exceed the amount reasonably expected to be available from that transit funding source in any of the four years of the TIP.

---

<sup>6</sup> FHWA Office of Innovative Program Delivery at [http://www.fhwa.dot.gov/ipd/finance/tools\\_programs/federal\\_aid/matching\\_strategies/toll\\_credits.htm](http://www.fhwa.dot.gov/ipd/finance/tools_programs/federal_aid/matching_strategies/toll_credits.htm).

## ***CHAPTER 3: Consultation and Public Involvement***

### **Introduction**

The **public involvement process** and the **consultation process** are both essential components of developing a Transportation Improvement Plan (TIP), but they serve different functions and target distinct groups of stakeholders. While the consultation process is focused on gathering detailed input from specific, often technical stakeholders, the public involvement process is designed to engage the broader community, particularly residents and local organizations who may not have the same level of expertise but are directly impacted by transportation decisions.

The **public involvement process** focuses on ensuring transparency and accessibility for all residents of the WestPlan MPO area. This emphasizes reaching a wide audience through public meetings, online surveys, social media engagement, and other outreach methods to ensure the public has the opportunity to provide feedback on proposed transportation projects and priorities. These efforts help gather a broad spectrum of opinions and concerns from the general public, encouraging the MPO to address issues such as road safety, public transit access, environmental sustainability, and overall quality of life for residents.

On the other hand, the **consultation process** is more focused on collaborating with stakeholders who have a specific role in the planning, funding, and execution of transportation projects. These stakeholders include state and federal transportation agencies, transit agencies, environmental groups, business organizations, and technical advisory committees. This process ensures that these technical stakeholders have the opportunity to comment on how the TIP projects might affect other local, regional, state, and national issues.

While both processes aim to incorporate feedback into the TIP, the public involvement process prioritizes accessibility and broad engagement, whereas the consultation process centers on expert and organizational input. Both processes are essential, and they complement each other by serving different needs and audiences within the development of the TIP.

### **Public Involvement**

WestPlan is committed to ensuring that citizen input will be utilized prominently throughout the planning processes and contribute to transportation problem identification through public comment periods, public meetings, open houses, and review of the draft document.

WestPlan, as the Metropolitan Planning Organization (MPO), is also federally required to explicitly set forth public participation policies. The standards for this process are found in Title 23 CFR 450.316 which requires that the public have reasonable opportunity to comment on transportation plans and programs.

The Public Participation Plan for the Transportation Decision Making document describes the public participation goals and requirements for WestPlan, including specific details regarding the development of the Transportation Improvement Program (TIP). These guidelines were followed by WestPlan throughout the development of the FY2026-2029 TIP. The update involved a variety of public outreach tools, including announcements on social media, direct emails, public meetings, and an open house.

### **Public Participation Mailing List**

WestPlan maintains an extensive public participation email list that is used to provide information and notice to the public regarding transportation planning activities. The Interested Citizen/Agency list includes many representatives. This list was broken down by type including businesses, chambers of commerce, community organizations (including non-profits, faith-based organizations, etc.), concerned citizens, educational organizations, elected officials, environmental organizations, government entities and organizations, media, organizations serving the disabled, organizations serving senior citizens, transportation related organizations, and tribal organizations. This list is continually maintained and updated regularly.

### **Public Participation in the TIP Process**

To provide the public with fast, easy access to all things related to the TIP update, staff continued to maintain the [wmsrdc.org](http://wmsrdc.org) website throughout the planning process. This included posting announcements for all public participation opportunities, the Public Participation Plan, air quality conformity analysis documents, other relevant background information, past planning documents, and MPO Technical and Policy Committee meeting materials. The WMSRDC website can be found at [wmsrdc.org](http://wmsrdc.org).

In late January 2025, the draft FY2026-2029 TIP project list was approved by the Technical and Policy Committees and was posted at [wmsrdc.org](http://wmsrdc.org). An email including the same information was distributed to the Interested Citizen/Agency list. Press releases were sent to local media and notices were posted on social media.

Once the draft TIP document, demographic analysis, and project list was complete, a 14-day public comment period was held from April 15, 2025, through April 29, 2025. Notices of the public comment period were posted at [wmsrdc.org](http://wmsrdc.org) on April 8, 2025, and sent to all on the Interested Citizen/Agency List. Announcements were also made on social media. Throughout the 14-day public comment period, the draft document was made available for the public to view on the WMSRDC website. In addition, a hard copy of the Draft FY2026-2029 TIP was available at the WMSRDC office with staff available to respond directly to any public questions or concerns.

On April 15, 2025, an open house regarding the draft 2026-2029 TIP was held at the WMSRDC office. The draft 2026-2029 TIP Project List and the draft of the 2026-2029 TIP were available at this meeting, as well as a staff PowerPoint presentation.

The open house was held from 2:00 p.m. to 3:00 p.m. at the WMSRDC office. The WMSRDC office is in an ADA accessible building, which is located along fixed-route bus service lines to increase ease of access. An announcement of the open house was sent to the Interested Citizen/Agency List on April 8, 2025. The announcement included information on how to access the document and other related materials. Concurrent with the meeting announcement mailing, the meeting information, methods for making public comments, and a draft plan were posted at [wmsrdc.org](http://wmsrdc.org).

In addition to the public open house, opportunities for public comment are available at monthly Technical Committee, Policy Committee, and WMSRDC board meetings. Agendas and minutes for these meetings are regularly posted on the [wmsrdc.org](http://wmsrdc.org) website. No written public comments were received during the project list phase or during the official public comment period.

All documents, events, and public comment opportunities were published at [wmsrdc.org](http://wmsrdc.org) throughout the TIP development process and were also made public through press releases to local media. Additionally, to provide ample time for staff to incorporate comments received, WestPlan Policy Committee approval is anticipated on May 21, 2025, which is several weeks after the close of the public comment period.

### **Consultation Process**

The primary goal of the consultation process is to avoid or reduce conflicts with other agencies' plans, programs, or policies related to the Transportation Improvement Program (TIP). The consultation process that WestPlan undertook is based on recommendations from the Federal Highway Administration and the Michigan Department of Transportation. The WestPlan consultation contact list is continually updated to maintain the most accurate and comprehensive list of stakeholders in the MPO. Consulted agencies were notified by WestPlan through an email that informed the consulted agency of the TIP development process, the role of WestPlan, instructions for providing input to the planning process and TIP projects, how to contact WestPlan staff, and the FY2026-2029 project list. This email was shared with 102 agencies.

### **Stakeholder Identification**

There are specific requirements for consulting various agencies and stakeholders during the transportation planning process, as well as the type of information to be shared with them. It is recommended to engage with state, local, Indian Tribes, and private agencies responsible for:

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

### **Summary of Comments**

All written and spoken public comments received, as well as consultation comments, are included in Appendix E.

### **Conclusion**

The public involvement and consultation processes for the WestPlan MPO's FY2026-2029 TIP reflect the diverse needs, priorities, and concerns of stakeholders across the region. While these processes are similar, they target two separate groups of stakeholders. By engaging with a broad range of community members, government agencies, and private sector representatives, as well as the public, the MPO has ensured that the TIP not only addresses current transportation challenges but also prepares the region for future growth and development. Moving forward, the WestPlan MPO remains committed to ongoing engagement with stakeholders to continuously improve the region's transportation infrastructure.

Throughout the FY2026-2029 TIP development, all pertinent public participation information was taken to the WestPlan Technical and Policy Committees for their review and consideration. This committee review



method aided staff during the process, helping to make decisions regarding the plan along the way.

All comments received were reviewed and incorporated into the TIP when and where appropriate. Specifically, all written public comments are recorded in Appendix E. An evaluation of the FY2026-2029 TIP public participation efforts will be made through the Public Participation Plan process to identify areas of success and areas that can be improved upon for future development.

**Figure 2: Consulted Agencies**

<b>CONSULTED AGENCIES</b>		
211 Muskegon	Health West	National Trust for Historic Preservation
AgeWell Services	Holton Branch Library	Newaygo County Road Commission
American Cancer Society	Holton Township	North Muskegon Walker Memorial Library
Baker College	Laketon Township	Norton Lakeshore Examiner
Blue Lake Township	Little River Band of Ottawa Indians	Norton Shores Branch Library
Bureau of Services for Blind Persons	Loutit District Library	Ottawa Conservation District Office
Cedar Creek Township	MDOT-Grand Region	Pioneer Resources
City of Ferrysburg	MDOT-Muskegon Transportation Service Center	Prein & Neuhoff
City of Grand Haven	MIBIZ	Ravenna Independent News
City of Montague	Michigan Department of Community Health	Ravenna Library
City of Muskegon	Michigan Department of Natural Resources	Ravenna Township
City of Muskegon Heights	Mlive	Robinson Township
City of North Muskegon	Montague City Library	Spring Lake District Library
City of Norton Shores	Montague Township	Spring Lake Township
City of Roosevelt Park	MSU Extension	Sullivan Township
City of Whitehall	Muskegon Area Chamber of Commerce	The ARC
Consumers Energy	Muskegon Area District Library	The Chamber of Grand Haven, Spring Lake & Ferrysburg
Crockery Township	Muskegon Area First	Times Indicator
Dalton Township/Twin Lake Library	Muskegon Area ISD	U.S. Department of Interior Fish & Wildlife Services
Disability Network of West Michigan	Muskegon Area Transit System	U.S. Environmental Protection Agency - Region 5
Egelston Township	Muskegon Charter Township	U.S. Fish & Wildlife Service
Egelston Township Library	Muskegon Chronicle	Village of Casnovia
Environmental Protection Agency-Reg 5	Muskegon Community College	Village of Fruitport
Fish and Wildlife Service	Muskegon Community College Library	Village of Lakewood Club
Fruitland Township	Muskegon Conservation District	Village of Ravenna
Fruitport Charter Township	Muskegon County	Village of Spring Lake
Fruitport District Library	Muskegon County Cooperating Churches	WBLV
Goodwill Industries of West Michigan	Muskegon County Environmental Coordinating Council	West Michigan Clean Air Coalition
Grand Haven Charter Township	Muskegon County Health Department	West MI Lakeshore Assoc. of Realtors
Grand Haven Dept. of Public Works	Muskegon County Road Commission	West Michigan Environmental Action Council
Grand Haven Memorial Airpark	Muskegon Heights Library	White Lake Beacon, Inc.
Grand Haven Tribune	Muskegon Innovation Hub - GVSU	White River Township
Hackley Public Library	Muskegon NAACP	WMKG-TV40
Harbor Transit	Muskegon Township Library	WSHZ

### Figure 3: Consultation Email

**Joel Fitzpatrick**

---

**To:** Joel Fitzpatrick  
**Subject:** Consultation Sought on Transportation Planning Document

#### **Consultation Sought on Transportation Planning Document**

The Muskegon and Northern Ottawa County Metropolitan Planning Organization (MPO), which is responsible for transportation planning in the area, is seeking consultation regarding the development of the Fiscal Year 2026-2029 Transportation Improvement Program (TIP). In developing transportation plans and the TIP, the MPO consults with agencies and officials responsible for other planning activities within the area that are affected by transportation and coordinates the TIP planning processes with such planning activities. The timeline for the TIP consultation process is April 15 – April 29, 2025.

As part of the consultation process, the TIP is being developed in a cooperative effort between federal, state, and local officials and serves as the final link in the transportation planning process. Its primary purpose is to identify transportation programs and projects to be funded with federal aid in accordance with federal law and regulations. This plan is an outline of the transportation needs of Muskegon and Northern Ottawa County for the next four years.

A draft list and map of transportation projects being submitted into the TIP is attached for your review.

A draft document of the TIP is being developed. The public review period for the TIP document will be April 15 – April 29, 2025. An email notification and a link to the draft document will be distributed.

The MPO staff is available for individual meetings and/or phone or email discussions with those interested in pursuing this consultation opportunity regarding the TIP development and planning process.

You are receiving this correspondence because your agency or organization are considered important in the transportation planning process. For more information, to schedule a meeting, or begin a dialogue, contact Joel Fitzpatrick, Transportation Planning Director, WMSRDC, 316 Morris Avenue Suite 340, P.O. Box 387, Muskegon Michigan 49440, (231) 722-7878 ext. 160, or by email at [jfitzpatrick@wmsrdc.org](mailto:jfitzpatrick@wmsrdc.org)

Joel Fitzpatrick  
Transportation Planning Director  
West Michigan Shoreline Regional Development Commission  
316 Morris Ave, Suite 340  
Muskegon MI 49440

(231) 722-7878 ext. 160

## **CHAPTER 4: Demographic Information**

The projects outlined in FY2026-2029 encompass a wide range of project types. To better understand the various potential impacts of these projects on the communities served by WestPlan, demographic information of the WestPlan boundary was compiled and analyzed via GIS. There were several specific demographics that were considered in this analysis including marriage rates, county birth rates, age, minority populations, impoverished populations, and disabled-persons populations.

### **Demographic Analysis**

These groups were chosen due to their significant need for access to a multi-modal transportation system. In this analysis, the percentages of the total population that are married, elderly, disabled, low-income, or identify as a minority were gathered from the US Census Bureau's Decennial Census and American Community Surveys. The county birth rate data was compiled through the State of Michigan Vital Statistics database. Marriage statistics are the percentage of the population over the age of 15 that are currently married. Birth rates are the number of live births per 1,000 residents. Elderly statistics are the percentage of the total population that is of the age of 65 or older. Minority statistics are the percentage of the total population that identify as a minority. For this analysis, individuals belonging to a minority group were grouped into one category and include individuals who identified as: Hispanic or Latino of any race, Black or African American, American Indian or Alaska Native, Asian, Native Hawaiian or other Pacific Islander, or another race other than white. Low-income statistics are the percentage of the total population that has an income that is at or below the poverty level as established by the federal government. Disability statistics are the percentage of the total population that has a non-institutional disability.

