GENESEE COUNTY METROPOLITAN ALLIANCE
ROOM 111 – 1101 BEACH STREET · FLINT, MI 48502-1470 · (810) 257-3010 · FAX (810) 257-3185

Genesee County Metropolitan Planning Commission
Technical Advisory Committee (TAC)

Genesee County Administration Building
Harris Auditorium
1101 Beach Street, 3rd Floor
Flint, Michigan 48502

Thursday, May 4, 2023
1:30 P.M.

AGENDA

I. Call to Order

II. Roll Call

III. Minutes
***A. Minutes of the April 6, 2023 Regular Meeting (attached)

IV. Old Business

***A. FY 2024 Unified Work Program (attached)

***B. Pavement, Bridge, System Reliability, & CMAQ Performance Targets (attached)

V. New Business

***A. FY 2023-2026 Transportation Improvement Program (TIP) Amendment #8 (attached)

***B. FY 2025 List of Proposed Safety Projects (attached)

C. 2023 Non-Motorized Count Survey Requests (attached)

D. 2023 Local Traffic Count Program (attached)

E. Adjusted Census Urban Area Boundaries (ACUB) Establishment & Revision (attached)

VI. Other Business
A. Selection of a Nominating Subcommittee for the Election of Officers (discussion)
B. Genesee County Road Commission Presentation

VII. Announcements

A. Genesee County Recycle Day(s)

VIII. Adjournment

*****Action Item**

NEXT MEETING – June 1, 2023 at 1:30 P.M.

GENESEE COUNTY TECHNICAL ADVISORY COMMITTEE
Thursday, April 6, 2023 1:30 p.m.

MINUTES

The Genesee County Technical Advisory Committee met at 1:30 p.m. on Thursday, April 6, 2023 in the Harris Auditorium of the Genesee County Administration Building, 1101 Beach Street, Flint, Michigan, 48502.

I. CALL TO ORDER

Chairperson Ed Benning called the meeting to order at approximately 1:30 p.m.

II. ROLL CALL

Chairperson Benning announced that a sign-in sheet would be used for today's official roll call. No verbal roll call was done.

Present: Amber Abbey, Andrea Schroeder, Chris Gehringer, Derek Bradshaw, Ed Benning, Eric Johnston, Lynn Markland, Mark Adas, Max Gierman, Michael Pifer, Michelle King, Rod McGaha and Shawnice Dorsey

Absent/Excused: Adam Zettel, Alex Patsy, Brian Saad, Chad Young, Chris Yeates, Christina Nicholaides, Craig Williams, Curtis Armstrong, Dan Eashoo, Dave Miller, David Dorr, Don Mayle, Ellen Glass, Emily Alexander, Eric Weiderhold, Frederick Thorsby, James Slezak, Jay Reithel, Jolena Sanders-Sims, Joseph Madore, Joseph Rizk, Karyn Miller, Mark Emmendorfer, Mary Ann Price, Neil Rankin, Paul Fortino, Rachel Stanke, Robert Bincsik, Sam Stiff, Scott Bennett, Sheri Wilkerson, Shirley Kautman-Jones, Thomas Spillane, Tonya Ketzler, Vadice Burgett, Vicki Fishell, Vince Lorraine and Wendy Jean-Buhrer

Others Present: Jason Nordberg, Jacob Maurer, Kris Garris, McKenna Dutkiewicz and Renate Soto.

III. MINUTES

***A. Minutes of the March 2, 2023 Regular Meeting

Motion: Action: Approve, **Moved by** Andrea Schroeder, **Supported by** Eric Johnston, to approve the minutes of the March 2, 2023 regular meeting as presented.
Motion carried unanimously.

IV. OLD BUSINESS

NONE

V. NEW BUSINESS

***A. FY 2023 Unified Work Program Amendment #1

Mr. Kris Garris stated the FY 2023 Unified Work Program (UWP) Amendment #1 is proposing to increase Transit Planning Funds by $240,000 in federal funding and $60,000 in local MTA

matching funding for a total increase of $300,000. This funding will be used for a Regional Transit Authority Study. Mr. Garris briefly went over the items in the UWP that were either added or adjusted. At this time, staff is requesting that the Technical Advisory Committee provide a recommendation of approval for Amendment #1 to the FY 2023 UWP to the Genesee County Metropolitan Alliance.
Motion: Action: Approve. **Moved by** Eric Johnston, **Supported by** Andrea Schroeder, to approve Amendment #1 to the FY 2023 United Work Program as presented.
Motion carried unanimously.
Discussion ensued.

*****B. 2023 FY 2023-2026 Transportation Improvement Program (TIP) Amendment #7**
Ms. McKenna Dutkiewicz stated Amendment #7 changes three projects, deletes one project and adds seven projects in the FY 2023-2026 TIP. At this time, staff is recommending the endorsement of Amendment #7 to the FY 2023-2026 TIP from the Technical Advisory Committee to the Genesee County Metropolitan Alliance.
Motion: Action: Approve. **Moved by** Chris Gehringer, **Supported by** Eric Johnston, to approve Amendment #7 to the FY 2023-2026 Transportation Improvement Program as presented.
Motion carried unanimously.

*****C. FY 2025 Safety Call for Projects**
Mr. Garris stated MDOT has released a call for Highway Improvement Safety Program (HSIP) projects, Highway Safety Improvement Streamlined Systemic Safety projects, and High-Risk Rural (HRRR) projects to all local road agencies for the 2025 fiscal year. MDOT is requesting that project applications be submitted to their office by Monday, May 1st, 2023. In order to have time to review and endorse the applications, staff is asking that applications be submitted to our office no later than Monday, April 24th, 2023. Mr. Garris stated that projects will be ranked using Time-of-Return Analysis, a prioritized list will be sent to MDOT and a resolution endorsing these projects will be sent to MDOT in May. At this time, staff is requesting that the Technical Advisory Committee recommend to the Genesee County Metropolitan Alliance that the FY 2025 Call for Safety Projects be reviewed and prioritized by staff.
Motion: Action: Approve. **Moved by** Eric Johnston, **Supported by** Andrea Schroeder, to recommend to the Genesee County Metropolitan Alliance that the FY 2025 Call for Safety Projects be reviewed and prioritized by staff.
Motion carried unanimously.

D. Pavement, Bridge, System Reliability, & CMAQ Performance Targets
Ms. Dutkiewicz stated that MDOT has established statewide performance targets. The Genesee County Metropolitan Alliance has until June 14th, 2023 to either adopt the statewide policies or set our own local targets. MDOT has provided supplementary factsheets to assist MPOs in making decisions on targets including a description of the measures, recent trends, and the methodology used to establish these targets. Between now and May, staff will be gathering localized data to help make an informed decision.
Discussion ensued.

E. FY 2024 Unified Work Program
Mr. Garris stated that the primary activities for the FY 2024 UWP will focus on the development of the 2050 Long Range Transportation Plan (LRTP), implementation of the

FY 2023-2026 Transportation Improvement Plan (TIP), development of a Safety Action Plan, and continuation of the US-23 Corridor Study. In addition, other activities will include performance measure monitoring, transportation related data collection, non-motorized planning and safety data analysis. Staff is currently developing the FY 2024 work program, and this is an opportunity for the committee to provide suggestions for work activities for the upcoming fiscal year. Mr. Garris asked the committee to provide that feedback by April 13, 2023. Discussion ensued.

VI. OTHER BUSINESS

NONE

VII. ANNOUNCEMENTS

Mr. Eric Johnston, stated that the Genesee County Road Commission (GCRC) now has 3 new Commissioners on the Board, including Commissioners Joe Massey, Reggie Smith, and Chris Gehringer. Mr. Johnston introduced Commissioner Chris Gehringer, who has been appointed to the TAC Committee by the GCRC.

VIII. ADJOURNMENT

Chairperson Benning adjourned the meeting at approximately 1:47 p.m.

Respectfully submitted,
Renate Soto, Secretary
Genesee County Metropolitan Planning Commission

GENESEE COUNTY METROPOLITAN ALLIANCE
ROOM 111 – 1101 BEACH STREET · FLINT, MI 48502-1470 · (810) 257-3010 · FAX (810) 257-3185

MEMORANDUM

TO: Members of the Technical Advisory Committee

FROM: Jacob Maurer, Division Manager
Genesee County Metropolitan Planning Commission

DATE: May 4, 2023

SUBJECT: **FY 2024 Unified Work Program**

The Unified Work Program (UWP) describes all transportation planning activities for the upcoming fiscal year and identifies funding sources and agencies involved in these activities. The primary activities for the 2024 fiscal year (FY) will focus on the development of the 2050 Long Range Transportation Plan (LRTP), implementation of the 2023-2026 Transportation Improvement Program (TIP), development of a Safety Action Plan, and continuation of the US-23 Corridor Study. Other activities include performance measure monitoring and updates, transportation related data collection, building permit collection, transit planning, non-motorized planning, safety data analysis, and pavement data analysis to name a few.

At this time, staff is requesting that the Technical Advisory Committee provide a recommendation of approval for the FY 2024 Unified Work Program (UWP) to the Genesee County Metropolitan Alliance and to authorize Derek Bradshaw to sign all contracts and agreements related to the work program.

FY 2024 Unified Work Program

for the

Flint/Genesee County Metropolitan Area

May 2023 - DRAFT

The preparation of this work program was completed by the Genesee County Metropolitan Planning Commission (GCMPC) and funded in part through grant[s] from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation. The views and opinions of the authors [or agency] expressed herein do not necessarily state or reflect those of the U. S. Department of Transportation.

GENESEE COUNTY
METROPOLITAN PLANNING COMMISSION

GENESEE COUNTY
METROPOLITAN ALLIANCE

FY 2024 UNIFIED WORK PROGRAM

TABLE OF CONTENTS

I. INTRODUCTION

The Genesee County Metropolitan Alliance (Metro) is the Metropolitan Planning Organization (MPO) for the Flint/Genesee Metropolitan Area. The Genesee County Metropolitan Planning Commission (GCMPC) functions as staff to Metro. The transportation planning process is complex, involving several funding sources and many agencies at the federal, state, and local levels. For a more complete description of the planning process in Genesee County, please refer to the Flint-Genesee County Long Range Transportation Plan.

Genesee County is situated in the southeastern portion of Michigan's Lower Peninsula, approximately 50 miles northwest of Detroit and northeast of Lansing. The county covers an area of approximately 415,360 acres (649 square miles).

The 2020 census counts indicate a population of 406,211 persons for Genesee County, distributed among eleven cities, seventeen townships, and five villages. The City of Flint is the largest political jurisdiction in Genesee County, with a 2020 census count of 81,252 persons. It is the population and geographic center of the county.

The major transportation elements in Genesee County include highway systems, local and interregional bus systems, railroad systems, air transportation systems; and pedestrian and bikeway systems.

Part of the planning process in Genesee County involves a Public Participation Plan (PPP). The PPP that addresses transportation planning activities for Metro was developed in cooperation with GCMPC and is identified as the Genesee County Metropolitan Planning Commission Public Participation Plan. Work items and activities that address the issue of Environmental Justice are identified through the PPP and the Metro Unified Work Program (UWP). As this issue is addressed, changes will continue to be made to both documents based on internal and external evaluations of how effective our activities have been.

The purpose of this Unified Work Program (UWP) is to describe, in a single document, all transportation planning activities for the upcoming year. The UWP also identifies funding sources, the agencies involved in these activities and an estimated timeline for completion of activities.

UWP Amendments and Administrative Modifications

Administrative Modification

An administrative modification to the UWP will be defined as follows:

1. A change that does not modify the FWHA-approved final total budget
2. An Increase or reduction of funds in a category less than 25%

An administrative modification can be made by staff and does not require formal approval by Metro.

Amendment Policy

An amendment to the UWP will be defined as follows:

1. Increase or reduction of funds in a category greater than or equal to 25%
2. A change that will modify the FHWA approved final total budget

An amendment to the UWP will be brought to Metro for approval.

II. MAJOR TRANSPORTATION ISSUES/PRIORITIES

The FY 2024 UWP has been formulated to address the major transportation issues and problems facing the Flint-Genesee County area. The identified issues establish the priorities for the UWP. Work activities are identified throughout the plan that address the identified issues/priorities. The amount of staff hours and funding will vary each fiscal year depending on the priority of the activity for the identified fiscal year.

A. SYSTEM-WIDE ISSUES

1. *Air Quality*

In November of 1990, the Clean Air Act Amendments were signed into law. These amendments substantially revise the federal-aid highway program in non-attainment areas (areas that are above the minimum threshold for a pollutant) due to its provisions for highway sanctions. The act requires the U.S. Environmental Protection Agency (EPA) to set, review, and revise the National Ambient Air Quality Standards (NAAQS) periodically. There are six NAAQS pollutants: ozone (O3), nitrogen dioxide (NO2), carbon monoxide (CO), lead (Pb), sulfur dioxide (SO2), particulate matter (PM). PM is subdivided into particulate sizes, less than 10 micrometer in diameter (PM10) and less than 2.5 micrometer in diameter (PM2.5). The sanctions can be imposed statewide if those areas that are in non-attainment do not make adequate revisions to change their status. On April 15, 2004, the Environmental Protection Agency (EPA) designated Genesee County and Lapeer County as being in basic non-attainment and assigned a maximum attainment date of June 2009. This area was identified as the Flint Michigan Non-attainment Area. An Interagency Work Group (IAWG) was established to review federally funded transportation projects to ensure that new transportation projects will improve or at least not degrade current air quality levels.

In 2007 the Michigan Department of Environmental Quality (MDEQ) requested re-designation of the Flint Non-attainment Area to attainment status. On May 16, 2007 the EPA provided notice in the Federal Register that the Flint Non-attainment Area was re-designated to be in attainment as a maintenance area for the 1997 ozone standard. April 30, 2012 the EPA announced that Genesee County was in attainment for the 2008 ozone standard. On April 6, 2015 the EPA completely revoked the 1997 ozone standard, so all transportation requirements related to this standard were removed. On April 23, 2018, the FHWA, complying with the court's decision in

South Coast Air Quality Management District v. EPA (US Environmental Protection Agency) started requiring areas in the country that were former maintenance areas for the 1997 ozone standard to conduct conformity for new TIP and LRTPs or amendments if they contain non-exempt projects. On Aug. 3, 2018, the EPA designated Genesee and Lapeer counties as in attainment for the strengthened 2015 ozone NAAQS (also referred to as 2015 ozone standard). On Dec. 4, 2019, the EPA proposed a rule that the Flint 1997 ozone maintenance area be considered for a limited maintenance plan for the area's second maintenance period. To be considered for a limited maintenance plan, the area must show the design value to be well below the NAAQS and the area's levels of air quality are unlikely to violate the NAAQS in the future. Areas with limited maintenance plans are not required to conduct emission modeling for conformity. On April 6, 2020, the limited (second) maintenance plan for the Flint (Genesee and Lapeer counties) 997 ozone NAAQS took effect (85 FR 13057).

Work items related to the area being a limited orphan maintenance area for the 1997 ozone standard will continue to be addressed.

2. *Energy*

Energy availability has a significant impact on the amount and mode of travel, as well as the overall economy of the area. Although energy supplies have remained relatively stable fluctuating costs in recent years have made energy much more of a concern. In the TSM Coordination activity, the status of energy availability will be monitored.

3. *Transportation Revenue*

Always an issue in transportation is whether or not adequate funding will be available to meet the needs of both maintenance and expansion of transportation facilities and services in a community.

On November 15, 2021, President Biden signed the Infrastructure Investment and Jobs Act (IIJA) (Public Law 117-58, also known as the "Bipartisan Infrastructure Law") into law. The IIJA is the largest long-term investment in our infrastructure and economy in our Nation's history. It provides $550 billion over fiscal years 2022 through 2026 in new Federal investment in infrastructure, including in roads, bridges, and mass transit, water infrastructure, resilience, and broadband.

The IIJA builds on and refines many of the highway, transit, bike, and pedestrian programs and policies established in 1991 with the Intermodal Surface Transportation Efficiency Act (ISTEA) legislation. ISTEA was replaced with Transportation Equity Act of the Twenty-first Century (TEA-21), the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Moving Ahead for Progress in the 21st Century (MAP-21), and most recently the Fixing America's Surface Transportation (FAST) Act.

The primary revenue sources for this legislation are the 18.4 cent per gallon tax on gasoline and a 24.4 cent per gallon tax on diesel fuel.

Public Act 51 of 1951 is the state law that covers many transportation funding issues in the state. Act 51 has not changed much since its original approval however a series of laws enacted in November 2015 increased state funding for transportation. The Michigan House Fiscal Agency estimates that, starting in FY 2016, an additional $455 million will be raised, increasing each year until FY 2020, when it's expected that the increase will stabilize at an additional $1.2 billion per year. The current gross receipts to the Michigan Transportation Fund (MTF) are approximately $1.95 billion annually. Currently, state motor fuel taxes are set at 19 cents per gallon on gasoline and 15 cents per gallon on diesel. The state also levies a six percent sales tax on the wholesale and federal tax portion of each gallon of motor fuel. Virtually none of this sales tax revenue goes to transportation. Funding from motor fuel taxes and registration fees (but not the sales tax) is deposited in the MTF

Through activities described in the UWP, including: TSM Coordination, Transit Planning, Pavement Management Program, Update Long Range Multi-Modal Plan, Transportation Program Management, and Prepare Transportation Improvement Program, any changes in federal or state transportation legislation will be evaluated. Coordination of both highway improvement projects and transit services will be undertaken.

4. *Environmental Justice*

Federal Highways and Federal Transit have adopted a proactive goal of addressing social and neighborhood issues throughout the planning process. Genesee County continues to implement more outreach into our planning process and will implement the Public Participation Plan (PPP) as required by the IIJA legislation or any new federal transportation legislation. Staff has also identified several

work items in the UWP to address this. These work items can be found primarily under the Program Management, although there are additional elements in the Transportation Improvement Program (TIP) and in TSM and Transit Planning. Staff follows the PPP when working on the UWP, the LRTP, the TIP, and any specific studies such as corridor and trail plans.

5. *Intelligent Transportation Systems (ITS)*

Genesee County has developed a county-wide ITS Architecture, that is now maintained as part of the statewide architecture, and is now working toward a coordinated approach to implementing various forms of ITS. Staff has worked with the Mass Transportation Authority to develop and implement a Transit ITS deployment plan built off of the county-wide ITS Architecture. The MTA is continuing to build their ITS which includes a central ITS monitoring center including a 900 megahertz transmitter and receiver, automated vehicle locator (AVL) systems installed in fleet vehicles, computers and software to monitor and report the status of vehicles along their routes, and a computerized scheduling system for Your Ride services. The MTA has offered the use of the ITS infrastructure to other road agencies in Genesee County.

Road agencies have started to implement ITS technologies to help reduce congestion such as connecting and optimizing signals to improve traffic flow. The City of Flint, using recommendations from the Downtown Flint Parking and One-Way Street Study, conducted by staff and a consultant, has switched many of the downtown one-way streets to a two-way system and has upgraded traffic signal hardware allowing the system to be connected and optimized. The Michigan Department of Transportation (MDOT) has implemented an ITS system along I-69 to monitor traffic along the I-69, I-75, and I-475 corridors. The system monitors traffic and provide information to travelers along the corridors such as current conditions and alternative routes.

