



West Michigan Transportation Operations Center

Annual Report

Fiscal Year 2023
Oct. 1, 2022 – Sept. 30, 2023



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The West Michigan Transportation Operations Center (WMTOC) focuses on the Michigan Department of Transportation's (MDOT) goals of improving safety, mobility, and economics through incident management, crash reduction, and traveler information activities.

This report includes a snapshot of our performance in the areas of traveler information, incident management, event management, and intelligent transportation systems maintenance. We are committed to providing the Grand Region with the highest level of transportation management, disseminating reliable traveler information to the public, and supporting goals of all our partners.

The WMTOC is operational 24 hours a day, seven days a week. This coverage increases the awareness of incidents impacting travel and provides motorists throughout the region with up-to-date notifications.

Additional detailed information is available in the monthly reports on our website located at www.Michigan.gov/WMTOC or by contacting Tim Schneider, P.E., WMTOC engineer, by calling 616-240-9813 or e-mailing SchneiderT6@Michigan.gov.

Traveler Information

Disseminating Essential Traveler Information for West Michigan Motorists

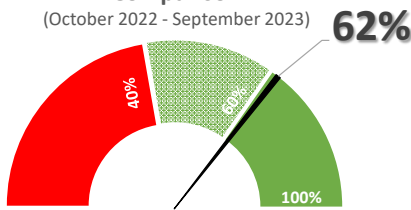
- The WMTOC has maintained a content accuracy level of 95 percent for messages sent to the public.

The WMTOC values relationships with our region partners and continually works to improve communications with them. One method of outreach is in-person visits to the communications centers in all of our counties.

This interaction fosters positive working relationships and helps us as we collaborate and find better solutions to make information sharing more efficient and accurate. We have seen a marked improvement in our overall incident awareness rate in the past years, in part, due to the increased efforts we have placed on outreach activities. The awareness rate is a comparison between crashes with WMTOC involvement versus the total number of police-reported crashes on Grand Region trunklines. Not all incidents have an impact on traffic mobility and safety so they do not all require WMTOC involvement.

	2022	2023	Growth
Crash Incident Notification Subscribers	38,955	41,795	7.5%
Construction Notification Subscribers	38,446	41,689	8.4%

FY2023 Freeway Incident Awareness Rate Comparison
(October 2022 - September 2023)



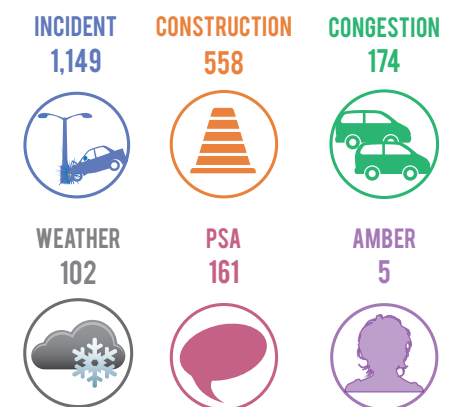
Social Media

WMTOC operators assist the MDOT Grand Region communications representative in providing up-to-date information to the general public through social media, such as X (formerly Twitter). @MDOT_West Twitter (www.twitter.com/MDOT_West) followers increased from 21,621 to 22,928 this year, about a 6 percent increase.

Dynamic Message Signs

Within the Grand Region, MDOT has 39 dynamic message signs (DMS) used to provide information for the traveling public. These signs display messages regarding incidents, weather, safety, construction, special events, congestion, and AMBER Alerts. DMS are also utilized to display auto-response messages for weather events and slow or stopped traffic. Weather messages are displayed when environmental sensor stations detect certain weather conditions ahead of the DMS location. Motorists are alerted to the upcoming conditions to help them navigate the changing road conditions. Similarly, vehicle detection systems are used to identify traffic that is slow or stopped on the freeway. Using the DMS to display warnings for upcoming slow traffic, along with providing travel times, helps reduce the number of crashes related to speed differential.

DMS Messages by Type



There were 30,397 congestion-related and 102 weather-related auto-responses in FY 2023.

Incident Management

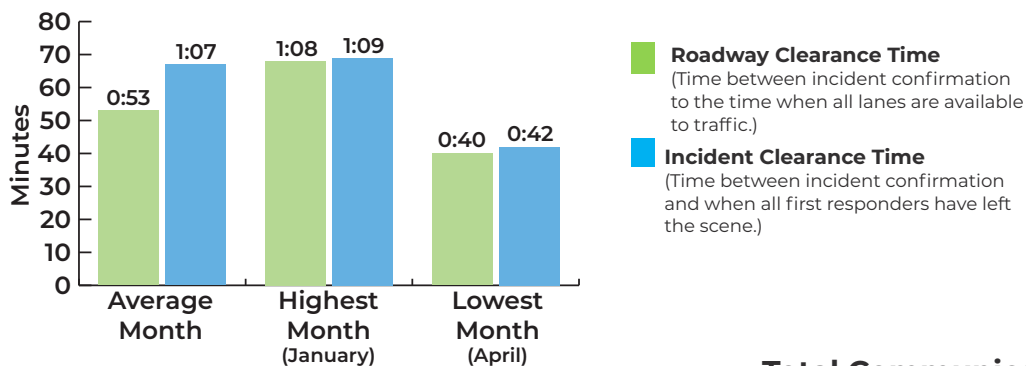
Supporting Coordination of Incident Response and Clearance Efforts to Increase Safety and Reduce Congestion

- WMTOC supported the most incidents per month in July 2023.

