Draft for Public Comment

Air Quality Conformity Analysis
for the
Partial County 2015 Ozone NAAQS Nonattainment Area
Muskegon County, Michigan
for
WestPlan's New 2026-2029 Transportation Improvement Plan

April 15, 2025

Prepared by:
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1.0 Conformity

1.1 Introduction

Transportation conformity provisions of the Clean Air Act Amendments require metropolitan planning organizations (MPOs) to make a determination that the Metropolitan Transportation Plan (MTP), Transportation Improvement Program (TIP), and projects conform to the State Implementation Plan (SIP), and that regional emissions will not negatively impact the region's ability to meet the National Ambient Air Quality Standards (NAAQS).

Conformity to the SIP means that the region's MTPs and TIPs 1) will not cause any new violations of the NAAQS; 2) will not increase the frequency or severity of existing violation; and 3) will not delay attaining the NAAQS. A demonstration is conducted by comparing emissions estimates generated from implementation of MTPs and TIPs for analysis years to the motor vehicle emission budgets (MVEBs) contained in the SIP.

The purpose of this report is to document the process and findings of the transportation conformity analysis for the nonattainment area.

1.2 Nonattainment and Maintenance Areas

Muskegon County is partially an ozone nonattainment area and entirely an ozone maintenance area. The West Michigan Metropolitan Transportation Planning Program (WestPlan) MPO covers Muskegon County and extends into Ottawa County.

The 2015 ozone NAAQS nonattainment area covers the western half of Muskegon County; it includes six cities (Muskegon, N. Muskegon, Roosevelt Park, Muskegon Heights, Montague, and Whitehall) and 10 townships (White River, Montague, Blue Lake, Fruitland, Dalton, Laketon, Muskegon Township, North Shores, Fruitport, and Whitehall Township).

Findings of this transportation conformity analysis are for projects within the partial county 2015 nonattainment area. Projects for the WestPlan's new 2026-2029 TIP were evaluated for this analysis at a meeting on March 17, 2025, of the Michigan Transportation Conformity Interagency Workgroup (MITC-IAWG). Projects for the 2050 MTP are unchanged from the last analysis and will be included. Projects for this analysis are contained in the partial county nonattainment area of the:

- WestPlan 2050 MTP, and
- WestPlan 2026-2029 TIP.

1.3 Conformity Finding

The staff of WestPlan finds that the MTP and TIP conform to the SIP for the 2015 ozone standard based on the results of this conformity analysis. This report makes the determination that the region's transportation plan and programs satisfy all applicable criteria and procedures in the conformity regulations.

This conformity analysis document is subject to a public comment period from April 15 to May 21, 2025. Comments will be recognized and considered, with responses provided in Appendix B.

On May 21, 2025, the WestPlan Policy Committee will make a formal conformity determination, through a resolution, supporting the conformity determination.

1.4 Results of Conformity Analysis

Conformity is demonstrated when the analysis-year emissions are equal to or less than the SIP budget. For the 2015 ozone standards, as shown in Table 1, the emissions results for the analysis years show that the volatile organic compounds (VOC) and nitrogen oxides (NOx) emissions are lower than the SIP budgets; thus, conformity for the ozone standard is demonstrated.

Table 1: Results of 2015 Ozone Standard Conformity Analysis

Analysis Year	Emissions (tons/day)	
	VOC	NOx
SIP Budget	1.74	1.73
2026	1.24	0.97
2030	1.11	0.71
2040	0.78	0.35
2050	0.63	0.25

2.0 Background and Attainment Status

2.1 Background

The federal Clean Air Act Amendments of 1990 (CAAA) established rules to improve the air, protect public health, and protect the environment. The act requires the U.S. Environmental Protection Agency (EPA) to set, review, and revise the National Ambient Air Quality Standards (NAAQS) periodically.

The Clean Air Act links together air quality planning and transportation planning through the transportation conformity process. Air quality planning is controlled by Michigan's SIP, which includes

the state's plans for attaining or maintaining the NAAQS. The main transportation planning tools are the metropolitan transportation plan and the metropolitan TIP. Transportation conformity ensures that federal funding and approval are given to highway and transit activities that are consistent with the SIP and that these activities will not affect Michigan's ability to achieve the NAAQS.

Transportation activities that are subject to conformity are MTPs, TIPs, and all federal projects that receive Federal Highway Administration (FHWA) or Federal Transit Administration (FTA) funding or approval. The conformity process ensures emissions from MTP, TIP, or projects are within acceptable levels specified within the SIP and meet the goals of the SIP.

Transportation conformity only applies to on-road sources and transportation-related pollutants: ozone, particulate matter (particulate sizes 2.5 and 10), nitrogen dioxide, and carbon monoxide.

In addition to emissions that are directly emitted, regulations specifically require certain precursor pollutants to be addressed. Precursor pollutants are those pollutants that contribute to the formation of other pollutants. For example, ozone is not directly emitted but created when NOx and VOC react with sunlight.

When the EPA revises an NAAQS, all areas of the country are evaluated to determine if monitored levels of the pollutant are at or below the standard; these areas are classified as attainment. If the pollutant level is above the standard, these areas are classified as nonattainment. MPOs in areas classified as nonattainment or maintenance must conduct conformity analysis on their transportation programs.

2.2 Attainment Status

On April 15, 2004, the EPA issued final designations of areas not attaining the 1997 ozone NAAQS (also referred to as 1997 ozone standard). Muskegon County was designated a nonattainment area.

On May 16, 2007, the EPA redesignated the area attainment/maintenance, approving and finding adequate motor vehicle emission budgets for VOC and NOx for the year 2018. The area was placed into maintenance, requiring conformity emissions to be compared to the MVEBs contained in the SIP, referred to as SIP budgets.

On July 20, 2012, the EPA designated all of Michigan as attainment for the strengthened 2008 ozone NAAQS.