6. *Safety*

This is a system-wide issue affecting all modes of transportation and all users of the system. Genesee County agencies, while always integrating safety into the planning process, are now placing an emphasis on Safety Planning. Staff is doing this through several different avenues that include analyses of crash data for trends, a "mix of fixes" for problem areas, incorporating safety as a factor in TIP

project selection, and more awareness of safety planning for local road agencies.

For the FY 2025 MDOT Call for Safety Projects, it was stated that one focus of the program was to fund road segments that planned for vulnerable road users (VRU). Staff encouraged locals to select VRU projects such as pedestrian refuge islands, rectangular rapid flashing beacon, and pedestrian crosswalk markings. Safety projects submitted to MDOT were prioritized locally using these factors. Safety was also included as an element in the 2023-2026 TIP call for projects.

Following receipt of a new federal grant in early 2023, staff is working with local road agencies to create a new regional safety action plan. Once in place, all road and transportation agencies in the county will be able to apply for future project implementation projects to fund regional and local initiatives to prevent roadway deaths and serious injuries as part of the Infrastructure Investment and Jobs Act (IIJA). Work will be completed in cooperation with the Michigan Department of Transportation (MDOT) and a consultant.

B. MODAL ISSUES

1. *Highways*

The Flint-Genesee County 2045 Long Range Transportation Plan was completed and approved in 2020. It serves as the foundation for many of the transportation planning and improvement activities undertaken in the area. Genesee County's economy is still strongly tied to the success or failure of General Motors. Staff will continue to identify land use changes as part of the process to update the Long Range Transportation Plan. The 2045 LRTP document will be updated as necessary to include any new transportation legislation requirements including performance measures.

During the highway construction boom, interest focused on long-term projects. As a result, maintenance of the existing road network has generally been neglected. Most of the pavements built during the highway construction boom have either exceeded or are nearing their 20-year life expectancy. Maintenance activities used generally do not improve the longevity of the roadway. This method was sufficient when dealing with a limited number of roads which would receive major rehabilitation on a scheduled basis. However, the method is no longer adequate or efficient to handle the number of roads in need of attention.

Through activities described in the Pavement Management Program, a consistent evaluation process has been developed for the roads that qualify for federal aid in the county. This system assists in targeting necessary improvements and maintenance of the roads through continual monitoring of their surface conditions. PAVER was the pavement evaluation system used to evaluate the condition of the Genesee County Road network until 2007. In 2007 the PASER pavement evaluation system, after several years of evaluation, was selected as the system to be used for pavement evaluation and in the criteria for TIP project selection. Transportation legislation may require changes to the way pavement data is collected. Staff will continue to monitor this issue.

2. *Transit Routes*

The Flint Mass Transportation Authority (MTA) provides about 3 million public transit trips annually through several types of service. The MTA currently operates fixed route services comprising of primary, peak, regional and shopper service; demand response services providing paratransit and county wide transportation; and On Demand services such as Rides 2 Wellness and Vets 2 Wellness.

There are fourteen (14) primary routes. Thirteen (13) of the primary routes part from the terminal located at the Inter-modal Transportation Center in downtown Flint. These routes radiate out into the City of Flint and selected locations in Genesee County. The primary fixed routes operate from 6:30 a.m. to 6:30 p.m. on thirty (30) minute intervals and on one (1) hour intervals until 11:00 p.m.

Saturday service operates from 6:30 a.m. to 11:00 p.m. on one (1) hour intervals and on Sunday from 9:30 a.m. to 7:00 p.m. on one (1) hour intervals.

The peak routes provide commuter service during peak periods with selected stops, providing service to the general public, workers and student populations. These routes operate weekdays, morning and afternoon.

The MTA also provides a demand response paratransit service known as "Your Ride". This service supplements fixed routes and serves those sectors of the public who cannot effectively use the regular fixed route services, due to disability or lack of access to a nearby fixed route. Within the City of Flint, eligibility is limited to persons who have

mobility restrictions. Outside the fixed route area, any Genesee County resident can use the Your Ride service. The MTA has nine (9) Your Ride Service Centers with locations in Burton, Flint, Grand Blanc, Fenton, Flushing, Mt. Morris, Swartz Creek, Clio, and Davison.

Through a State of Michigan Department of Transportation (MDOT) Specialized Services grant program, the MTA provides various community agencies with funding assistance for those populations with specialized transportation needs, such as the elderly and persons with disabilities. The availability of these specialized services makes daily activities possible for many elderly and disabled citizens in various communities throughout Genesee County.

Regional Transportation was implemented in September 1997. Regional service routes originate at the MTA Customer Service Center at Harrison and Second Street in Downtown Flint and provide regular scheduled service to adjoining counties. Service is open to the general public but scheduled to meet the needs of Genesee County residents who need transportation to a work site outside of Genesee County. Regional routes are provided for two (2) counties surrounding Genesee County and some routes connect with suburban Detroit transit routes. This service is provided seven (7) days a week to meet the transportation needs of Genesee County residents.

Rides to Wellness is a comprehensive health and wellness related transportation program that provides mobility management, door-to-door service, and same day service to riders going to medical or other health-related appointments. Using cutting-edge technology and a ride-hailing-like model, Rides to Wellness is provided through service agreements with local agencies and to the general public for a premium fare. Health and wellness transportation is expected to be a key area of growth for MTA in the next 10 years.

Through Transit Planning, staff will continue to address transit needs within Genesee County especially those related to Ladders of Opportunity.

3. *Air*

Bishop International Airport, dedicated in 1934, had 299,865 enplanements through three (3) commercial airlines in 2022. These numbers are comparable to pre COVID years as 2019 had 301,534 enplaned passengers. The airport is managed by a nine-member

authority appointed by the mayor of Flint and the Genesee County Board of Commissioners.

Bishop International Airport has direct access to interstates I-69 and I-75 as well as two major railroad systems and also connects to US-23.

Staff will continue to monitor activities involving Bishop Airport through the TSM Coordination activity.

4. *Rail*

Railroad grade crossings have been the major issues in rail transportation. Staff will continue to work with local road agencies to identify and evaluate railroad grade crossings in Genesee County. Grant and earmark funds have provided funding for many railroad improvements in the county and will continue to be pursued. Other important issues include the impact of federal cuts on local AMTRAK service and track improvements. Despite repeated attempts by various administrations to reduce or eliminate federal financial support, there is still a clear Congressional mandate to continue operating a national system of rail passenger service. The Flint AMTRAK terminal is located at the Dort Highway MTA Administration Building.

5. *Non-motorized*

Staff will continue to integrate non–motorized transportation into transportation planning in Genesee County. Through activities described in the Update Long-Range Transportation Plan, Transportation System Management, and the Transportation Improvement Program sections of the UWP, staff will address non-motorized needs and assist local jurisdictions with non-motorized project requests. In 2006 and 2007 staff inventoried the Genesee County non-motorized transportation system (all types including existing sidewalks, shared use pathways, & bike lanes), identified a series of potential connecters to create a regional non-motorized transportation system, and completed work on the Genesee County Regional Transportation Plan. Staff, through a local grant awarded to our office, contracted consultants to complete preliminary engineering on the top five priority shared use paths from the plan and is working with local agencies to fund shared use pathway construction. Major sections of these top priority pathways have been constructed or have received funding commitments since the plan was developed. The Regional Non-Motorized plan was

updated as part of the 2045 LRTP. Staff will continue to work with local road agencies and trail groups to implement the plan.

C. STATEWIDE MODEL IMPLEMENTATION PROCESS

Genesee County staff was involved in the development of the statewide planning process and uses this model to initiate changes throughout our county planning process. The implementation of the statewide planning process has created additional linkages as well as strengthened existing ties with the state in all forms of transportation.

As a result of the statewide planning process, staff has been implementing changes in the UWP. Staff will continue to make changes and improvements that are consistent with the statewide planning process in the FY 2024 work program. In the following work elements, staff has indicated how the UWP elements are related to elements in the statewide process. This highlights the coordination and shared data gathering inherent in the planning process. One area of key importance to staff is the opportunity for more coordination on a local, regional and state level. Better coordination through these work items will help to provide ladders of opportunity by working to address gaps in essential services related to transportation connectivity.

Please note that GCMPC is identified in the "Funding Sources" and "Funding Use by Agency" tables on the following pages rather than Metro. This correctly identifies GCMPC as the entity that provides the match for federal funds and as the entity that is reimbursed for work performed for the identified work items. Additional details regarding funding, hours, and a generalized timeline for each work item can be found in Appendix B, C, D and E.

IIIA. DATA MANAGEMENT: DATA MANAGEMENT SYSTEMS

Objective

To collect and process land development, socioeconomic, and transportation data, which will be incorporated into an information management system. This information will be utilized to support all phases of the transportation planning process, including long range transportation planning, congestion management, and the transportation model, and other activities of Metro.

Major Work Elements

The major work elements can be categorized into the collection, maintenance and processing of land use, socioeconomic, transportation, and geographic information systems (GIS) data.

Land Use Data: The maintenance of a zoning and building permit information file will be continued, with major zoning changes being monitored. The Genesee County Land Use inventory will also be maintained.

Socioeconomic Data: This item includes the maintenance, development, and processing of socioeconomic (employment and population) data including CENSUS, REMI, and Woods & Poole databases. Other databases will be evaluated and incorporated into the management system as necessary. The SE projections, updated in FY 2023, are the main input into the transportation model for the Long Range Transportation Plan and will be used throughout plan development in FY 2024.

Transportation Data: Staff will work with other transportation agencies, such as MDOT and the MTA, to develop and maintain transportation related databases and incorporate this information into the management system. Transportation data includes information for automobiles, transit, rail, air, and freight/congestion (RITIS (NPMRDS from INRIX)) and is related to service type, quality, use (counts and speed study), safety, and inventory. Staff will work to better coordinate annual data collection and submittals with MDOT staff as we work to improve our traffic count program. Non-motorized data will be collected on select non-motorized networks such as facility condition and counts. Work items related to Highway Performance Monitoring System (HPMS) data collection for Genesee County are outlined in the Genesee-Lapeer-Shiawassee Region V Planning and Development Commission work program. Staff will also work with MDOT in the collection,

review, and processing of Model Inventory Roadway Elements (MIRE) data. The six (6) data items that MPO staff will be requested to review will be: surface type, number of through lanes, access control, median type, facility type and junction traffic control. MPO and MDOT staff will begin the process of meeting to discuss and plan for annual maintenance and validating the six (6) data items going forward. The review and delivery of these data items will be done using Roadsoft.

Geographic Information Systems: Staff will continue to transfer and update transportation, socioeconomic and land use data into a GIS format.

U.S. Census Urban Area Review: Staff will review the new 2020 Urban Area data in coordination with MDOT. The boundaries will be smoothed and adjusted to identify urban roads for transportation planning purposes. The proposed adjustments to the U.S. Census Urban Areas will then be submitted to FHWA for approval. The final result will be an Adjusted Census Urbanized Boundary or "ACUB."

Data collection and work resulting from new state or federal transportation legislation will be conducted under this work item.

Products

Products will include a maintained database and GIS management system for Genesee County. Reports and graphics illustrating data analysis will be developed as necessary.

Funding Sources	
Agency	**Cost**
GCMPC	$6,019
MTA	$0
FHWA (PL)	$27,142
MDOT (MTF)	$7,593
TOTAL	**$40,754**

Funding Use by Agency		
Agency	**Cost**	**Hours**
GCMPC	$33,161	600
MTA	$0	0
MDOT	$7,593	240
Consultant	$0	0
TOTAL	**$40,754**	840

IIIB. DATA MANAGEMENT: MODEL MAINTENANCE AND ANALYSIS

Objective

To implement, maintain and update the Flint-Genesee County transportation system model (TRANSCAD). This model will be used as the basis for developing current and future transportation plan updates. Model

data may be exported to the current version of the air quality emissions model being used to evaluate air quality conformity of the LRTP and TIP, and amendments to each document as necessary and according to what our air quality conformity status dictates. The model may also be used to create sub-area models, information for corridor studies, and alternative analysis, for local units of government or other agencies.

Major Work Elements

MDOT will update files, as needed, utilizing census data and other data sources and will conduct traffic counts at external stations in Genesee County.

The calibrated transportation model, which is a component of the CMP, will be used for the development of the TIP and LRTP, and amendments to each. This includes model exports for air quality analysis for the plans and amendments as necessary and according to what our air quality conformity status dictates. Under this work item staff will attend training related to the air quality emissions model and will work to fully integrate it into the planning process in Genesee County. This includes model updates, testing of the model, and analysis for updates or amendments to the TIP and LRTP as needed. Staff will work to better integrate congestion management into the transportation model improving the CMP. Staff will also work to better integrate non-recurring congestion in the CMP.

Staff with the assistance of MDOT will use the model for data analysis related to the 2023-2026 Transportation Improvement Program (TIP) and the new 2050 Long Range Transportation Plan (LRTP). This will include incorporation of new socio-economic data, road/transit network updates, and other attributes. Staff will also work with MDOT to run and update the current transportation model for various transportation studies. Staff will attend trainings in relation to transportation modeling.

Products

Updates to the model will include changes resulting from amendments to TIP and LRTP projects, and the release of updated transportation and/or socio-economic related data. Staff will run the model for alternative analysis and scenarios as necessary. A fully incorporated emissions model is in place to run conformity analysis as necessary and according to what our air quality conformity status dictates. Updates to the model will be documented and the calibration report will be kept up to date with any new procedures. Staff used model outputs, existing and projected levels of congestion, to identify congested corridors as part of the CMP. Staff will continue to use the model and its outputs for the CMP, and will improve

and monitor this process. Most of the model analysis in FY 2024 will be for development of the 2050 LRTP including calibration and utilization of new socioeconomic projections and updated road/transit networks.

Funding Sources	
Agency	**Cost**
GCMPC	$3,228
MTA	$0
FHWA (PL)	$14,559
MDOT (MTF)	$13,324
TOTAL	**$31,112**

Funding Use by Agency		
Agency	**Cost**	**Hours**
GCMPC	$17,787	320
MTA	$0	0
MDOT	$13,324	400
Consultant	$0	0
TOTAL	**$31,112**	720

IVA. TRANSPORTATION SYSTEM MANAGEMENT (TSM) PLANNING: TSM ACTIVITY COORDINATION

Objective

To coordinate a short-range program intended to identify feasible traffic engineering, regulatory, public transportation, and various other measures that would provide for a more efficient utilization of existing transportation facilities. This activity will also enhance and complement the ridesharing activity to decrease the number of vehicles on the roadway and the long range transportation planning activity to improve the air quality and decrease energy use in Genesee County.

Major Work Elements

Staff will prepare for and conduct meetings related to transportation planning such as the Technical Advisory Committee (TAC) and its subcommittees. Staff will monitor and perform work related to non-motorized and intermodal transportation, congestion management, access management, Intelligent Transportation Systems (ITS), traffic flow, parking and other transportation system-related elements. This includes work items such as workshops, reports and/or plan development, assisting with grant/application development, and general technical assistance. Staff will continue to evaluate and incorporate transportation related software into the Flint-Genesee County system and evaluate and maintain technologies, such as the GCMPC website, to publish and host work products and information related to transportation planning. Working through the TSM, TAC, and the Genesee County Metropolitan Alliance, staff will begin to discuss and evaluate issues related to livability, climate change, tourism, natural disaster threats, and performance measures with

the goal of inventorying activities that are already in place to address these issues and to develop a plan for improvement.

When developing transportation-related studies and reports staff will be conscious of how the data collected may be beneficial to the National Environmental Policy Act (NEPA) to help facilitate Planning and Environmental Linkages (PEL).

Staff will perform any anticipated and/or unanticipated work including activities resulting from the interpretation and/or implementation of certain IIJA requirements by FHWA and/or MDOT, or any new state or federal transportation legislation that may be put in place. Specifically, this could include activities related to working cooperatively and collaboratively with MDOT and statewide committees, such as the Statewide Congestion Management Group (SCMG), in the review and development of performance targets and/or activities resulting from new guidance released from FHWA or development of specific performance measures by MDOT. Staff will continue to evaluate better ways to display and track progress of performance measure related data such as web-based dashboards and system performance reports.

The 2045 LRTP includes a preliminary analysis of the Genesee County road network identifying potential locations that may be good candidates for future roundabouts. In FY 2021 staff worked with a consultant to performing a more detailed analysis of select intersection in Genesee County for conversion to a roundabout. Staff will continue to work with local road agencies to go after funding for intersections that are good candidates for roundabouts.

Staff will continue to coordinate with MDOT, the City of Flint, and other stakeholders on a corridor study of I-475 and M-21 in the City of Flint. Results of this study are expected early FY 2024 with implementation funds assigned over the next few years.

Products

Attendance of transportation related meetings including meeting preparation and work requested as staff of these meetings. Maintenance, update, and implementation of plans prepared under this work item including the Regional Trail Plan, Roundabout Study, and I-475 extension feasibility study. The US-23 Corridor Traffic Study, initiated in FY 2023, will help gauge where future transportation improvements may be needed along and surrounding the corridor. Staff will continue to work with the consultant through public involvement, data collection, and implementation of

project recommendations. Any unanticipated products including those related to IIJA implementation or new legislation as described above.

Funding Sources	
Agency	**Cost**
GCMPC	$77,271
MTA	$0
FHWA (PL)	$348,466
MDOT (MTF)	$30,743
TOTAL	**$456,480**

Funding Use by Agency		
Agency	**Cost**	**Hours**
GCMPC	$425,737	7,520
MTA	$0	0
MDOT	$30,743	920
Consultant	$0	0
TOTAL	**$456,480**	8,440

IVB. TRANSPORTATION SYSTEM MANAGEMENT (TSM) PLANNING: TRANSIT PLANNING

Objective

To enhance and continue the development of an efficient and effective transit service in the Flint-Genesee County area. This activity will provide the avenue to perform in-depth studies of transit-related problems in operations/management, service planning, and energy contingency planning.

Major Work Elements

Staff will be in attendance at MTA meetings including Local Advisory Council (LAC) meetings. Staff will assist the MTA in the determination of new fixed routes, transit related surveys, ITS integration plan, and the development and update of transit related plans such as the coordinated Public Transit-Human Services Transportation Plan. MTA staff will continue to collect information regarding the Your Ride Program and a survey of public and user opinion of the public transit system will be completed. Staff will work with the MTA and MDOT to ensure transit projects in the TIP and LRTP demonstrate fiscal constraint. Metro will also coordinate with the MTA on matters related to land use issues for the region so that access to public transportation will be a consideration as new developments are planned. Better coordination through this work element will help to provide ladders of opportunity by working to address gaps in essential (core) services related to transportation connectivity.

Staff will continue to work with the MTA on implementing recommendations from the recent Transit Asset Management Plan and the I-69, I-75 transit

needs studies. Staff will also continue to work with the MTA and consultants on new studies for FY 2024 including an MTA Regional Transit Authority Study.

Staff will perform any unanticipated work including activities resulting from the interpretation and/or implementation of certain IIJA requirements by FHWA/FTA and/or MDOT, or any new state or federal transportation legislation that may be put in place. Specifically, this could include activities related to working with MDOT and the MTA in the review and development of performance targets and/or activities resulting from new guidance released from FHWA/FTA or development of specific performance measures by MDOT.

Products

Staff will work with the MTA, MTA consultants, and other planning agencies to develop, update, and implement transit related studies and surveys such as the coordinated Public Transit-Human Services Transportation Plan, transit use and needs survey and study, ridership surveys, fixed route study, MTA Regional Transit Authority Study, and ITS Integration Plan as needed.