Incident clearance time and roadway clearance time are key metrics that MDOT reports annually to the Federal Highway Administration on all incidents that block at least one lane of the trunkline. MDOT continues to offer training to area responders of police, fire, EMS agencies, and towing companies along with internal employees in an effort to improve clearance times. This training, coupled with incident debriefs, has proven valuable by sharing areas that can be improved and best practices from the different disciplines. Responder agencies are able to raise awareness of dangers and work toward a shared goal of reducing responder exposure and secondary crashes.

The chart below shows the average incident and roadway clearance time. January 2023 had the longest duration for clearance times, while April 2023 had the lowest. MDOT works with responding agencies to improve roadway and incident clearance times while maintaining responder safety as the first priority.

Roadway/Incident Average Clearance Times



Incident Response

In order to manage incidents and reduce congestion, WMTOC operators actively monitor freeways and state trunklines within the 13 counties of MDOT's Grand Region. Operators maintain close contact with state and local dispatch centers, MDOT, and county stakeholders while also monitoring radios and other tools that provide traffic incident information within the Grand Region.

Effective incident management requires the support of many stakeholders actively working together to provide

timely support to the traveling public. The chart above provides a snapshot of the level of coordination and communication between the WMTOC and local dispatch centers. We worked with several of our partners to automate the notification process, which makes it easier for their dispatchers to get the information to us in a timely manner.

TOTAL UNPLANNED INCIDENTS



3,693

SECONDARY CRASHES



14

HOUR OF HIGHEST INCIDENTS



5 P.M.

MONTH OF HIGHEST INCIDENTS



JULY 2023
560

TOTAL CALLS/E-MAILS



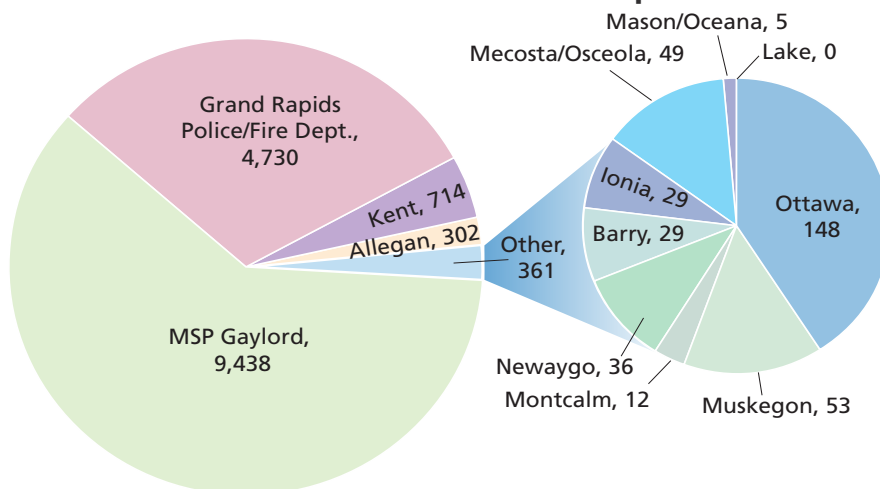
7,233 / 26,679

TOTAL WORK ZONE INCIDENTS



95

Total Communications with Dispatch



Event Management

Informing Motorists of Special Events and Work Zone Activities

FY 2023 **Spotlights**

Project Work on Eastbound I-196

In 2023, MDOT resumed project work funded in part from a \$66 million investment to rebuild 7 miles of I-196 from Byron Road in Zeeland to 32nd Avenue in Hudsonville. Last year, the westbound lanes of that I-196 stretch were rebuilt, leaving the eastbound lanes for this construction season.



In April 2023, two on ramps from I-196 Business Loop/Byron Road to eastbound I-196 closed along with the off ramp from eastbound I-196 to Byron Road. Work for this project included culvert replacement, sewer and drainage improvements, and bridge work. Lane closures went into effect to shift eastbound I-196 traffic to the westbound side of the roadway. One lane of eastbound and two lanes of westbound I-196, separated by a concrete barrier wall, shared the westbound side through the end of the project.

The WMTOC worked with contractors and MDOT project managers to secure closure detail updates. Details were used to generate DMS message response plans and posts to Mi Drive to inform motorists of traffic flow restrictions.

By July, the contractors had completed all pipe work and new concrete was installed. Byron Road, which had been closed since April, reopened in August after new asphalt shoulders and pavement markings were installed.

There were several high-impact incidents in this work zone, many of which had a longer incident clearance time due to the single lane available for motorists and emergency responders. Some events lasted more than four hours. When traffic incidents occurred in this work zone, the WMTOC

dispatched high-impact incident e-mail notifications to public subscribers and updated the DMS and portable changeable message sign messaging to reflect the impact. The overall project, with the full list of proposed work and several weather-related delays, was completed by the second week of November 2023, just in time for the upcoming holiday season.

Weather-related Response Preparation

In 2023, the WMTOC responded to weather-related conditions much earlier compared to previous years. Beginning in April, the WMTOC saw the earliest start to the Clean Air Action Days (CAAD) season, with the previous year starting on June 15. CAADs are declared when higher levels of ozone or particulate matter are present, which can put people at risk. The weather can have a significant impact since it affects the ozone and particulates present in a specific area.



Several CAADs were issued following April 2023. In June, the ozone quality worsened, largely due to wildfire smoke drifting in from Canada. This poor-quality ozone condition lasted for several weeks during the summer.

The Annual Partners for Clean Air Awards Luncheon was held in April 2023; it provides subject matter for air quality and the anticipated risks for the upcoming peak season. WMTOC sent a representative to be part of this conversation and provide guidance to the rest of the center.