

Draft for Public Comment

Air Quality Conformity Analysis for the Partial County 2015 Ozone NAAQS Nonattainment Area Muskegon County, Michigan

New WestPlan 2050 Metropolitan Transportation Plan

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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 emissions budgets (MVEBs) contained in the maintenance 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 part 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 the transportation conformity analysis are for projects within the partial county 2015 nonattainment area. Projects for the new 2050 WestPlan MTP and 2023 to 2026 TIP were evaluated for this analysis at a meeting on Oct. 26, 2023, of the Michigan Transportation Conformity Interagency Workgroup (MITC-IAWG). Projects for this analysis are contained in the partial county nonattainment area of the:

- WestPlan 2050 MTP, and
- WestPlan 2023-2026 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 March 28 to April 17, 2024. Comments will be recognized, considered, and responses provided in Appendix B.

On April 17, 2024, the WestPlan Policy Committee is scheduled to 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 |
| 2025 | 1.35 | 1.18 |
| 2030 | 1.06 | 0.78 |
| 2040 | 0.84 | 0.52 |
| 2050 | 0.76 | 0.47 |

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 non-exempt 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 NO_x 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 NO_x 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.

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 TIPs 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 was held on Oct. 26, 2023, to review projects and modeling assumptions; individuals attended by video conferencing (Microsoft Teams). The meeting was a joint meeting between the three conformity areas: The Allegan County Nonattainment Area, the Muskegon County Nonattainment Area, and the Grand Rapids 1997 ozone Limited Orphan Maintenance Area (LOMA). The MPO boundaries of the MACC and WestPlan extend into Ottawa County, which is part of the Grand Rapids 1997 ozone LOMA. Summaries of the MITC-IAWG meetings 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 March 28 to April 17, 2024. 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 2050 MTP and 2023 to 2026 TIP at the Oct. 26, 2023, 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 County 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 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. The 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 |
|---------------|--|
| 2025 | Interim year (so analysis years not more than 10 years apart) |
| 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 models.

Table 2: Base and Future Year Population and Employment by Nonattainment Area

| | Population | | Employment | |
|-------------------------|------------|---------|------------|--------|
| | 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 Rate by Nonattainment Area

| | Analysis year | | | | |
|-------------------------|----------------|-----------|-----------|-----------|-----------|
| | Base Year 2019 | 2025 | 2030 | 2040 | 2050 |
| Muskegon Partial County | | | | | |
| VMT | 3,445,245 | 3,493,946 | 3,593,004 | 3,646,813 | 3,645,034 |
| Growth Rate | 1.00 | 1.01 | 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 by Nonattainment Area

| | Analysis year | | | | |
|-------------------------|----------------|---------|---------|---------|---------|
| | Base Year 2019 | 2025 | 2030 | 2040 | 2050 |
| Muskegon Partial County | | | | | |
| VHT | 102,374 | 103,860 | 106,835 | 108,517 | 108,115 |

7.4 Transportation Control Measures

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

8.0 Emission Modeling

8.1 MOVES Specifications

The EPA's MOVES version MOVES3.1 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. Combination truck data was missing from the SOS 2019 data, so year 2015 vehicle data was used represent these vehicles. 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 30-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 30 years and older, which are aggregated into the 30-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 Meteorology Data

In Michigan, ozone is worst 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.

8.8 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) and starts. 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 2050 MTP and 2023-2026 TIP 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, Wrecker, 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 Data missing from 2019 SOS database; used 2015 data and associated default distribution from MOVES. | | |

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:

**Allegan County 2015 Ozone Nonattainment Area and 1997 Ozone Maintenance Area,
Muskegon County 2015 Ozone Nonattainment Area and 1997 Ozone Maintenance Area**

For new 2050 Long-Range Transportation Plans

Teams Meeting: 1:00 - 2:00 p.m. Oct. 26, 2023,

Members and partners attended by video conference by Teams.