Each demographic, excluding county birth data, was mapped at the census tract level and displayed using graduated values with the Jenks Natural Breaks classification system. This system is a technique that optimizes the arrangement of values into "natural" classes based on the data within the set. The county birth data is mapped at the county level using their unique values. The FY2026-2029 TIP projects were mapped and overlaid with demographic layers. If a project resided within a census tract displaying the lowest data class, it was not considered to be a project impacting that demographic and was not analyzed further. If a project was in a census tract displaying any data class other than the lowest class, they were considered to have an impact on that demographic and were included in further analysis. These projects were then subjected to visual review to determine if any of the following three questions were true:

- 1) Were there any disproportionately high adverse impacts on various populations?
- 2) Do any projects restrict access to the transportation system?
- 3) Was there any noticeable neglect of the transportation system in areas of various populations?

This analysis looked at all TIP projects within the WestPlan MPO, Figure 4.

### **Results & Discussion**

The following sections present the initial findings and their implications from the visual analysis conducted according to the procedures outlined in this chapter. All Surface Transportation Block Grant (STBG), Congestion Mitigation and Air Quality (CMAQ), Carbon Reduction (CR), MDOT, and Transit projects

were included. There were 116 projects in total. It is important to note that the analysis determined there are no projects that create adverse impacts to the access of facilities to any of the demographic groups analyzed. Restricting access to the transportation systems involves the closure of streets or interchanges that affect public transportation access, and the FY2026-2029 projects do not include any permanent closures along the transportation system.

### ***Marriage Rates***

There are 75 TIP projects that are in areas that have a married population above 15% as shown in Figure 5. After evaluating these 75 projects, it has been determined that there will be minimal negative impacts from noise, right-of-way acquisition, or pollution. None of the roadway projects require right-of-way acquisition, and most involve either reconstructing or resurfacing existing roads. The analysis has confirmed that there are no disproportionately high adverse impacts on the areas that have a married population above 15% immediately affected by these TIP projects.

The 75 projects within areas that have a married population above 15% make up 65% of all the projects outlined in this TIP. This proportion indicates that the transportation system is not being neglected in these areas.

### ***Birth Rates***

Of the identified projects contained in the WestPlan FY2026-2029 TIP, there are 77 projects that were in Muskegon County that experienced an annual live birth rate of 10.5 per every 1,000 residents as shown in Figure 6. The remaining 39 projects are in Ottawa County that experienced an annual live birth rate of 10.1 per 1,000 residents. Many of the projects are in areas that are experiencing relatively high birth rates and thus can be indicative of investment in growing communities. None of the roadway projects require right-of-way acquisition, and most involve either reconstructing or resurfacing existing roads. The analysis has confirmed that there are no disproportionately high adverse impacts on areas with a high relative birth rate immediately affected by these TIP projects.

The 77 projects within the county that are experiencing higher relative birth rates make up 66% of the projects outlined in this TIP. This proportion indicates that the transportation system is not being neglected in these areas.

### ***Elderly Populations***

Of all the identified projects, 65 of which were fully or partially within areas where the population over the age of 65 exceeds 15%, as shown in Figure 7. It has been determined that there will be minimal negative impacts from noise, right-of-way acquisition, or pollution. None of the roadway projects require right-of-way acquisition, and most involve either reconstructing or resurfacing existing roads. The analysis of projects in these areas has confirmed that there are no disproportionately high adverse impacts on the areas where the population over the age of 65 exceeds 15% immediately affected by these TIP projects.

The 65 projects within areas with higher levels of people over the age of 65 make up 56% of the projects outlined in this TIP. This proportion indicates that the transportation system is not being neglected in these areas.

### ***Low-Income Populations***

There are 71 projects that are fully or partially within census tracts that experience a population above 15% that are low income, as shown in Figure 8. None of the roadway projects require right-of-way acquisition, and most involve either reconstructing or resurfacing existing roads. Therefore, this analysis has confirmed that there are no disproportionately high adverse impacts on the low-income areas immediately affected by these TIP projects.

As previously stated, 71 of the 116 TIP projects (61%) are within or partially within the low-income areas. The proportion of projects in low-income areas indicates that the transportation system is not being neglected in these regions.

### ***Minority Populations***

Of the projects contained in the FY2026 - 2029 TIP, at least 53 are fully or partially within a minority area. The projects in these areas will have minimal to no impact on neighboring communities regarding noise, right-of-way acquisitions, or pollution. An analysis of each individual roadway project, as shown in Figure 9, has determined that there are no disproportionately high adverse impacts on the minority areas immediately affected by these TIP projects.

These 53 projects located in minority areas represent 46% of the projects in the FY2026-2029 TIP. After analysis, it has been determined that the transportation system in minority areas is not being neglected.

### ***Disabled Persons***

There are 81 projects that were fully or partially within areas that has a high population of disabled persons (>10%), as shown in Figure 10. After evaluating these 81 projects, it has been determined that there will be minimal negative impacts from noise, right-of-way acquisition, or pollution. None of the roadway projects require right-of-way acquisition, and most involve either reconstructing or resurfacing existing roads. An analysis of each individual roadway project has confirmed that there are no disproportionately high adverse impacts on the low-income areas immediately affected by these TIP projects.

These 81 projects located in areas with a high percentage of disabled persons represent 70% of the projects in the FY2026-2029 TIP. After analysis, it has been determined that the transportation system in these areas is not being neglected.

### ***Conclusions***

After a thorough analysis of the FY2026-2029 TIP project list, it's confirmed that the proposed roadway and transit projects have minimal negative impacts on several populations that rely on the transportation system while simultaneously investing in areas that are experiencing growth, as shown by 65% and 66% of all projects being in areas with many married individuals and high birth rates, respectively. These projects also offer an improvement to the safety and quality of the multi-modal transportation system for all individuals not included in this analysis. To ensure that the FY2026-2029 TIP provides a comprehensive and efficient plan of investment, WestPlan's Consultation and Public Participation Plans were used to gather input from stakeholders and the community. This outreach aimed to understand the potential effects and impacts of the proposed projects on various communities who were and were not included in this chapter, ensuring all concerns and needs of the people throughout WestPlan were addressed and considered.