On July 20, 2013, the EPA partially revoked the 1997 ozone standard, withdrawing the requirement to do transportation conformity for areas that were in maintenance.

On April 6, 2015, the EPA completely revoked the 1997 ozone standard, which resulted in removal of all transportation conformity requirements.

On April 23, 2018, the FHWA started requiring areas in the country to conduct conformity if they were a maintenance area for the 1997 ozone standard and attainment for the 2008 ozone standard when the 1997 ozone NAAQS was revoked. This was to comply with the court's decision in *South Coast Air Quality Management District v. EPA.* Later, this was amended to require MPOs to have a conformity in place on Feb. 16, 2019, and conduct conformity going forward.

On Aug. 3, 2018, the EPA designated part of Muskegon County as nonattainment for the strengthened 2015 ozone NAAQS (also referred to as 2015 ozone standard). Conformity was conducted for the whole county because the MVEBs were for the whole county.

On Nov. 7, 2022, the Muskegon County 2015 ozone nonattainment area (partial county) was reclassified by EPA from marginal to moderate for failure to attain the NAAQS by Aug. 3, 2021. Therefore, the area now has more stringent CAA requirements to follow to assist in attaining the NAAQS. The area must now show attainment by Aug. 3, 2024, with 2023 being the last ozone season. MVEBs for the 2015 ozone partial county nonattainment area will be used once approved by EPA.

In 2024, the EPA approved the MVEBs for the Muskegon Partial County 2015 Ozone Nonattainment Area. With these budgets approved, the emissions analysis will include only the partial county nonattainment area. A qualitative report will cover the remaining 1997 ozone maintenance area in the county going forward.

On Jan. 16, 2025, the Muskegon County 2015 ozone nonattainment area (partial county) was reclassified by EPA from moderate to serious for failure to attain the NAAQS by Aug. 3, 2024. The area must now show attainment by Aug. 3, 2027, with 2026 being the last ozone season. MVEBs budgets developed for the moderate SIP will be used until new budgets are approved by EPA.

2.3 SIP Budgets

MVEBs for the partial county nonattainment area were adopted into the SIP as part of the requirements of a moderate nonattainment area. Emissions generated must be equal to or less than the SIP MVEBs, also referred to as budgets. The MVEB is the portion of the total allowable emissions allocated to highway and transit vehicle use in the nonattainment area. By showing emissions are below the MVEBs, the MTP and TIP are conforming to the SIP.

3.0 Interagency Consultation

Consultation with federal, state, and local transportation authorities is conducted through the MITC-IAWG. Issues discussed include evaluating and choosing emission models and methods,

determining regionally significant project definition and projects, procedures for future MITC-IAWG meetings, and rules for reviewing projects.

An MITC-IAWG meeting was held on March 17, 2025, to review projects and modeling assumptions; individuals attended by video conferencing (Microsoft Teams). It was a joint meeting for all the nonattainment and maintenance areas in Muskegon, Allegan, Ottawa and Kent counties. All three MPO (WestPlan, MACC, and GVMC) boundaries extend into Ottawa County, which is part of the Grand Rapids 1997 ozone LOMA. WestPlan is also part of the Muskegon partial county 2015 ozone nonattainment area and Muskegon partial county 1997 ozone OMA.

A summary of the MITC-IAWG meeting and relevant interagency consultation correspondence related to this conformity is in Appendix A. A copy of this conformity analysis was sent to each MITC-IAWG member for review and comment.

4.0 Public Participation

The Public Participation Plan, adopted by the MPO policy committee, establishes the procedures by which the MPOs reach affected public agencies and the public. The same procedures were followed for this document, ensuring the public has an opportunity to review and comment before the MPO policy committee makes a determination.

A formal public comment period for the draft Air Quality Conformity Analysis will be held April 15 to May 21, 2025. Public comments received and responses to the comments will be in Appendix B.

5.0 Projects Evaluated for the Conformity Analysis

The MITC-IAWG reviewed projects for the WestPlan new 2026-2029 TIP at the March 17, 2025, meeting. Projects classified as non-exempt must be analyzed. Projects with exempt classification that can be modeled with the travel demand model were modeled. Appendix C includes a list of the projects evaluated for Muskegon partial county 2015 ozone nonattainment area at the MITC-IAWG meeting.

6.0 Transportation Modeling

6.1 Travel Demand Forecasting Models

Nonattainment areas are established independent of MPO boundaries. The Muskegon partial county nonattainment area is covered by the WestPlan travel demand forecasting model. The model was developed in TransCAD modeling software, using the latest demographic and employment data available to generate estimates of travel, vehicle miles of travel (VMT), vehicles hours of travel (VHT), and speeds. Detailed documentation is contained in a separate document available upon request.

6.1.2 WestPlan Model

The WestPlan travel demand model covers all of Muskegon County and the northwest portion of Ottawa County. Only the portion of the model representing the partial county nonattainment area is utilized for this analysis. Developed by the Michigan Department of Transportation (MDOT), this standard four-step model has a base year of 2019 and a horizon year of 2050. Each of the four steps - trip generation, trip distribution, mode choice, and traffic assignment - are checked for reasonableness against national standards. Final model validation verifies that the assigned volumes replicate actual traffic counts. The 2010 census and 2019 American Community Survey (ACS) data were the sources of population and household base data. Data from the 2020 census was also used as a reference when developing the 2019 data. Employment data is developed from a private business database verified with local knowledge. Future data is based on the Regional Economic Models, Inc. (REMI) economic and demographic forecasts. The University of Michigan and MDOT jointly develop county-specific forecast data for the REMI model.