In attendance:

| Agency | Name |
|---|---|
| Federal Highway Administration (FHWA) | Christina Nicholaides |
| Federal Transit Administration (FTA) | Kathleen Russell |
| Michigan Department of Environment, Great Lakes, and Energy (EGLE) | Breanna Bukowski |
| Michigan Department of Transportation (MDOT) Conformity | Donna Wittl |
| Macatawa Area Coordinating Council (MACC) | Alec Miller and Eric Dykstra |
| West Michigan Metropolitan Transportation Planning Program (WestPlan) | Brian Mulnix, Joel Fitzpatrick and Robert Johnson |
| MDOT Program Manager MACC, WestPlan | Luke Walters |
| MDOT Grand Region | Dennis Kent |
| MDOT project level | Lane Masoud |
| MDOT travel demand modeling, Grand Valley Metro Council (GVMC) | Daniela Khavajian |
| MDOT travel demand modeling, WestPlan | Ryan Gladding |
| MDOT Office of Passenger Transportation (OPT) Allegan County | Fred Featherly |
| MDOT OPT Muskegon and Ottawa counties | Tina Hawley |
| MDOT | Sam Hetherington |

Note: March 2024: required modifications affecting WestPlan new 2050 MTP. The Allegan County emissions analysis for the MACC 2050 LRTP is completed and not affected. Partial county motor vehicle emission budgets are being approved by the US Environmental Protection Agency (EPA) and published in the federal register and will need to be used for subsequent conformity analyses. The emissions analysis for the WestPlan new 2050 MTP will need to use the new budgets and will cover only the partial county 2015 ozone nonattainment area. The analysis year of 2023 has passed, so it will be

replaced with year 2025. Local 2019 meteorology data will be used. The remaining area of the county in the 1997 ozone maintenance area will require a qualitative report.

Welcome and introductions:

The group was welcomed to the MITC-IAWG to review projects and modeling for air quality for the new 2050 LRTP for the MACC and 2050 MTP for the WestPlan. It was explained because these are nonattainment areas, the IAWG must be done by a teleconference or videoconference. Attendance was determined by participants listed by Teams in call. GVMC staff was invited to the meeting but was unable to attend. They are being included to keep the cohesion among the groups and some of the projects being reviewed are in Ottawa County.

Conformity documents:

It was explained that each of the four documents listed below would be needed. Depending on the timing of WestPlan’s new 2050 MTP, the projects for GVMC might be included in the same report.

- a. Allegan County: New 2050 MACC LRTP - requires emission analysis.
- b. Muskegon County: New 2050 WestPlan MTP - requires emission analysis.
- c. Kent-Ottawa County Limited Orphan Maintenance Area (LOMA) New 2050 MACC LRTP in Ottawa County - conformity report (no analysis).
- d. Kent-Ottawa County Limited Orphan Maintenance Area (LOMA) New 2050 WestPlan MTP in Ottawa County - conformity report (no analysis).

Allegan County analysis years:

- 2019 base year of MACC travel demand model
- 2023 attainment year of 2015 ozone NAAQS - moderate
(Must attain standard by Aug. 3, 2024)
- 2025 interim analysis year
- 2035 interim analysis year
- 2045 interim analysis year
- 2050 last year of LRTP

A question was asked why year 2025 was needed. Interim analysis years can’t have more than 10 years between them.

Muskegon County analysis years:

- 2019 base year of WestPlan travel demand model
- 2023 attainment year of 2015 ozone NAAQS - moderate
(Must attain standard by Aug. 3, 2024)
- 2030 interim analysis year
- 2040 interim analysis year
- 2050 last year of MTP

It was explained that analysis years can be different since the two nonattainment areas don’t have any overlapping area requiring emission modeling.

Project review:

Project lists were sent with the agenda. It was explained that non-exempt projects are highlighted in yellow and would be modeled. Orange highlights were projects requiring discussion. Many projects were listed as exempt but will be modeled; these are indicated on the lists. It was explained that it is better to have all projects reviewed by the IAWG so there is a record. The environmental process finds it beneficial to have a record even if the project is exempt.

Project list for MACC:

The MACC sent two nonmotorized pathway projects that were added to the final list as exempt projects. The group discussed the College Avenue new road extension; given its proposed configuration, it was deemed exempt. The group agreed with all project classifications as listed.