Figure 4: WestPlan MPO



Figure 5: TIP Projects & Married Populations

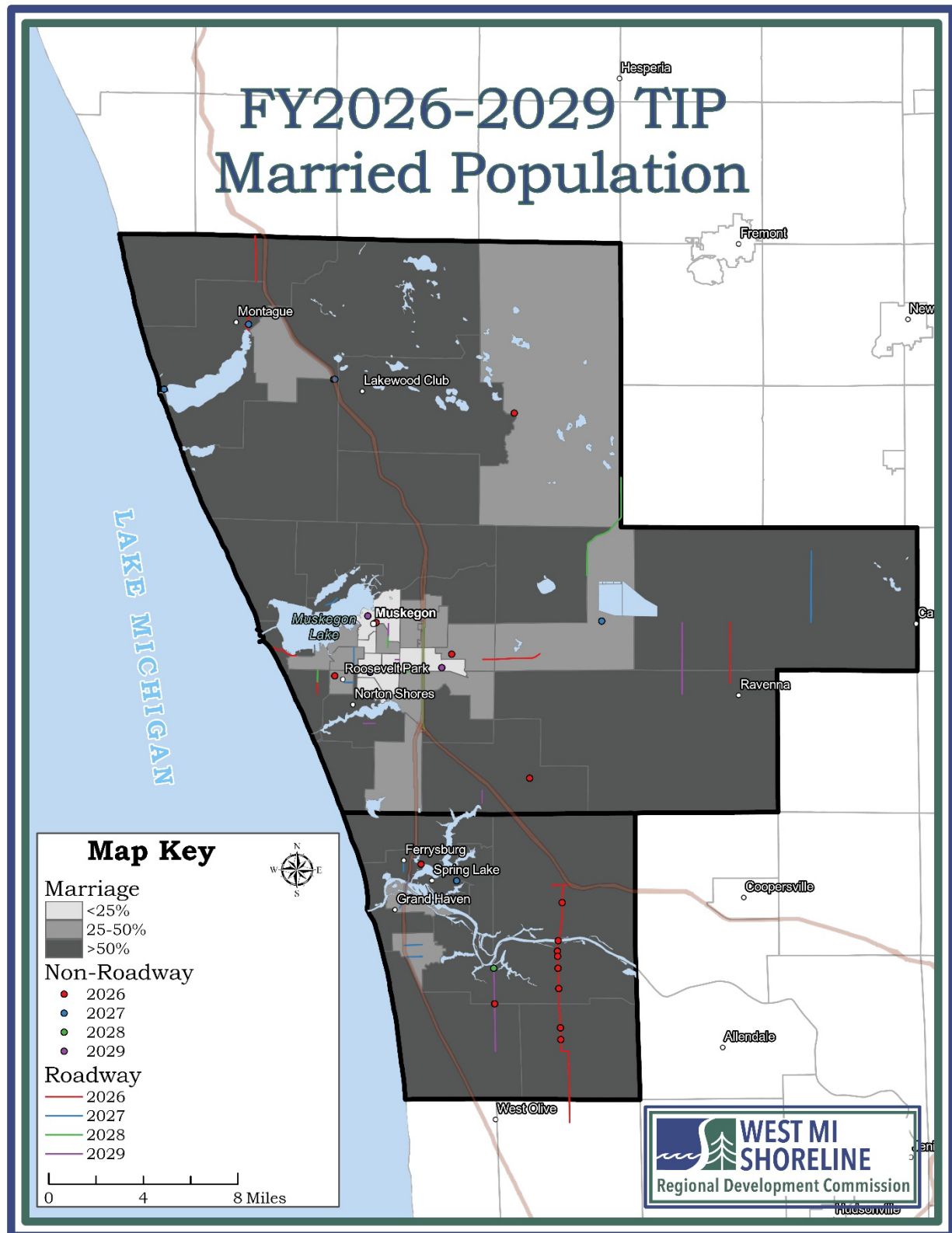


Figure 6: TIP Projects & Birth Rates

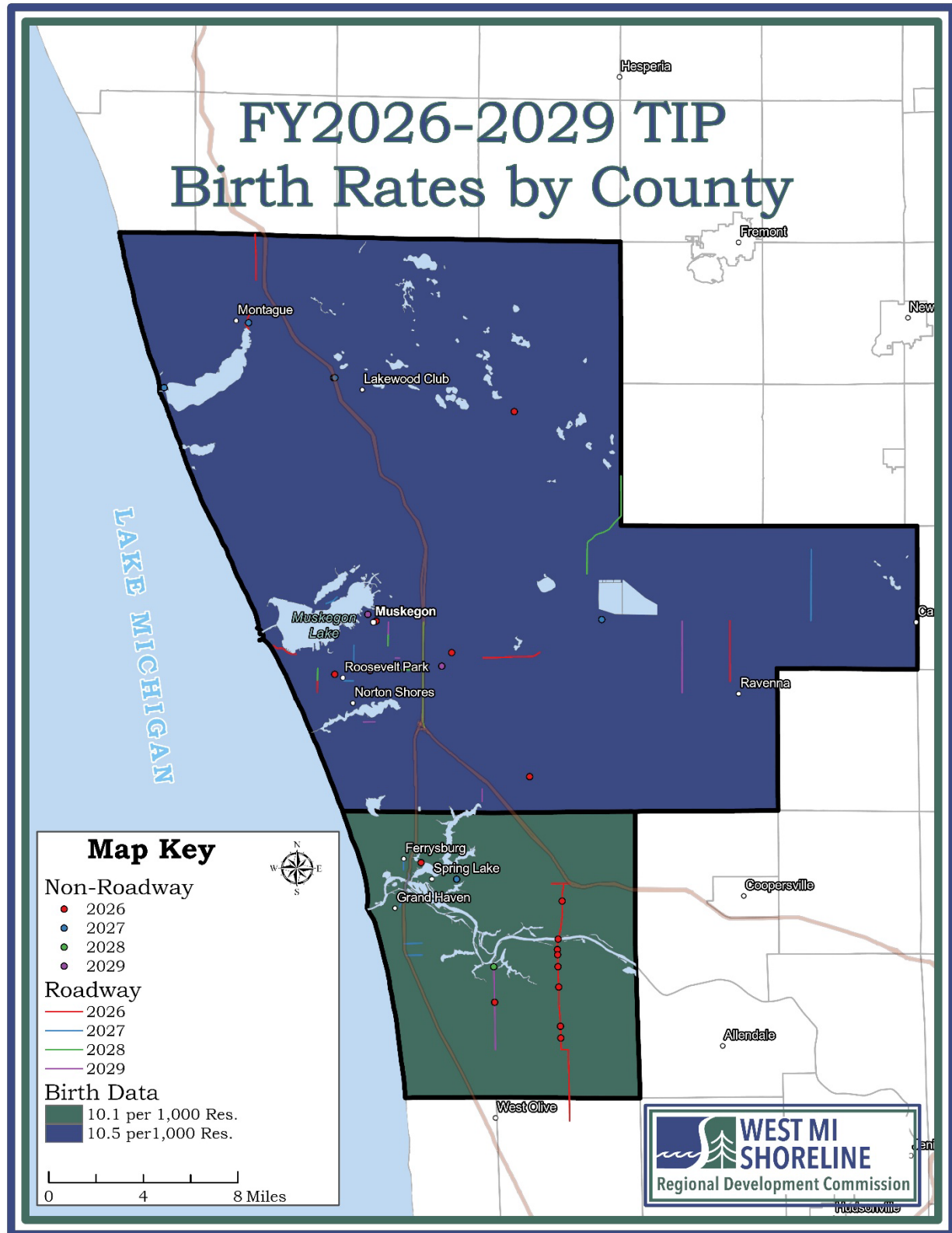


Figure 7: TIP Projects & Elderly Populations

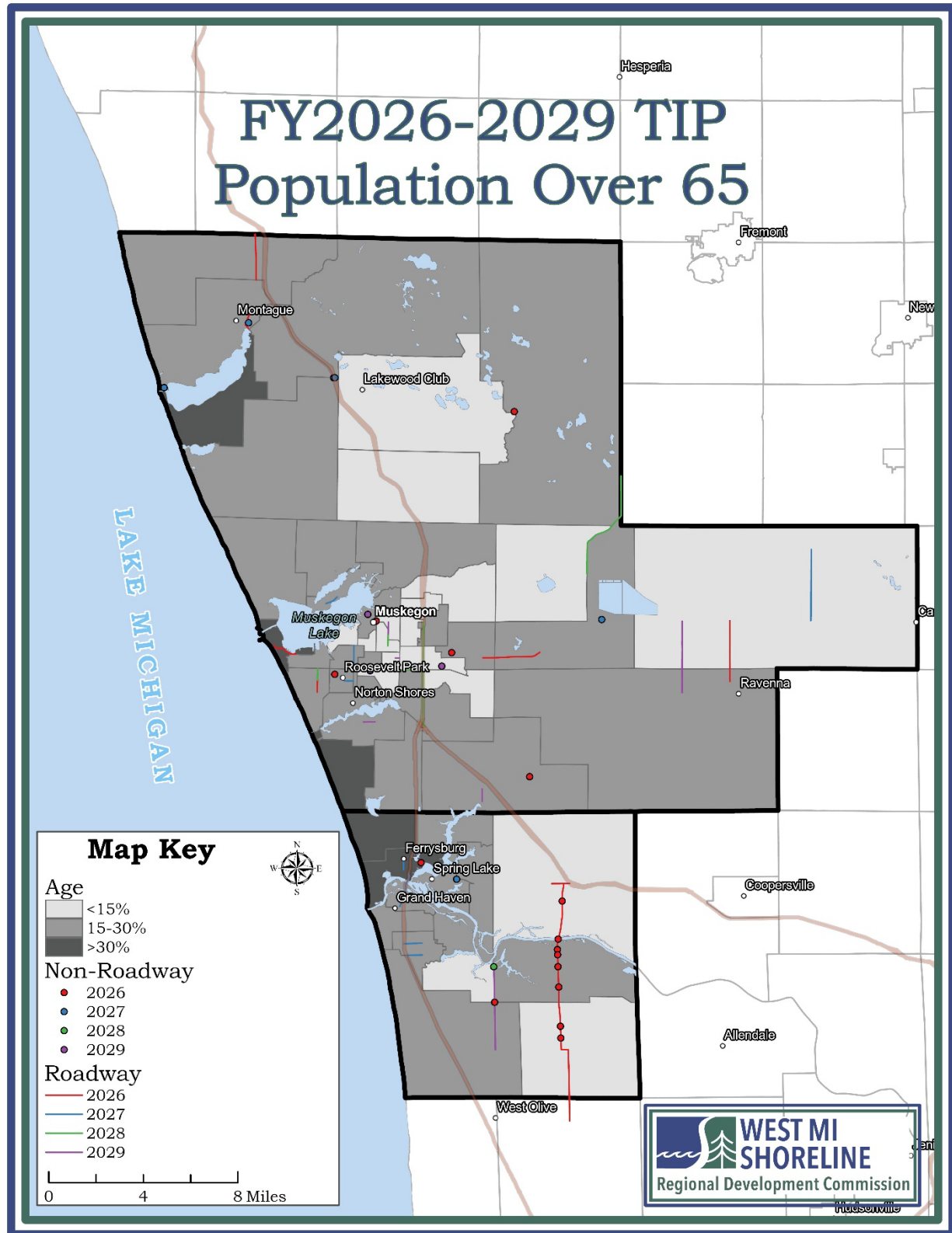




Figure 8: TIP Projects & Low Income Populations

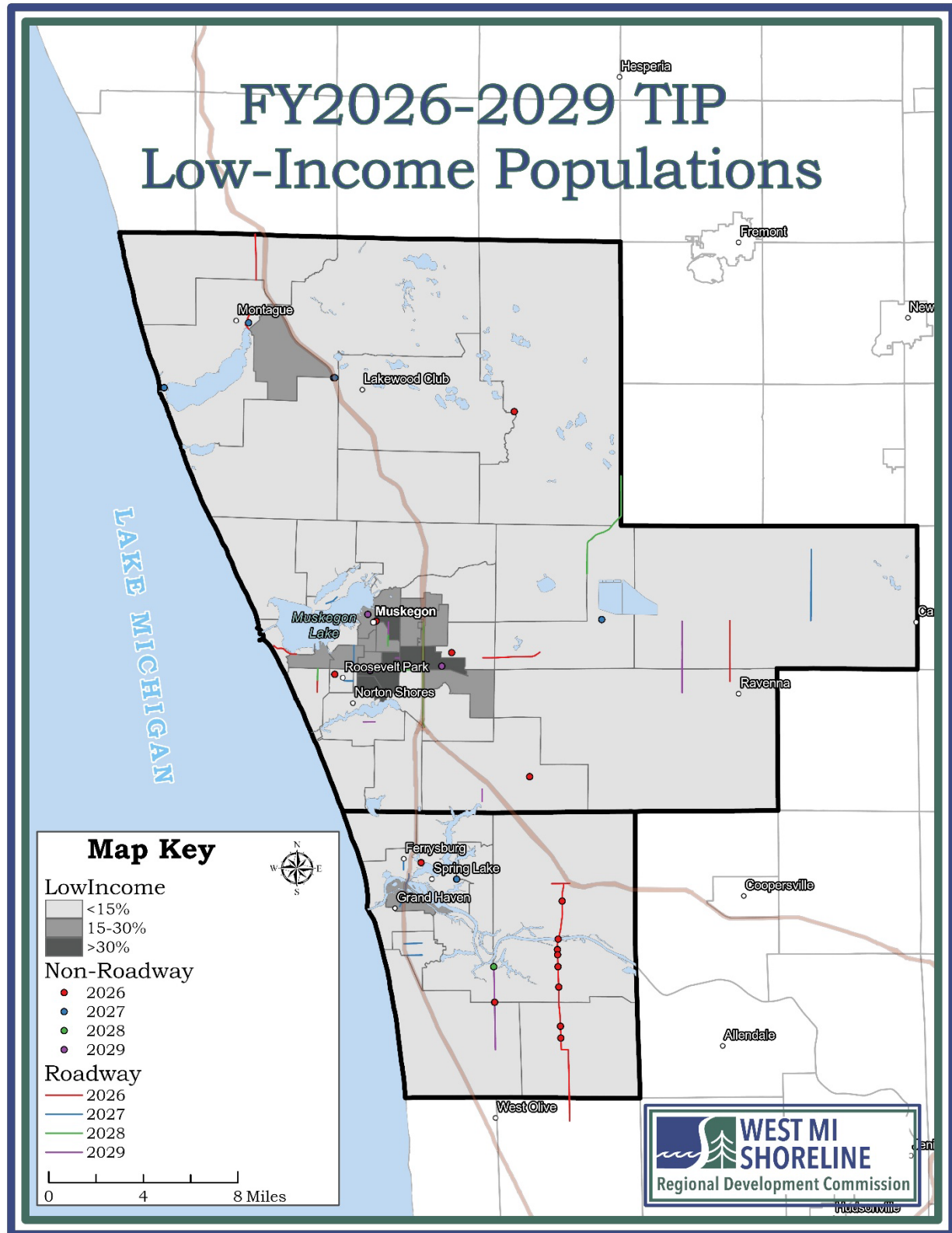


Figure 9: TIP Projects & Minority Populations

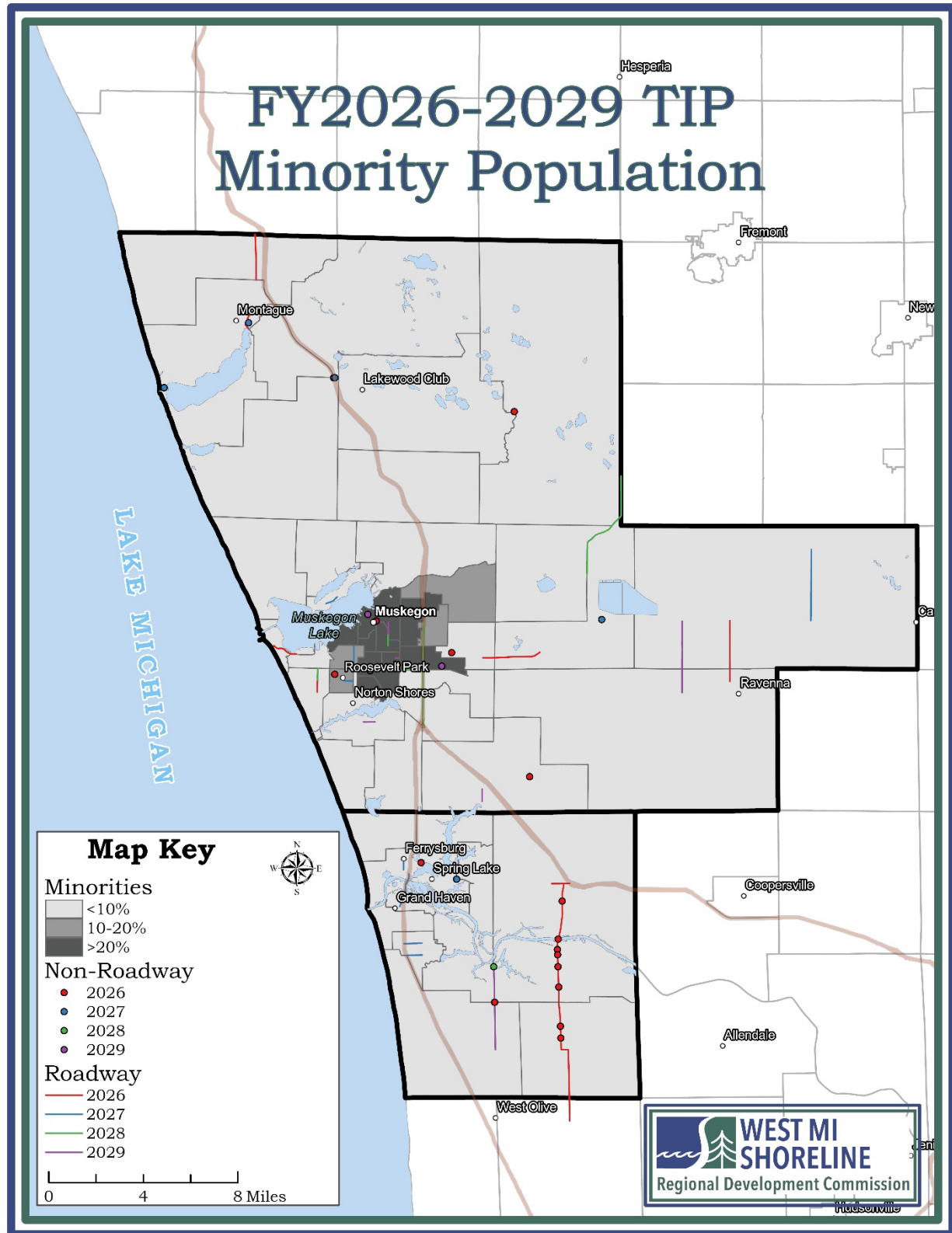
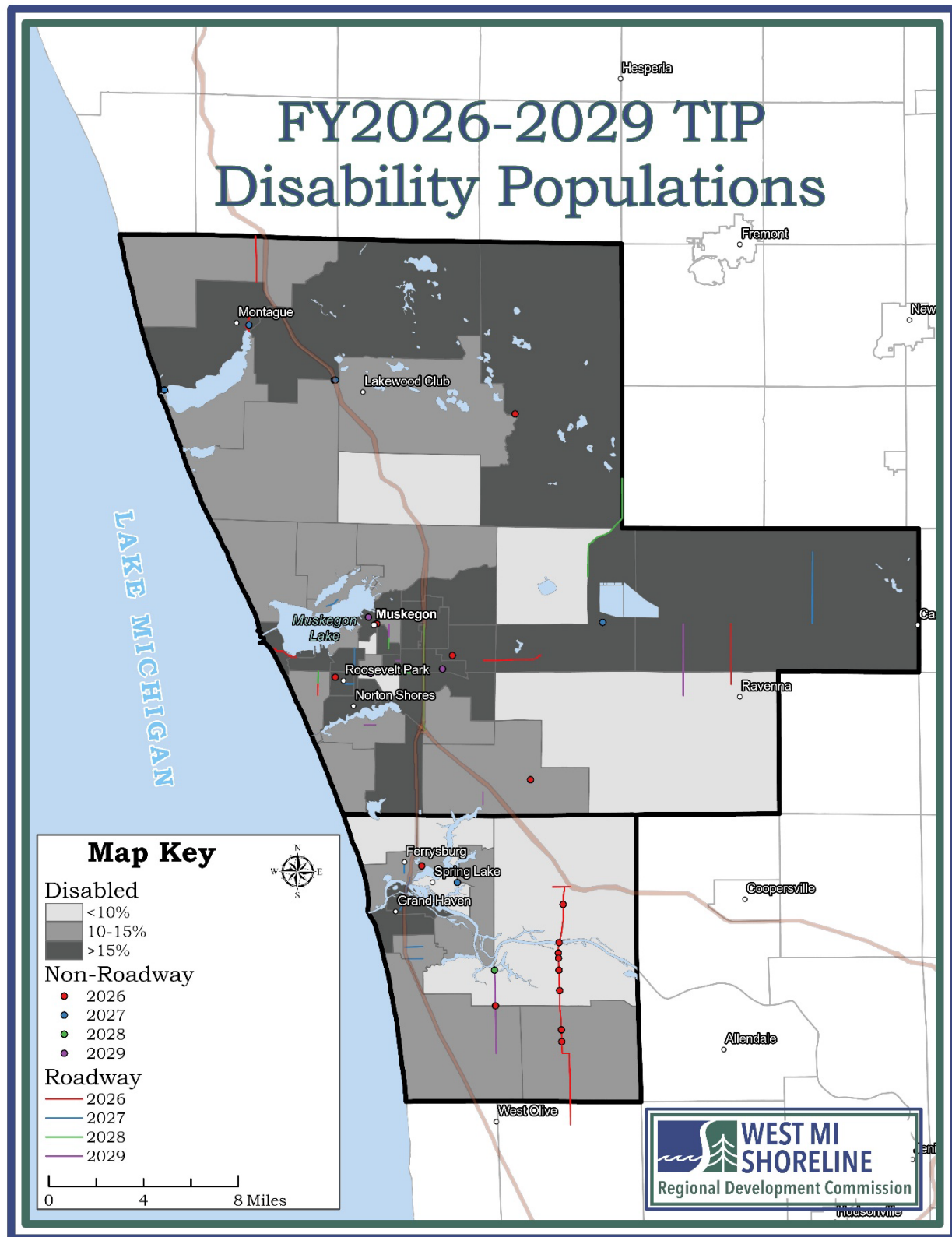