6.1.4 Coding Travel Demand Model Links for NFC by Urban and Rural

For emission modeling, the National Functional Classification (NFC) system is used to determine the function of roads; however, after 2010, NFCs do not distinguish roads by urban and rural. The emission model, Motor Vehicle Emission Simulator (MOVES), requires roads to be classified as urban or rural. MOVES also requires roads to be grouped into one of four road types: rural restricted, rural unrestricted, urban restricted, and urban unrestricted. To determine a road's urban or rural status, roads within the adjusted census urban boundary were considered urban and those outside the boundary as rural. NFCs designated as interstate and other freeways are considered restricted while all others are considered unrestricted. A geographic information system (GIS) digital base map was used to combine NFC with the adjusted census urban boundary to generate MOVES road types for the network.

6.1.5 Highway Performance Monitoring System (HPMS)

The EPA and FHWA endorse HPMS as the source of VMT estimates. The travel demand modeling VMT is aggregated by NFC road types for the county, then normalized to HPMS data for the base year/validation year of the travel demand model. Normalization factors were applied to all analysis years.

6.2 Analysis Years

Analysis years were determined by the MITC-IAWG. Projects requiring modeling are grouped into an analysis year based on the projects open-to-traffic date. Emissions are generated for each analysis year.

Analysis Year	Reason
2026	Attainment year of 2015 ozone NAAQS - serious
2030	Interim year (so analysis years not more than 10 years apart)
2040	Interim year (so analysis years not more than 10 years apart)
2050	Last year of metropolitan transportation plan for the WestPlan

7.0 Latest Planning Assumptions

7.1 Demographic Data

The most current and future assumptions developed or approved by the MPO were used in the development of the travel demand models. Table 2 shows base and future year population and employment by the nonattainment area from the travel demand model.

Table 2: Base and Future Year Population and Employment in the Nonattainment Area

	Population		Employment	
Year	2019	2050	2019	2050
Muskegon Partial County	148,015	153,115	79,808	88,000

7.2 Vehicle Miles of Travel

VMT is one measure of travel. Current and future levels of travel and growth rates are provided in Table 3.

Table 3: Vehicle Miles of Travel and Growth Rates for the Nonattainment Area

	Analysis year				
Muskegon Partial County	Base Year 2019	2026	2030	2040	2050
VMT	3,445,245	3,514,482	3,593,285	3,647,527	3,646,065
Growth Rate	1.00	1.02	1.04	1.06	1.06

7.3 Vehicle Hours of Travel

VHT is an indicator of congestion. Current and future levels are provided in Table 4.

Table 4: Vehicle Hours of Travel for the Nonattainment Area

	Analysis year				
Muskegon Partial County	Base Year 2019	2026	2030	2040	2050
VHT	102,374	104,412	106,786	108,490	108,106

7.4 Transportation Control Measures

There are no transportation control measures (TCMs) identified in the applicable state implementation plan. Thus, no measures are included.

8.0 Emission Modeling

8.1 MOVES Specifications

The EPA's MOVES version MOVES5 was used to generate emissions. Ozone is formed in the presence of heat and sunlight, so the highest ozone concentrations are monitored during the summer. This conformity analysis involves generating summer (July) weekday emissions to simulate the meteorology of a high-ozone summer day.

8.2 Road Type Distribution

HPMS data is used to create MOVES road-type distribution fractions. County-level HPMS passenger data is used for motorcycle and passenger vehicles, and commercial HPMS is used for trucks and buses. HPMS VMT is aggregated to MOVES road types, then converted to a fraction, generating a road-type distribution.

8.3 Average Speed

A speed distribution is created using a method developed by EPA for taking a single average speed and creating a distribution. An average speed is generated for each of four time periods (a.m., midday, p.m., and off-peak) in the travel demand forecasting models for each of the four road types in MOVES, generating 16 average speeds. The same distribution was used for each vehicle type.

8.4 Average Weekday VMT to Annual VMT

Monthly VMT adjustment factors were obtained from MDOT's data collection area. The EPA's moves3_aadvmt convert-tool was used to convert annual average daily VMT to annual VMT, monthly VMT fractions, and daily VMT fractions. Hourly fractions use MOVES default data. For motorcycles, the monthly fractions use MOVES defaults since local data is limited. Future analysis years utilize the same fractions.

8.5 Vehicle Population

The source of most of the vehicle population is from the Michigan Department of State, Secretary of State (SOS) Customer and Automotive Records System (CARS) database, which extracted vehicles able to drive on the road on July 1, 2019. The database was supplemented with school bus data from the Michigan Department of Education and MDOT public transit bus data. The EPA's default distributions were used to determine refuse truck, single-unit truck, and combination truck categories. The SOS data must be converted to MOVES source (vehicle) types. Table 5 shows how vehicle body style combined with other variables derive MOVES vehicle types. The document,

Development of 2019 Vehicle Population Data for MOVES from MDOS CARS, MDOT Transit, and MDOE School Bus Databases, describing the process, is available upon request.

Future year vehicle population is based on growth in VMT from base year to analysis year. The growth rate is applied to all MOVES vehicle types. Table 3 shows the VMT for each analysis year and growth rate.

For partial county analysis, the SOS data was not available to determine vehicles only within the partial county nonattainment area. The same approach that is used for future year data was applied here. Vehicle populations are based on the reduction rate of VMT from the base year (2019) to analysis year. For each year, the rate is applied to all MOVES vehicle types.

8.6 Vehicle Age Distribution

MOVES requires vehicle age as one of the local data inputs. The SOS CARS database for year 2019 was the source of vehicle ages. Vehicles are assigned to an age group, from 0 to 40-plus, based on model year indicated in the SOS database, with 0 being the newest vehicles (2019 or newer) and each year is its own group until vehicles are 40 years and older, which are aggregated into the 40-plus group. The SOS database is sorted by MOVES vehicle types and age. For refuse trucks, single-unit trucks, and combination trucks, the EPA's default age distribution is used to calculate splits in population because of limited local numbers. Base year age distribution fractions were used for all future analysis years.