Funding Sources	
Agency	**Cost**
GCMPC	$1,109
MTA	$21,658
FHWA (PL)	$102,671
MDOT (MTF)	$0
TOTAL	**$125,438**

Funding Use by Agency		
Agency	**Cost**	**Hours**
GCMPC	$6,109	120
MTA	$0	0
MDOT	$0	0
Consultant	$119,329	2,120
TOTAL	**$125,438**	2,240

IVC. TRANSPORTATION SYSTEM MANAGEMENT (TSM) PLANNING: RIDESHARING

Objective

To continue implementation of an area-wide ridesharing program involving carpools, vanpools and public transportation information services. Promote and implement ridesharing programs within public and private sector organizations; assist individuals in making ridesharing arrangements; and coordinate ridesharing programs with public transportation, energy conservation, air quality and park-and-ride programs.

Major Work Elements

Staff will maintain a Local Ridesharing Office (LRO) within the offices of the Genesee County Metropolitan Planning Commission (GCMPC), and develop and implement appropriate ridesharing programs to meet the needs of Genesee and Lapeer Counties. Because the Flint-Genesee County area is the employment/service center, the major focus of the ridesharing program will be in the Flint-Genesee County area. Staff will, however, provide a complete program of information and assistance to Lapeer County. Also, staff will maintain and implement a participant match website/database for these areas. Additional services to be provided include the identification of strategic locations for transit friendly car pool lots. Staff will evaluate and implement various promotional/marketing materials and methods for the Rideshare program such as billboard style advertisements, commercials, press releases, informational tables at events, and promotional giveaways such as pens, cups, etc.

Products

Products for this work item include a maintained Rideshare participant match website/database and marketing materials. Other items will be developed for the Rideshare program as needed.

Funding Sources	
Agency	**Cost**
GCMPC	$0
MTA	$0
FHWA (PL)	$0
MDOT (MTF)	$0
CMAQ	$50,000
TOTAL	**$50,000**

Funding Use by Agency		
Agency	**Cost**	**Hours**
GCMPC	$50,000	880
MTA	$0	0
MDOT	$0	0
Consultant	$0	0
TOTAL	**$50,000**	880

IVD. TRANSPORTATION SYSTEM MANAGEMENT (TSM) PLANNING: PAVEMENT MANAGEMENT PROGRAM

Objective

To operate a Pavement Management Program for all roads in Genesee County.

Major Work Elements

Staff will continue to evaluate and monitor ongoing maintenance and reconstruction projects within the pavement management network as to their relationship to the pavement management program. Assistance will be provided to local road agencies for data collection procedures and project selection, implementing maintenance procedures and showing the results of maintenance efforts, data collection as needed, and other pavement management related requests. Staff will continue to integrate pavement management data into the County GIS system.

Products

Staff will prepare a PASER condition summary for Metro and detailed reports as requested by the local units of government or agencies responsible for roads in Genesee County. Staff will continue to maintain the pavement management system, including software updates, and evaluate and implement new technologies and software as necessary. The main Michigan Transportation Asset Management Council (TAMC) data collection efforts and reports related to pavement management for Genesee County are conducted as part of the Genesee-Lapeer-Shiawassee Region V work program.

Products for this work item include updates to the plan due to changes in projects or requirements that may result from the interpretation and/or implementation of certain IIJA requirements by FHWA and/or MDOT, or any new state or federal transportation legislation that may be put in place. Specifically, this could include activities related to working with MDOT in the review and development of performance targets and/or activities resulting from new guidance released from FHWA or development of specific performance measures by MDOT.

Funding Sources	
Agency	**Cost**
GCMPC	$443
MTA	$0
FHWA (PL)	$2,000
MDOT (MTF)	$0
TOTAL	**$2,443**

Funding Use by Agency		
Agency	**Cost**	**Hours**
GCMPC	$2,443	40
MTA	$0	0
MDOT	$0	0
Consultant	$0	0
TOTAL	**$2,443**	40

IVE. TRANSPORTATION SYSTEM MANAGEMENT (TSM) PLANNING: SAFETY AND COMPLETE STREETS CONSCIOUS PLANNING

Objective

The IIJA requires that the metropolitan planning process shall provide for the consideration of projects and strategies that will increase the safety and security of the transportation system for the motorized and non-motorized users. Safety Conscious Planning (SCP) implies a proactive approach to the prevention of accidents and unsafe transportation conditions by establishing an inherently safe multimodal transportation network. SCP achieves road safety improvements through small, but measurable, changes targeted at the whole network. The objective is to integrate safety considerations into the core activities of the transportation planning process. The IIJA also established a 2.5% of planning fund set-aside for increasing safe and accessible transportation options, or complete streets.

Major Work Elements

Staff will work to keep the safety website and website links up to date and will work to educate locals on how to use these internet resources to create county and local level safety profiles in real-time. Staff will work with local road agencies to conduct corridor studies on select road segments in Genesee County identifying multimodal safety issues and potential mitigating strategies such as installation of separated shared-use pathways where deemed appropriate. Staff will also provide assistance with analysis and studies of high crash corridors and intersections as requested outside of the specified study previously mentioned. The evaluation and implementation of safety analysis software will be continued. All safety planning activities will be documented in relevant plans and the GCMPC website.

GCMPC will continue to work with the County Information Technology (IT) department and potential consultants to improve the security of the data and operation systems.

Staff will continue to explore partnerships with other organizations, such as our partnership with the Michigan State Police and Wayne State University for the intersection safety study, to help improve safety and leverage additional safety money for the region. Future partnerships may include organizations such as the AAA Foundation for Traffic Safety, insurance agencies, and continued partnerships with the Michigan State Police and Wayne State University. In FY 2016 staff began working with MDOT and a

consultant on a regional safety study for Genesee, Lapeer, and Shiawassee Counties. Now that the study is complete staff will continue to work with local road agencies on implementation of the study and integration into the LRTP.

Staff will perform any unanticipated work including activities resulting from the interpretation and/or implementation of certain FAST Act requirements by FHWA and/or MDOT, or any new state or federal transportation legislation that may be put in place. Specifically, this could include activities related to working with MDOT in the review and development of performance targets and/or activities resulting from new guidance released from FHWA, results from the 2019 Certification Review, or development of specific performance measures by MDOT.

Staff will continue to work with MDOT, FHWA, and FTA to further implement the new IIJA complete streets set-aside requirements to improve multimodal safety, mobility, and accessibility for all users of the transportation system. The current complete streets policy for Genesee County will be reviewed for potential updates. Staff will continue to work with local transportation agencies, local units of government, and committees to implement and update existing complete streets policies and help to develop new policies. Complete streets are fully integrated into TIP and LRTP project development, prioritization, and selection process. Staff will work to develop a complete streets prioritization plan that identifies specific complete streets projects to improve multimodal safety, mobility, and accessibility.

Products

Products for this work item include analysis and studies of high crash corridors and intersections as requested, updated website with links and instructions to safety analysis tools to create real-time safety profiles, and other transportation safety related work items as needed. Staff will document all safety planning activities on the GCMPC website. Staff will continue to provide local road agencies with safety information and analysis on their road network as part of TIP project selection and also the annual MDOT call for safety projects.

Funding Sources	
Agency	**Cost**
GCMPC	$5,581
MTA	$0
FHWA (PL)	$25,168
MDOT (MTF)	$0
TOTAL	**$30,749**

Funding Use by Agency		
Agency	**Cost**	**Hours**
GCMPC	$30,749	560
MTA	$0	0
MDOT	$0	0
Consultant	$0	0
TOTAL	**$30,749**	560

IVF. TRANSPORTATION SYSTEM MANAGEMENT (TSM) PLANNING: **Air Quality Awareness**

Objective

To develop and implement an air quality awareness public education and outreach program to educate the public and community leaders about connections among trip making and transportation mode choices, traffic congestion, and air quality. These activities can help communities reduce emissions and congestion by inducing drivers to change their transportation choices. This program will complement the existing Rideshare program and will improve the overall GCMPC program by expanding education and outreach opportunities beyond Rideshare to other air quality improving activities.

Major Work Elements

This is the fourth year of the Air Quality Awareness program. Program outreach in FY 2023 picked up due to reduction in Covid restrictions. Staff will continue to review various programs from across the country to build the program. Staff will continue to develop educational and promotional materials such as webpages, social media content, commercials, press releases, billboard style advertisement, and presentations to assist in outreach for the program. Staff will work with local municipalities, businesses, schools, and various events to provide educational and outreach opportunities regarding air quality awareness.

Products

Products for this work item include the continued development of an Air Quality Awareness program and supporting educational and outreach materials.

Funding Sources	
Agency	**Cost**
GCMPC	$12,500
MTA	$0
FHWA (PL)	$0
MDOT (MTF)	$0
CMAQ	$50,000
TOTAL	**$62,500**

Funding Use by Agency		
Agency	**Cost**	**Hours**
GCMPC	$62,500	0
MTA	$0	0
MDOT	$0	0
Consultant	$0	0
TOTAL	**$62,500**	0

VA. LONG RANGE TRANSPORTATION PLANNING PROGRAM: UPDATE LONG RANGE TRANSPORTATION PLAN

Objective

To efficiently maintain and update a compliant multi-modal long range transportation plan. The long range transportation planning program involves the compilation of all the tools for analysis, evaluation and needs identification. These sections contribute the framework, along with a transparent public participation process on which staff develops the long range transportation plan (LRTP).

Major Work Elements

Staff will monitor and update the 2045 LRTP as needed. Updates will include administrative modifications or amendments due to changes in projects or requirements that may result from the interpretation and/or implementation of certain FAST Act requirements by FHWA and/or MDOT, or any new state or federal transportation legislation that may be put in place. Specifically, for the LRTP this could include activities resulting from new guidance released from FHWA or development of specific performance measures by MDOT. Staff will work with MDOT and local road agencies in the development and tracking of statewide and local performance measures. LRTP work for the model update will continue in FY 2024 under the Model Maintenance and Analysis work item.

Staff will also continue the 2050 LRTP update. In FY 2023 Staff developed a LRTP update timeline and began updating the socio-economic projections as noted in the Data Management work items.

As freight issues and freight planning take on more significance at a national level MPO's have been asked to identify specific tasks in their UWP's to better identify freight planning activities. The following is a listing of activities that outline freight planning in regards to the development and maintenance of the LRTP.

- MPO staff will work closely with state and federal transportation partners to further integrate freight planning into the transportation planning process including the State Freight Plan. This includes monitoring funding opportunities for regional freight related projects and identification of Freight stakeholders.

- MPO staff will work closely with local officials and interests to inventory and monitor freight routes and intermodal facilities within the metropolitan area.

- MPO staff will work closely with local officials and stakeholders to monitor freight related issues within the metropolitan area.

- Input from freight stakeholders will be sought by MPO staff and considered to successfully integrate freight planning into existing transportation planning processes.

Products

Products for this work item include updates to the plan due to changes in projects or requirements that may result from the interpretation and/or implementation of certain FAST Act requirements by FHWA, and/or MDOT or any new state or federal transportation legislation that may be put in place. Specifically, this could include activities related to working with MDOT in the review and development of performance targets and/or activities resulting from new guidance released from FHWA or development of specific performance measures by MDOT. Items specific to the LRTP update include LRTP Steering Committee meetings, various reports on data collected, and draft plan chapters resulting from changes at the local, state and/or federal level.

Funding Sources	
Agency	**Cost**
GCMPC	$4,172
MTA	$0
FHWA (PL)	$18,812
MDOT (MTF)	$3,871
TOTAL	**$26,854**

Funding Use by Agency		
Agency	**Cost**	**Hours**
GCMPC	$22,984	400
MTA	$0	0
MDOT	$3,871	120
Consultant	$0	0
TOTAL	**$26,854**	520

Work on the LRTP will be accounted for through indirect staff costs.

VIA. PLANNING SUPPORT: TRANSPORTATION PROGRAM MANAGEMENT

Objective

To provide for administration of the 3-C transportation planning process and provide for the cooperative, continuing, comprehensive and intermodal nature of the entire planning program.

Major Work Elements

Staff will prepare and process monthly progress reports on the UWP, prepare programs/agendas for policy meetings, prepare the Final Acceptance Report, and attend MTPA Transportation Directors meetings. There will be a review of IIJA, ACT 51 funding, and Economic Development Fund Programs for updates and to address any required changes as necessary including new legislation. Staff will implement the statewide planning process and work with the MTPA Directors to set priorities and policies such as a uniform financial plan for the various Michigan MPO LRTPs and TIPs.

Through this activity, staff will document the evaluation of public outreach efforts of Metro plans, programs, and other work activities as outlined in the PPP. This information will be used to update the PPP and to improve outreach efforts, such as virtual options for public involvement, of the various programs administered by the Genesee County Metropolitan Planning Commission. To help incorporate public comment received regarding Metro documents and programs, there will be at least a two-week period between the end of a comment period and committee action following PPP requirements.

MDOT activities are related to the administration and review of the PL program. MDOT efforts will focus on the preparation of the Final

Acceptance Report, State Review Committee Coordination, MTPA committee meeting attendance, contract administration related to the UWP and overall program administration. MDOT staff will provide for general departmental liaison and coordination with local and regional agencies and the general public. Other MDOT costs involving the more technical activities are indicated under the appropriate work activities.

Staff will also continue to maintain formal agreements and work cooperatively with surrounding counties on parts of the Flint/Genesee urbanized area that fall outside the metro planning area (SEMCOG Region). Agreements with regional partners will be reviewed to see if updates need to be made. GCMPC will continue efforts for cooperation and coordination across MPO boundaries where appropriate to ensure a regional approach to transportation planning.

Products

Products for this work item include programs/agendas for policy and committee meetings, Final Acceptance Report for the most recently completed fiscal year, a transportation planning process summary for use by the public, an updated PPP, newsletters and presentations at public meetings as necessary.

Funding Sources	
Agency	**Cost**
GCMPC	$44,022
MTA	$0
FHWA (PL)	$198,522
MDOT (MTF)	$13,101
TOTAL	**$255,645**

Funding Use by Agency		
Agency	**Cost**	**Hours**
GCMPC	$242,544	4,280
MTA	$0	0
MDOT	$13,101	400
Consultant	$0	0
TOTAL	**$255,645**	4,680

VIB. PLANNING SUPPORT: DEVELOP UNIFIED WORK PROGRAM (UWP)

Purpose

To prepare the Unified Work Program (UWP).

Major Work Elements

Specifically included under this work element is the preparation of the UWP. All work conducted regarding the UWP will be on a cooperative basis involving all local agencies, transportation providers, the general public,

and targeting groups that have historically been underserved, who have an interest in transportation planning. Staff will be responsible for outreach, coordination and final preparation of the work program. Any amendments required will be prepared by staff.

Products

Staff will complete a UWP for FY 2025 and, if required, administrative modifications and amendments to the FY 2024 UWP. In addition, changes will be made to the UWP as a result of any new planning regulations.

Funding Sources	
Agency	**Cost**
GCMPC	$1,668
MTA	$0
FHWA (PL)	$7,523
MDOT (MTF)	$1,935
TOTAL	**$11,126**

Funding Use by Agency		
Agency	**Cost**	**Hours**
GCMPC	$9,191	160
MTA	$0	0
MDOT	$1,935	40
Consultant	$0	0
TOTAL	**$11,126**	200

VIC. PLANNING SUPPORT:
PREPARE TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

Purpose

To efficiently prepare a multi-modal TIP outlining the projects being proposed, justification, type of improvement, priority rating, and respective costs through a transparent public process meeting the federal guidelines established for a TIP. In addition, this work element includes the maintenance of the TIP through amendments and administrative modifications as required. Changes to the TIP will also be made as a result of the interpretation and/or implementation of certain FAST Act requirements by FHWA and/or MDOT or any new state or federal transportation legislation that may be put in place.

Major Work Elements

The FY 2023-2026 TIP document was developed and approved in FY 2022. FY 2024 work items for the FY 2023-2026 TIP will focus on maintenance of the TIP, which include working with TIP project agencies to monitor project status, preparation of status reports, preparation of amendments and administrative modifications to the TIP as requested by the TIP project agencies, air quality conformity related to TIP amendments as needed/required, preparation and publication of an annual report as

outlined in IIJA to include how projects work towards meeting performance measure targets, and public participation and documentation of public participation for the previously identified work items following the Public Participation Plan requirements. Changes will also be made to the TIP as a result of the interpretation and/or implementation of certain IIJA requirements by FHWA and/or MDOT, or any new state or federal transportation legislation that may be put in place. Specifically, for the TIP this could include working with MDOT and MTA in the development and implementation of performance targets and/or activities resulting from new guidance released from FHWA or development of specific performance measures by MDOT. JobNet became the official TIP repository in FY 2019. Staff will work to maintain project information and fiscal constraint in Jobnet, and will work with MDOT, FHWA, FTA, and other MPOs in Michigan to improve the functionality of JobNet.

As freight issues and freight planning take on more significance at a national level MPO's have been asked to identify specific tasks in their UWP's to better identify freight planning activities. The following is a listing of activities that outline freight planning in regards to the development and maintenance of the TIP.

- MPO staff will work closely with state and federal transportation partners to further integrate freight planning into the transportation planning process including the State Freight Plan. This includes monitoring funding opportunities for regional freight related projects and identification of Freight stakeholders.

- MPO staff will work closely with local officials and interests to inventory and monitor freight routes and intermodal facilities within the metropolitan area.

- MPO staff will work closely with local officials and stakeholders to monitor freight related issues within the metropolitan area.

Improving the coordination between transit, non-motorized interests and road agencies during project development and selection through this work element will help to provide ladders of opportunity by working to address gaps in essential (core) services related to transportation connectivity. Staff will continue to improve environmental justice, environmental consultation, and environmental mitigation methodology and documentation for the TIP. As more information is released regarding implementation of the IIJA requirements staff will look for ways to better integrate infrastructure and connectivity needs in the transportation planning process for STRAHNET routes and other public roads that connect to the Department of Defense

facilities and lands related to the Federal Land Management Agency (FMLA).

Products

Products for this work item include amendments and administrative modifications to the FY 2023-2026 TIP as necessary, an updated JobNet database, TIP project status reports, and documentation of TIP public participation/outreach efforts. Staff will also publish, in accordance with the TIP notice requirements as identified in the PPP, an annual listing of projects that were obligated, let for bid, under construction and/or completed during the previous fiscal year no more than 90 calendar days following the end of the represented fiscal year, and will include how the projects helped to work towards meeting performance targets.

Funding Sources	
Agency	**Cost**
GCMPC	$20,920
MTA	$0
FHWA (PL)	$94,343
MDOT (MTF)	$3,870
TOTAL	**$119,133**

Funding Use by Agency		
Agency	**Cost**	**Hours**
GCMPC	$115,263	2,040
MTA	$0	0
MDOT	$3,870	120
Consultant	$0	0
TOTAL	**$119,133**	2,160

APPENDICES

Please note that the represented numbers in the following charts may vary slightly from the real numbers as they have been rounded through Excel and/or by a conversion formula.

APPENDIX A

BUDGET NARRATIVE AND INDIRECT COST ESTIMATES

BUDGET NARRATIVE

Fiscal Year 2024

Fiscal Year 2024 will begin on October 1, 2023 and end on September 30, 2024.

Genesee County Metropolitan Planning Commission and Mass Transportation Contractual Relationship

The FTA funds shown in this UWP will be applied for by staff. The MTA will contract with the staff to carry out a portion of the work. Each agency will provide its own local match for the federal funds it receives.