Figure 10: TIP Projects & Disabled Populations



## CHAPTER 5: Performance Measures (FY2026-2029 TIP)

Federal transportation legislation established a performance-based planning framework and target setting requirements for states and Metropolitan Planning Organizations (MPOs). These requirements are focused on several national goals which include the following categories, shown below in **Figure 11**:

**Figure 11: Performance Measures and Targets**

Performance Measure	Performance Targets
Safety Performance	<ul style="list-style-type: none"> <li>• Number of fatalities</li> <li>• Rate of fatalities</li> <li>• Number of serious injuries</li> <li>• Number of non-motorized fatalities and non-motorized serious injuries</li> </ul>
Pavement and Bridge Condition	<ul style="list-style-type: none"> <li>• Percent NHS bridges in good and poor condition</li> <li>• Percent interstate pavement in good and poor condition</li> <li>• Percent non-interstate NHS pavement in good and poor condition</li> </ul>
System Performance and Freight Reliability	<ul style="list-style-type: none"> <li>• Percent of person-miles traveled on the interstate that are reliable</li> <li>• Percent of person-miles traveled on the non-interstate NHS that are reliable</li> <li>• Truck travel-time reliability</li> </ul>
Congestion Mitigation and Air Quality	<ul style="list-style-type: none"> <li>• Peak hour excessive delay per capita</li> <li>• Percent of non-single occupancy vehicle travel</li> <li>• Total emissions reduction</li> </ul>
Public Transportation	<ul style="list-style-type: none"> <li>• Transit Asset Management (TAM) Plans (rolling stock, equipment, facilities, infrastructure)</li> <li>• State of Good Repair measures are identified by individual transit providers as part of TAM Plan</li> <li>• Public Transportation Agency Safety Plan (Fatalities, Injuries, Safety events, System reliability)</li> </ul>



## Safety Performance Measures

In March 2016, the Federal Highway Administration (FHWA) published in the Federal Register (81 FR 13722) a final rule revising 23 CFR part 924 and 23 U.S.C. 148 Highway Safety Improvement Program (HSIP) to incorporate new statutory requirements of MAP-21 and the FAST Act. The HSIP focuses on reducing fatalities and serious injuries on all public roads through targeted investment in infrastructure programs and projects to improve safety. In August of 2024, MDOT released their FY2025 Safety Performance Measure Targets, shown below in **Figure 12**, based on a 5-year rolling average baseline trend. On January 15, 2025, the WestPlan Policy Committee voted to exercise its option to “support the state targets” for the 5 categories of safety information. Safety targets are required to be developed by the state and responded to by the MPOs each year.

**Figure 12: Michigan State Safety Targets - Calendar Year 2025**

Safety Performance Measure	Baseline Condition	2025 State Safety Target
Fatalities	1,085.2	1,098.0
Fatality Rate	1.137	1.113
Serious Injuries	5,727.8	5,770.1
Serious Injury Rate	5.988	5.850
Non-motorized Fatalities & Serious Injuries	743.0	728.3

The FY2026-2029 Transportation Improvement Program (TIP) includes projects which are anticipated to produce safety benefits to the transportation system which are illustrated below in **Figure 13**.

**Figure 13: FY2023-2026 TIP Specific Safety Related Projects**

Year	Project	Description	Safety Benefit
2026	M-45 & M-46	Non-Freeway Signing Upgrade	Sign upgrades to improve visibility and safety
2026, 2027	Grand Region-Regionwide	Longitudinal pavement marking application	Reduce the potential for crashes along multiple roadways with dangerous sight distances
2026	US-10/US-31 BL	Sign Upgrades Regionwide	Sign upgrades to improve visibility and safety
2026	Lincoln Street	Construct Roundabout	Intersection Safety Improvements
2026, 2027	M-104 @ Fruitport Road	Traffic signal modernization at intersection	Provide for better traffic flow, thereby reducing the potential for crashes at the intersection
2026, 2027, 2029	US-31	Traffic and Safety- Signs	Sign upgrades to improve visibility and safety

2026	Muskegon County Multiple Locations	Horizontal Curve	Reduce the potential for crashes along multiple roadways
2026	Muskegon County Multiple Locations	Intersection Signs	Sign upgrades to improve visibility and safety
2028	144 <sup>th</sup> Ave at Mercury Drive	Construct Roundabout	Intersection Safety Improvements
2027	Henry Street	Signal Upgrade and Interconnect	Provide for better traffic flow, thereby reducing the potential for crashes at the intersection
2027	Airline Road	Construct Roundabout	Intersection Safety Improvements
2027	Third Avenue	Signal Upgrade and Interconnect	Provide for better traffic flow, thereby reducing the potential for crashes at the intersection
2026	US-31 S	Traffic signal modernization at intersection	Provide for better traffic flow, thereby reducing the potential for crashes at the intersection

In addition to the specific projects listed in **Figure 13**, WestPlan will continue to contribute to achieving the safety targets by working with state and local partners and programming projects that will move toward meeting those targets. As a small MPO, WestPlan local agencies apply annually for consideration of funding for safety projects from a statewide pool of safety funds. Project selection at the state level is heavily weighted toward projects impacting fatality and serious injury crash locations. WestPlan supports the local agencies and assists them with the application process. Once awarded, projects are amended into the TIP. In addition, WestPlan will continue to implement the safety plan and work with state and local agencies to identify potential safety related projects and to support educational campaigns. These actions will help the MPO and state move toward the agreed targets.

## **National Performance Program: NHPP/NFPP/CMAQ**

### **Bridge**

The MPOs will establish targets by either supporting MDOT's statewide target(s) or defining a target unique to the metropolitan area each time MDOT sets a target. WestPlan supports the maintenance of NHS and local bridges within its area. However, bridge funding is administered at the state level by MDOT. MDOT evaluates bridges on interstate and state trunkline routes for necessary projects and funding. A statewide Local Bridge Advisory Board allocates funds for the Michigan Local Bridge Program based on available funds and weighted ratios.

MDOT is projecting "condition improvement" for the NHS bridges in the state based on projects programmed through the MDOT and local bridge programs described above. Deterioration is estimated based on comparing network wide deterioration rates to the age and condition of each major component of each structure. The targets are highly dependent on the deck area of bridges that fall to poor, and so the smaller the inventory considered the higher potential for a single bridge to skew results. The statewide targets are assumed to be less variable than for an individual MPO.

### **Pavement**

Federal regulations require that states measure, monitor, and set goals for pavement performance based upon a composite index of metrics. The four pavement condition metrics are: international roughness index (IRI), cracking percent, and rutting or faulting as reported by each state to the Highway Performance Monitoring System (HPMS) database. IRI and cracking percent are metrics for all road types. Rutting is only applicable to asphalt pavements and faulting is only measured for jointed concrete pavements. The rule applies to the entire National Highway System (NHS), which includes interstate and non-interstate NHS. MDOT is responsible for approximately 5,931 miles of interstate in Michigan, as of 2016.

The non-interstate portion of the system includes MDOT trunkline routes (M-routes) (about 11,959 miles in 2016) and local government owned non-trunkline roads (about 4,239 miles in 2016). Local agencies are responsible for 19 percent of the NHS route mileage in Michigan.

On October 18, 2024, the Michigan Department of Transportation (MDOT) reported to Michigan's MPO's that it had adjusted the bridge, pavement, and reliability targets for the Mid-Performance Period. On February 19, 2025, the WestPlan Policy Committee voted to exercise its option to "support the Mid-Performance Period Target Adjustments" for the bridge, pavement and reliability performance measures.

## System and Freight Reliability Performance Measures

The level of travel time reliability for both the NHS interstate and non-interstate NHS measures the percentage of person-miles traveled and considered to be reliable. The roads are considered reliable when the difference between normal travel time and congested travel time is below 50 percent. Baseline data from 2022 reveals Michigan's interstate highways and non-interstate highways have been around 94 percent reliable, meaning 94 percent of person-miles traveled are meeting the federally established thresholds. The freight reliability measure measures the same reliability; however, the longer travel time is calculated using the 95<sup>th</sup> percentile travel time.

WestPlan staff participated in coordination meetings during MDOT's statewide target development process and the WestPlan MPO Committees elected to support the state targets for this reporting period.

## Congestion Mitigation and Air Quality Performance Measures

This measure applies to urbanized areas containing NHS mileage and having a population over 200,000 (Phase 1 population over 1 million). While the traffic congestion measures do not apply to the WestPlan area, the On-Road Mobile Source Emissions reduction does. The MPO supported these standards on 2/15/2023.

WestPlan will continue to contribute to achieving the National Performance Program targets through the following actions:

- Provide pavement deficiency information to local jurisdictions to utilize during the project selection process.
- Implement road projects that make the most cost-effective use of resources while focusing on maintenance to maximize the life of existing roads.
- Support the development of local asset management plans that are regularly monitored, updated, and coordinated with other infrastructure systems.
- Implement construction projects that make the most cost-effective use of resources with a focus on maintenance to maximize the life of existing roads and bridges.

The FY2026-2029 TIP includes several projects which are anticipated to help the state meet the proposed targets for pavement and bridge conditions. See **Figure 15** below. **Figure 16** illustrates the CMAQ projects included in the TIP.

