MDOT

Annual Report

Oct. 1, 2019 - Sept. 30, 2020

West Michigan Transportation Operations Center

1420 Front Ave. NW · Grand Rapids, MI 49504
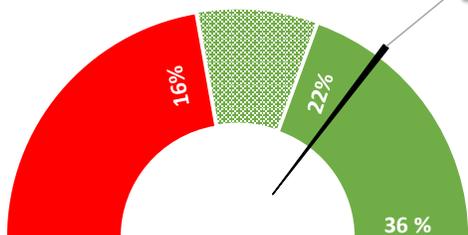Phone - 616-451-8329 · www.Michigan.gov/WMTOC

Traveler Information

Disseminating Essential Traveler Information for West Michigan Motorists

- The WMTOC has maintained a content accuracy level of 97 percent for messages sent to the public.

As a way to measure the effectiveness of the outreach effort, the WMTOC focused on outreach to our region partners to help increase the WMTOC's awareness of the number of incidents. This awareness rate is a comparison between crashes with WMTOC involvement versus the total number of police-reported crashes on Grand Region Freeways. The incident awareness goal is less than 100 percent because only crashes that have an impact on traffic mobility and safety require WMTOC involvement. Based on a 2019 analysis of crash data it was determined that, on average, the WMTOC should be involved in about 36 percent of all freeway crashes. In FY 2020 the WMTOC achieved an average incident awareness rate of 25 percent moving us closer to our 36 percent goal.

FY2020 Freeway Incident Awareness Rate Comparison
(Oct 2019 - Sept 2020)

25%

16%   22%   36 %

	2019	2020	Growth
Crash Incident Notification Subscribers	30,464	31,874	4%
Construction Notification Subscribers	28,369	30,507	7%

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 Twitter.

@MDOT_West Twitter (www.twitter.com/MDOT_West) followers increased from 17,257 to 18,350 this year, about a 6 percent increase.

Dynamic Message Signs

Within the Grand Region, MDOT has 36 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. Most of the DMS continuously display travel times to one or two destinations, which aids motorists with navigating the freeway network. The WMTOC is focused on providing reliable and accurate information for the Grand Region.

DMS Messages by Type

INCIDENT	CONSTRUCTION	CONGESTION
970	973	231

WEATHER	PSA	AMBER
38	185	10
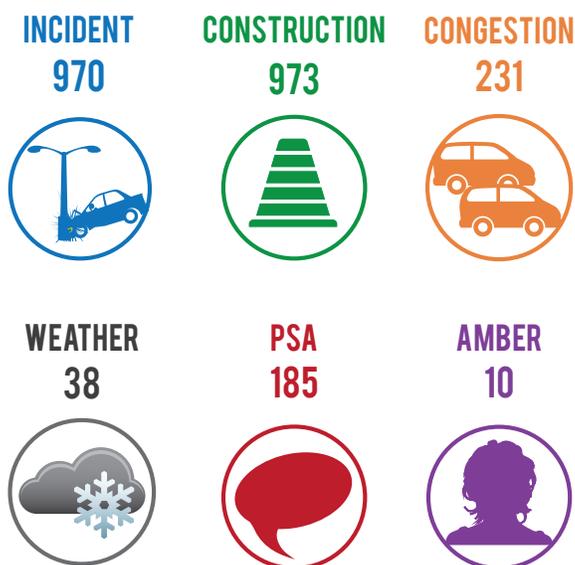
Incident Management
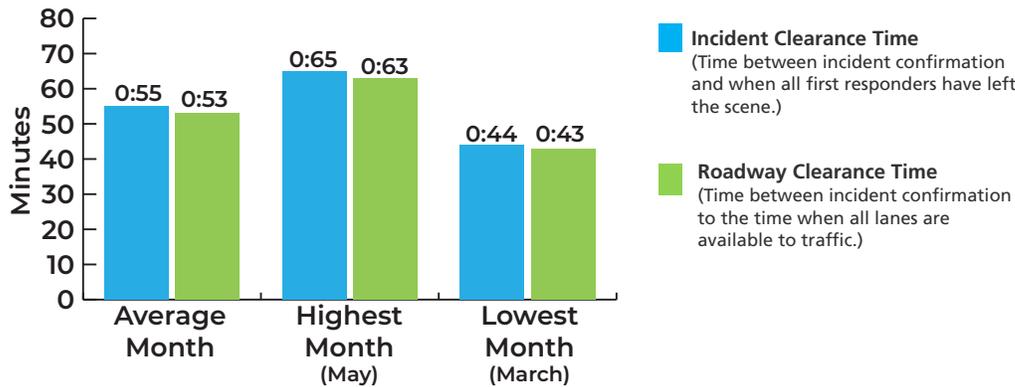
Supporting Coordination of Incident Response and Clearance Efforts to Increase Safety and Reduce Congestion

• WMTOC supported the most incidents per month in September 2020.

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. Reducing clearance times decreases exposure of first responders and helps reduce secondary crashes.