GCMPC

GCMPC will provide its own cash match for FHWA funding. The match (18.15% for FHWA) will be shown in the funding source table next to the agency participating.

MDOT Match

Local match for MTF funds will be shown in the UWP for fiscal year 2022. MDOT (MTF, 20%) will be shown separately from SPR (federal share, 80%).

Cost Estimation Methodology

The dollar amounts shown in the responsible agency table are based on weekly cost estimates to finance a professional planner with support services. The dollar amount estimates include all fringes and support services. Estimates for labor are as follows:

Agency	**Labor Cost/Week**
GCMPC	$2,267
MDOT	$1,349

APPENDIX B

FISCAL YEAR 2024 UNIFIED WORK PROGRAM FUNDING SOURCES

FUNDING SOURCES
FISCAL YEAR 2024 UNIFIED WORK PROGRAM

Activities	GCMPC	PL	PL Transit	Carry Over--PL	Carry Over PL Transit	CMAQ*	HPP	Subtotal (GCMPC)	MTF (MDOT)	Total
III. DATA MANAGEMENT										
A. Data Management Systems	$6,019	$26,132	$1,010					$33,161	$7,593	$40,754
B. Data Inventory and Model Maintenance	$3,228	$12,925	$1,634					$17,787	$13,324	$31,112
Subtotal	$9,247	$39,057	$2,644	$0				$50,948	$20,917	$71,865
IV. TSM PLANNING										
A. TSM Coordination	$77,271	$311,276	$37,190					$425,737	$30,743	$456,480
B. Transit Planning	** $22,767	$0	$102,671					$125,438	$0	$125,438
C. Ridesharing						$50,000		$50,000	$0	$50,000
D. Pavement Management	$443	$2,000						$2,443	$0	$2,443
E. Safety and Complete Streets Planning	$5,581	$25,168						$30,749	$0	$30,749
F. Air Quality Awareness	$12,500					$50,000		$62,500	$0	$62,500
Subtotal	$118,563	$338,444	$139,861	$0	$0	$100,000	$0	$696,868	$30,743	$727,611
V. LONG-RANGE PLANNING										
A. Update Long Range Transportation Plan	$4,172	$14,886	$3,926					$22,984	$3,871	$26,854
Subtotal	$4,172	$14,886	$3,926	$0	$0			$22,984	$3,871	$26,854
VI. PLANNING SUPPORT										
A. Program Management	$44,022	$189,224	$9,298					$242,544	$13,101	$255,645
B. Develop Unified Work Program	$1,668	$6,322	$1,201					$9,191	$1,935	$11,126
C. Prepare Transportation Improvement Program	$20,920	$55,931	$38,412					$115,263	$3,870	$119,133
Subtotal	$66,610	$251,477	$48,911	$0	$0		$0	$366,998	$18,906	$385,904
GRAND TOTAL	**$198,591**	**$643,864**	**$195,342**	**$0**	**$0**	**$100,000**	**$0**	**$1,137,797**	**$74,437**	**$1,212,234**

**21,658 of match to be provided by the MTA
*CMAQ Funds are being requested under a separate application.

Amounts shown below represent Federal Funds equaling 81.85% of total.
Studies and other contracted services
MTA Transit Planning - Transit Surveys $25,000
MTA Transit Studies - $72,671

Studies and other contracted services Obligated in FY 2023
US- 23 Traffic Development Study - $282,383 ($345,000 total)
MTA Regional Transit Authority Study $240,000 ($300,000 total) - 5304 Funds

GCMPC-Genesee County Metropolitan Planning Commission Local Match
PL-Federal Funds for Planning Activities from the Federal Highway Administration
PL Transit-Federal funds for Transit Planning from Federal Transit Administration
CMAQ - Congestion Mitigation and Air Quality funds (Ridesharing/Air Quality Awareness)
MTF-Michigan Transportation Fund
HPP-High Priority Projects

Funding Sources - Transportation Planning Funds and GCMPC Match			
Activities	GCMPC	PL	Total
A. DATA MANAGEMENT			
1. Data Management Systems	$6,019	$27,142	$33,161
2. Data Inventory and Model Maintenance	$3,228	$14,559	$17,787
Subtotal	$9,247	$41,701	$50,948
II. TSM Planning			
1. TSM Coordination	$77,271	$348,466	$425,737
2. Transit Planning	$22,767.00	$102,671	$125,438
3. Ridesharing	$0	$0	$0
4. Pavement Management	$443	$2,000	$2,443
5. Safety and Complete Streets Planning	$5,581	$25,168	$30,749
6. Air Quality Awareness	$12,500	$0	$12,500
Subtotal	$118,563	$478,305	$596,868
C. LONG-RANGE PLANNING			
1. Update Long Range Transportation Plan	$4,172	$18,812	$22,984
Subtotal	$4,172	$18,812	$22,984
D. PLANNING SUPPORT			
1. Program Management	$44,022	$198,522	$242,544
2. Develop Unified Work Program	$1,668	$7,523	$9,191
3. Prepare Transportation Improvement Program	$20,920	$94,343	$115,263
Subtotal	$66,610	$300,388	$366,998
GRAND TOTAL	$198,591	$839,206	$1,037,797

APPENDIX C

FISCAL YEAR 2024 UNIFIED WORK PROGRAM

RESPONSIBLE AGENCIES

RESPONSIBLE AGENCIES

UNIFIED WORK PROGRAM

Activities	GCMPC	MDOT	MTA	CONSULTANT	TOTAL
I. DATA MANAGEMENT					
A. Data Management Systems	$33,161	$7,593	$0	$0	$40,754
B. Data Inventory and Model Maintenance	$17,787	$13,324	$0	$0	$31,112
Subtotal	$50,948	$20,917		$0	$71,865
II. TSM PLANNING					
A. TSM Coordination	$425,737	$30,743	$0	$0	$456,480
B. Transit Planning	$6,109	$0	$0	$119,329	$125,438
C. Ridesharing	$50,000	$0	$0	$0	$50,000
D. Pavement Management	$2,443	$0	$0	$0	$2,443
E. Safety and Complete Streets Planning	$30,749	$0	$0	$0	$30,749
F. Air Quality Awareness	$62,500	$0	$0	$0	$62,500
Subtotal	$577,539	$30,743	$0	$119,329	$727,611
III. LONG-RANGE PLANNING					
A. Update Long RangeTransportation Plan	$22,984	$3,871	$0	$0	$26,854
IV. PLANNING SUPPORT					
A. Program Management	$242,544	$13,101	$0	$0	$255,645
B. Develop Unified Work Program	$9,191	$1,935	$0	$0	$11,126
C. Prepare Transportation Improvement Program	$115,263	$3,870	$0	$0	$119,133
Subtotal	$366,998	$18,906			$385,904
GRAND TOTAL	$1,018,468	$74,437	$0	$119,329	$1,212,234

APPENDIX D

FISCAL YEAR 2024 UNIFIED WORK PROGRAM - LABOR ESTIMATES

LABOR ESTIMATES
UNIFIED WORK PROGRAM

Activities	GCMPC HOURS	MDOT HOURS	MTA HOURS	CONSULTANTS HOURS	TOTAL HOURS
I. DATA MANAGEMENT					
A. Data Management Systems	600	240	0	0	840
B. Data Inventory and Model Maintenance	320	400	0	0	720
Subtotal	920	640	0	0	1560
II. TSM PLANNING					
A. TSM Coordination	7520	920	0	-	8440
B. Transit Planning	120	0	0	2,120	2240
C. Ridesharing	880	0	0	0	880
D. Pavement Management	40	0	0	0	40
E. Safety and Complete Streets Planning	560	0	0	0	560
F. Air Quality Awareness	1120	0	0	0	1120
Subtotal	9120	920	0.0	2120	12160
III. LONG-RANGE PLANNING					
A. Update Long RangeTransportation Plan	400	120	0	0	520
Subtotal	400	120	0	0	520
IV. PLANNING SUPPORT					
A. Program Management	4280	400	0	0	4680
B. Develop Unified Work Program	160	40	0	0	200
C. Prepare Transportation Improvement Program	2040	120	0	0	2160
Subtotal	6480	560	0	0	7040
GRAND TOTAL	16920	2240	0	2120	21280

APPENDIX E

FISCAL YEAR 2024 UNIFIED WORK PROGRAM - FLOW CHART

FLOW CHART
UNIFIED WORK PROGRAM

Activities	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
I. DATA MANAGEMENT												
A. Data Management Systems	→	→	→	→	→	→	→	→	→	→	→	→
B. Data Inventory and Model Maintenance	→	→	→	→	→	→	→	→	→	→	→	→
II. TSM PLANNING												
A. TSM Coordination	→	→	→	→	→	→	→	→	→	→	→	→
B. Transit Planning	→	→	→	→	→	→	→	→	→	→	→	→
C. Ridesharing	→	→	→	→	→	→	→	→	→	→	→	→
D. Pavement Management	→	→	→	→	→	→	→	→	→	→	→	→
E. Safety and Complete Streets Planning	→	→	→	→	→	→	→	→	→	→	→	→
F. Air Quality Awareness	→	→	→	→	→	→	→	→	→	→	→	→
III. LONG-RANGE PLANNING												
A. Update Long RangeTransportation Plan	→	→	→	→	→	→	→	→	→	→	→	→
	Data collection complete, data analysis, draft technical reports, goals, objectives, p. measures			draft technical reports, goals, objectives, p. measures, call for projects			Project level analysis (model/CMP) and public participation and begin final plan draft			Final draft of the plan ready for committee review		
IV. PLANNING SUPPORT												
A. Program Management	→	→	→	→	→	→	→	→	→	→	→	→
B. Develop Unified Work Program							→	→	→			
C. Prepare Transportation Improvement Program	→	→	→	→	→	→	→	→	→	→	→	→

APPENDIX F

Resolution

RESOLUTION APPROVING THE
FY 2024 UNIFIED WORK PROGRAM

WHEREAS, the Genesee County Metropolitan Alliance (Metro) is the designated policy committee and Metropolitan Planning Organization (MPO) for the Flint-Genesee County Transportation Planning Study Area, and

WHEREAS, the Metropolitan Planning Organization is responsible for the development of a Unified Work Program (UWP) which is required by both the Federal Transit Administration and Federal Highway Administration, and

WHEREAS, the Flint-Genesee County 2045 Long Range Transportation Plan and the FY 2024 Unified Work Program have been developed pursuant to Section 134 of Title 23 as amended, United States Code and Section 8(f) of the Federal Transit Act, and

WHEREAS, the FY 2024 Unified Work Program includes an analysis that identifies sources of anticipated revenue, responsible agencies and demonstrates how identified projects will be funded, and

NOW, THEREFORE, BE IT RESOLVED, it is the finding by the Genesee County Metropolitan Alliance that the FY 2024 Unified Work Program is consistent with the Flint-Genesee County 2045 Long Range Transportation Plan, and

BE IT FURTHER RESOLVED, that the Genesee County Metropolitan Alliance approves the FY 2024 Unified Work Program, and

BE IT FURTHER RESOLVED, that the current FY 2023 Unified Work Program remain in effect until the FY 2024 Unified Work Program has been approved by the Michigan Department of Transportation and the Governor, and has been found acceptable by the Federal Highway Administration, and the Federal Transit Administration.

_____ _____

Robert Johnson, Chairperson DATE:
Genesee County Metropolitan Alliance

APPENDIX G

Certification

CERTIFICATE OF INDIRECT COSTS

This is to certify that I have reviewed the indirect cost rate proposal submitted herewith and to the best of my knowledge and belief:

(1) All costs included in this proposal insert date to establish billing or final indirect costs rates for October 1, 2023 to September 30, 2024 are allowable in accordance with the requirements of the Federal award(s) to which they apply and 2 CFR part 225, Cost Principles for State, Local, and Indian Tribal Governments. Unallowable costs have been adjusted for in allocating costs as indicated in the cost allocation plan.

(2) All costs included in this proposal are properly allocable to Federal awards on the basis of a beneficial or causal relationship between the expenses incurred and the agreements to which they are allocated in accordance with applicable requirements. Further, the same costs that have been treated as indirect costs have not been claimed as direct costs. Similar types of costs have been accounted for consistently and the Federal Government will be notified of any accounting changes that would affect the predetermined rate.

I declare that the foregoing is true and correct.

Governmental Unit: Genesee County Metropolitan Planning Commission

Signature:

Name of Official: Derek Bradshaw

Title: Director

Date of Execution: insert date

APPENDIX H

Title VI Certification

Clear Form

Michigan Department of Transportation
0179 (10/19)

TITLE VI SUB-RECIPIENT ANNUAL CERTIFICATION FORM

This form is to certify compliance with Title VI of the Civil Rights Act of 1964. If your Title VI Plan has been approved by the Michigan Department of Transportation (MDOT), all changes to the organization's Title VI Plan which occurred during the current fiscal year (October 1st through September 30th) must be reported on this form. Please attach additional pages, as necessary, to provide a complete response to each question.

NAME OF ORGANIZATION			
Genesee County Metropolitan Planning Commission			
NAME OF TITLE VI COORDINATOR		TITLE	
Christine A. Durgan		Assistant Director	
ADDRESS			
1101 Beach Street Room 223			
CITY	COUNTY	STATE	ZIP CODE
Flint	Genesee	MI	48502
TELEPHONE NO.	FAX NO.	E-MAIL ADDRESS	
810-257-3010	810-257-3185	cdurgan@geneseecountymi.gov	

1.	Has your Title VI Coordinator changed during the reporting period or since your last Title VI Plan was approved? If yes, please list the name and contact information for the new coordinator.	☒ No	☐ Yes
2.	Has your organization had any projects that have Title VI, LEP, or EJ impacts? How many? If yes, what did you do to ensure that those populations affected by the project had meaningful access to and involvement in the development process?	☒ No	☐ Yes
3.	What is the number or percentage of LEP or EJ populations who were affected by the project?		
4.	How many public involvement meetings did you hold during the reporting period?	4	
5.	Did you provide language assistance at any of your public meetings during the reporting period? How many persons received this assistance?	☒ No	☐ Yes
6.	Did you receive any formal or informal Title VI complaints, or law suits during this reporting period? If yes, how many, and please provide details regarding each complaint or law suit and the resolution.	☒ No	☐ Yes

7. During this reporting period, how many of your employees have been educated about Title VI and their responsibility to ensure non-discrimination in any of your programs, services, or activities.

17

8. Please provide any comments or additional information related to the organization's Title VI Plan.

Submit by E-mail

The information reported on this form is accurate and reflects all changes to the organization's Title VI Plan for the current fiscal year.

NAME	TITLE	DATE
Christine A. Durgan	Assistant Director	8/5/2022

If you have any questions regarding Title VI, contact: MDOT Title VI Coordinator (517) 241-7462, or MDOT-TitleVI@Michigan.gov. **PLEASE RETURN COMPLETED FORM VIA EMAIL, OR FAX TO:** (517) 335-0945.

PLEASE SUBMIT THIS FORM BY OCTOBER 5TH OF THE REPORTING YEAR.

GENESEE COUNTY METROPOLITAN ALLIANCE
ROOM 111 – 1101 BEACH STREET · FLINT, MI 48502-1470 · (810) 257-3010 · FAX (810) 257-3185

MEMORANDUM

TO: Members of the Technical Advisory Committee

FROM: McKenna Dutkiewicz, Planner
Genesee County Metropolitan Planning Commission

DATE: May 4th, 2023

SUBJECT: **Pavement, Bridge, System Reliability, & CMAQ Performance Targets**

In December, the Michigan Department of Transportation (MDOT) established statewide targets for the performance measure areas of Bridge, Pavement, System Reliability, and Congestion Mitigation and Air Quality. The Genesee County Metropolitan Alliance has until June 14, 2023 (180 days after State targets are set) to either adopt the statewide targets or set our own local targets. The statewide targets are listed on the following page.

Staff has reviewed each of the targets provided by MDOT and staff finds that the adoption of MDOT's Performance Targets will be acceptable.

At this time, staff is requesting the Technical Advisory Committee (TAC) provide a recommendation of approval to the Metropolitan Alliance to adopt MDOT's performance targets for Bridge, Pavement, System Reliability, and Congestion Mitigation and Air Quality (CMAQ).

Statewide Targets

Performance Area	Measure	Desired Trend	2022 Baseline Condition	2-Year Target	4-Year Target
Bridge	Percent National Highway System (NHS) Deck Area in Good Condition		22.1%	15.2%	12.8%
	Percent NHS Deck Area in Poor Condition		7.0%	6.8%	5.8%
Pavement	Percent of Interstate Pavement in Good Condition		70.4%	59.2%	56.7%
	Percent of Interstate Pavement in Poor Condition		1.8%	5.0%	5.0%
	Percent of Non-Interstate NHS in Good Condition		41.6%	33.1%	33.1%
	Percent of Non-Interstate NHS in Poor Condition		8.9%	10.0%	10.0%
System Reliability	Level of Travel Time Reliability of the Interstate		97.1%	80.0%	80.0%
	Level of Travel Time Reliability of the Non-Interstate NHS		94.4%	75.0%	75.0%
	Freight Travel Time Reliability Measure on the Interstate		1.31	1.60	1.60
CMAQ (Flint Urbanized Area)	Annual Hours of Peak Hour of Excessive Delay Per Capita		5.7 hours	10.0 hours	10.0 hours
	Percent of Non-Single Occupancy Vehicle (Non-Sov) Travel		18.5%	15.5%	15.5%

PAVEMENT PERFORMANCE MANAGEMENT NEWSLETTER

2022-2025 PERFORMANCE PERIOD - BASELINE REPORT

Title 23 CFR §490 – National Performance Management Program (NPMP), Subpart C, directs MDOT and Michigan MPOs coordinate development of 2-year and 4-year predicted performance pavement targets within a defined four-year performance period in support of the national goals established by Congress in MAP-21 of 2012. In accordance with regulation and Federal Highway Administration (FHWA) guidance, targets are data-informed, analysis driven, realistic predictions of future performance constrained to projected program funding. These short-term predictions are intended to evaluate and support the most effective investment strategies for achieving long-term performance goals and expectations in State and MPO planning documents. The NPMP pavement measures are limited to the National Highway System (NHS), regardless of ownership, and the NHS represents a subset of the entire pavement network managed by MDOT, MPOs and local governments.

The four-year performance period baseline is actual pavement performance calculated from data collected the year prior to the first year of a performance period, and reported to the HPMS in the first year of the performance period. Pavement performance is calculated using the Pavement Condition Measure (PCM) which requires evaluation of pavement condition thresholds using International Roughness Index (IRI), Cracking Percent, Rutting (asphalt) and Faulting (jointed concrete) metrics (Figure 1), or Pavement Serviceability Rating (PSR) for segments where the posted speed limit is less than 40 miles per hour (mph).

Within each four-year performance period, FHWA will determine whether the State DOT has made significant progress toward respective State 2- and 4-year target achievement. Regulation defines significant progress as (1) actual performance is better than baseline or (2) actual performance is better than the respective target.