8.7 Alternative Vehicle Fuel and Technology (AVFT)

This MOVES input allows local data on the fraction of vehicles that use different fuels and technology. The fraction of vehicles using each fuel type can be defined by source type and model year. The local AVFT data is based on the 2019 SOS data pulled July 1, 2019. The first full year of data is 2018. Future year data is generated using EPA's AVFT tool. Source types 21 to 43 and 54 use the AVFT Tool gap filling method automatic and projection method proportional. Source types 11, 51, 52, 53, 61 and 62 use AFVT default data with gap filling method automatic and projection method national average.

8.8 Meteorology Data

In Michigan, ozone levels are highest in the summer. Local temperature and humidity data measured at the airport within the nonattainment area was generated using the Midwestern Regional Climate Center (MRCC) cli-MATE tool. Averaging the three summer months (June, July, and August) for 2019 estimated a typical summer day and was used as local input in MOVES.

8.9 Other Local Data

The MOVES model allows input for other types of local data, if available. Lacking local data, defaults were used for hoteling (truck parking), starts, idling, and hour VMT fraction. The default fuel data is correct for Michigan and was used.

9.0 Conclusion

Conformity has a two-step endorsement process. The MPOs must make a formal conformity determination through a resolution that the findings of this conformity analysis conform to the SIP; thus, emissions are at or below the budgets found in the SIP. Then FHWA, jointly with the FTA (after consultation with the EPA), issues a letter of concurrence with the determination.

The conformity analysis described here and conducted by MDOT, with support of the WestPlan, concludes that the WestPlan 2026-2029 TIP and 2050 MTP meet all applicable requirements for conformity for the 2015 ozone standards; thus, it is recommended that FHWA support this conformity determination finding.

Table 5: Mapping to MOVES Source Types

MOVES Source Type	SOS Body Style	MDOT Transit Database	MDOE School Bus Database
11 – Motorcycle	Motorcycle		
21 – Passenger Car	Two-Door, Four-Door, Convertible, Roadster, Low-Speed		
31 – Passenger Truck	Station Wagon (includes SUVs), Pickup, Van, Hearse Based on Use Type if Regular/Non-Commercial or Farm or Historical/Authentic. If Use Type Standard Gross Vehicle Weight (GVW) and Plate Type GVW and Owner Type Individual. Vehicles over 10,000 pounds are moved to source type 50.		
32 – Light Commercial Truck	Station Wagon (includes SUVs), Pickup, Van, Hearse, Ambulance Based on Use Type if Regular/Commercial, Carnival/Moving Company, Charitable Corporation, Log, Milk, Transport Passenger for Hire, Commercial - Tow Mobile Home, Wreaker, or Funeral Home. If Use Type Standard GVW and Plate Type commercial or fleet. If Use Type Standard GVW and Plate Type GVW and Owner Type Business or Lease. Vehicles over 10,000 pounds moved to source type 50, except ambulances.	Van/SUV/ minivan from MDOT Transit database were put in source type 32.	
41 – Other Bus	Bus Removed if duplicate in MDOE or MDOT Transit database		
42 – Transit Bus		Regular service buses	
43 – School Bus			Active school buses
<u>50 – Single-Unit Trucks:</u> 51 - Refuse Truck 52 - Single-Unit Short Haul 53 - Single-Unit Long Haul	Panel, Dump, Mixer, Stake, Wrecker, Utility Also: Station Wagon, Pickup, Van, or Hearse with weight over 10,000 pounds. Distribution of source type 51, 52, 53 determined by default distribution in MOVES3.		
54 – Motorhome	Motorhome		
<u>60 – Combination Trucks:</u> 61 - Combination Short Haul 62 - Combination Long Haul	Tank, Tractor Distribution of source type 61 and 62 determined by default distribution in MOVES3		

Process described in table are documented in *Development of 2019 Vehicle Population Data for MOVES from MDOS CARS, MDOT Transit, and MDOE School Bus Databases*.

Appendix A: Meeting Summary of the Interagency Workgroups

Meeting Summary
Michigan Transportation Conformity Interagency Workgroup (MITC-IAWG)
for
Partial Allegan County 2015 Ozone Nonattainment Area
Partial Allegan County 1997 Ozone Orphan Maintenance Area (OMA)
Partial Muskegon County 2015 Ozone Nonattainment Area
Partial Muskegon County 1997 Ozone Orphan Maintenance Area (OMA)
Grand Rapids Area 1997 Ozone Limited Orphan Maintenance Area (LOMA) (Kent and Ottawa counties)
for
New 2026-2029 Transportation Improvement Programs
Teams Meeting: 11 a.m. - noon (EST) March 17, 2025

Welcome and Introductions:
Members and partners attended the video conference by Teams. The group was welcomed to the MITC-IAWG for the conformity areas in Allegan, Muskegon, Ottawa, and Kent counties, which now contain five conformity areas. The group met to review projects and modeling parameters for the new 2026-2029 Transportation Improvement Programs (TIPs). Each attendee introduced themself.

In attendance:

EPA: Michael Leslie
FHWA: Jenny Staroska
MDOT: Donna Wittl, Luke Walters, Heather Bowden, Tyler Kent, Dennis Kent, Blake Wright, Lane Masoud, Ryan Gladding, Jon Roberts, Fred Featherly, Sam Hetherington
MACC: Alec Miller, Jason Latham
WestPlan: Lauryn Blake, Brian Mulnix, Joel Fitzpatrick, Jack Grice
GVMC: Mike Zonyk

Not attending:

FHWA: Christina Nicholaides
FTA: Cecilia Crenshaw
EGLE: Breanna Bukowski
MACC: Eric Dykstra
GVMC: Andrea Faber, Laurel Joseph, George Yang
MDOT: Mark Kloha, Bill Loehle, Susan Rozema, Valerie Shultz, Tina Hawley

Conformity documents:
It was explained that each of the five documents listed below would be needed, thus new conformity documents for each area. Muskegon had partial county documents created for their new 2050 MTP. For Allegan County, this will be the first time the partial county moderate motor vehicle emission budgets will be used. The Grand Rapids area has not changed; the report will be in the same format.