## Figure 14: State of Michigan Pavement and Bridge Condition Targets (WestPlan MPO Supported)

National Performance Program: NHPP/NFPP/CMAQ

2022 - 2025 Performance Period

Updated: September 24, 2024

Performance Measure	Desired Trend	Baseline <sup>(9)</sup>	2-Year PREDICTED Performance	2-Year ACTUAL Performance	2-Year Performance Better than Baseline	2-Year Performance Better than Target	2-Year Significant Progress Achieved (1)(3)	4-Year ORIGINAL Predicted Performance	4-Year ADJUSTED <sup>(2)</sup> Predicted Performance
NHPP: NHS Pavement Condition (\$490, Subpart C)									
Measure: IRI, Cracking, and Rutting (asphalt) or Faulting (joined concrete)									
Percentage of Pavements of the <u>Interstate</u> in <u>Good Condition</u> (PCM)	↑	Null MIU (Actual 70.4%)	59.2%	71.4%	Yes	Yes	No MIU 9.8%	56.7%	67.1%
Percentage of Pavements of the <u>Interstate</u> (NHS) in <u>Poor Condition</u> (PCM)	↓	Null MIU (Actual 1.8%)	5.0%	1.6%	Yes	Yes	No MIU 9.8%	5.0%	
Percentage of Pavements of the <u>Non-Interstate NHS</u> in <u>Good Condition</u> (PCM)	↑	41.6%	33.1%	38.7%	No	Yes	Yes	33.1%	29.4%
Percentage of Pavements of the <u>Non-Interstate NHS</u> in <u>Poor Condition</u> (PCM)	↓	8.9%	10.0%	8.1%	Yes	Yes	Yes	10.0%	
NHPP: NHS Bridge Condition (\$490, Subpart D)									
Measure: Percent square foot condition to total deck square foot, by deck area									
Percentage of NHS Bridges in <u>Good Condition</u>	↑	22.1%	15.2%	24.0%	Yes	Yes	Yes	12.8%	
Percentage of NHS Bridges in <u>Poor Condition</u>	↓	7.0%	6.8%	7.1%	No	No	No	5.8%	10.0%
NHPP: NHS System Reliability (\$490, Subpart E)									
Measure: 80th percentile over 4 time periods									
Percent of the Reliable Person-Miles Traveled on the <u>Interstate</u>	↑	97.1%	80.0%	93.9%	No	Yes	Yes	80.0%	
Percent of the Reliable Person-Miles Traveled on the <u>Non-Interstate NHS</u>	↑	94.4%	75.0%	93.6%	No	Yes	Yes	75.0%	
NHPP: Greenhouse Gas (\$490, Subpart E)									
Measure: NHS tailpipe CO <sub>2</sub> emissions									
Percent change in NHS tailpipe CO <sub>2</sub> emissions compared to reference year 2022	↓	Not applicable at this time, reference Note 4.							
NHPP: Interstate (NHS) Freight Reliability (\$490, Subpart F)									
Measure: 95th percentile over 5 time periods, expressed as an Index									
Truck Travel Time Reliability (TTTR) Index on the <u>Interstate</u>	↓	1.31	1.60	1.43	No	Yes	Yes	1.60	
CMAQ: Traffic Congestion and Emissions Reduction (\$490, Subparts G and H) <sup>(Note 1)</sup>									
Traffic Congestion <u>Unified</u> Targets: Annual Hours of Peak Hour Excessive Delay Per Capita (NPMRDS/HPMS-AADT)									
Ann Arbor Urbanized Area (Unified Target Setting: MDOT and SEMCOG; included WATS for inclusive collaboration)		9.0 hours	16.0 hours	10.4 hours	No	Yes	Yes	16.0 hours	
Detroit Urbanized Area (Unified Target Setting: MDOT and SEMCOG)		9.8 hours	18.0 hours	10.4 hours	No	Yes	Yes	18.0 hours	
Flint Urbanized Area (Unified Target Setting: MDOT; included GCMPC for inclusive collaboration)		5.7 hours	10.0 hours	5.2 hours	Yes	Yes	Yes	10.0 hours	
South Bend Urbanized Area (Unified Target Setting: MDOT, INDOT, SMPC; included MACOG for inclusive collaboration)		0.6 hours	2.0 hours	0.9 hours	No	Yes	Yes	2.0 hours	
Toledo Urbanized Area (Unified Target Setting: MDOT, ODOT, and SEMCOG; included TMACOG for inclusive collaboration)		6.1 hours	7.0 hours	7.1 hours	No	No	No	7.0 hours	
Traffic Congestion <u>Unified</u> Targets: Percent of Non-Single Occupancy Vehicle (Non-SOV) Travel (U.S. Census ACS Journey to Work method).									
Ann Arbor Urbanized Area (Unified Target Setting: MDOT and SEMCOG; included WATS for inclusive collaboration)	↑	31.9%	29.7%	35.1%	Yes	Yes	Yes	29.7%	
Detroit Urbanized Area (Unified Target Setting: MDOT and SEMCOG)		18.7%	15.5%	21.5%	Yes	Yes	Yes	15.5%	
Flint Urbanized Area (Unified Target Setting: MDOT; included GCMPC for inclusive collaboration)		18.5%	15.5%	19.1%	Yes	Yes	Yes	15.5%	
South Bend Urbanized Area (Unified Target Setting: MDOT, INDOT, SMPC; included MACOG for inclusive collaboration)		20.6%	18.0%	21.3%	Yes	Yes	Yes	18.0%	
Toledo Urbanized Area (Unified Target Setting: MDOT, ODOT, and SEMCOG; included TMACOG for inclusive collaboration)		16.1%	15.0%	17.6%	Yes	Yes	Yes	15.0%	
On-Road Mobile Source Emissions Reduction (Cumulative 2-year and 4-year performance and targets), kg/day (Coordination with SEMCOG, MACC, SMPC, and WMSRDC)									
State Total Emission Reduction: PM <sub>2.5</sub>	↑	1,527.492	595.000	1,064.792	Yes	Yes	Yes	1,191.000	
State Total Emission Reduction: NO <sub>x</sub>		13,118.817	5,227.000	14,648.581	Yes	Yes	Yes	10,455.000	
State Total Emission Reduction: VOC		5,246.548	2,295.000	5,418.239	Yes	Yes	Yes	4,590.000	
State Total Emission Reduction: CO (NA to MI this performance period)									
State Total Emission Reduction: PM <sub>10</sub> (NA to MI this performance period)									
Supplemental Documents to State Biennial Performance Report (Baseline, Mid and Final)									
1. MM2045 (provide key freight plan pages in narrative)									
2. IJA Compliant Freight Plan Amendment									
3. MPO CMAQ Performance Plan Update (23 CFR §490.107) : SEMCOG (applies only to urbanized area with a population over 1 million with nontainment/maintenance area for criteria pollutant overlapping the TMA boundary)									

**National Performance Program: NHPP/NFPP/CMAQ**  
**2022 - 2025 Performance Period**  
**Updated: September 24, 2024**

**Notations and References:**

**Note 1 - Significant Progress Determination.** [NHPP/NFPP Measures \(23 CFR 100\)](#): Significant progress is achieved when (1) actual performance is better than baseline or (2) actual performance is better than the target. FHWA definition of "better than" for NHPP is an improvement of at least 0.1 percent and 0.01 for NHPP. [CMAQ Measures](#): FHWA does not assess significant progress for CMAQ measures, the following is for internal purposes: Traffic Congestion measures - significant progress for 2- and 4-year targets is when (1) actual performance is better than baseline or (2) actual performance is better than the target by 0.1 points. Emissions Reduction measures - significant progress for 2-year targets is cumulative 2-year actual performance is better than the 2-year target, and significant progress for 4-year targets is cumulative 4-year actual performance is (1) better than the baseline or (2) better than the cumulative 4-year target.

**Note 2 - Target Adjustment.** State DOTs may adjust an established 4-year target in the Mid Performance Period Progress Report, as described in § 490.107(a)(2). State DOTs shall coordinate with relevant MPOs when adjusting their 4-year targets for NHPP and NHFP. Any adjustments made to 4-year targets established for the CMAQ Traffic Congestion measures in paragraph (c)(7) of this section shall be agreed upon and made collectively by all State DOTs and MPOs that include any portion of the NHS in the respective urbanized area applicable to the measures.

**Note 3 - Missing, Invalid or Unresolved (MIU) pavement data.** MIU threshold is 5.0 percent per regulation. Reference 23 CFR 5490.313 including (b)(4)(i) Calculation of overall pavement conditions in any State meeting the requirements of § 490.309(b) shall be based only on sections containing data reported in the HPMS submission as of the submission dates required in § 490.311(c)(4) and (5). State DOTs not meeting the requirements of § 490.309(a) will be considered non-compliant with § 420.105(b) requiring State DOTs to submit data to the HPMS and § 490.107 requiring reporting on performance targets. Failure to report data meeting the requirements of § 490.309(b) by the submission dates for the Interstate System will be considered as not meeting the minimum requirements for pavement conditions on the Interstate System and that State DOT is subject to the penalties in § 490.315. If MIU exceeds threshold, FHWA will make an "indeterminable" significant progress determination even if performance is better than baseline and/or better than the target year. If the MIU exceeds 5.0 percent in a baseline year, the FHWA will either make a 1) "Significant Progress Not Achieved" determination if FHWA does not accept the justification provided or 2) "Progress Not Determined" if FHWA accepts the justification provided. The FHWA decision is subjective without regulatory input on what criteria FHWA will utilize to make the final determination.

**Note 4 - Greenhouse Gas.** On December 7, 2023 FHWA published a final rule incorporating a greenhouse gas measure into 23 CFR 490. On March 27, 2024, the U.S. District Court for the Northern District of Texas (5:23-CV-304-H), vacated and remanded the final rule nationwide. On April 1, 2024, the U.S. District Court for the Western District of Kentucky (5:23-cv-00162-BJB-LJK) also vacated and remanded the final rule but only for the twenty-one states participating in the multi-state lawsuit against the FHWA. On April 10, 2024, the U.S. Senate passed a Congressional Review Act to overturn the final rule. FHWA has announced its decision to challenge both District Court rulings through the respective Circuit Court of Appeals. As of the updated version of this document, the GHG remains both remanded and vacated awaiting an appeals decision, and still documented in 23 CFR 490 as a reporting requirement.

**2024 Mid-Performance Report Important Notes (See 2-year summary for additional details)**

**Interstate Pavement MIU Baseline Impact:** In 2022, the baseline year for the performance period, MDOT exceeded the MIU threshold of 5.0 for Interstate pavement data. In accordance with regulation, FHWA made a "Progress Not Determined" determination for the 2018-2021 performance period 4-year target which also serves as the 2022-2025 baseline. In practical terms, this eliminated the option to achieve significant progress through actual performance better than baseline for the entire 2022-2025 performance period.

**Interstate Pavement MIU on 2-Year Performance Progress:** On the basis of actual performance, Michigan achieved significant progress for Interstate in Good and Poor Condition with actual performance being both better than baseline and better than the 2-year targets. That said, the 2023 Interstate HPMS data submission exceeded the 5.0 MIU threshold. For the Mid Performance Period, it is anticipated FHWA will again assess "Progress Not Determined" and not recognize actual 2-year performance for reporting purposes. With approximately 10 percent of the Interstate under construction, and the data collection process conditions and process being tightly regulated, it is impossible for Michigan to not exceed the 5.0 MIU threshold. MDOT has taken every possible opportunity to encourage FHWA to reconsider and revise this requirement in 23 CFR 490 to recognize substantial investment to improve the condition of the NHS should be rewarded, not penalized.

**Interstate Good Pavement 4-Year Target Adjustment:** Analysis predicts 70.1% Interstate pavement in 'Good' condition at the end of 2025. Adjusting the Good target to 67.1% retains a 3-point cushion while also communicating the improved anticipated 4-year performance compared to the 56.7% Good 4-year target established in 2022. The Federal Pavement Condition Measure behaves differently than RSL and PASER and forecasting the PCM continues to improve with each reporting cycle. There are also two active MDOT pavement-related research projects including developing an improved federal pavement performance model.

**Non-Interstate Good Pavement 4-Year Target Adjustment:** Analysis predicts 32.4% Non-Interstate NHS pavement in 'Good' condition at the end of 2025. Adjusting the Good target to 29.4% retains a 3-point cushion. As the most recent analysis indicates achieving significant progress with performance better than the baseline or better than the 4-year target established in 2022 is not feasible, adjusting the target is necessary. The Federal Pavement Condition Measure behaves differently than RSL and PASER and forecasting the PCM continues to improve with each reporting cycle. There are also two active MDOT pavement-related research projects including developing an improved federal pavement performance model.

**NHS Bridge Performance:** Analysis predicts 9.5% NHS Bridge 'Poor' condition by deck area at the end of 2025. Adjusting the Poor target to 10.0% provides a 0.5 point cushion. As the most recent analysis indicates achieving significant progress with performance better than the baseline or better than the 4-year target established in 2022 is not feasible, adjusting the target is necessary.

**Traffic Congestion - PHED:** ODOT and MDOT used RITIS to calculate a 2-year actual performance at 5.2 hours for the Toledo Urbanized Area. FHWA used a complex process to calculate 7.1 hours. FHWA has rejected ODOT's request to utilize the 5.2 hours reported through RITIS, as anticipated. If using RITIS data, significant progress achieved, however the FHWA calculated 7.1 hours falls short of demonstrating significant progress. That said, FHWA does NOT make an official significant progress determination for any of the CMAQ Measures. After discussing this joint target with Ohio DOT, TMACOG and SEMCOG, the parties elected to not adjust the 4-year target. MDOT and ODOT are working with RITIS (Cambridge Analytics) to conduct an analysis of the data used for their reporting too to identify the difference and make appropriate adjustments. This

**Traffic Congestion - Non-SOV:** While 2022 data is available through the ACS Commute to Work survey data tables, the CMAQ applicability tables issued in October 2021 used as the baseline for the 2022-25 performance period baseline, was based on the 2010 Decennial Census. The 2020 census was not finalized before the 2022 baseline CMAQ applicability tables were required to be published by regulation. As a result, both the 2-year and 4-year actual performance for NonSOV will report the 2021 DP08 5-Year table data as that is the latest available (and last available) table that reflects the 2010 census urban boundaries.



**Figure 15: FY 2026-2029 TIP Projects**

Year	Project	Description	Benefit
2026	W Spring Lake Rd	Over Smith Bayou	Bridge Replacement
2026	(4) Locations Muskegon County	Various locations in Muskegon County	Bridge Replacement
2026	M-231	(7) Structures on M-231	Bridge CPM
2026	M-231	M-231 Bridge over Grand River	Bridge CPM
2027	US-31 S	White Lake Drive over US-31	Bridge Replacement
2026	M-231	M-231: M-45 to M-104; M-104: 124 <sup>th</sup> Ave to I-96	Road CPM
2028	I-96	US-31 to Apple Drive	Road Rehabilitation
2027	US-31	Madison St. to 3 <sup>rd</sup> St	Road Rehabilitation
2026	I-96 EB	Airline Road to Apple Drive	Rehab and Reconstruction
2026	US-31 BR	White River to Stanton Blvd	Road Rehabilitation

WestPlan will also continue to monitor the pavement conditions of state and local owned roads within the MPO as well as region wide, through the annual Pavement Surface Evaluation and Rating (PASER) system. The system, under the guidance of the Michigan Transportation Asset Management Council (TAMC) and is part of Michigan's ACT 51 (P.A. 499 in 2002 and 199 in 2007) is his legislation that provides a means for road agencies to annually report the mileage and condition of the federally funded road and bridge system under their jurisdiction. In addition, the MPO also collects local data for road agencies throughout the MPO and region using the same method. **Figure 17** describes the PASER rating system, and the results of the current data collection are shown on the following pages.