The chart below shows the average incident and roadway clearance time. May 2020 had the longest duration for clearance times, while March 2020 had the lowest. MDOT works with responding agencies to improve roadway and incident clearance times while maintaining responder safety as the first priority.
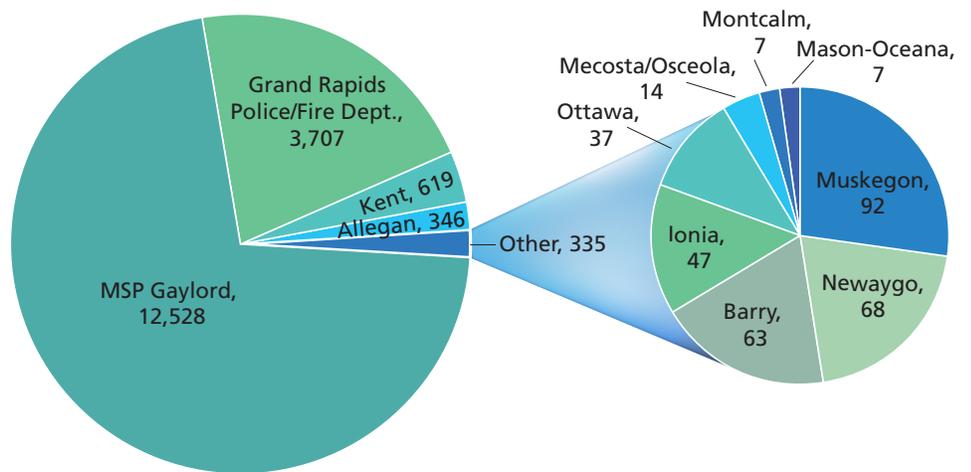
TOTAL UNPLANNED INCIDENTS

1,340

SECONDARY CRASHES

12

HOUR OF HIGHEST INCIDENTS

3 P.M.

MONTH OF HIGHEST INCIDENTS

SEPTEMBER 2020
196

Incident/Roadway Average Clearance Times

Average Month	Highest Month (May)	Lowest Month (March)
0:55 / 0:53	0:65 / 0:63	0:44 / 0:43

Incident Clearance Time (Time between incident confirmation and when all first responders have left the scene.)

Roadway Clearance Time (Time between incident confirmation to the time when all lanes are available to traffic.)

TOTAL CALLS / E-MAILS

6,247 / 30,411

TOTAL WORK ZONE INCIDENTS

29

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 local county dispatch centers, MDOT, Michigan State Police, local agency employees, local police and fire departments, and county stakeholders while also monitoring radio scanners and other tools that provide traffic incident information within the Grand Region.

Total Communications with Local Dispatch

Grand Rapids Police/Fire Dept., 3,707
Kent, 619
Allegan, 346
MSP Gaylord, 12,528
Other, 335

Montcalm, 7
Mason-Oceana, 7
Mecosta/Osceola, 14
Ottawa, 37
Muskegon, 92
Ionia, 47
Newaygo, 68
Barry, 63

Effective incident management requires the support of many stakeholders actively working together to provide timely support to the traveling public. The graph above provides a snapshot of the level of coordination and communication between the WMTOC and local dispatch centers. This year saw another large increase in the number of e-mails received from our regional 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.

Event Management

Informing Motorists of Special Events and Work Zone Activities

• WMTOC operators posted more than 1,900 construction and incident-related messages on DMS.

FY 2020 Spotlights

I-96 I-196 Flip Project

The I-96 I-196 Flip Project to improve the traffic flow at the I-96/I-196 split is complete. The project included adding a travel lane for westbound traffic on I-96 before the split to provide a smoother transition to I-196. It also included a new dedicated exit ramp directly to the East Beltline from eastbound I-96 giving motorists easy access. Improvements were also made to the eastbound I-96 and I-196 merger lanes that will help to limit slow downs in that area.

Using automated slow and stopped traffic messages also proved to be very useful on several projects throughout the region. These messages were utilized on two I-196 projects, one on US-31, and one on I-96. The message is triggered based on speed data that is fed directly to the portable changeable message sign in the field. This technology provides real-time alerts to motorists to prevent crashes at the back of the queue.

Impacts of COVID-19

2020 has proven to be a year full of change in traffic volumes throughout the region. Starting in March, the WMTOC saw volumes dip as much as 60 percent from the average as much of the state was shut down by the Governor's orders. The actions taken to slow the spread of the COVID virus kept many people working at home, drastically decreasing the number of commuters on a daily basis. Venues involving public gatherings were limited or prohibited so most special events were canceled or held as virtual events. While there were some increases during the summer months, volumes continued to be lower than average for the remainder of the year.

Move Over Study

The WMTOC was asked to assist with a study to determine compliance with the Move Over law that was enacted throughout Michigan. Maintenance vehicles were staged on the shoulder and messaging on DMS was activated upstream from the location to remind motorists of the Move Over law. The maintenance vehicle was then replaced with a police unit with the same messaging. One of the observations was that motorists were more compliant for the police unit than the maintenance vehicle.

ITS Management

Maintain an Intelligent Transportation Systems (ITS) Network Built for Growth

Grand Region ITS Devices

This year the WMTOC added a new video wall. The wall is comprised of 10 flat screen LED monitors that fit together seamlessly so images are able to be shown on multiple monitors. The screen is five monitors wide and two monitors tall giving operators a great view of incidents occurring on our roadways. We are able to display up to 40 camera views and configure any number of different ways to best fit our needs.