Pavement Condition Thresholds

Metric	Surface Type	Metric Value Range: Good	Fair	Poor
International Roughness Index [IRI] (inches/mile)	Asphalt Pavement, Jointed Concrete Pavement, CRCP[1]	<95	95 - 170	>170
Cracking Percent (% of total area)	Asphalt Pavement	<5%	5 - 20%	>20%
	Jointed Concrete Pavement	<5%	5 - 15%	>15%
	CRCP[1]	<5%	5 - 10%	>10%
Rutting (inches)	Asphalt Pavement	<0.20	0.20 - 0.40	>0.40
Faulting (inches)	Jointed Concrete Pavement	<0.10	0.10 - 0.15	>0.15

Figure 1

2018-2021 "Phase-In" Comparison to 2022-2025

The 2018-2021 performance period was the first under the national program and several requirements of Title 23 CFR §490 were "phased-in." For pavement performance, there are two fundamental changes that apply to the 2022-2025 performance period, and all future performance periods.

First, State DOTs and MPOs are required to develop two-year and four-year targets for Interstate good and poor measures, where the 2018-2021 period only required four-year targets. Second, the 2022-2025 Non-Interstate NHS baseline and targets will be calculated using the PCM or PSR compared to the 2018-2021 performance period that required targets based on IRI or PSR.

Baseline Condition

In the first year of a new four-year performance period, a baseline for each pavement measure is calculated using prior year actual performance data and in accordance with Section 490, Subpart C.

NHS pavement data collected in 2021 and certified by FHWA in the 2021 HPMS Pavement Data Quality Summary (Figure 2, published 2022), serves as the performance period baseline condition for both Interstate and Non-Interstate NHS measures.

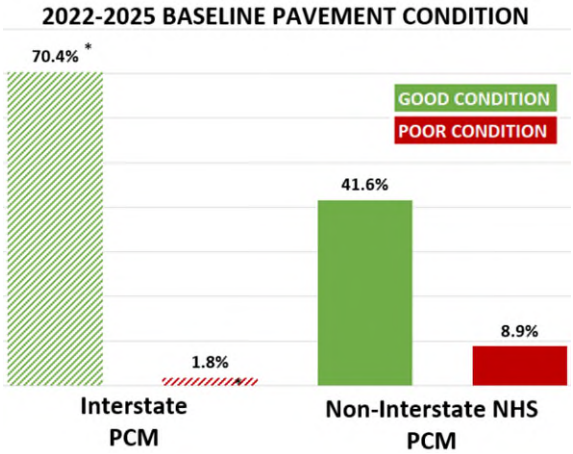


Figure 2 – Reflects condition reported by FHWA in the 2021 HPMS Pavement Data Quality Summary

In 2020, the Rebuilding Michigan Bond Program (RBMP) was announced. The RMBP focuses on rebuilding state highways and bridges critical to the state's economy and that carry the most traffic. The bond financing is aimed at long-term asset performance. In 2021, the data collection vendor was not able capture 5.1 percent of the Interstate pavement segment due to construction-related traffic controls that prevented collection in compliance with 23 CFR 490.309.

Through regulation, FHWA established a 5.0 Missing, Invalid, or Unresolved (MIU) threshold. If a categorial dataset exceeds 5.0 MIU, FHWA considers the data set to be invalid for use in the national performance program. FHWA has unofficially signaled MDOT's 2021 Interstate dataset at 5.1 MIU will be insufficient to determine significant progress for (1) the 2018-2021 Interstate performance and (2) the 2022-2025 performance period baseline - although regulation on the latter is more ambiguous.

This was something Michigan and peer State DOTs raised as a concern during the rule-making process. Michigan is encouraging FHWA evaluate the regulatory threshold impact and consider exceptions where the MIU is the direct verified result of program investment. FHWA will provide their formal written assessment by mid-year 2023.

Target Setting Process

As directed by Section 490 and FHWA guidance, national predicted performance targets are to reflect data-informed, analysis driven, realistic predictions of future performance constrained to available program funding for the four-year performance period. FHWA strongly discourages establishing aspirational targets for this program.

It is also important to distinguish the difference between performance goals, such as those established by the State Transportation Commission (STC) for MDOT or by a board for an MPO, and the federally required predicted performance targets. For example, the STC pavement goals for MDOT are for State trunkline measured by Remaining Service Life (RSL), wherein the national predicted performance targets are for the NHS (State and local owned), measured by PCM. These are not equivalent or appropriate for comparison. The NHS represents a portion of the pavement system managed by MDOT and local governments.

For the 2022-2025 performance period, the analysis and methods used by the TPM Pavement Team to develop the national predicted performance targets considered inputs and influences not limited to the following: historical trends (outcome of prior investments), current condition (baseline), improvements from investment strategies (5-year program/projects), anticipated natural deterioration based on life-cycle analysis (assets), anticipated changes in use (system performance), and other exogenous factors. Grant and other competitive funding opportunities being pursued but not officially

awarded at the time of analysis were not considered in the target setting process

As part of the current/forecasted condition analysis, the TPM pavement team examined the segments currently rated in fair condition and determined it necessary to further subdivided fair rated segments into three categories: "near good", "fair", and "near poor." As shown in Figure 4, 7.8 percent of the network currently rated in "Fair" condition is nearing poor condition. The team then examined the 5-year investment program to determine the extent to which investments planned for the 4-year period would offset/manage the decline.

PCM Rating	Composite Metric Combinations	Breakdown	Interstate Lanemiles	% of Interstate
Fair	Poor, Fair, Fair	Near Poor	77	1.3%
	Poor, Fair, Good	Near Poor	393	6.5%
	Poor, Good, Good	Fair	299	4.9%
	Fair, Fair Fair,	Fair	21	0.3%
	Good, Fair, Fair	Fair	197	3.2%
	Good, Good, Fair	Near Good	704	11.6%

Figure 3 – Further analysis of "Fair" PCM rated Interstate segements

On a related matter, when FHWA published the final HPMS PDQS there were notable differences from the preliminary condition used for the MDOT- MPO pavement target-setting coordination session held in July 2022 as shown in Figure 4. While not uncommon for preliminary condition estimates and the final performance reported in the HPMS PDQS to have minor differences, this year the differences were more significant. Of interest in 2022, FHWA had to delay the biennial performance reporting process due to ongoing issues with their HPMS 9.0 system upgrade. This complicated the data verification and reconciliation process.

Performance Measure	Baseline Performance
NHPP: NHS Pavement Condition (§490, Subpart C)	
Pavement Condition Metric (PCM) is IRI, Cracking, and Rutting (asphal	
Percentage of Pavements of the Interstate in Good Condition (PCM)	70.4% ~~65.0%~~
Percentage of Pavements of the Interstate (NHS) in Poor Condition (PCM)	1.8% ~~2.3%~~
Percentage of Pavements of the Non-Interstate NHS in Good Condition (PCM)	41.6% ~~42.1%~~
Percentage of Pavements of the Non-Interstate NHS in Poor Condition (PCM)	8.9% ~~6.2%~~

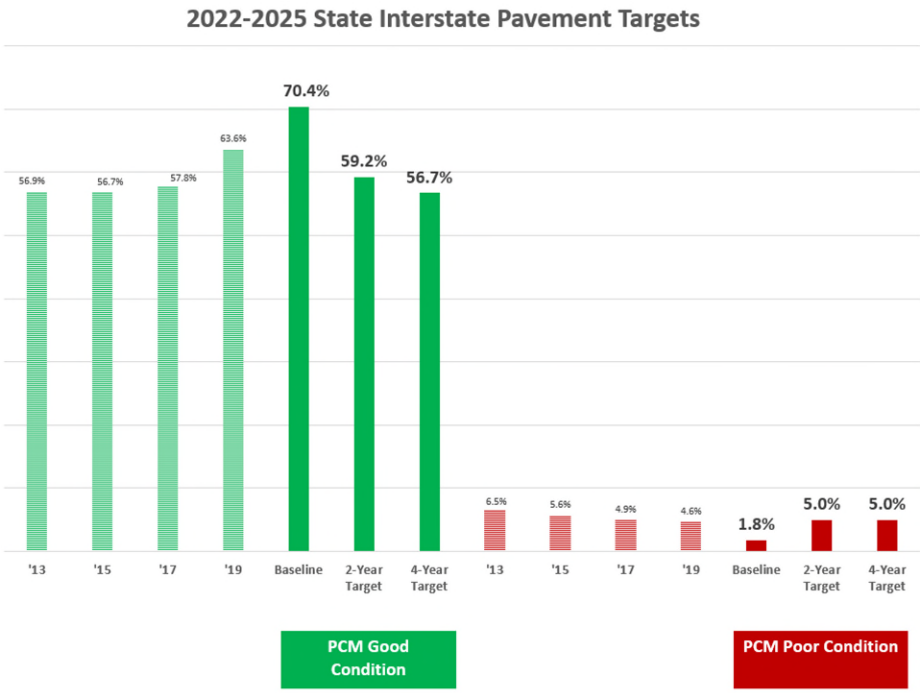
Figure 4 – 2022-2025 baseline changes between MDOT-MPO coordination session and final HPMS PDQS.

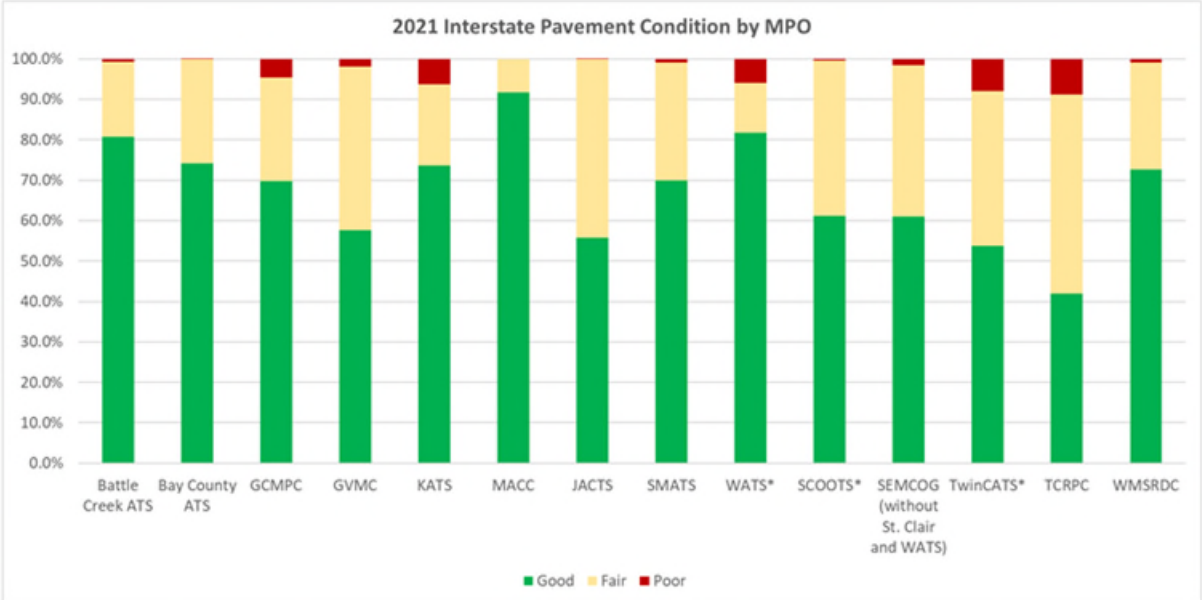
Considering the baseline changes, the TPM Pavement Team conservatively improved the State Interstate good condition 2-year target from 56.7 percent to 59.2 percent from the draft targets discussed by MDOT-MPOs at the target setting coordination meeting in July 2022. The 2.5-point improvement represents about half of the difference between the preliminary calculated baseline and the final 2021 HPMS PDQS reported by FHWA. This change was presented to MTPA in November 2022 with no noted concerns. The pavement team recommended no changes to the remaining pavement targets. Actual performance will be evaluated over the next two years and if supported by data, there will be an opportunity to discuss adjusting one or more 4-year State pavement targets within the mid-performance period report of 2024.

By June 14, 2023 (180 days following establishment of State targets), MPOs are required to develop 2- year and 4-year targets for all four pavement measures. MPOs have two options for target development: (1) agree to plan and program projects that supports a State target(s) or (2) develop a quantifiable target(s) for the metropolitan planning area. MPOs target elections can be made on a per measure basis. For example, an MPO can elect to support the State 2-year target for Interstate Good and develop an MPO boundary 2-year target for Interstate Poor.

Also note, FHWA does not make a significant progress determination of MPO targets whether the MPO elects to support the State target or develop an MPO boundary target. Further, an MPO is not subject the consequence or penalty imposed upon the State DOT for not achieving State targets regardless of whether the MPO elected to support the State target or develop an MPO boundary target.

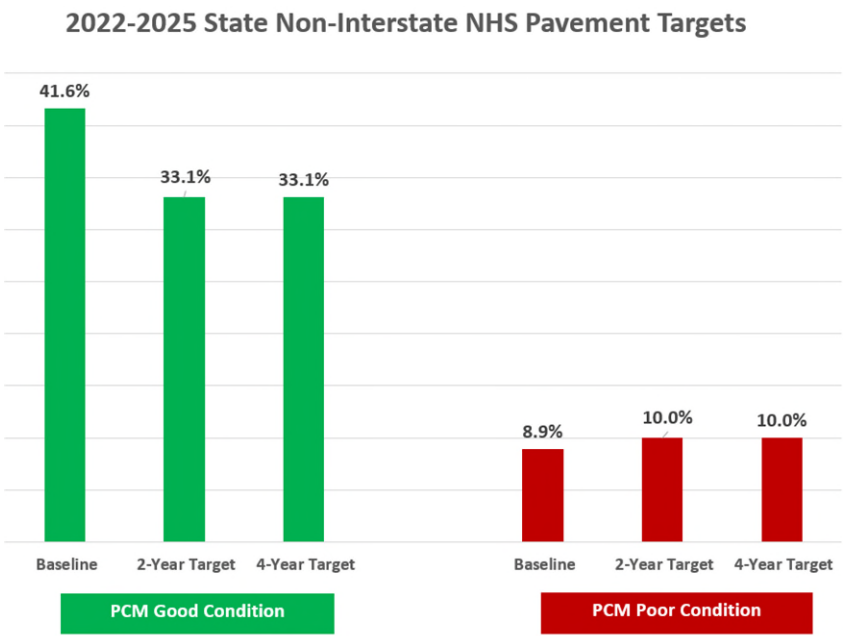
Interstate State Targets and MPO 2021 Performance



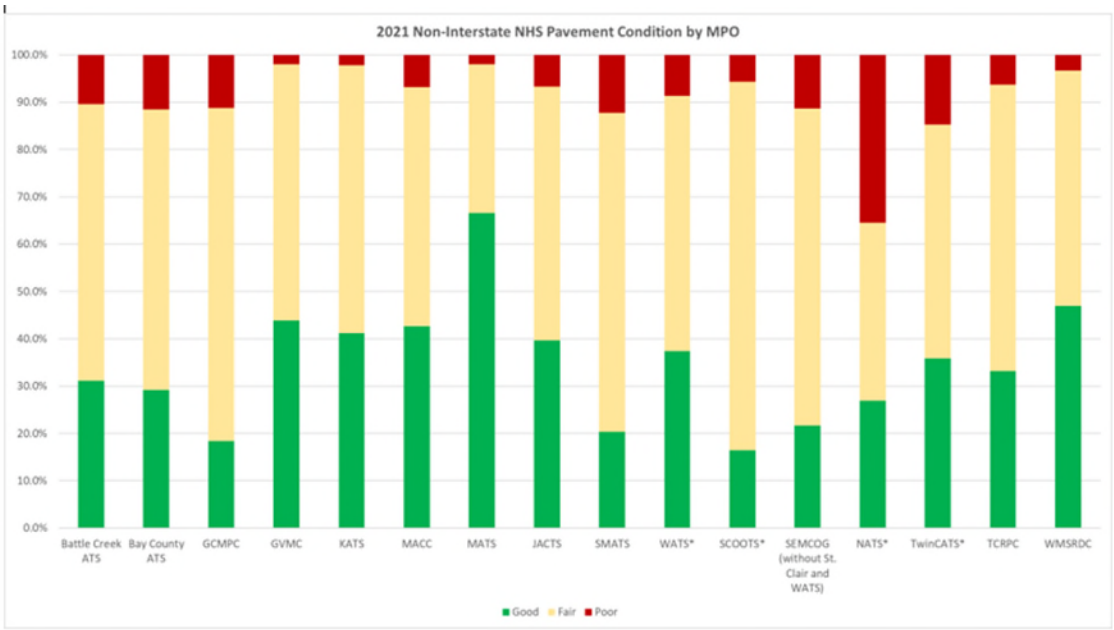


2021 Interstate Pavement Condition Measure by MPO				
MPO	Good	Fair	Poor	Interstate Thru Miles **
Battle Creek Area Transportation Study	80.7%	18.6%	0.7%	66.5
Bay County Area Transportation Study	74.1%	25.8%	0.1%	92.2
Genesee County Metropolitan Planning Comission	69.7%	25.6%	4.6%	390.4
Grand Valley Metropolitan Council	57.6%	40.6%	1.8%	253.6
Kalamazoo Area Transportation Study	73.6%	20.1%	6.4%	161.1
Macatawa Area Coordinating Council	91.7%	8.3%	0.0%	76.3
Region 2 Planning Comission	55.8%	44.1%	0.0%	124.3
Saginaw Metropolitan Area Transportation Study	69.9%	29.2%	0.9%	198.8
Southeast Michigan Council of Governments	63.0%	35.1%	1.9%	2,291.8
Washtenaw Area Transportation Study *	81.8%	12.3%	5.9%	211.1
St. Clair County Transportation Study *	61.2%	38.4%	0.3%	158.5
SEMCOG (without St. Clair and WATS)	61.1%	37.3%	1.6%	1,922.2
Southwest Michigan Planning Commission	53.8%	38.3%	7.9%	169.7
Twin Cities Area Transportation Study *	53.8%	38.3%	7.9%	169.7
Tri-County Regional Planning Commission	41.9%	49.3%	8.7%	432.4
West Michigan Shoreline Regional Development Commission	72.7%	26.5%	0.8%	48.4

Non-Interstate NHS State Targets and MPO 2021 Performance



The 2022-2025 performance period introduces PCM as the Non-Interstate NHS pavement measure for the national program.