Note: both MACC and WestPlan will also need to have a supporting policy resolution for the Grand Rapids report, as well as GVMC.

1) Partial Allegan County 2015 Ozone Nonattainment Area Conformity Analysis (requires emission modeling)
2) Partial Allegan County 1997 Ozone Orphan Maintenance Area (OMA) conformity report (qualitative, no modeling)
3) Partial Muskegon County 2015 Ozone Nonattainment Area Conformity Analysis (requires emission modeling)
4) Partial Muskegon County 1997 Ozone Orphan Maintenance Area (OMA) conformity report (qualitative, no modeling)
5) Grand Rapids Area (Kent and Ottawa counties) 1997 Ozone Limited Orphan Maintenance Area (LOMA) conformity report (qualitative, no modeling)

Modeling:
The modeling assumptions below were reviewed, and the group agreed with the methods. Local AVFT data will be entered into EPA's AVFT Tool to determine future years. The different analysis years for Allegan and Muskegon are because given past analysis, these work best and since there is no overlapping area, they don't need to be the same.

a. Analysis years:

Allegan Partial County 2015 ozone nonattainment area

2019 base year of MACC travel demand model
2026 attainment year of 2015 ozone NAAQS - serious
(Must attain standard by Aug. 3, 2027)
2035 interim analysis year
2045 interim analysis year
2050 last year of MTP

Muskegon Partial County 2015 ozone nonattainment area

2019 base year of WestPlan travel demand model
2026 attainment year of 2015 ozone NAAQS - serious
(Must attain standard by Aug. 3, 2027)
2030 interim analysis year
2040 interim analysis year
2050 last year of MTP

b. Emission model: MOVES5
c. Budgets: moderate SIP partial county 2015 ozone nonattainment budgets
d. Meteorology data: local 2019 meteorology
e. Speeds: average speed by MOVES road types by travel demand model time periods
f. Vehicle population and age distribution: year 2019 Secretary of State (SOS) active vehicle registrations pulled on July 1
g. Default data used in MOVES: starts, hoteling, idling, fuel, hour VMT fraction

Project list review:
It was stated that the lists provided are not from the new JobNet Air Quality report. The report could not be used because of the way JobNet is configured for the overlapping TIP year. A new field, "Conformity Area," was added to the spreadsheet and indicates which conformity area/s a job is in. This was manually determined but, in the future, might be done by JobNet.

How abandoned jobs should be handled also was covered. In the comment field it should be stated if the job was modeled or not and to use font red. It was explained that all jobs that can be modeled are modeled when modeling occurs.

The project list for the MACC was reviewed. There are two non-exempt projects: one in the nonattainment area and one in Ottawa County, which is part of the Grand Rapids LOMA. All other projects are exempt.

The project list for WestPlan was reviewed and all projects are deemed exempt.

The project list for GVMC was reviewed. There are two non-exempt projects; all other projects are deemed exempt. It was mentioned that job number 222925, construct a two-way bikeway, is not a road diet, this comment was added to the list.

Rural projects in Allegan and Ottawa counties contained in the Rural STIP were reviewed and all projects are exempt.

Other:
The question was asked about job number 214169 in Muskegon County that it might be changing to a road diet. It is currently not on the TIP list because it is in a GPA, but if it changes it will be moved to the TIP list.

A question was asked about how wildfires and exceptional events might affect the analysis. It was explained that wildfires affect new designations of areas, for example, for the new PM2.5 NAAQS, not existing conformity analysis. There is a separate process for designating new nonattainment areas.

It was asked what the exact boundaries are for the partial county nonattainment areas. It was explained they can be found in the conformity analysis and reports for those areas and in the Federal Register. After the meeting, a pdf of the Federal Register containing the information, Federal Register/Vol. 83, No. 107/Monday, June 4, 2018/page 25776 – 25848, was emailed to the group.

A question was also asked about other areas in the Grand Region that might need conformity done for the new TIPs. Mason and Benzie counties are considered isolated rural maintenance areas and only need to do a new conformity report if have a non-exempt project. These areas are LOMAs so do not need to do modeling for their conformity and IAWGs are done entirely by email.

Wittl, Donna (MDOT)

From:	Wittl, Donna (MDOT)
Sent:	Monday, March 10, 2025 9:56 AM
To:	leslie.michael@epa.gov; Nicholaides, Christina (FHWA); Staroska, Jenny (FHWA); Cecilia.Crenshaw@dot.gov; Bukowski, Breanna (EGLE); Wittl, Donna (MDOT); Walters, Luke (MDOT); Bowden, Heather (MDOT); amiller@the-macc.org; jlatham@the-macc.org; edykstra@the-macc.org; lblake@wmsrdc.org; Brian Mulnix; Joel Fitzpatrick; andrea.faber@gvmc.org; Laurel Joseph; George Yang; Michael Zonyk; Kloha, Mark (MDOT); Kent, Tyler (MDOT); Kent, Dennis (MDOT); Loehle, William (MDOT); Rozema, Susan (MDOT); Wright, Blake (MDOT); Masoud, Lane (MDOT); Gladding, Ryan (MDOT); Roberts, Jonathan (MDOT); Featherly, Fred (MDOT); Shultz, Valerie (MDOT); Hawley, Tina (MDOT)
Cc:	Hetherington, Samuel (MDOT); Jack Grice
Subject:	March 17 IAWG Agenda and Projects to Review
Attachments:	Agenda March 17 IAWG.docx; Rural STIP Projects Allegan Ottawa.xlsx; MACC FY26-29 All TIP Projects.xlsx; WestPlan 26-29 All TIP List.xlsx; GVMC 2026 to 29 new TIP Project list.xlsx

Greetings MITC-IAWG Members and Partners:

Partial Allegan County 2015 Ozone Nonattainment Area
Partial Allegan County 1997 Ozone Orphan Maintenance Area (OMA)
Partial Muskegon County 2015 Ozone Nonattainment Area
Partial Muskegon County 1997 Ozone Orphan Maintenance Area (OMA)
Grand Rapids Area (Kent-Ottawa counties) 1997 Ozone Limited Orphan Maintenance Area (LOMA)

Attached are the agenda and project lists for the March 17 meeting. Please review projects in the four lists and the agenda because it contains modeling procedures the group needs to agree on.