**Figure 16:CMAQ Projects**

<b>Fiscal Year</b>	<b>Responsible Agency</b>	<b>Project Name</b>	<b>Project Description</b>
2026	Harbor Transit Multi-Modal Transportation System	Transit Capital	Marketing
2026	Muskegon County Board of Commissioners	Transit Capital	CMAQ - Bus Purchase
2026	Muskegon County Board of Commissioners	Transit Capital	FY 26 5307 CMAQ Outreach and Marketing
2026	Muskegon County Board of Commissioners	Transit Capital	FY2026 CMAQ 5307 Heavy Duty bus replacement
2026	Ottawa County	Lincoln St	Construct roundabout
2026	West Michigan Shoreline Regional Development Commission	Morris Ave	Air quality program
2027	Harbor Transit Multi-Modal Transportation System	Transit Capital	Marketing
2027	Muskegon	Henry Street	New Signals and Controls
2027	Muskegon County	Airline Rd	Construct Roundabout
2027	Muskegon County Board of Commissioners	Transit Capital	Support Transit Marketing and Outreach Activities
2027	West Michigan Shoreline Regional Development Commission	Morris Ave	Air Quality Program
2028	Harbor Transit Multi-Modal Transportation System	Transit Capital	Marketing
2028	Muskegon County Board of Commissioners	Transit Capital	Support Transit Marketing and Outreach Activities
2028	Muskegon County Board of Commissioners	Transit Capital	Purchase Van (Revenue Service)
2028	Muskegon County Board of Commissioners	Transit Capital	Heavy Duty Bus
2028	West Michigan Shoreline Regional Development Commission	Morris Ave	Air Quality Program
2029	Harbor Transit Multi-Modal Transportation System	Transit Capital	Marketing
2029	Muskegon County Board of Commissioners	Transit Capital	Support Transit Marketing and Outreach Activities
2029	Muskegon County Board of Commissioners	Transit Capital	Purchase Vans (Revenue Service)
2029	Muskegon County Board of Commissioners	Transit Capital	Heavy Duty Bus
2029	West Michigan Shoreline Regional Development Commission	Morris Ave	Air Quality Program



**Figure 17: PASER Rating System**

Surface Rating		Visible Distress	General Condition / Treatment Measures
10	Excellent	None	New construction
9	Excellent	None	Recent overlay, like new.
8	Very Good	<ul style="list-style-type: none"> <li>No longitudinal cracks except reflection of paving joints.</li> <li>Occasional transverse cracks, widely spaced (40' or greater).</li> </ul>	Recent sealcoat or new road mix. Little or no maintenance required.
7	Good	<ul style="list-style-type: none"> <li>Very slight or no raveling, surface shows some traffic wear.</li> <li>Longitudinal cracks (open 1/4") spaced due to reflection or paving joints.</li> <li>Transverse cracks (open 1/4") spaced 10 feet or more apart, little or slight crack raveling.</li> <li>No patching or very few patches in excellent condition.</li> </ul>	First signs of aging. Maintain with routine crack filling.
6	Good	<ul style="list-style-type: none"> <li>Slight raveling (loss of lines) and traffic wear.</li> <li>Longitudinal cracks (open 1/4" - 1/2") due to reflection and paving joints.</li> <li>Transverse cracking (open 1/4" - 1/2") some spaced less than 10 feet.</li> <li>Slight to moderate flushing or polishing.</li> <li>Occasional patching in good condition.</li> </ul>	Show signs of aging, sound structural condition. Could extend life with sealcoat.
5	Fair	<ul style="list-style-type: none"> <li>Moderate to severe raveling (loss of lines and coarse aggregate).</li> <li>Longitudinal cracks (open 1/2") show some slight raveling and secondary cracks. First signs of longitudinal cracks near wheel path or edge.</li> <li>Transverse cracking and first signs of block cracking. Slight crack raveling (open 1/2").</li> <li>Extensive to severe flushing or polishing.</li> <li>Some patching or edge wedging in good condition.</li> </ul>	Surface aging, sound structural condition. Needs sealcoat or non-structural overlay.
4	Fair	<ul style="list-style-type: none"> <li>Severe surface raveling.</li> <li>Multiple longitudinal and transverse cracking with slight raveling.</li> <li>Block cracking (over 25 - 50% of surface).</li> <li>Patching in fair condition.</li> <li>Slight rutting or distortions (1" deep or less).</li> </ul>	Significant aging and first signs of need for strengthening. Would benefit from recycling or overlay.
3	Poor	<ul style="list-style-type: none"> <li>Closely spaced longitudinal and transverse cracks often showing raveling and crack erosion.</li> <li>Block cracking over 50% of surface.</li> <li>Some alligator cracking (less than 25% of surface).</li> <li>Patches in fair to poor condition.</li> <li>Moderate rutting or distortion (1" or 2" deep).</li> <li>Occasional potholes.</li> </ul>	Need patching and major overlay or complete recycling.
2	Very Poor	<ul style="list-style-type: none"> <li>Alligator cracking (over 25% of surface).</li> <li>Severe distortions (over 2" deep).</li> <li>Extensive patching in poor condition.</li> <li>Potholes.</li> </ul>	Severe deterioration. Needs reconstruction with extensive base repair.
1	Failed	<ul style="list-style-type: none"> <li>Severe distress with extensive loss of surface integrity.</li> </ul>	Failed. Needs total reconstruction.

## ***Muskegon County Road Ratings***

### **Project overview**

In 2024, region staff assessed the condition of 100% of Muskegon County's federal-aid eligible roads, using the PASER road rating system, as required by the State of Michigan Asset Management Council. In addition, the Muskegon County Road Commission rated some local roads under their jurisdiction.

### **Results**

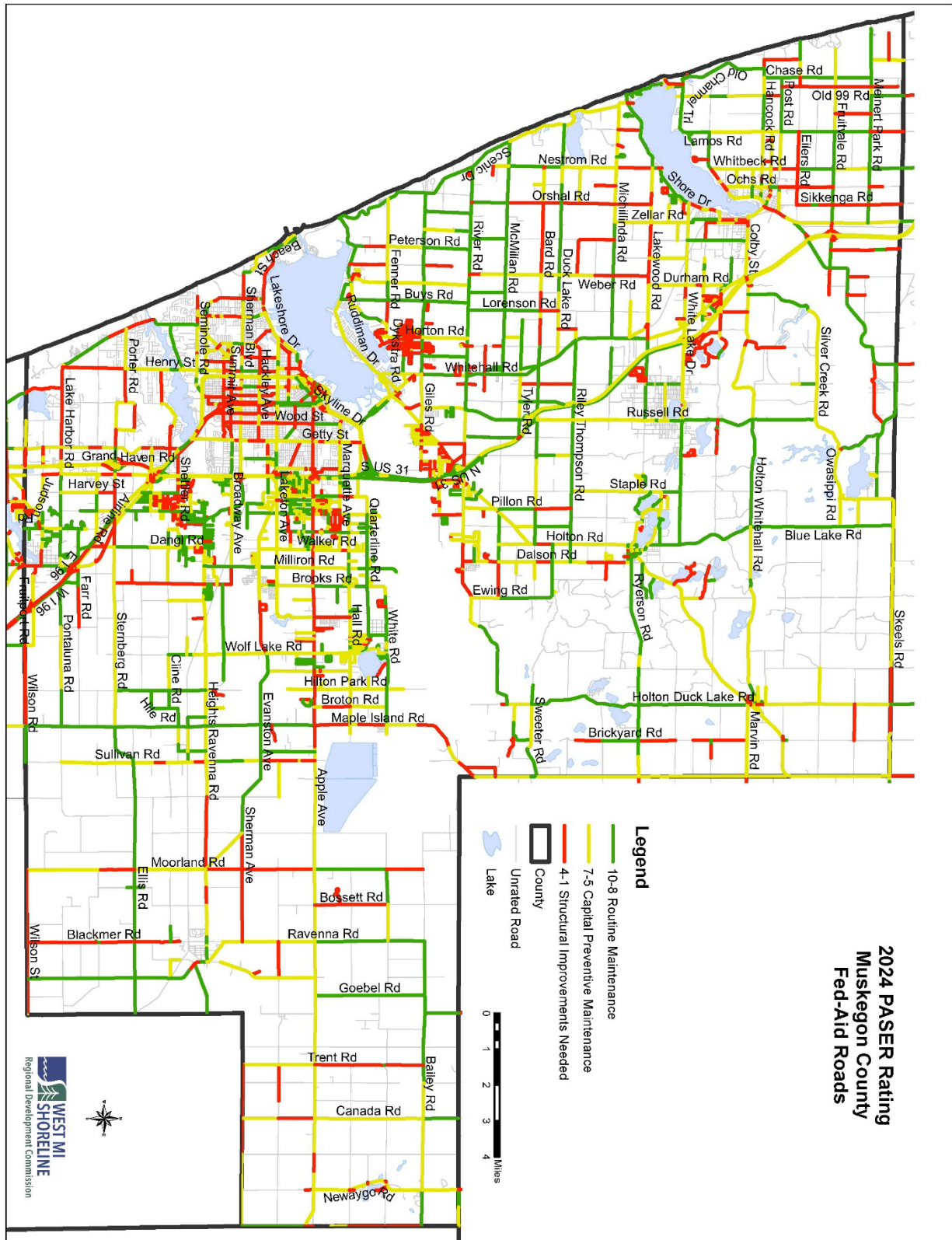
Approximately 1097 miles of combined local and federal-aid eligible roads were rated for this project in 2024. The following summarizes the distribution of ratings by mileage and percentage of the total for all roads rated in the project. The Asset Management Council has prescribed a fix for each of the PASER rating categories:

- Roads receiving a rating of Good (8 or higher) require only Routine Maintenance
- Roads receiving a rating of Fair (5-7) require Capital Preventative Maintenance
- Roads receiving a rating of Poor (4 or less) require Structural Improvements

**Figure 18: 2024 PASER Rating Summary for Muskegon County**

<b><i>Condition</i></b>	<b><i>Centerline Miles</i></b>	<b><i>Percentage</i></b>
<b><i>Good (Rating 8+)</i></b>	<b>637.695</b>	<b>33.52</b>
<b><i>Fair (Rating 5-7)</i></b>	<b>457.146</b>	<b>41.67</b>
<b><i>Poor (Rating 1-4)</i></b>	<b>272.259</b>	<b>24.82</b>

Figure 19: 2024 Muskegon County PASER Ratings



## *Ottawa County Road Ratings*

### **Project overview**

Northern Ottawa County is part of the WestPlan MPO which is administered by WMSRDC. In 2024, region staff assessed 100% of the federal-aid eligible roads in the Village of Spring Lake, the City of Ferrysburg, the City of Grand Haven, Spring Lake Township, Grand Haven Township, Robinson Township, and Crockery Township. In addition, the Ottawa County Road Commission rated several local roads using the PASER road rating system.

### **Results**

Approximately 334.144 miles of local and federal-aid eligible roads were rated for this project in 2024. This includes less than 1 mile of unpaved roads which do not receive a numerical rating. The following summarizes the distribution of ratings by mileage and percentage of the total for all roads rated in the project. The Asset Management Council has prescribed a fix for each of the PASER rating categories:

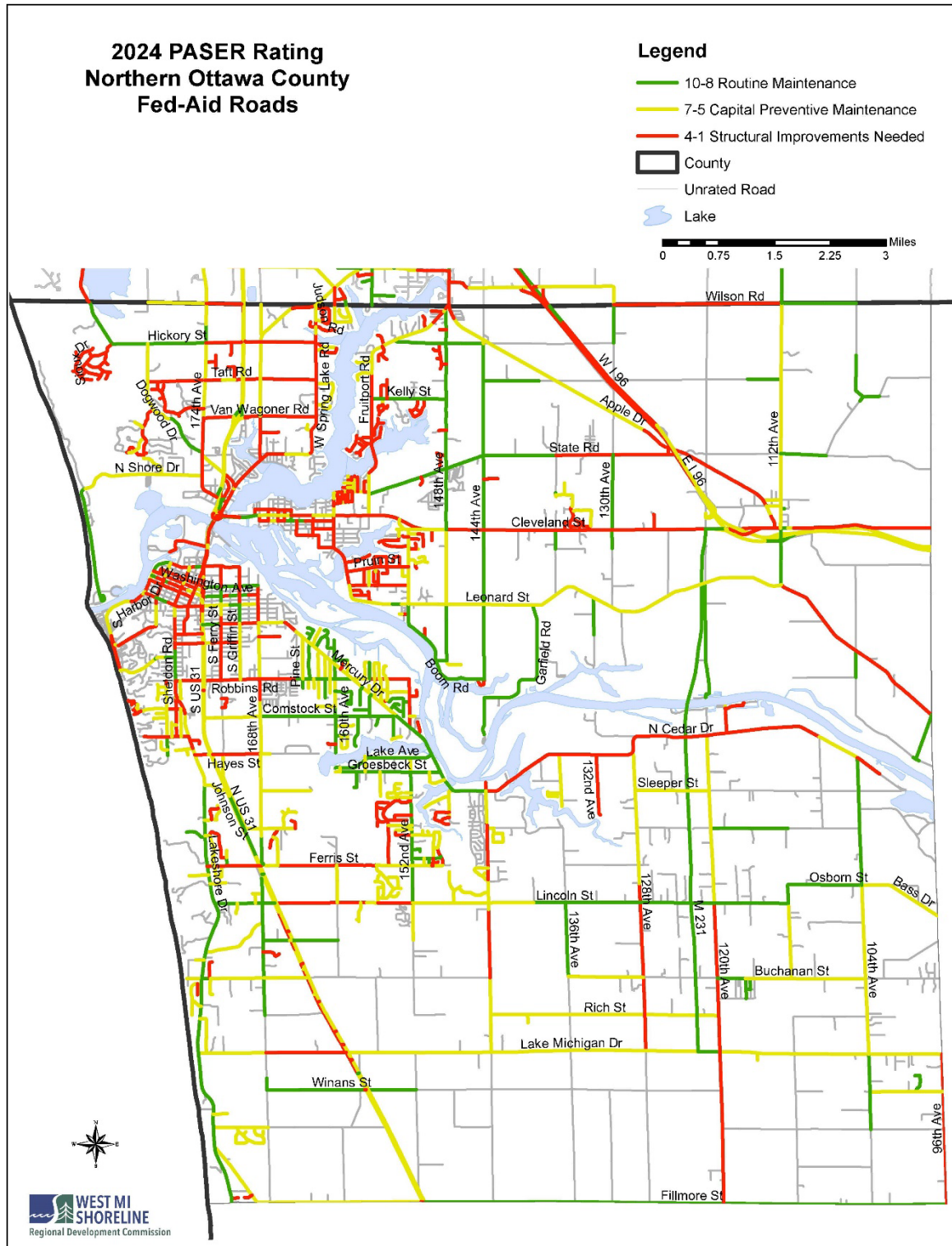
- Roads receiving a rating of Good (8 or higher) require only Routine Maintenance
- Roads receiving a rating of Fair (5-7) require Capital Preventative Maintenance
- Roads receiving a rating of Poor (4 or less) require Structural Improvements