2021 Non-Interstate NHS Pavement Condition by MPO

MPO	Good	Fair	Poor	Non-Interstate Thru Miles **
Battle Creek Area Transportation Study	31.1%	58.5%	10.4%	101.7
Bay County Area Transportation Study	29.1%	59.3%	11.6%	147.7
Genesee County Metropolitan Planning Comission	18.4%	70.4%	11.2%	488.0
Grand Valley Metropolitan Council	43.9%	54.2%	2.0%	831.0
Kalamazoo Area Transportation Study	41.2%	56.6%	2.2%	308.0
Macatawa Area Coordinating Council	42.7%	50.5%	6.8%	134.9
Midland Area Transportation Study	66.6%	31.4%	2.0%	296.4
Region 2 Planning Comission	39.6%	53.7%	6.7%	199.3
Saginaw Metropolitian Area Transportation Study	20.3%	67.4%	12.3%	280.9
Southeast Michigan Council of Governments	22.7%	66.2%	11.1%	5,825.9
Washtenaw Area Transportation Study *	37.4%	53.9%	8.7%	428.7
St. Clair County Transportation Study *	16.4%	77.8%	5.7%	83.3
SEMCOG (without St. Clair and WATS)	21.6%	67.0%	11.4%	5,313.9
Southwest Michigan Planning Commission	32.3%	44.7%	23.0%	235.1
Niles-Buchanan-Cass Area Transportation Study	26.9%	37.6%	35.5%	94.4
Twin Cities Area Transportation Study *	35.9%	49.4%	14.7%	140.7
Tri-County Regional Planning Commission	33.2%	60.5%	6.3%	554.8
West Michigan Shoreline Regional Development Commission	47.0%	49.7%	3.4%	356.4

Pavement Condition Thresholds

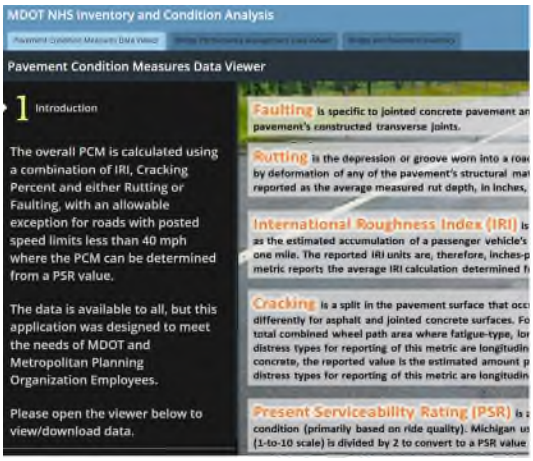
	Good	Fair	Poor
IRI (inches/mile)	<95	95-170	>170
Rutting (inches)	<0.20	0.20-0.40	>0.40
Faulting (inches)	<0.10	0.10-0.15	>0.15
Cracking (%)	<5	5-20 (asphalt) 5-15 (JCP) 5-10 (CRCP)	>20 (asphalt) >15 (JCP) >10 (CRCP)

Calculation of Pavement Condition Measures for Interstate

	Pavement Type		
	Asphalt and Jointed Concrete	Continuous Concrete	Measures
Overall Section Condition Rating	3 Metric Ratings (IRI, Cracking and Rutting/Faulting)	2 Metric Ratings (IRI and Cracking)	
Good	All Three (3) Metrics Rated "Good"	Both Metrics Rated "Good"	Percentage of Lane-miles in "Good" Condition
Poor	≥ Two (2) Metrics Rated "Poor"	Both Metrics Rated "Poor"	Percentage of Lane-miles in "Poor" Condition
Fair	All Other Combinations	All Other Combinations	N/A

Available Data

The MDOT NHS Inventory and Condition Analysis data viewer is available online, which provides pavement condition and inventory information for Interstate PCM and non-Interstate IRI data, and information on bridges as well. In addition, MDOT developed the Michigan Transportation Program Portal providing links and maps to the 5-Year Transportation Plan, State Transportation Improvement Program, and the Rebuilding Michigan Program.



For More Information

Pavement condition data: Dan Sokolnicki
517-241-0736; SokolnickiD@Michigan.Gov

Pavement condition information: Marcus Whiters
517-335-2925; WhitersM1@Michigan.Gov

BRIDGE PERFORMANCE MANAGEMENT NEWSLETTER

2022-2025 PERFORMANCE PERIOD – BASELINE REPORT

BRIDGE CONDITION

Title 23 CFR §650, Subpart C - National Bridge Inspection Standards (NBIS), defines a bridge as a structure carrying traffic with a span greater than 20 feet and requires that all bridges be inspected every two years to monitor and report condition ratings. The FHWA requires that for each applicable bridge, the performance measures for determining condition be based on the minimum values for substructure, superstructure, deck, and culverts. The FHWA further requires counting this condition by the respective deck area of each bridge and express condition totals as a percentage of the total deck area of bridges in a state.

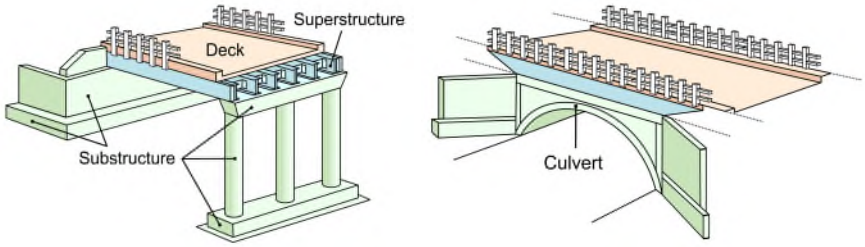
Condition ratings are based on a 0-9 scale and assigned for each culvert, or the deck, superstructure and substructure of each bridge. These ratings are recorded in the National Bridge Inventory (NBI) database. Condition ratings are an important tool for transportation asset management, as they are used to identify preventative maintenance needs, and to determine rehabilitation and replacement projects that require funding.

REPORTING ON BRIDGE CONDITION

Title 23 CFR §490, National Performance Management Measures, Subpart D, designates recurring four-year performance periods for which MDOT is required to develop, in coordination with MPOs, two-year and four-year State targets for bridge condition on the National Highway System (NHS). The two performance measures for assessing bridge condition are:

- % of NHS bridges in Good Condition; and
- % of NHS bridges in Poor Condition.

In accordance with regulation and FHWA guidance, targets are data-informed, analysis driven, realistic predictions of future performance constrained to projected program funding. These short-term predictions are intended to evaluate and support the most effective investment strategies for achieving long-term performance goals and expectations in State and MPO planning documents. The bridge measures are limited to the National Highway System (NHS), regardless of ownership, and the NHS represents a subset of the entire bridge network managed by MDOT, MPOs and local governments.



ANATOMY OF A BRIDGE OR CULVERT

NBI Condition Ratings			
7-9	Good Condition		Routine maintenance candidate.
5-6	Fair Condition		Preventative maintenance and minor rehabilitation candidate.
4	Poor Condition	Poor	Major rehabilitation or replacement candidate.
2-3		Serious or Critical	Emergency repair or high priority major rehabilitation or replacement candidate. Unless closely monitored it may be necessary to close until corrective action can be taken.
0-1		Imminent Failure or Failed	Major rehabilitation or replacement candidate. **Bridge is closed to traffic.**

REPORTING ON BRIDGE CONDITION, CONTINUED

By June 14, 2023 (180 days following establishment of State targets), MPOs are required to develop 2- year and 4-year targets for each bridge measure in coordination with MDOT. MPOs have two options for target development: (1) agree to plan and program projects that support State targets, or (2) develop to a quantifiable target for the respective metropolitan planning area. MPO target elections can be made on a per measure basis. For example, an MPO can elect to support the State 2-year good condition target, and develop an MPO boundary 2-year poor condition target.

While FHWA does not make a significant progress determination of MPO targets, whether the MPO elects to support the State target or develop an MPO boundary target, the MPO is required to report progress in a system performance report. Also note, an MPO is not subject to any regulatory consequence or penalty if significant progress is not achieved regardless of whether the election was to support a State target or develop an MPO boundary target.

Baseline NHS Bridge Condition by Deck Area - Statewide

Owner	Good		Fair		Poor		Total (sft)	
Trunkline	7,290,726	22%	23,690,343	71%	2,242,167	7%	33,223,236	88%
Bridge Authority	320,575	16%	1,676,900	83%	11,944	1%	2,009,419	5%
Local	717,498	29%	1,354,360	55%	381,037	16%	2,452,895	7%
Total	8,328,799	22%	26,721,604	71%	2,635,147	7%	37,685,550	

Baseline NHS Bridge Condition by Count – Statewide (for reference only)

Owner	Good		Fair		Poor		Total	
Trunkline	663	24%	1910	70%	170	6%	2743	92%
Bridge Authority	4	44%	4	44%	1	11%	9	<1%
Local	83	37%	101	45%	40	18%	224	8%
Total	750	25%	2015	68%	211	7%	2976	

BASELINE NHS BRIDGE CONDITION

Structures that meet the definition of a bridge according to the NBIS are recorded in the Michigan Bridge Inventory database through a web-based system called MiBRIDGE. MDOT's Bureau of Bridges and Structures (BOBS) in turn submits this information to the National Bridge Inventory (NBI). Using this database, BOBS compiles the number of bridges and deck area for each of the categories required by the Performance Management requirements.

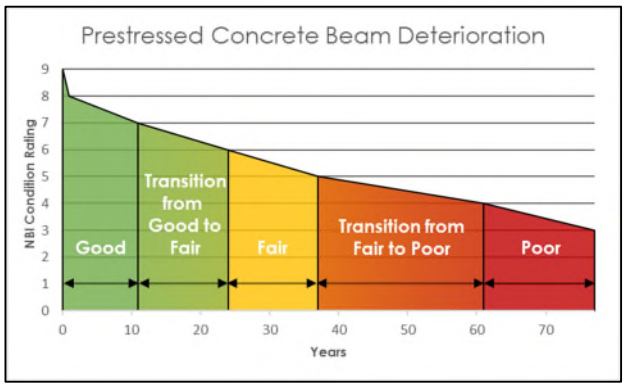
While the National Bridge Inspection Standards applies to all publicly owned highway bridges, the TPM Targets are only applied to those bridges carrying routes on the NHS including bridge on- and off-ramps connected to the NHS. The NHS consists of roadways important to the nation's economy, defense, and mobility. The NHS includes the following subsystems of roadways: interstate, other principal arterials, strategic highway network, major strategic highway network connectors, and intermodal connectors. condition totals as a percentage of the total deck area of bridges in a state.

The FHWA requires calculating the NHS condition by the respective deck area of each bridge and express condition totals as a percentage of the total deck area of bridges in a state. The area is computed using the NBI Structure Length and Deck Width or Approach Roadway Width (for some culverts). Tables above represent the data submitted to the FHWA on March 13, 2022.

Local agencies own 7 percent of the NHS bridge deck area in Michigan, while MDOT and the Bridge Authorities maintain ownership of approximately 93 percent of bridge deck area. MDOT and MPO targets must cover the entire NHS, regardless of ownership. To account for this, the rule requires MDOT and MPOs to coordinate target setting, planning, and programming, ensuring targets are feasible, and projects are geared toward achieving them.

BRIDGE DETERIORATION MODELS

As a bridge ages, its condition declines and an increasing amount of work is required to restore condition or extend the usable life of the bridge. By tracking the rate at which bridges have declined in the past, MDOT is able to predict the rate at which a bridge will decline in the future. MDOT has an established process through which trends in bridge deterioration rates can be evaluated at regular intervals. These periodic reviews will show whether preventive maintenance and other small actions taken on bridges are effective over time. This process is documented in the report "A Process for Systematic Review of Bridge Deterioration Rates" which is available on the MDOT website at: http://www.michigan.gov/documents/mdot/A_Process_for_Systematic_Review_of_Bridge_Deterioration_Rates_522422_7.pdf.



As shown in the image above, the minimum NBI condition rating is the y axis, and the number of years in each condition state is the x axis. As the Target setting periods are two and four years, the key transition times for this analysis are the Transition from Good to Fair (the time it takes to drop from 7 to 6) and the Transition from Fair to Poor (the time it takes to drop from 5 to 4). Outside of the initial drop for 9 (Excellent) to 8 (Very Good), a bridge would not be *predicted* to fall multiple condition ratings over a span of four years as it is based on statewide averages. This can sometimes occur in practice and is part of the error involved in predictions.

PROJECT IMPACTS

MDOT PROJECT SELECTION - As the product of ongoing asset management by MDOT and our local agencies, projects are programmed each year to extend life or improve condition throughout the bridge network. MDOT analyzes the candidates for each of the major work types – preventive maintenance, rehabilitation and replacement – and identifies a strategy that is the most cost-effective means to achieve and sustain a state of good repair within financial constraints. Starting from this initial strategy, the regions then perform more detailed analysis and scopes, coordinating with other programs such as road, and selecting projects through the annual Call for Projects process.

A small number of MDOT bridges are managed centrally within the Big Bridge Program. The Big Bridge Population is a unique subset of MDOT's trunkline bridge population that includes sixteen large deck bridges (deck area in excess of 100,000 sq ft), nineteen complex bridges, and twelve moveable bridges. These fifty-one bridges are unique not only from an engineering standpoint, but they also represent large capital investments in terms of their initial construction costs and in terms of their long-term preservation and rehabilitation costs. Because of the significant investment these bridges represent, MDOT's goal is to preserve and maintain the Big Bridge inventory in a continuously good or fair condition state. This population is also of unique importance to the Performance Management Target Settings as the 39 structures that carry NHS comprise 14% of the trunkline NHS deck area.

LOCAL AGENCY PROJECT SELECTION - As the product of ongoing asset management by MDOT and our local agencies, projects are programmed within JobNet, and local agency bridge projects included in this analysis are those that have been selected through the local bridge program. Legislation enacted October 1, 2004 created a local bridge fund, a local bridge advisory board (LBAB) and seven regional bridge councils (RBC). The legislation places control of the funding allocations of the local bridge fund in the hands of the local agencies of Michigan through the LBAB and RBCs. A call for applications is sent to all local agencies on an annual basis. The submitted applications are reviewed by the staff of MDOT local agency program's bridge unit for completeness and funding eligibility. Formula rating points are computed and each region's applications are submitted to their respective RBC for addition of discretionary points. A 3-year bridge program is maintained by each RBC.

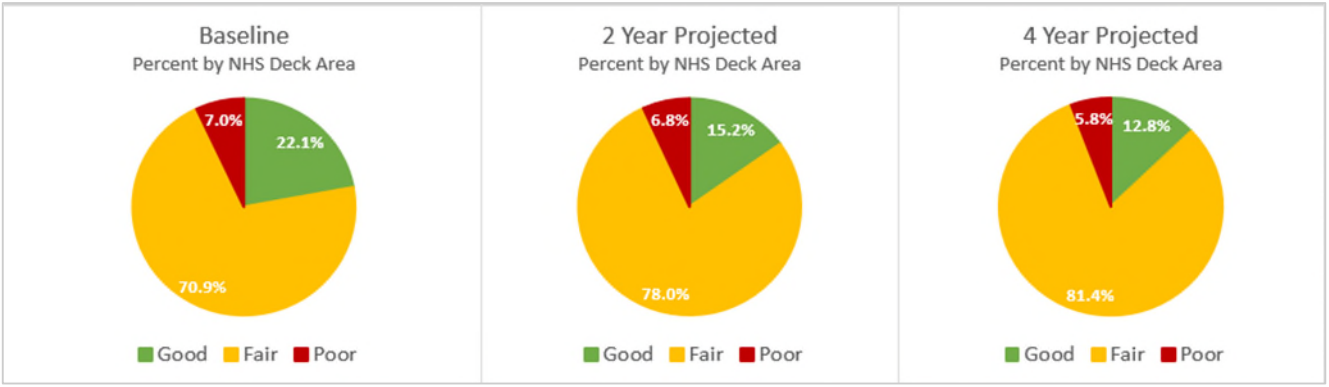
Local Agencies may also identify bridge projects through their Metropolitan Planning Organization or Rural Task Force, although because of the dollar amounts available these projects are rare. Many local agencies do projects on their bridges with their Act 51 fund distributions. These projects, however, do not have to be entered as a programmed project within JobNet and would not be reflected in the results. Due to the relatively small amount of local agency deck area, this is considered an acceptable omission at this time, but is an area identified for future improvement.

DEVELOPING TARGETS

Starting from the condition reported with the NBI submittal on March 13, 2022, the expected improved condition from projects and reduced condition from deterioration was summarized into projected 2-Year and 4-year condition. The deck areas in good, fair and poor conditions at each year was summarized. To account for uncertainty, the amount of deck area in good condition was conservatively reduced by 1%, and the amount of deck area in poor condition was increased by 1%. A 1% reduction for uncertainties reflects about 30 average size structures that either deteriorated faster than predicted or that did not see as much of an improvement as predicted.

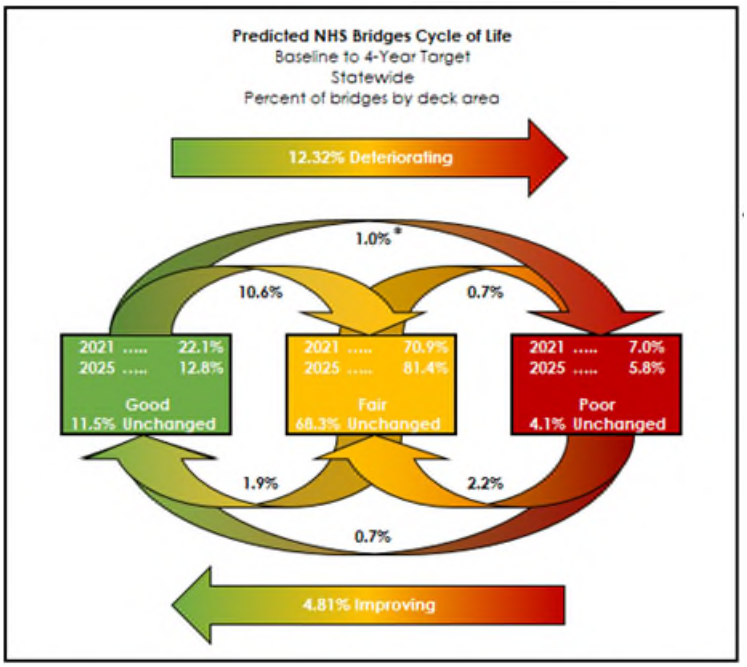
ANALYZING TARGETS

Overall, the number of good bridges is expected to decline significantly as preservation efforts tend to extend life in fair condition. While the amount of bridges in good condition is predicted to decrease, the amount of deck area in poor condition is also predicted to decrease. While the decrease in poor deck area is important towards achieving/maintaining a state of good repair, the amount of fair deck area will require a sustained commitment to preservation in order to prevent an unsustainable number of fair bridges from falling into poor condition.



EVALUATING GOOD CONDITION

The target for Good condition was set as a combination of estimating the deck area that is expected to deteriorate and the deck area that is expected to be improved. This is demonstrated in Cycle of Life, which shows that 10.6% of the NHS deck area is predicted to leave Good condition and 1.9% is expected to enter Good condition during the time period.



MPO COORDINATION

Shown below is the 2021 NHS bridge deck area estimated condition for each MPO's population of bridges. As discussed earlier, the method used to predict bridge deterioration for State targets applies statewide average deterioration rates to all bridges. Some bridges will deteriorate faster while others will deteriorate slower. At the network level, these differences tend to balance. When looking at smaller populations, such as at an MPO boundary level, the difference between specific bridge deterioration and statewide averages can lead to large differences between predictions and measured values. When the performance values are measured in terms of deck area rather than count, large bridges can exacerbate this discrepancy.

MDOT also created a Transportation Performance Measures Dashboard for MPOs and bridge owners to aid in reviewing State bridge targets. The 2022 baseline data (bridge inspection data collected between March 2021 and March 2022) can be found via the NHIS Bridge Inventory. This page represents a snapshot of data of the NHS bridges in the NBI submittal to FHWA, and is what will be used by FHWA to evaluate the respective 2-year and 4-year State target achievement for the performance period. For more current information, all NBI bridge data is updated monthly at the NBIS website.