Projects classified as non-exempt are highlighted in yellow and projects being abandoned or suspended are in red font. A new field "Conformity Area" lists if the job is in the nonattainment, OMA, LOMA area, or a combination.

If there are questions or concerns, you can reach out before the meeting to allow time for research so questions can be answered at the meeting.

Thanks,
Donna

Donna Wittl
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Appendix B: Public Comments and Responses

Comments received will be addressed here.

Appendix C: Projects Evaluated for Conformity Analysis

Attached are the projects evaluated at March 17, 2025, MITC-IAWG for WestPlan within the Muskegon partial county nonattainment area.

The list of projects begins on the following page.

FY2026-2029 Transportation Improvement Program (TIP) Project list Muskegon Partial County Nonattainment Area

Fiscal Year	Job Type	Job#	GPA Type	MPO	County	Responsible Agency	Project Name	Limits	Length	Primary Work Type	Project Description	Phase	Air Quality Classification	Air Quality Comment	Conformity Area	Phase Status	S/TIP Cycle	Fund Source	Template Name	Fed Estimated Amount	State Estimated Amount	Local Estimated Amount	Total Estimated Amount	Total Job Cost	Schedule Obligation Date
2026	Local	220535	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	Muskegon County	Farr Rd	Farr Road, Str #13474, over Norris Creek, Muskegon County	0.000	Bridge Replacement	Bridge Replacement	CON	exempt		nonattainment	Programmed	23-26	BO	Bridge	$466,400	$46,640	$69,960	583,000.00	$583,000.00	10/10/2025
2026	Local	214246	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	West Michigan Shoreline Regional Development Commission	Morris Ave	Areawide	0.000	Planning, Research & Design	Air quality program	NI	exempt		nonattainment, OMA partial Muskegon County, LOMA	Programmed	23-26	CM	CMAQ	$90,000	$0	$22,500	112,500.00	$112,500.00	10/01/2025
2026	Local	223025	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	Roosevelt Park	Garrison Rd	North of Garrison road, south of railroad tracks	0.202	New Facilities	Construct Asphalt nonattainment-Motorized Trail	CON	exempt		nonattainment	Programmed	23-26	CRSM	Carbon Reduction - Small MPO	$120,000	$0	$30,000	150,000.00	$170,000.00	01/09/2026
2026	Local	221934	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	Muskegon County	Countywide	Various Locations - Muskegon County	0.206	Traffic Safety	Horizontal curve signing	CON	exempt		nonattainment	Programmed	23-26	HSIP	Safety	$211,154	$0	$23,462	234,616.00	$234,616.00	04/10/2026
2026	Local	215733	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	Muskegon	Lakeshore Dr	Lakeshore Drive from Beach Street to 600' West of Sherin	1.926	Reconstruction	Reconstruct	CON	exempt		nonattainment	Programmed	23-26	ST	Stp Flex - Small MPO	$135,266	$0	$33,817	169,083.00	$2,400,000.00	10/10/2025
2026	Local	214303	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	Muskegon County	Whitehall Rd	Fruitvale Road to Skeels Road	1.931	Road Rehabilitation	Cold mill existing road surface.	CON	exempt		nonattainment	Programmed	23-26	STUL	STP - Small Urban	$385,000	$0	$265,647	650,647.00	$904,826.00	10/10/2025
2026	Local	215733	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	Muskegon	Lakeshore Dr	Lakeshore Drive from Beach Street to 600' West of Sherin	1.926	Reconstruction	Reconstruct	CON	exempt		nonattainment	Programmed	23-26	STUL	STP - Small MPO	$854,334	$0	$1,376,583	2,230,917.00	$2,400,000.00	10/10/2025
2026	Local	215762	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	Norton Shores	McCracken St	Norton Avenue to Boneville Drive	0.512	Reconstruction	Reconstruct	CON	exempt		nonattainment	Programmed	23-26	STUL	STP - Small MPO	$990,520	$0	$554,480	1,545,000.00	$2,377,000.00	10/10/2025
2026	Local	214246			Muskegon, Ottawa	WMSRDC	Air Quality	Regionwide		Air Quality Program		NI	exempt		nonattainment, OMA Partial Muskegon County, LOMA			CM		$90,000	$0	$22,500	112,500.00		