**Figure 20: 2024 PASER Rating Summary for Ottawa County**

<i>Condition</i>	<i>Centerline Miles</i>	<i>Percentage</i>
<i>Good (Rating 8+)</i>	<b>84.795</b>	<b>25.38</b>
<i>Fair (Rating 5-7)</i>	<b>139.023</b>	<b>41.61</b>
<i>Poor (Rating 1-4)</i>	<b>110.326</b>	<b>33.02</b>



Figure 21: 2024 Ottawa County PASER Ratings



## Public Transportation

There are two public transit providers in the WestPlan area: Muskegon Area Transportation System (MATS) and Harbor Transit Multi-Modal Transit System (HT). Both are direct recipients of funds from the Federal Transit Administration (FTA). As such, MATS and HT are identified as Tier II recipients under the current federal legislation and have developed state of good repair targets. Federal surface transportation legislation mandated that the FFA develop a rule establishing a strategic and systematic process of operating, maintaining, and improving public capital assets effectively through their entire life cycle. The Transit Asset Management (TAM) Final Rule 49 CFR part 625 became effective Oct. 1, 2016, and established four performance measures:

- Rolling Stock - Percentage of revenue vehicles exceeding useful life benchmark (ULB)
- Equipment - Percentage of non-revenue vehicles exceeding ULB
- Facilities - Percentage of facilities rated under 3.0 on the Transit Economic Requirements Model (TERM) scale
- Infrastructure - Percentage of track segments under performance restriction (only applies to rail fixed
- Guideway Systems – Not applicable in the WestPlan region

**Figure 22: Transit Asset Management Targets (For MDOT's Section 5311 and 5310 subrecipients)**

Asset Class	Current Condition	2024 Targets	Goals
Revenue vehicles – Autos/SUV	37% past ULB	Not more than 10% will exceed ULB of 7 years	Not more than 20% of each agency's fleet will exceed ULB
Revenue vehicles – Vans	51% past ULB	Not more than 10% will exceed ULB of 7 years	Not more than 20% of each agency's fleet will exceed ULB
Revenue vehicles – Cutaways	26% past ULB	Not more than 10% will exceed ULB of 10 years	Not more than 20% of each agency's fleet will exceed ULB
Revenue vehicles – bus Med Duty	26% past ULB	Not more than 15% will exceed ULB of 10 years	Not more than 20% of each agency's fleet will exceed ULB

WestPlan received agency-level State of Good Repair (SGR) targets from MATS and HT in 2025. FTA recommends that MPOs adopt a single set of region-level targets for each asset class that are developed in coordination with the region's public transportation providers. Therefore, staff engaged the public transit providers in a coordination process to cooperatively develop a single set of regional SGR targets after WestPlan received updated targets from the transit agencies, as well as targets from MDOT (applicable to MDOT Section 5311 and 5310 sub recipients). Through this coordination process, the following region-level targets were developed and adopted by the WestPlan Committees and are shown in **Figure 23**, below.

**Figure 23: Transit State of Good Repair Targets for 2025**

Asset Class	Current Condition MATS	2025 Target MATS	Current Condition HT	2025 Target HT
Revenue Vehicles: small bus and van	0%	18%	5%	0%
Revenue Vehicles: large bus	44%	56%	21%	20%
Service Vehicles	1%	0%	5%	0%
Facilities	1%	0%	5%	0%

MATS and HT have both submitted TAM plans which are on file with the WestPlan MPO. **Figure 24** on the following page shows the projects in the FY2026-2029 TIP that are expected to help the transit agencies meet their targets for the State of Good Repair.



**Figure 24: FY2026-2029 Transit Projects**

<b>Fiscal Year</b>	<b>Responsible Agency</b>	<b>Project Description</b>	<b>State of Good Repair Benefit</b>
2026	Harbor Transit Multi-Model Transportation System	Bus Replacement	Large/Medium Bus
2026	Harbor Transit Multi-Model Transportation System	Bus Replacement	Large/Medium Bus
2026	Harbor Transit Multi-Model Transportation System	Bus Replacement	Large/Medium Bus
2026	Muskegon Area Transit System	Heavy Duty replacement bus	Large Bus
2026	Muskegon Area Transit System	Heavy duty replacement bus	Large Bus
2026	Muskegon Area Transit System	Heavy duty replacement bus	Large Bus
2026	Muskegon Area Transit System	Preventative Maintenance	Preventative Maintenance
2027	Harbor Transit Multi-Model Transportation System	Bus Replacement	Large/Medium Bus
2027	Harbor Transit Multi-Model Transportation System	Bus Equipment	Vehicle Air Scrubbers
2027	Harbor Transit Multi-Model Transportation System	Bus Equipment	Passenger Counters and software
2027	Harbor Transit Multi-Model Transportation System	Support Equipment	Facilities Air Purifier
2027	Harbor Transit Multi-Model Transportation System	Support Equipment	Driver Training Software
2027	Muskegon Area Transit System	Support Vehicle	Administrative Support Vehicle
2027	Muskegon Area Transit System	Preventative Maintenance	Preventative Maintenance
2028	Harbor Transit Multi-Model Transportation System	Bus Replacement	Large/Medium Bus
2028	Harbor Transit Multi-Model Transportation System	Bus Replacement	Large/Medium Bus
2028	Harbor Transit Multi-Model Transportation System	Bus Replacement	Large/Medium Bus
2028	Muskegon Area Transit System	Heavy duty replacement bus	Large Bus
2028	Muskegon Area Transit System	Van Expansion	Purchase Van
2028	Muskegon Area Transit System	Preventative Maintenance	Preventative Maintenance
2029	Harbor Transit Multi-Model Transportation System	Bus Replacement	Large/Medium Bus
2029	Harbor Transit Multi-Model Transportation System	Bus Replacement	Large/Medium Bus
2029	Harbor Transit Multi-Model Transportation System	Preventative Maintenance	Preventative Maintenance
2029	Muskegon Area Transit System	Van Expansion	Purchase Van
2029	Muskegon Area Transit System	Heavy duty replacement bus	Large Bus
2029	Muskegon Area Transit System	Preventative Maintenance	Preventative Maintenance

## Transit Safety

As part of federal performance-based planning requirements, MATS and Harbor Transit are required to develop and submit a public transportation agency safety plan and provide it to the MPO for their acknowledgement. **Figures 25 and 26** illustrate MATS and Harbor Transits safety targets.

**Figure 25: MATS Safety Performance Targets**

Vehicle Revenue Hours (VRH)		Unlinked Passenger Trips	Vehicle Revenue Miles (VRM)
40,000		480,000	650,000
Fatality	Injury	Event Without Personal Injury	System Reliability
0	<0.5/100K VRM	<1/100K VRM	<6 Road Failures/100K VRM

**Figure 26: Harbor Transit Safety Performance Targets**

Mode of Transit Service	Fatalities (total)	Fatalities (100 thousand VRM)	Injuries (total)	Injuries (per 100 thousand VRM)	Safety Events (total)	Safety Events (per 100 Thousand VRM)	System Reliability (Mean distance Bwt failures)
Demand Response	0	0	4	.46	12	1.4	27,615
Route Deviation Service	0	0	1	.11	2	.23	1,000
Targets	0/0	0/0	3/1	.40/.10	11/2	1.2/.20	35,000/2,000
2020 for DR/RDS Results	0/0	0/0	0/0	0/0	0/0	0/0	0/0

## Project Selection for the FY 2026-2029 TIP

For the development of the FY2026-2029 TIP, WestPlan collected detailed data for each individual project that was submitted for consideration. To gather this data, road agencies were required to submit a “project/program nomination form” for each project submitted. The form, developed by WestPlan, specifically asks for safety information (number of crashes) about each project, as well as condition data, traffic volumes, crash data, congestion issues, PASER ratings, and priority within the agency if multiple projects were submitted. In addition, the form captures information regarding other modes of transportation (i.e., non-motorized and transit).

The project selection form was utilized in compiling a list of projects to be considered for inclusion in the FY2026-2029 TIP and evaluated by the WestPlan TIP Subcommittee. Projects were selected within the financial constraints of the various funding programs and with consideration to supporting the goals of the 2050 WestPlan Metropolitan Transportation Plan.

Transit agencies also submitted forms and worked with MPO staff to determine potential projects that will address the public transportation performance measures and targets, including the Transit Asset Management (TAM) Plan that is currently in use.

All these forms were utilized to prepare a list of projects for consideration by the WestPlan TIP Subcommittee. The MPO Technical Subcommittee worked together to select projects within the financial constraints for the various funding programs represented in the TIP, as well as considering each project’s support for the performance targets adopted by WestPlan.

WestPlan is committed to meeting the statewide performance measure targets for all the national goals. Project planning and allocation of federal funding to meet these measures and goals is an important part of the MPO process. As resources continue to be available, they will be allocated toward multimodal transportation projects that address these measures and targets.

**Figure 27** on the following pages shows the detailed project selection form that is used as a tool for selecting projects for the TIP.

**Figure 27: WestPlan Project Selection Form**

WESTPLAN PROJECT SUBMISSION FORM FY 2026-2029 TIP			
PROJECT		PROJECT LIMITS	
ROAD NAME		FROM	TO
FISCAL YEAR	COUNTY	ROAD AGENCY	PROJECT RANK #
MAJOR WORK TYPE		NFC CLASS	CURRENT PASER RATING
EXISTING PAVEMENT TYPE	PROPOSED PAVEMENT TYPE	DATE OF LAST WORK COMPLETED	AGE OF PAVEMENT
PROJECT ON TRANSIT ROUTE?	ADJACENT SIDEWALKS/NON MOTORIZED FACILITIES?	ON STREET PARKING?	UTILITY WORK PLANNED?
PROJECT LENGTH	POSTED SPEED	ADT	% COMMERCIAL
ROW EXISTING FEET	ADDITIONAL IF NEEDED (Feet)	# OF EXISTING LANES	PROPOSED # LANES IF NECESSARY
BUDGET		ADDITIONAL BUDGET INFO	
FEDERAL			
LOCAL MATCH			
OTHER PARTICIPATING			
NON-LAP PARTICIPATING			
1. CE			
2. PE			
3. OTHER			
NON PARTICIPATING			
TOTAL JOB COST	\$0		

Does this project address any of the federally mandated performance measures such as Safety, Transit, Pavement/Bridge Condition, Congestion, System Reliability, or Environmental Sustainability? If so, how?
OTHER INFO

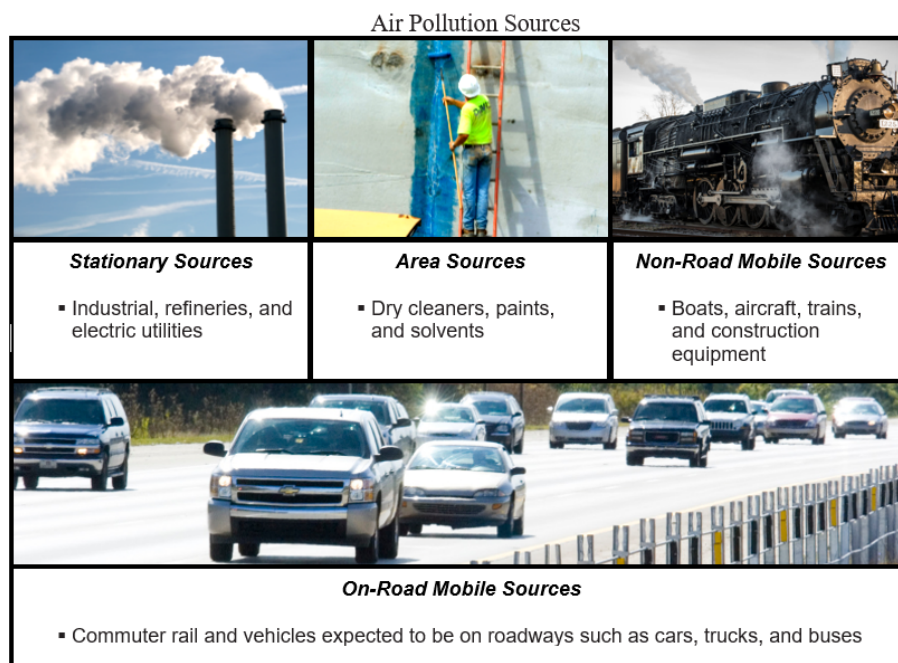
## CHAPTER 6: Air Quality Conformity

The Clean Air Act (CAA) was established to improve air quality, protect public health, and to protect the environment. The CAA has been amended over the years, most significantly in the 1990s. The CAA requires the U.S. Environmental Protection Agency (USEPA) to set, review, and periodically revise the National Ambient Air Quality Standards (NAAQS). There are six NAAQS pollutants:

- Ozone (O<sub>3</sub>)
- Nitrogen dioxide (NO<sub>2</sub>)
- Carbon monoxide (CO)
- Lead (Pb)
- Sulfur dioxide (SO<sub>2</sub>)
- Particulate matter (PM), is subdivided into particulate sizes:
  - Less than 10 micrometers in diameter (PM<sub>10</sub>)
  - Less than 2.5 micrometers in diameter (PM<sub>2.5</sub>)

Generators of air pollution are classified into four main types: stationary sources, area sources, non-road mobile sources, and on-road mobile sources. Examples of generators by source category are shown in **Figure 28**.