MPO	Good		Fair		Poor		Total	
	Deck Area	Percentage	Deck Area	Percentage	Deck Area	Percentage	Deck Area	Percentage
Battle Creek Area Transportation Study	3,429	1%	420,443	92%	31,720	7%	455,593	100%
Bay City Area Transportation Study	104,804	17%	465,703	76%	45,655	7%	616,162	100%
Genesee County Metropolitan Planning Commission	138,432	7%	1,561,627	81%	233,080	12%	1,933,138	100%
Grand Valley Metropolitan Council	1,034,362	26%	2,663,907	68%	244,662	6%	3,942,932	100%
Jackson Area Comprehensive Transportation Study / Region 2 Planning Commission	15,419	5%	277,594	82%	44,780	13%	337,793	100%
Kalamazoo Area Transportation Study	199,736	37%	271,815	51%	65,117	12%	536,668	100%
Macatawa Area Coordinating Council	44,805	15%	255,007	84%	4,149	1%	303,960	100%
Midland Area Transportation Study	41,127	21%	154,374	79%	-	0%	195,501	100%
Niles Area Transportation Study	8,757	3%	254,883	97%	-	0%	263,640	100%
Saginaw Area Transportation Agency	186,425	8%	1,995,579	90%	31,484	1%	2,213,489	100%
Southeast Michigan Council of Governments	5,274,541	32%	10,086,998	61%	1,290,294	8%	16,651,833	100%
Tri-County Regional Planning Commission	41,937	2%	1,990,461	86%	287,576	12%	2,319,974	100%
Twin Cities Area Transportation Study	23,312	3%	747,123	96%	6,655	1%	777,089	100%
West Michigan Metropolitan Planning Program	36,164	5%	617,306	92%	15,841	2%	669,311	100%
Outside MPO Boundaries	1,175,550	18%	4,958,783	77%	334,134	5%	6,468,467	100%
All NHS	8,328,799	22%	26,721,604	71%	2,635,147	7%	37,685,550	100%

For More Information

Mike Halloran
MDOT
Bridge Preservation and Management Administrator
269-930-0786
HalloranM@michigan.gov

Amy Gill
MDOT
Bridge Program Performance Engineer
517-282-3196
GillA@michigan.gov

RELIABILITY PERFORMANCE MANAGEMENT NEWSLETTER

2022-2025 PERFORMANCE PERIOD - BASELINE REPORT

Title 23 CFR §490 – National Performance Measures, Subpart E, directs MDOT and Michigan Metropolitan Planning Organizations (MPOs) to coordinate development of 2-year and 4-year predicted performance reliability targets within a defined four-year performance period in support of the national goals established by Congress in MAP-21 of 2012.

In accordance with regulation and Federal Highway Administration (FHWA) guidance, targets are data-informed, analysis driven, realistic predictions of future performance constrained to projected program funding. These short-term predictions are intended to evaluate and support the most effective investment strategies for achieving long-term performance goals and expectations in State and MPO planning documents.

The reliability measures are limited to directional mainline highways on the National Highway System (NHS), regardless of ownership, and the NHS represents a subset of the entire network managed by MDOT, MPOs and local governments.

Section 490 directs State DOTs and MPOs to use three performance measures *(Figure 1)* for assessing travel time reliability. The National Performance Management Research Data Set (NPMRDS) is vehicle probe-based travel time data used to calculate the national reliability measures. The NPMRDS is provided by the Federal Highway Administration (FHWA) for use by states and MPOs. The NPMRDS is processed through an analytical software tool known as Regional Integrated Transportation Information System (RITIS).

Level of Travel-Time Reliability (LOTTR)

Percentage of person-miles traveled on the [Interstate/Non-Interstate NHS] that are reliable

- (1) Interstate and (2) Non-Interstate NHS
- 2-Year and 4-Year Targets
- Four (4) Time Periods
- Fifteen (15) Minute Travel Intervals
- Longer Travel Time: 80th Percentile
- Normal Travel Time: 50th Percentile
- Threshold: Reliability <1.50
- Factors Applied: Vehicle volumes (HPMS) and Vehicle Occupancy Factor (provided by FHWA)

Truck Travel-Time Reliability (TTTR)

Interstate freight reliability, truck travel time Index

- Interstate (only)
- 2-Year and 4-Year Targets
- Five (5) Time Periods
- Fifteen (15) Minute Travel Intervals
- Longer Travel Time: 95th Percentile
- Normal Travel Time: 50th Percentile
- Threshold: None
- Factors Applied: No additional factors are applied

Figure 1: Reliability metrics/measures

Travel Time Reliability Overview

Travel time reliability measures how consistent travel between X and Y is from one day to the next. To determine reliability, data is analyzed to see how it varies over time. As directed by Section 490, travel time for each discrete segment of the National Highway System (NHS) is placed in order from the shortest time (fastest speed), which is the 1st percentile speed, to the longest time (slowest speed), which is the 100th percentile speed. Three performance measures are examined to compare the "normal" travel time, (which is defined as the 50th percentile travel time) on a segment, with either the 80th percentile or the 95th percentile travel time to determine the overall reliability. If the difference between the normal travel time and the longer travel time (80th for person-miles or 95th percentile for freight) is greater than 50 percent, then the segment is classified as unreliable.

To help explain travel time reliability, consider the following simplified hypothetical example. Suppose an individual person's normal travel time from home to work is 20 minutes. The 80th percentile is defined as one out of every five days, or approximately one time in a traditional commuter work week. If in a typical week, it takes an individual 30 minutes or longer to travel to work one or more times, then the route driven would be designated as unreliable (exceeds the 1.50 threshold). See page five for more a detailed example of the metrics/ measures.

Travel Time Reliability is not the same as Congestion. Reliability is important because travelers prefer a consistent travel time to their destination. If people understand that a route is routinely congested, they can plan accordingly. However, if a route is unreliable, they really have no consistent reference of how long it will take to get to their destination, which creates frustration. In addition, segments of roads can be both congested, and reliable (e.g., reliably congested).

50th Percentile (Average or Normal Travel Time)

80th Percentile (Longer Travel Time)

Baseline Condition

As a result of the global pandemic, Michigan (and the United States more broadly) experienced an unprecedented reduction in traffic volumes starting in early 2020. While traffic volumes have increased, through the end of 2022 reliability performance remains notably improved from pre-pandemic levels. That said, it is difficult to predict future performance with a higher-than-normal level of uncertainty. For this reason, MDOT is hesitant the 2022 baseline (2021 actual performance) will accurately reflect a sustainable expectation of future performance.

LOTTR: Reliable Person Miles
Desired Trend ⬆

Data Year/ Reporting Year	Interstate	Non-Interstate NHS
2017/2018	85.2%	84.0%
2019/2020	88.6%	88.5%
2021/2022 2022 Baseline	**97.1%**	**94.4%**

Truck Travel Time Index
Desired Trend ⬇

Data Year/ Reporting Year	Interstate
2017/2018	1.38
2019/2020	1.44
2021/2022 2022 Baseline	**1.31**

Note: It is important to note the NPMRDS data set continues to evolve and MDOT has found prior year reported data changes in the RITIS system. MDOT has also observed the baseline/actual performance reported by FHWA is frequently different than the RITIS system, although typically by +/- 1 point. MDOT does not have the authority to override the performance data reported by FHWA in the biennial reports. Therefore, baseline/actual performance data for MDOT required biennial reporting should be considered a snapshot of what was reported by FHWA in the respective reporting year which may be different than what RITIS reports for that year now/in the future.

Target Setting Process

These short-term predicted performance targets are intended to evaluate and support the most effective investment strategies for achieving long-term performance goals and expectations in State and MPO planning documents. Policies and investment strategies included in Michigan Mobility 2045 (state long-range transportation plan) contribute to Michigan's ability to meet the national transportation performance management goals established by Congress. In alignment with MM2045, MDOT created a new operations template program to fund projects that will improve safety and reliability while also addressing congestion. The level of travel time reliability is a key factor in prioritizing projects and measuring anticipated investment outcomes.

For the **2022-2025 performance period**, the analysis and methods used to develop the national predicted performance reliability targets considered inputs and influences not limited to the following:

- Historical trends and current baseline. As previously noted, the 2022 baseline (2021 actual performance) is unlikely sustainable as post-pandemic traffic volumes have increased, while also acknowledging reliability remains notably improved from pre-pandemic historical trends.
- Expected outcomes from projects programmed to improve reliability (5-year program/projects).
- The next two to three years will see more RMBP construction projects on the NHS.
- Anticipated changes in use (long-term adoption of telecommuting/hybrid work, for example).
- Potential competitive funding opportunities that are not appropriate to quantify and consider in target-setting until an award has been made.
- Other factors of influence:
  - Inclement weather, especially winter weather, has a major impact on reliability.
  - The Interstate has a small percentage of segments nearing unreliable while Non-Interstate NHS has shown to be more volatile and has a higher percentage of segments nearing unreliable.
  - Freight performance as measured is more volatile due to using 95th percentile speeds.

2022-2025 Predicted Performance State Targets

Measure	2-Year	4-Year
LOTTR: Interstate	80.0%	80.0%
LOTTR: Non-Interstate NHS	75.0%	75.0%
Freight Travel Time Index	1.60	1.60

The State LOTTR predicted performance targets are improved by five percentage-points from those established for the 2018-2021 performance period. The freight Index target is also improved by .15 (from 1.75 to 1.60).

MPO Target Setting

In accordance with Section 490, MPOs have 180 days following the recording of State national performance program targets to develop and report MPO targets to MDOT. For 2022, FHWA delayed the biennial report from October 1 to December 16 therefore MPO target reporting to MDOT has respectively changed to June 14, 2023.

MPOs can satisfy the Section 490 target setting requirements by either electing to plan and program projects that support State targets, or develop a quantifiable target for the respective metropolitan planning area. MPO target elections can be made on a per measure basis. For example, an MPO can elect to support the State 2-year LOTTR Interstate target, and develop a quantifiable MPO boundary 4-year LOTTR Interstate target. That said, once target elections have been made (i.e., support State or develop MPO specific), the MPO must retain each election for the duration of the four-year performance period.

Also note, FHWA does not make a significant progress determination of MPO targets whether the MPO elects to support the State target(s) or develop MPO boundary target(s). Further, an MPO is not subject to any consequence or penalty imposed by FHWA on MDOT should a target not be achieved regardless of which target development option the MPO selected. For reference, significant progress is defined by regulation as achieving performance that is equal to or better than the target, or better than the baseline performance.

Level of Travel Time Reliability (LOTTR) Example

Segment: Longer Travel Time (80th) ÷ Normal Travel Time (50th) = # seconds ÷ # seconds = LOTTR

Monday – Friday	6am - 10am	LOTTR = 44 sec ÷ 35 sec = 1.26
	10am - 4pm	LOTTR = 1.39
	4pm – 8pm	LOTTR = **1.54**
Weekends	6am – 8pm	LOTTR = 1.31
Reliability Threshold: LOTTR below 1.50 during ALL of the time periods		**Segment is NOT reliable**

Measure: Percent of person-miles traveled on the [Interstate/Non-Interstate NHS] that are reliable

1. Length x Volume (AADTx365) x Occupancy = person miles
2. Σ (Reliable Person-Miles) ÷ Σ (Total Person-Miles) = Reliability

Truck Travel Time Reliability (TTTR (This is an index, not a reliability threshold) Example

Segment: Longer Travel Time (95th) ÷ Normal Travel Time (50th) = # seconds ÷ # seconds = TTTR

Monday – Friday	6am - 10am	TTTR = 72 sec ÷ 50 sec = 1.44
	10am - 4pm	TTTR = 1.39
	4pm – 8pm	TTTR = 1.49
Weekends	6am – 8pm	TTTR = 1.31
Overnight	8pm – 6am	TTTR = 1.20
Maximum TTTR		1.49

Measure: Truck Travel Time Reliability (TTTR) Index

1. Length x MaxTTTR = Length-weighted TTTR
2. Σ (All segment length weighted TTTR) ÷ Σ (All segment lengths)

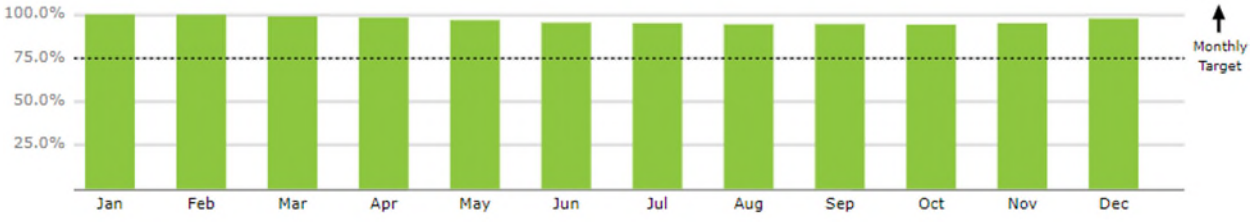
Michigan

MAP-21 Percent of the Person-Miles Traveled on the Interstate That Are Reliable (the Interstate Travel Time Reliability measure)

2021 Target
at least
75.0%

97.1%
Year-to-Date
2021

Target: At least 75% of the system should have a LOTTR less than 1.50



Show map...

Calculated using 99.77% of miles in Michigan

Data source: NPMRDS INRIX

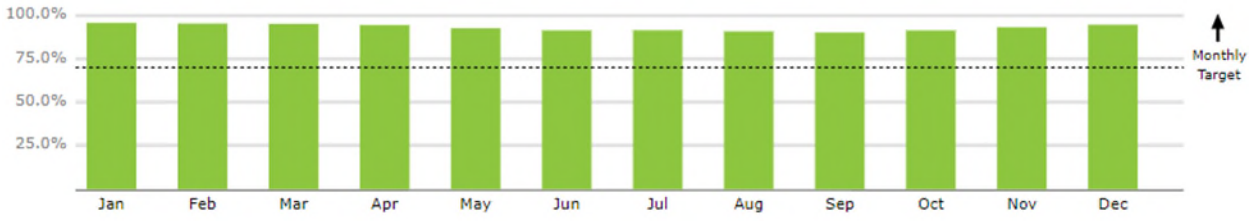
Michigan

MAP-21 Percent of the Person-Miles Traveled on the Non-Interstate NHS That Are Reliable (the Non-Interstate NHS Travel Time Reliability measure)

2021 Target
at least
70.0%

94.4%
Year-to-Date
2021

Target: At least 70% of the system should have a LOTTR less than 1.50



Show map...

Calculated using 98.95% of miles in Michigan

Data source: NPMRDS INRIX

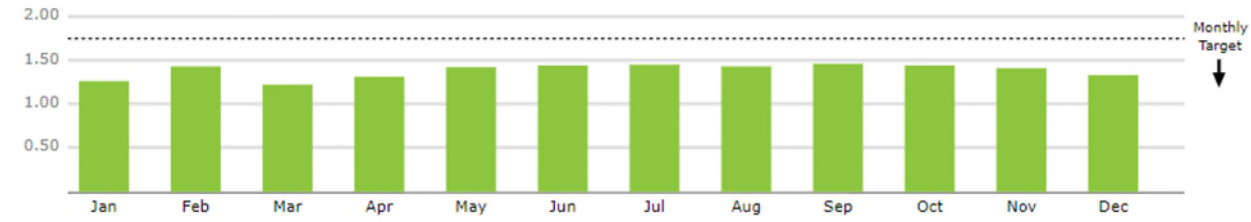
Michigan

MAP-21 Truck Travel Time Reliability Index (for interstate roads only)

2021 Target
less than
1.75

1.31
Year-to-Date
2021

Target: The system should have a TTTR less than 1.75



Show map...

Calculated using 99.77% of miles in Michigan

Data source: NPMRDS INRIX

2021 MPO System Performance

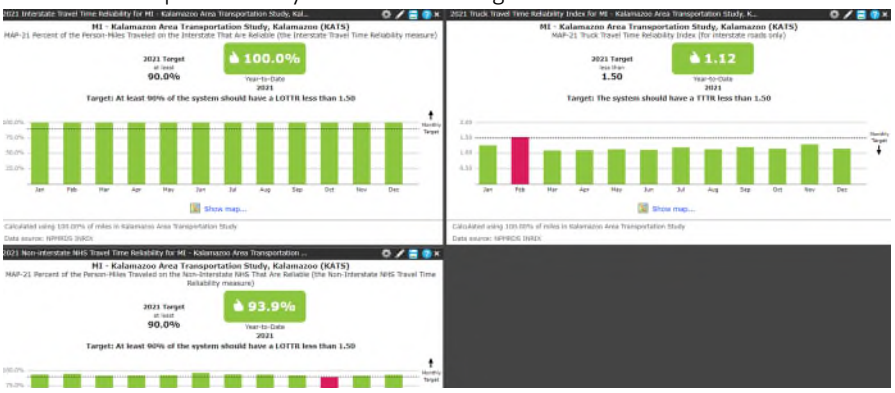
MPOs can access a wealth of system performance information, including the below reliability performance, through the RITIS NPMRDS Analytics tool. At this time there is no cost to Michigan MPOs to use this valuable tool and available data can greatly benefit decision-making.

MPO/Study Area	Interstate Reliability	Non-Interstate NHS Reliability	Freight Reliability
Battle Creek Area Transportation Study	100.0%	93.6%	1.15
Bay City Area Transportation Study	100.0%	95.3%	1.56
Genesee County Metropolitan Planning Commission	100.0%	88.0%	1.20
Grand Valley Metropolitan Council	97.8%	93.4%	1.42
Kalamazoo Area Transportation Study	100.0%	93.9%	1.12
Macatawa Area Coordinating Council	100.0%	91.1%	1.35
Midland Area Transportation Study	Not Avail	99.7%	Not Avail
Region 2 Planning Commission	100.0%	92.5%	1.13
Saginaw Metropolitan Area Transportation Study	100.0%	89.1%	1.21
Southeast Michigan Council of Governments	94.8%	93.5%	1.44
Southwest Michigan Planning Commission	100.0%	95.9%	1.12
Tri-County Regional Planning Commission	99.5%	97.1%	1.30
West Michigan Shoreline Regional Dev Commission	100.0%	93.9%	1.22

The steps to access the reliability performance information is as follows:

- From the opening screen scroll down and select the “MAP-21” dashboard widget.
- Select your respective MPO from the drop-down menu titled “MPA.”
- Select the measure(s) you want to include on your dashboard. Optional: The default target is 90% for LOTTR and 1.5 for TTTR. You can change these to reflect your target value or just leave the targets as-is.
- Select the year(s) you want to review; you can select multiple years for longer historical trends. [Note, you need to actually click the “Add time period” green button for each year you select, this is less intuitive.]
- Select whether you want to see the data in graph or map format.
- Select the “Add Widget” blue button.
- You can save this to your dashboard for future reference.

This is an example of what your dashboard might look like.



For Travel Time Reliability Technical Information, contact Lee Nederveld at (517) 202-0322 or NederveldL@michigan.gov

TRANSPORTATION PERFORMANCE MANAGEMENT

CONGESTION MITIGATION AND AIR QUALITY IMPROVEMENT (CMAQ)

THIS NEWSLETTER COVERS THE THREE SYSTEM PERFORMANCE MEASURES RELATED TO THE CMAQ PROGRAM:

1. ON-ROAD MOBILE SOURCE EMISSIONS: TOTAL EMISSION REDUCTIONS (TOTAL EMISSION REDUCTION)
2. TRAFFIC CONGESTION: ANNUAL HOURS OF PEAK HOUR EXCESSIVE DELAY PER CAPITA (PHED MEASURE)
3. TRAFFIC CONGESTION: PERCENT OF NON-SINGLE OCCUPANCY VEHICLE (SOV) TRAVEL (NON-SOV TRAVEL)

CMAQ PROGRAM PURPOSE

Since 1992, the purpose of the Congestion Mitigation and Air Quality (CMAQ) program has been to provide a flexible federal funding source for state and local governments to implement surface transportation projects and other related efforts that help meet the air quality standard and emission reduction requirements of the Clean Air Act (CAA). State and local governments with regions that currently do not or previously did not meet National Ambient Air Quality Standards (NAAQS) can use CMAQ to help fund transportation programs and projects that reduce mobile source emissions for ozone (NOx and VOC), carbon monoxide (CO), and/or particulate matter (PM 2.5).