2026	Multi-Modal	222976	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	Muskegon County Board of Commissioners	Transit Capital	Areawide	0.000	SP1107-30-34 foot expansion bus with or without lift	CMAQ - Bus Purchase	NI	exempt		nonattainment	Programmed	23-26	CM	Transit	$420,874	$105,218	$0	526,092.00	$526,092.00	09/30/2026
2026	Multi-Modal	214301	Transit Capital	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	Muskegon County Board of Commissioners	Transit Capital	Areawide	0.000	SP1103-35-39 foot replacement bus with or without lift	FY2026 CMAQ 5307 Heavy Duty bus replacement	NI	exempt	was not modeled	nonattainment	Abandoned	23-26	CM	Transit	$400,000	$100,000	$0	500,000.00	$0.00	09/30/2026
2026	Multi-Modal	215768	Transit Capital	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	Muskegon County Board of Commissioners	Transit Capital	Area-Wide	0.000	SP1103-35-39 foot replacement bus with or without lift	FY25 CMAQ 5307 Heavy Duty Bus Replacement 35' Bus	NI	exempt	was not modeled	nonattainment	Abandoned	23-26	CRSM	Transit - STP - Small MPO - Flex	$54,184	$13,546	$0	67,730.00	$0.00	10/01/2025
2026	Trunkline	213275	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon, Ottawa, Kent	MDOT	Regionwide	All Trunkline Routes in Grand Region	17.668	Traffic Safety	Longitudinal Pavement Markings on trunkline routes in Grand Region	PE	exempt		nonattainment	Programmed	23-26	HSIP	Traffic And Safety - Pavement Markings	$756	$84	$0	840.00	$2,960,000.00	10/10/2025
2026	Trunkline	213275	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon, Ottawa, Kent	MDOT	Regionwide	All trunkline routes in Grand Region, All Trunkline Routes in Grand Region	17.668	Traffic Safety	Longitudinal Pavement Markings on trunkline routes in Grand Region	CON	exempt		nonattainment	Programmed	23-26	HSIP	Traffic And Safety - Pavement Markings	$223,020	$24,780	$0	247,800.00	$2,960,000.00	03/06/2026
2026	Trunkline	220426	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	MDOT	US-31	All within WESTPLAN area	67.368	Traffic Safety	Freeway Ground-Mounted Sign Replacement	PE	exempt		nonattainment	Programmed	23-26	NHG	Traffic And Safety - Signs	$881,750	$0	$0	881,750.00	$4,937,800.00	10/06/2025
2026	Trunkline	214189	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	MDOT	Regionwide	M-104 at Fruitport	0.000	Traffic Safety	Modernize signalized intersections	ROW	exempt		nonattainment, LOMA	Programmed	23-26	STG	Traffic Signal Modernizatio n	$3,333	$0	$0	3,333.00	$2,575,415.00	11/10/2025
2027	Local	222992	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	North Muskegon	Ruddiman Dr	Linderman Road to East Circle Drive	0.562	Road Rehabilitation	Resurface	CON	exempt		nonattainment	Programmed	26-29	STUL	STP - Small MPO	$260,000	$0	$290,000	550,000.00	$550,000.00	12/04/2026
2027	Local	223027	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	Roosevelt Park	Summit Ave	Henry Street to Roosevelt Road	0.465	Road Rehabilitation	Resurface	CON	exempt		nonattainment	Programmed	26-29	STUL	STP - Small MPO	$339,000	$0	$131,000	470,000.00	$470,000.00	10/09/2026
2027	Local	223053	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	Muskegon County	Airline Rd	Airline Road	1.763	Traffic Safety	Construct Roundabout	CON	exempt		nonattainment	Programmed	26-29	CM	CMAQ	$600,000	$0	$150,000	750,000.00	$2,100,000.00	04/09/2027
2027	Local	223181	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	Whitehall	Hart Montague	White Lake Pathway	0.480	Roadside Facilities - Preserve	Resurface Non-motorized Path	CON	exempt		nonattainment	Programmed	26-29	CRSM	Carbon Reduction - Small MPO	$142,704	$0	$35,676	178,380.00	$178,380.00	04/09/2027
2027	Local	223182	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	Montague	Montague Trail	Montague Trail	0.381	Roadside Facilities - Preserve	Resurface Non-motorized Path	CON	exempt		nonattainment	Programmed	26-29	CRSM	Carbon Reduction - Small MPO	$237,304	$0	$59,326	296,630.00	$296,630.00	04/09/2027
2027	Local	223048			Muskegon	City of Muskegon	Henry Street	Sherman to Laketon		Signal Interconnect		CON	exempt		nonattainment			CM		$250,000	$0	$0	500,000.00		