**Figure 28: Air Pollution Sources**



The CAA links air quality planning and transportation planning through the transportation conformity process. Air quality planning is controlled by Michigan's State Implementation Plan (SIP) which includes the state's plans for attaining or maintaining the NAAQS. The primary transportation planning tools are the

Metropolitan Transportation Plan (MTP) and, at both the metropolitan and state level, the Transportation Improvement Program (TIP). Transportation conformity ensures that federal funding and approvals are given to highway and transit activities that are consistent with the SIP, and these activities will not affect Michigan's ability to achieve the NAAQS.



Transportation activities that are subject to conformity are MTPs, TIPs, and all federal projects that receive Federal Highway or Federal Transit Administration funding or approval. Projects that are determined to be non-exempt trigger a new conformity analysis, either qualitative or quantitative. The conformity process ensures emissions from implementing MTPs, TIPs, and Statewide Transportation Improvement Plan (STIP) projects are within acceptable levels specified within the SIP and meet the goals of the SIP.

Transportation conformity only applies to emissions from on-road sources for the following transportation-related pollutants:

- Ozone
- Particulate matter (particulate sizes 2.5 and 10)
- Nitrogen dioxide
- Carbon monoxide

In addition to emissions that are directly emitted from vehicles, regulations specifically require certain precursor pollutants to be addressed. Precursor pollutants are those pollutants which contribute to the formation of other pollutants. For example, ozone is not directly emitted but created when nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOC) react with sunlight. **Figure 29** shows the transportation pollutants and their associated precursors. Pollutants can be directly emitted or only formed due to precursors. Not all precursors are required to be analyzed for a pollutant; it depends on what is causing the pollutant to form in an area.

**Figure 29: Transportation Pollutants and Precursor Emissions**

Transportation Pollutant	Direct Emissions	Precursor Emissions			
		Nitrogen Oxides	Volatile Organic Compounds	Ammonia	Sulfur Dioxide
Ozone		X	X		
Particulate Matter <sub>2.5</sub>	X	X	X		
Particulate Matter <sub>10</sub>	X	X	X	X	X
Nitrogen Dioxide		X			
Carbon Monoxide	X				

The Michigan Department of Environmental Great Lakes and Energy (EGLE) uses monitors throughout the state to measure pollutant levels to determine if concentrations exceed NAAQS. When a new NAAQS is established, an area is classified as either:

- Attainment (under the standard)
- Nonattainment (area has more pollutant than allowed)
- Unclassifiable/attainment (insufficient information to support an attainment or nonattainment classification; conformity requirements are the same as for an attainment area)

Once a nonattainment area can demonstrate attainment of the standard, the area can be re-designated to attainment and is considered a maintenance area. Transportation conformity is required for nonattainment or maintenance areas. Maintenance areas are required to do conformity for 20 years.

Transportation conformity requires Metropolitan Planning Organizations (MPOs) to make a determination that the MTP, TIP, and projects conform to the SIP based on the findings of a regional emissions analysis. The determination affirms that regional emissions will not negatively impact the region's ability to meet the NAAQS. Conformity has a two-step approval process. First, the MPOs must make a formal conformity determination through a resolution that the findings of a conformity analysis conform to the SIP; thus, emissions are at or below the budgets found in the SIP. Then FHWA, jointly with the FTA, after consultation with USEPA, issues a concurrence with the determination.

### Statewide Air Quality Conformity Information

Michigan areas designated as nonattainment for the 2015 ozone NAAQS (2015 ozone Standard) are shown in **Figure 31** at the end of the chapter. These areas are the seven counties that create the Southeast Michigan Council of Governments (SEMCOG) MPO, Berrien County, a portion of Allegan County, and a portion of Muskegon County. The SEMCOG counties are also a maintenance area for the 2006 24-hour particulate matter 2.5 NAAQS. Designations are also shown in **Figure 31**.

In February 2019, the Federal Highway Administration, complying with the court's decision in *South Coast Air Quality Management District v. U.S. EPA*, started requiring areas in the country to conduct conformity that were both maintenance for the 1997 ozone standard and attainment for the 2008 ozone standard when the 1997 ozone standard was revoked. These areas are not considered traditional maintenance areas because the 1997 ozone standard was revoked, but they must fulfill the obligation to conduct conformity until the end of their maintenance plans. These areas are considered a Limited Orphan Maintenance Area (LOMA) or Orphan Maintenance Area (OMA), and this impacted 17 counties in Michigan. Areas doing conformity for the 2015 ozone NAAQS are satisfying the requirements for the 1997 ozone NAAQS.

Many of Michigan's nonattainment, maintenance, or conformity areas have geographic boundaries that include both MPO areas and rural areas (non-MPO). Having projects in both areas requires conformity to be joint between MPO, TIP (urban), and the STIP (rural). The Michigan Transportation Conformity Interagency Workgroup (MITC-IAWG) reviewed the projects in the 2026-2029 S/TIPs to determine if a new conformity analysis was required. **Figure 30** indicates the Transportation NAAQS Designations in Michigan for the new 2026-2029 S/TIPs.



**Figure 30: Transportation National Ambient Air Quality Standards (NAAQS) In Michigan by Pollutant**

<b>Transportation NAAQS Designations in Michigan</b>		
<b>Pollutant</b>	<b>Designation</b>	<b>Area(s)</b>
2015 Ozone Standard (0.070 ppm)	Nonattainment	<ul style="list-style-type: none"> <li>• Berrien County</li> <li>• Allegan Partial County</li> <li>• Muskegon Partial County</li> </ul>
2015 Ozone Standard (0.070 ppm)	Maintenance	Detroit (SEMCOG counties: Livingston, Macomb, Monroe, Oakland, St. Clair, Washtenaw, and Wayne)
2008 Ozone Standard (0.075 ppm)	Unclassifiable/Attainment	Entire State
1997 Ozone Standard (0.080 ppm)	limited orphan maintenance or orphan maintenance	<ul style="list-style-type: none"> <li>• Allegan County*</li> <li>• Muskegon County *</li> <li>• Benzie County</li> <li>• Cass County</li> <li>• Flint Area (Genesee and Lapeer counties)</li> <li>• Lenawee County</li> <li>• Grand Rapids Area (Ottawa and Kent counties)</li> <li>• Huron County</li> <li>• Kalamazoo – Battle Creek Area (Van Buren, Kalamazoo, and Calhoun counties)</li> <li>• Lansing- East Lansing Area (Clinton, Eaton, and Ingham counties)</li> <li>• Mason County</li> </ul> <p>*Whole county designation; qualitative analysis for area not covered by 2015 ozone NAAQS</p>
2012 Particulate Matter (PM <sub>2.5</sub> )	Unclassifiable/Attainment	Entire State
2006 Particulate Matter (PM <sub>2.5</sub> )	Maintenance	Detroit-Ann Arbor (SEMCOG counties: Livingston, Macomb, Monroe, Oakland, St. Clair, Washtenaw, and Wayne)
Nitrogen Dioxide	Unclassifiable/Attainment	Entire State
Carbon Monoxide	Unclassifiable/Attainment	Entire State

Source: [www3.epa.gov/airquality/greenbook/anayo\\_mi.html](http://www3.epa.gov/airquality/greenbook/anayo_mi.html)

#### **Transportation Conformity Analysis for Muskegon County Portion of WestPlan MPO:**

Part of Muskegon County is a nonattainment area for the 2015 ozone NAAQS and the whole county is a conformity area for the 1997 ozone NAAQS. The western portion of Muskegon County did a qualitative analysis, which aligned with the 2015 ozone nonattainment area, requiring emission modeling. The remaining eastern half of the county utilized a quantitative analysis where no emission modeling was performed. This process is referred to as a Determination Report for the 1997 ozone NAAQS. The MPO within the boundary is part of the West Michigan Metropolitan Transportation Planning Program (WestPlan).

The staff of WestPlan found that the MTP and the 2026-2029 TIP all conform to the SIP for the 2015 and

1997 ozone standards based on the results of the Air Quality Conformity Analysis for Muskegon County, Michigan Nonattainment Area document dated April 2025. This conformity analysis report makes the determination that Muskegon County portion of the MPO's transportation plan and programs satisfy all applicable criteria and procedures in the conformity regulations. The conformity analysis document was subject to a public comment period from April 15 to May 21, 2025, and is pending review and approval by FHWA regarding determination. MITC-IAWG consultation documentation for the WestPlan MPO included in the appendices.


#### **Transportation Conformity Determination for Ottawa County portion of WestPlan MPO:**

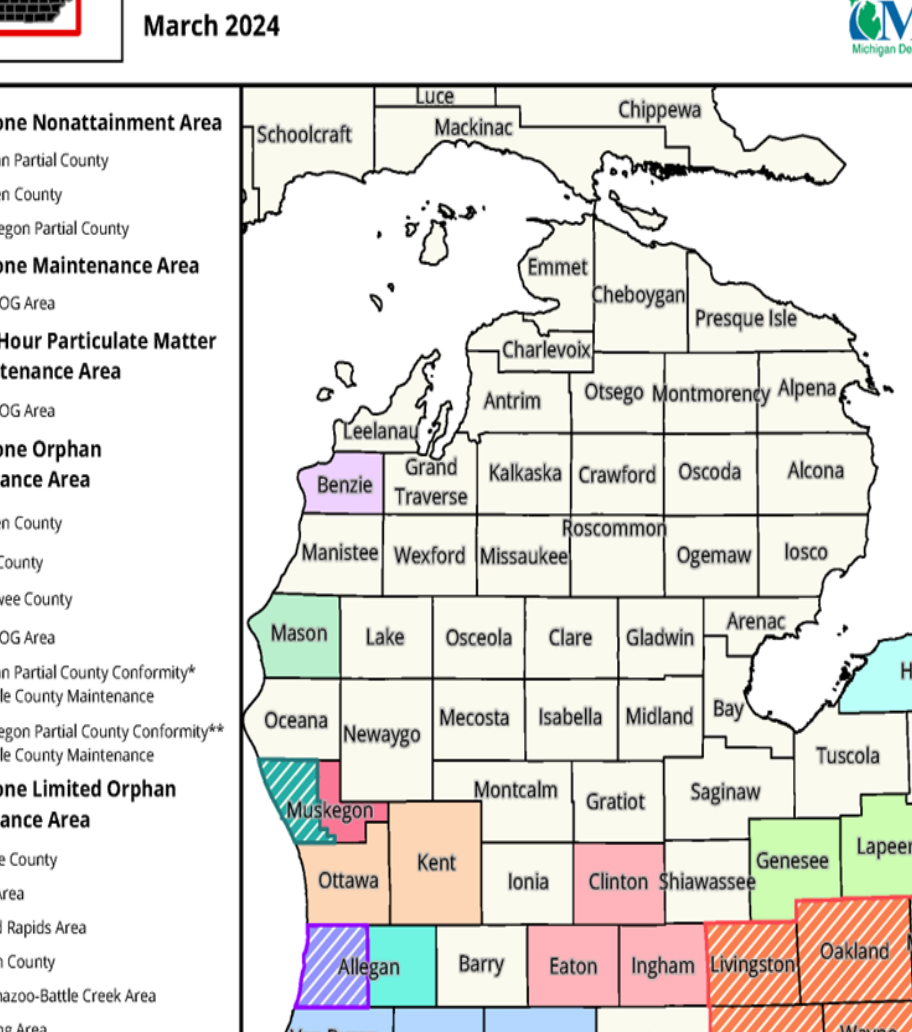
The Air Quality Conformity Determination Report for the Grand Rapids, Michigan Limited Orphan Maintenance Area (LOMA) consists of two counties: Kent and Ottawa. Within the boundary is the MPO of Grand Valley Metro Council (GVMC), parts of the West Michigan Metropolitan Transportation Planning Program (WestPlan), and Macatawa Area Coordinating Council (MACC), as well as the rural projects contained in the State Transportation Improvement Program (STIP).

The Grand Rapids LOMA for the 1997 ozone NAAQS can demonstrate regional conformity without an emission analysis. Transportation conformity can be demonstrated by showing the other requirements are met. The MITC-IAWG group discussed the projects and of those that were preliminarily thought to be non-exempt, determined all but two were exempt. The rural STIP projects in Ottawa County were discussed and the group agreed that all projects were exempt.

## Michigan Transportation Nonattainment and Maintenance Areas by Pollutant

March 2024


**MDOT**  
 Michigan Department of Transportation



**2015 Ozone Nonattainment Area**

- Allegan Partial County
- Berrien County
- Muskegon Partial County

**2015 Ozone Maintenance Area**

- SEMCOG Area

**2006 24-Hour Particulate Matter 2.5 Maintenance Area**

- SEMCOG Area

**1997 Ozone Orphan Maintenance Area**

- Berrien County
- Cass County
- Lenawee County
- SEMCOG Area

**1997 Ozone Limited Orphan Maintenance Area**

- Benzie County
- Flint Area
- Grand Rapids Area
- Huron County
- Kalamazoo-Battle Creek Area
- Lansing Area
- Mason County

*Prepared by the Statewide Transportation Planning Division, MDOT*