A series of federal rules that focus the federal surface transportation program on achieving performance outcomes was initiated under the Moving Ahead for Progress in the 21st Century (MAP-21) Act and continued under the Fixing America's Surface Transportation (FAST) Act. In total, 12 performance measures have been identified for highway systems, including a set of three (3) measures to assess progress toward achieving the goals of the CMAQ Program. The requirements and targets of these measures and tools to calculate them are summarized below.

SUMMARY OF CMAQ PERFORMANCE MEASURES

The TOTAL EMISSION REDUCTION Measure requires significant progress toward reducing mobile source emissions in areas designated as non-attainment or maintenance for ozone (O3), carbon monoxide (CO), or particulate matter (PM10 and PM2.5). Accordingly, MDOT established 2-year and 4-year targets for the total annual reduction of these emissions and uses data collected from project submittals to identify which projects are most cost-effective in meeting them. MDOT, with coordination from state and local stakeholders, may recommend that these projects take a higher priority in determining which projects will move forward.

The PHED Measure requires significant progress toward reducing delay in travel time caused by traffic congestion on the National Highway System (NHS). MDOT has established targets for the reduction in annual peak hours of excessive delay. MDOT and SEMCOG agreed to use 3:00 p.m. to 7:00 p.m. as Peak Hours for this Measure. Annual hours of delay are calculated by determining the difference between the actual time it takes to get through a travel segment and the baseline time expected to get through the segment.

The NON-SOV TRAVEL Measure requires significant progress toward increasing the percentage of non-single occupancy vehicle (Non-SOV) travel on the National Highway System (NHS). MDOT has established 2-year and 4-year targets of 14.4% for this Measure. These targets reflect a conservative approach and factors in a ten percent decline for unknown factors that could produce volatility in Non-SOV travel. MDOT and SEMCOG selected the U.S. Census Bureau American Community Survey (ACS) Journey to Work data method based on data availability and integrity, as well as meeting the needs of both agencies.

ON-ROAD MOBILE SOURCE EMISSIONS: TOTAL EMISSION REDUCTIONS

A primary focus of the CMAQ program is to fund transportation projects that reduce mobile-source emissions. Each project submitted for CMAQ funding must include an estimated reduction in emissions of primary pollutants.

Description: Measures are intended to assess the CMAQ program by measuring 2- and 4-year cumulative reported emissions reductions for all projects financed by CMAQ program funds. The regulation applies to any DOT and MPO with CMAQ funded projects in areas designated as nonattainment or maintenance for ozone (O_3), carbon monoxide (CO), or particulate matter (PM_{10} and $PM_{2.5}$) National Ambient Air Quality Standards (NAAQS). For the first performance period, the measure only applies to the seven counties that are within the SEMCOG boundaries. These counties have been designated nonattainment or maintenance for particulate matter ($PM_{2.5}$).

Tool Used to Calculate Measure: The baseline information was pulled from the CMAQ Public Access System for years 2014 through 2017. The emissions benefit information is one of the items reported in the tracking system, and this information was used to develop the cumulative 2- and 4-year mobile emissions targets. A yearly average emissions benefit for $PM_{2.5}$ was calculated based on 2016 and 2017 figures, and then reduced by 10% for unforeseen variables.

Baseline On-Road Mobile Emissions Information	
Year	Particulate Matter (PM2.5 kg/day)
2017	190.373
2016	273.416
2015	177.086
2014	12.481
Totals	653.357

Target Calculation Steps:

Particulate Matter	
Calculate average using years 2016 & 2017	190.373 + 273.416 = 463.789
Divide by 2 to get yearly average	463.789 / 2 = 231.894
Reduce by 10% for unforeseen variables	231.894 x .90 = 208.705
Multiply by two for 2-year target	208.705 x 2 = 417.410
Multiply by four for 4-year target	208.705 x 4 = 834.820

Target Summary:

Measure	Baseline Condition	2-Year Targets FYE 2019	4-Year Targets FYE 2021
On-Road Mobile Source Emissions for Particulate Matter	653.357	417.410	834.820

TRAFFIC CONGESTION: ANNUAL HOURS OF PEAK HOUR EXCESSIVE DELAY (PHED) PER CAPITA

Description: Tracks traffic congestion by measuring the annual hours of peak hour excessive delay per capita on the National Highway System (NHS). This measure applies to Nonattainment or Maintenance Urbanized Areas with NHS mileage, and a population greater than 200,000. However, this regulation has phase-in criteria for the first performance period (2018-2022) and is only applicable for an urbanized area with a population exceeding one million and meeting all other criteria. In Michigan, only the Detroit Urbanized Area meets all criteria for the first performance period.

Excessive delay is calculated for segments of the NHS where travel times show speed at twenty miles per hour or less, or sixty percent of the posted speed limit or less; whichever is greater, during fifteen-minute intervals per vehicle. The regulation applies to weekdays and prescribes a specific time for morning peak travel hours, and two options for the afternoon to provide flexibility to state DOTs and MPOs (3:00 p.m. to 7:00 p.m. or 4:00 p.m. to 8:00 p.m.). MDOT and SEMCOG agreed to use the 3:00 p.m. to 7:00 p.m. option as the data demonstrated had higher levels of delay per capita between 2014 and 2017.

Tool Used to Calculate Measure: The data for the measure comes from the National Performance Measure Research Data Set (NPMRDS), Highway Performance Monitoring System (HPMS), Annual Average Daily Traffic (AADT), Annual Vehicle Occupancy rates (provided by FHWA), and may utilize U.S. decennial census in lieu of HPMS for urbanized area boundaries. The analysis tool is RITIS.

Please note that in late April there were changes made by FHWA that impacted the data outputs in RITIS for the PHED measure. The official average vehicle occupancy values to be used in the PHED per capita metric were released by FHWA and this was updated in RITIS. Also, FHWA provided new guidance on how to address segments that are not entirely on the NHS. A third change was HPMS facility type 6 in addition to facility types 1 and 2 are now included when calculating metrics. The combination of these changes impacted the PHED per capita measure. The target was developed prior to these changes being made in RITIS. The target was set conservatively with a 20% factor for unforeseen variables such as the above.

Target Calculation Steps:

- In RITIS, select the 'MAP-21' widget
- In the MAP-21 widget, under geography select 'UZA' and type 'Detroit'
- Under Select measures choose 'Annual Hours of Peak Hour Excessive Delay Per Capita'
    - Set target to less than desired hours (for this target 22 hours was selected)
    - Choose evening peak period (for this target 3pm-7pm was used)
- Years 2014 through 2018 were selected to help set the target
- Select 'Save Widget'
- The table below is the RITIS output from mid-March when data was collected to set the target

Calculate average using years 2014 – 2017	19.21 + 18.28 + 21.23 + 14 = 72.72
Calculate the yearly average	72.72 / 4 = 18.18
Increase the yearly average by 20% for unforeseen variables	18.18 x 1.2 = 21.81 *Target was rounded up to 22 hours

Target Summary:

Measure	Baseline Condition (2014 to 2017)	2-Year Targets CYE 12/31/2019	4-Year Targets CYE 12/31/2021
Peak Hour Excessive Delay	**18 hours, 30 min**	**N/A**	**22 hours**

TRAFFIC CONGESTION: PERCENT OF NON-SINGLE OCCUPANCY VEHICLE (SOV) TRAVEL

Description: Measurement of non-SOV travel in specific urbanized areas, including travel via carpool, van, public transportation, commuter rail, walking or bicycling as well as telecommuting. This measure applies to Nonattainment or Maintenance Urbanized Areas with NHS mileage, and a population greater than 200,000. However, this regulation has phase-in criteria for the first performance period (2018-2022) and is only applicable for an urbanized area with a population exceeding one million and meeting all other criteria. In Michigan, only the Detroit Urbanized Area meets all criteria for the first performance period.

Tool Used to Calculate Measure: American Community Survey (ACS) Commuting (Journey to Work) data from the U.S. Census Bureau.

Target Calculation Steps:

- https://data.census.gov/cedsci/
- Search: 'S0801: COMMUTING CHARACTERISTICS BY SEX'
- Select '*Desired Year*: ACS 5-Year Estimates Subject Tables' from the Product drop down menu
- Select 'Urban Area' and under Geographies
- Select subset 'Detroit, MI Urbanized Area (2010)' under Geographies

	Total	
	Estimate	Margin of Error
Workers 16 years and over	1,637,063	+/-4,835
⌄ MEANS OF TRANSPORT...		
⌄ Car, truck, or van	92.5%	+/-0.1
Drove alone	84.0%	+/-0.2

- % SOV Travel = Workers who drove alone / Total Workers
- % SOV Travel = 84.0%
- % Non-SOV Travel = 100% - 84% = 16%
- A conservative approach to setting the target was taken and a 10% decline for unanticipated factors was used. Therefore the Non-SOV Travel Measure target was calculated as follows:
  - 16% of Non-SOV travel – 10% = 14.4%
- 14.4% Non-SOV travel was used as the 2- and 4-year target based on the historic trend of non-SOV travel remaining consistent per the 2012 through 2016 data.

Target Summary:

Measure	Baseline Condition	2-Year Targets CYE 12/31/2019	4-Year Targets CYE 12/31/2021
Non-Single Occupancy Vehicle (SOV) Travel	**16.0%**	**14.4%**	**14.4%**

GENESEE COUNTY METROPOLITAN ALLIANCE
ROOM 111 – 1101 BEACH STREET · FLINT, MI 48502-1470 · (810) 257-3010 · FAX (810) 257-3185

MEMORANDUM

TO: Members of the Genesee County Technical Advisory Committee

FROM: McKenna Dutkiewicz, Planner
Genesee County Metropolitan Planning Commission

DATE: May 4th, 2023

SUBJECT: **FY 2023-2026 Transportation Improvement Program (TIP) Amendment # 8**

Attached is the description of proposed projects in the FY 2023-2026 TIP Amendment # 8. This amendment changes three (3) projects and adds one (1) project in the FY 2023-2026 TIP.

This amendment meets the financial constraints of the TIP and will have no disproportionately high or adverse impacts on any of the identified Environmental Justice (EJ) populations in Genesee County. The projects being amended are eligible for the funding programmed and meet the intended state (including State TEDF Category C) and federal goals and objectives identified for the funding.

The assumptions asserted in the conformity document for the FY 2023-2026 TIP, for which this amendment is being made, are maintained for transportation control measures (TCM), fiscal constraint, and public involvement. Thus, this amendment also meets the Clean Air Act and Transportation Conformity rules required for the 1997 ozone National Ambient Air Quality Standards (NAAQS).

At this time, staff is recommending the approval of the attached Amendment #8 to the FY 2023-2026 Transportation Improvement Program from the Technical Advisory Committee to the Genesee County Metropolitan Alliance.

FY 2023-2026 Transportation Improvement Program
Proposed Amendment # 8

Project Proposed to be Changed with a TIP Amendment

Year	MDOT Job Number	Agency	Project	Length	Limits	Description	Phase	Fund Type	Federal	State	Local	Total Cost	Comments
2023	210054	MDOT	I-475	~~5.29~~ 2.897	Flint River to Carpenter Road	Road Reconstruction and Bridge Replacement	ROW	RBMP	$0	$300,000	$0	$300,000	Scope construction length change.
2023	210054	MDOT	I-475	~~5.29~~ 2.897	Flint River to Carpenter Road	Road Reconstruction and Bridge Replacement	CON	IM, RBMP	~~$103,080,582~~ $48,755,709	~~$127,453,396~~ $92,197,421	$0	~~$230,533,978.00~~ $140,953,130.00	Scope construction length change. Budget Reduction.
2026	211016	MDOT	1-75 N	30.75	I-75 in Genesee County	Freeway Signing Upgrade	CON	STG	~~$5,405,978~~ $8,970,000	$0	$0	~~$5,405,978~~ $8,970,000	Additional Federal Funding for Traffic and Safety Signs.

Project Proposed to be Added with a TIP Amendment

Year	MDOT Job Number	Agency	Project	Length	Limits	Description	Phase	Fund Type	Federal	State	Local	Total Cost	Comments
2025	215485	MDOT	I-475 N	2.48	Bristol Rd to Thread Creek and 17 structures	Road Reconstruction and Bridge Rehabilitation	CON	IM, RBMP	$81,535,416	$38,076,279	$0	$119,611,694	Scope originates from JNs 204782, 204779, and 204864. Funding transferred from JNs 210054, 204782, 204779, and 204864.

RBMP -- Rebuilding Michigan Program

STG -- STP - Safety - 100% Federal for ST

IM -- Interstate Maintenance - No Added Lanes

GENESEE COUNTY METROPOLITAN ALLIANCE
ROOM 111 – 1101 BEACH STREET · FLINT, MI 48502-1470 · (810) 257-3010 · FAX (810) 257-3185

MEMORANDUM

TO: Members of the Technical Advisory Committee

FROM: Kristofor Garris, Planner
Genesee County Metropolitan Planning Commission

DATE: May 4, 2023

SUBJECT: **FY 2025 List of Proposed Safety Projects**

During the month of February, the Michigan Department of Transportation (MDOT) released a Call for FY 2025 Local Safety Programs -encompassing Safety Projects, Highway Safety Improvement Systemic(HSIP) programs, and High-Risk Rural Road (HRRR) Projects to all local road agencies for the 2025 fiscal year. Applications were due to MDOT by May 1, 2023. Staff requested that copies of applications for safety projects be sent to our office for prioritization and support.

Staff received six (6) local safety program applications which were reviewed according to MDOT Time-of-Return (TOR) Analysis and appear as a prioritized list below.

Projects received for the FY 2025 Safety Program:

	Agency	Road Name	Location	Improvement	TOR	Total
1	GCRC	Belsay	At Carpenter Road	Ground-Mounted Solar Beacons	0.62	$28,000
2	GCRC	Davison	At Irish Road	Upgrade signal, ADA upgrades	2.15	$250,000

3	**GCRC**	**Seymour**	North of Whitney Rd.	Reconstruct curves, High Friction Surface	4.76	$400,000
4	**GCRC**	**Wilson**	At Clio Road	Reconstruct approaches, add center turn lane	5.55	$300,000
5	**GCRC**	**Irish**	Court to McDermitt	Widen to 5 lanes, resurface	6.47	$500,000
6	**GCRC**	**Owen**	Silvercrest Dr. to Jennings Rd.	Widen to 3 lanes, resurface	6.51	$1,000,000

At this time, staff is requesting that the Technical Advisory Committee provide a recommendation of approval to the Metropolitan Alliance for the prioritized list of FY 2025 Safety Projects for MDOT consideration.

GENESEE COUNTY METROPOLITAN ALLIANCE
ROOM 111 – 1101 BEACH STREET · FLINT, MI 48502-1470 · (810) 257-3010 · FAX (810) 257-3185

MEMORANDUM

TO: Members of the Technical Advisory Committee

FROM: Kristofor Garris, Planner
Genesee County Metropolitan Planning Commission

DATE: May 4, 2023

SUBJECT: **2023 Non-Motorized Count Survey Requests**

The Genesee County Metropolitan Planning Commission (GCMPC) is now accepting requests from all Genesee County municipalities who are interested in collecting pedestrian and bicyclists count statistics along their non-motorized trail network. Spring is here and staff is beginning to develop a schedule to collect non-motorized counts on trails throughout the county. Each count will have a duration of two weeks. Each survey will depict general usage trends such as daily average, busiest days, hourly profiles, and comparisons between weekday vs. weekend.

If your community is interested in participating in the 2023 Non-Motorized Trail Count program, staff would be happy to meet with you to discuss the best locations to install the counter along your trails. Requests will be considered on a first come, first served basis.

To view previous trail count locations and their average daily use, check out the Genesee County GIS Map Gallery at: https://arcg.is/1959Dm

Should you have any questions regarding the non-motorized count program, please contact Kris Garris at kgarris@geneseecountymi.gov or (810) 766-6564.

JM:dc

GENESEE COUNTY METROPOLITAN ALLIANCE
ROOM 111 – 1101 BEACH STREET · FLINT, MI 48502-1470 · (810) 257-3010 · FAX (810) 257-3185

MEMORANDUM

TO: Members of the Technical Advisory Committee

FROM: Kristofor Garris, Planner
Genesee County Metropolitan Planning Commission

DATE: May 4, 2023

SUBJECT: **2023 Local Traffic Count Program**

On an annual basis, the Genesee County Metropolitan Planning Commission (GCMPC) requests that local units of government update traffic count information on roads under their jurisdiction. Traffic Counts are used for a variety of transportation planning activities. Accurate and up-to-date traffic counts are critical pieces of information for Transportation Planning and funding opportunities,

GCMPC has traffic counters and accessory equipment available for rental by local jurisdictions. The counters can collect vehicle counts, as well as other traffic data such as vehicle classification and speed. The charge for equipment rental is $5.00 per day or $25.00 per week, per counter. Our staff is available to assist in setup and training. Optimal times for taking traffic counts are in the spring before schools are out for the summer and in the autumn after the Labor Day Holiday. Tuesday through Thursday generally provide the best average weekday count.

As traffic counts are taken, remember to upload this information to the web-based traffic count system. If you are not participating in the web-based system, you may send traffic count data in Roadsoft or Excel formats via e-mail to kgarris@geneseecountymi.gov.

Should you have any questions or concerns, or would like to rent traffic count equipment, please contact me at (810) 766-6564 or by e-mail at kgarris@geneseecountymi.gov.

GENESEE COUNTY METROPOLITAN ALLIANCE
ROOM 111 – 1101 BEACH STREET · FLINT, MI 48502-1470 · (810) 257-3010 · FAX (810) 257-3185

MEMORANDUM

TO: Members of the Technical Advisory Committee

FROM: Jacob Maurer, Division Manager
Genesee County Metropolitan Planning Commission

DATE: May 4, 2023

SUBJECT: **Adjusted Census Urban Boundaries (ACUB) Establishment & Revision**

Staff was informed that MDOT will soon schedule workshops for each of the U.S. Census Urban Areas (UA) to review the 2020 Census Urban Boundary. Following each decennial U.S. Census, federal law allows the Michigan Department of Transportation (MDOT), in cooperation with the responsible local officials, to adjust the U.S. Census UA boundaries. This process results in the creation of the Adjusted Census Urban Boundaries (ACUBs). Adjustments are made by adding census blocks to the UA that would smooth the Census UA and prevent the confusion resulting from road(s) that switch back and forth between urban and rural within short distances.

The ACUBs are important for determining eligibility for federal-aid, highway and street national functional classification density, statistical reporting, and the distribution of Act 51 county funds. Attached is a map of the 2010 and preliminary 2020 Census Urban Boundaries for reference.

Staff will review the new boundary data once received and set up meetings with local road agencies to review prior to the MDOT workshop. Staff is also waiting for further guidance from MDOT on how this will impact transportation funding in the 2024 fiscal year and beyond. We will keep the committee up to date as more information is released.

Please feel free to contact me at jmaurer@geneseecountymi.gov or (810) 766-6545 if you have any questions.

Census Urban Boundary

GENESEE COUNTY, MICHIGAN