Project list for WestPlan:

WestPlan explained that they were only having their expand list reviewed. An MDOT project on US-31 in Grand Haven was brought to the group at the meeting. The group discussed the project and established an appropriate description and price, and determined it was non-exempt to be modeled in 2050. The group discussed the Walker Road project and determined it to be exempt and will not be modeled. The group agreed with all project classifications as listed.

Projects for rural STIP: No changes from last amendment.

Modeling:

Travel demand models:

- a. MACC and WestPlan travel demand models will be updated to base year 2019.
- b. Statewide travel demand model will have a base year 2015; used for rural areas of Allegan County.

Emission model: Motor Vehicle Emissions Simulator (MOVES)3.1 will be used.

Budgets: The 1997 ozone maintenance budgets for each county will be used.

Meteorology data: After the call, there was a consultation with EPA and it was determined that data used to create the budgets should be used for the analysis. Default MOVES data should be used because that was the data used for 1997 ozone maintenance SIPs.

Speeds: Average speed by MOVES road types per time period will be used.

Vehicle population and age distribution: Both will be updated to year 2019 (Secretary of State (SOS) registration data on July 1).

Combination trucks: 2019 data is unavailable from the SOS for this analysis. The 2015 data will be used assuming year 2015 is year 2019 for vehicle population and age distribution for Allegan County analysis. The same method will be used for Muskegon if data is still not available.

Default data used in MOVES: starts, hoteling, idling, fuel, hour VMT fraction.

Public comment period:

- a. MACC: Jan. 2 - 17, 2024. Later changed to Jan. 4 to Feb. 26, 2024.
- b. WestPlan: Dates still uncertain, maybe as early as February 2024.

Formal resolution from MACC supporting findings: Feb. 26, 2024.

MACC: New determination letter from FHWA needed by April 30, 2024; last LRTP letter dated April 30, 2020.

Formal resolution from WestPlan supporting findings: Date still uncertain.

WestPlan: New determination letter from FHWA needed by June 5, 2024; last MTP letter dated June 5, 2020.

Other items: It was mentioned the 2015 Ozone National Ambient Air Quality Standard Moderate Element Attainment State Implementation Plan was submitted to EPA on Oct. 16, 2023. It appears at this time the budgets will not be approved in time for these two analyses. This is important because the 2015 ozone budgets represent partial county areas, and the 1997 ozone budgets are for the whole county. A second MITC-IAWG was held to review a project in the MACC MPO area; see below.

Meeting Summary

Michigan Transportation Conformity Interagency Workgroup (MITC-IAWG)

for:

**Allegan County 2015 Ozone Nonattainment Area and 1997 Ozone Maintenance Area
Muskegon County 2015 Ozone Nonattainment Area and 1997 Ozone Maintenance Area**

For new 2050 Long-Range Transportation Plans

E-mail Meeting: Dec. 5, 2023

An MITC-IAWG was conducted by e-mail and requesting that a non-exempt project, center turn lane of 1.137 could be added to the MACC modeling for Allegan County and a conference call was not necessary. The group concurred with the request and the project was added to the travel demand model for year 2025. The e-mail requesting concurrence is on the following page. The project was added to MACC list of projects.

Members and partners concurring:

| Agency | Name |
|--|------------------------------|
| U.S. Environmental Protection Agency (EPA) | Michael Leslie |
| Federal Highway Administration (FHWA) | Christina Nicholaides |
| Federal Transit Administration (FTA) | Kathleen Russell |
| Michigan Department of Environment, Great Lakes, and Energy (EGLE) | Breanna Bukowski |
| Michigan Department of Transportation (MDOT) Conformity | Donna Wittl |
| Macatawa Area Coordinating Council (MACC) | Alec Miller |
| West Michigan Metropolitan Transportation Planning Program (WestPlan) | Robert Johnson |
| MDOT Program Manager MACC, WestPlan | Luke Walters |
| MDOT Grand Region | Tyler Kent |
| Grand Valley Metro Council (GVMC) | Mike Zonyk and Laurel Joseph |
| MDOT Office of Passenger Transportation (OPT) Muskegon and Ottawa counties | Tina Hawley |