Fiscal Year	Job Type	Job#	GPA Type	MPO	County	Responsible Agency	Project Name	Limits	Length	Primary Work Type	Project Description	Phase	Air Quality Classification	Air Quality Comment	Conformity Area	Phase Status	S/TIP Cycle	Fund Source	Template Name	Fed Estimated Amount	State Estimated Amount	Local Estimated Amount	Total Estimated Amount	Total Job Cost	Schedule Obligation Date
2027	Local	223161			Muskegon, Ottawa, Kent	WMSRDC	Air Quality	Regionwide		Air Quality Program		NI	exempt		nonattainment, OMA Partial Muskegon County, LOMA			CM		$92,857	$0	$0	115,734.00		
2027	Multi-Modal	223159	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	Muskegon County Board of Commissioners	Transit Capital	Areawide	0.000	SP1603-marketing	Support Transit Marketing and Outreach Activities	NI	exempt		nonattainment	Programmed	26-29	CM	Transit	$120,000	$30,000	$0	150,000.00	$150,000.00	09/30/2027
2027	Trunkline	201316	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	MDOT	US-31 S	White Lake Drive over US-31-SB/NB (SN 7601, 7602)	0.000	Bridge Replacement	Deck Replacement	CON	exempt		nonattainment	Programmed	26-29	BFP	Bridge Replacement and Preservation	$3,993,280	$885,498	$0	4,878,778.00	$6,338,882.00	07/09/2027
2027	Trunkline	213376	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon, Ottawa, Kent	MDOT	Grand Regionwide Pvmt Mrkg Retro Readings	All of WESTPLAN MPO	18.393	Traffic Safety	Pvmt Mrkg retroreflectivity readings on trunklines in Grand Region	CON	exempt		nonattainment, LOMA	Programmed	26-29	HSIP	Traffic And Safety - Pavement Markings	$1,210	$134	$0	1,344.00	$16,000.00	10/01/2026
2027	Trunkline	213937	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	MDOT	US-10/US-31BL	TSC - major PR	24.249	Traffic Safety	Non-Freeway Sign Replacement	CON	exempt		nonattainment, LOMA Mason County	Programmed	26-29	STG	Traffic And Safety - Signs	$0	$0	$0	0.00	$540,000.00	11/13/2026
2027	Trunkline	214189	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	MDOT	Regionwide	M-104 at Fruitport	0.000	Traffic Safety	Modernize signalized intersections	CON	exempt		nonattainment, LOMA	Programmed	26-29	STG	Traffic Signal Modernizatio n	$353,403	$0	$0	353,403.00	$2,575,415.00	12/11/2026
2028	Local	223028	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	Muskegon	Wood St	Laketon Avenue to Irwin Avenue	0.502	Reconstruction	Reconstruction	CON	exempt		nonattainment	Programmed	26-29	STUL	STP - Small MPO	$950,000	$0	$750,000	1,700,000.00	$3,700,000.00	10/08/2027
2028	Local	223029	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	Norton Shores	McCracken St	Sherman Boulevard to Bonneville Drive	0.502	Reconstruction	Reconstruction	CON	exempt		nonattainment	Programmed	26-29	STUL	STP - Small MPO	$945,000	$0	$645,000	1,590,000.00	$2,265,000.00	10/08/2027
2028	Local	223031	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	Muskegon County	Sherman Blvd	Getty Street to US-31	0.984	Road Rehabilitation	Resurface	CON	exempt		nonattainment	Programmed	26-29	STUL	STP - Small MPO	$501,000	$0	$169,000	670,000.00	$670,000.00	10/08/2027
2028	Local	223168			Muskegon, Ottawa	WMSRDC	Air Quality	Regionwide		Air Quality Program		NI	exempt		nonattainment , OMA Partial Muskegon County LOMA			CM		$99,838	$0	$24,960	124,798.00		
2028	Multi-Modal	223163	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	Muskegon County Board of Commissioners	Transit Capital	Areawide	0.000	SP1603-marketing	Support Transit Marketing and Outreach Activities	NI	exempt		nonattainment	Programmed	26-29	CM	Transit	$140,000	$35,000	$0	175,000.00	$175,000.00	09/29/2028
2028	Multi-Modal	223164	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	Muskegon County Board of Commissioners	Transit Capital	Areawide	0.000	SP1110-van expansion, any size with or without lift	Purchase Van (Revenue Service)	NI	exempt		nonattainment	Programmed	26-29	CM	Transit	$120,000	$30,000	$0	150,000.00	$150,000.00	09/29/2028
2028	Multi-Modal	223165	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	Muskegon County Board of Commissioners	Transit Capital	Areawide	0.000	SP1103-35-39 foot replacement bus with or without lift	Heavy Duty Bus	NI	exempt		nonattainment	Programmed	26-29	CM	Transit	$715,000	$178,750	$0	893,750.00	$893,750.00	09/29/2028
2028	Trunkline	211173	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	MDOT	I-96	from US-31 east to Apple Drive	8.637	Road Rehabilitation	Milling and Two Course Asphalt Resurfacing	CON	exempt		nonattainment	Programmed	26-29	IM	Road - Rehabilitatio n and Reconstructi	$20,313,900	$2,257,100	$0	22,571,000.00	$23,186,000.00	08/25/2028
2029		220589	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	Muskegon	Wood St	Irwin Avenue to Apple Avenue	0.504	Reconstruction	Reconstruct	CON	exempt		nonattainment	Programmed	26-29	STUL	STP - Small MPO	$900,000	$0	$800,000	1,700,000.00	$2,450,000.00	10/06/2028
2029	Local	223033	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	Norton Shores	Randall Rd	Vineyard Lane to Martin Road	0.496	Reconstruction	Reconstruct	CON	exempt		nonattainment	Programmed	26-29	STUL	STP - Small MPO	$750,000	$0	$236,500	986,500.00	$1,083,000.00	10/06/2028
2029	Local	223036	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	Muskegon Heights	Hackley Ave	Elwood Street to Getty Street	0.188	Reconstruction	Reconstruction	CON	exempt		nonattainment	Programmed	26-29	STUL	STP - Small MPO	$500,000	$0	$250,000	750,000.00	$750,000.00	10/06/2028
2029	Local	223169			Muskegon, Ottawa	WMSRDC	Air Quality	Regionwide		Air Quality Program		NI	exempt		nonattainment, OMA Partial Muskegon County, LOMA			CM		$92,537	$0	$23,134	115,671.00		
2029	Local	223179			Muskegon	Fruitport Village	3rd Avenue	Pontaluna to Park		New Signals and Signal Interconnect		CON	exempt		nonattainment			CM		$120,000	$0	$0	120,000.00		
2029	Multi-Modal	223175	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	Muskegon County Board of Commissioners	Transit Capital	Areawide	0.000	SP1603-marketing	Support Transit Marketing and Outreach Activities	NI	exempt		nonattainment	Programmed	26-29	CM	Transit	$130,000	$32,500	$0	162,500.00	$162,500.00	09/28/2029
2029	Multi-Modal	223176	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	Muskegon County Board of Commissioners	Transit Capital	Areawide	0.000	SP1110-van expansion, any size with or without lift	Purchase Vans (Revenue Service)	NI	exempt		nonattainment	Programmed	26-29	CM	Transit	$220,000	$55,000	$0	275,000.00	$275,000.00	09/28/2029
2029	Multi-Modal	223178	S/TIP Line items	West Michigan Metropolitan Transportation Planning Program (WESTPLAN)	Muskegon	Muskegon County Board of Commissioners	Transit Capital	Areawide	0.000	SP1103-35-39 foot replacement bus with or without lift	Heavy Duty Bus	NI	exempt		nonattainment	Programmed	26-29	CRSM	Transit	$540,000	$135,000	$0	675,000.00	$675,000.00	09/28/2029