Wittl, Donna (MDOT)

From: Wittl, Donna (MDOT)
Sent: Tuesday, December 5, 2023 12:21 PM
To: leslie.michael@epa.gov; Weber, Susan (FTA); Bukowski, Breanna (EGLE); Walters, Luke (MDOT); rjohnson@wmsrdc.org; bmulnix; jfitzpatrick@wmsrdc.org; andrea.faber@gvmc.org; Laurel Joseph; George Yang; Michael Zonyk (GVMC); Kloha, Mark (MDOT); Kent, Tyler (MDOT); Kent, Dennis (MDOT); Loehle, William (MDOT); Rozema, Susan (MDOT); Khavajian, Daniela (MDOT); Gladding, Ryan (MDOT); Roberts, Jonathan (MDOT); Featherly, Fred (MDOT); Jason Latham; Alec Miller; Eric Dykstra (MACC); Masoud, Lane (MDOT); Shultz, Valerie (MDOT); c.nicholaides@dot.gov; Kathleen.russell@dot.gov; Hawley, Tina (MDOT)
Cc: Hetherington, Samuel (MDOT)
Subject: Additional Project review for MITC-IAWG MACC New 2050 LRTP and TIP
Attachments: MACC TIP Project IAWG Review.xls

Greetings MITC-IAWG Members and Partners for:

Allegan County Nonattainment Area
Muskegon County Nonattainment Area
Grand Rapids Limited Orphan Maintenance Area

The project in the attached file, is in Allegan County and the CON phase for a center-left turn lane for 1.137 miles. The project is being expanded from its previous length of 0.5 miles which was reviewed by the group for the new 2023 to 2026 TIP and thus in the TIP. The project was deemed exempt but is being modeled in the emission analysis for the new 2050 LRTP. Projects classified as exempt are modeled if they can be in the next conformity analysis. Because the project is being expanded to over

1 mile the project would now be considered non-exempt and the expanded length added to the current analysis.

The policies adopted by the group require a call to discuss non-exempt projects but given a call was held to discuss the modeling and emission analysis years, would like to forgo this because the decision is if the project is exempt or non-exempt.

Please, review the project and reply to this email with “concur” if in agreement with the recommendations: the project will be added to the current analysis as non-exempt, and no call required. If not in agreement respond accordingly and explain why. Please use “reply to all.” **Responses due by Wednesday December 13, 2023.**

Clarification or questions on the project can be directed to me or the group.

Thank you for your participation,
Donna

Donna Wittl
Air Quality Conformity Specialist
Statewide & Urban Travel Analysis Section
Michigan Department of Transportation
517-335-4620
WittlD@Michigan.gov

Appendix B: Public Comments and Responses

No comments received to date.

Appendix C: Projects Evaluated for Conformity Analysis

Attached are the projects evaluated at the Oct. 26, 2023, MITC-IAWG for WestPlan within Muskegon County. Only projects within the partial county nonattainment area were included in the analysis.

The list of projects begins on the following page.

MITC-IAWG WestPlan 2050 Metropolitan Transportation Plan Project List

| Project Name | To/From | Description | Jurisdiction | Cost | Est. Year of | Project Length | Air Quality | Air Quality Comment |
|---|--|--|---------------------------------|--------------|--------------|----------------|-------------|--|
| Henry Street | Seminole to Hile | Reconstruct from 2 to 3 lanes | Norton Shores | \$1,600,000 | 2045 | 1.25 miles | non-exempt | modeled |
| Sternberg Road | Quarterline Road to Sheridan | Add center left turn lane – 1 mile | MCRC | \$800,000 | 2030 | 1 mile | exempt | modeled |
| Witham Road | Bear Creek Bridge to Moulton Road | Reconstruct and add left turn lane and storm sewer – 2000 feet | North Muskegon | \$670,000 | 2040 | 2,000 feet | exempt | less than 0.5 of a mile (0.379 of a mile) |
| Sternberg Road | Martin Road to Lake Harbor Road | New two-lane road – 2 miles | Norton Shores | \$2,200,000 | 2045 | 2 miles | non-exempt | modeled |
| Pontaluna Road | Grand Haven Road to Harvey | Reconstruct from 2 to 3 lanes - .75 miles, with bike lanes | Norton Shores | \$1,600,000 | 2045 | .75 miles | exempt | modeled |
| Grand Haven Road | Hile to 100 ft south of Seaway | Reconstruct from 2 to 3 Lanes. | Norton Shores | \$1,100,000 | 2045 | .75 miles | exempt | modeled |
| Hile Road | Harvey Street to Grand Haven Road (excludes US- 31 bridge) | Reconstruct from 2 to 3 lanes with bike lanes | Norton Shores | \$1,600,000 | 2045 | .75 miles | exempt | modeled |
| West Spring Lake Road Bridge | Lake Road to 168 th Avenue | Reconstruct bridge structure | City of Ferrysburg | \$13,000,000 | 2025 | 447 ft. | exempt | not modeled |
| 112th Avenue/Cleveland Street intersection | Roundabout | Roundabout | Ottawa County Road Commission | \$1,300,000 | 2035 | NA | exempt | modeled |
| 120th Avenue/Fillmore Street intersection | Roundabout | Roundabout | Ottawa County Road Commission | \$1,300,000 | 2035 | NA | exempt | modeled |
| 144 th Avenue | Lincoln Street to Mercury Dr | Reconstruct to 3 lanes | Ottawa County Road Commission | \$3,000,000 | 2035 | 1.7 miles | non-exempt | modeled |
| 168 th Avenue | Hayes to N Comstock | Reconstruct to 3 lanes | Ottawa County Road Commission | \$1,400,000 | 2035 | .75 miles | exempt | modeled |
| 174th | Van Wagener to Wilson Street | Reconstruct to 3 lanes | Ottawa County Road Commission | \$2,700,000 | 2035 | 1.5 miles | non-exempt | modeled |
| Apple Drive/3 rd Street/ Fruitport Rd intersection | Roundabout | Roundabout | Ottawa County Road Commission | \$1,300,000 | 2035 | NA | exempt | modeled |
| Mercury Drive/Groesbeck St intersection | Roundabout | Roundabout | Ottawa County Road Commission | \$1,300,000 | 2035 | NA | exempt | modeled |
| Mercury Drive/Comstock St intersection | Roundabout | Roundabout | Ottawa County Road Commission | \$1,300,000 | 2035 | NA | exempt | modeled |
| Mercury Drive/Robbins Rd intersection | Roundabout | Roundabout | Ottawa County Road Commission | \$1,300,000 | 2035 | NA | exempt | modeled |
| Whitehall Road | Giles Road to Tyler Road | Add center left turn lane. 2030. | Muskegon County Road Commission | \$2,000,000 | 2030 | 3 miles | non-exempt | modeled |
| Walker Rd | Mt. Garfield to Farr | New road, two lanes, | Muskegon County Road Commission | \$750,000 | 2030 | .5 miles | exempt | road not in travel demand model. Not regionally significant. Not modeled |
| Dangl Road | Heights Ravenna Road to Cline Road | Add center left turn lane | Muskegon County Road Commission | \$800,000 | 2030 | 1 mile | exempt | modeled |
| Sternberg Roundabout | Sternberg and Airline | Roundabout | Muskegon County Road Commission | \$1,300,000 | 2030 | NA | exempt | modeled |
| US-31 | Franklin Street to Jackson Street | Reconstruct and add right and left turn lanes and other operational improvements | MDOT | \$6,000,000 | 2050 | 0.6 | non-exempt | Modeled. Ottawa County. JN 88877 and 105534 |

Public transit is an important transportation mode in our community. The public transit agencies in the MPO operate services within the financial constraints presented and, like the road agencies, are continually seeking opportunities to improve and to secure additional resources where available. Current and future transit studies will help to identify specific projects.