

**Genesee County Metropolitan Planning Commission
Metropolitan Alliance Committee (METRO)**

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

**Wednesday, October 20, 2021
7:00 P.M.**

AGENDA

- I. Call to Order
- II. Pledge of Allegiance
- III. Roll Call
- IV. Minutes
 - ***A. Minutes of the September 15, 2021 Regular Meeting (attached)
- V. Introduction of Guests
- VI. Public Comment
- VII. Public Hearing
- VIII. Finances
 - ***A. FY 2022 Dues for Local Units and to Pay Secretarial
 - ***B. Financial Report
- IX. Committee Reports
- X. Old Business
 - A. Roundabout Implementation Study Update (presentation)
 - B. FY 2023-2026 Transportation Improvement Program Call Update (attached)
 - C. FY 2021 Asset Management PASER Update (attached)
 - D. FY 2023 List of Approved Safety Projects (attached)

- E. Transportation Reauthorization (Discussion)

- XI. New Business
 - A. State Safety Targets FY 2022 (attached)

- XII. Other Business

- XIII. Announcements

- XIV. Adjournment

***** Action Item**

NEXT MEETING – November 17, 2021 at 7:00 P.M.

GENESEE COUNTY METROPOLITAN ALLIANCE
Regular Meeting Minutes
Wednesday, September 15, 2021

The Genesee County Metropolitan Alliance Committee met at 7:00 p.m. on Wednesday, September 15, 2021, in the Harris Auditorium of the Genesee County Administration Building, 1101 Beach Street, Third Floor, Flint, Michigan.

I. CALL TO ORDER

Chairperson Johnson called the meeting to order at 7:02 p.m.

II. PLEDGE OF ALLEGIANCE

Chairperson Johnson led the Pledge of Allegiance.

III. ROLL CALL

Members present and absent were noted as follows:

UNIT REPRESENTED

MEMBERS PRESENT

MEMBERS ABSENT

Genesee County

City of Burton

City of Clio

City of Davison
City of Fenton

City of Flint

City of Flushing

City of Grand Blanc

City of Linden

City of Montrose

City of Mt. Morris
City of Swartz Creek

Duane Mosher
(City of Clio, Genesee County)

Ray Culbert
(City of Linden, Genesee County)

Mark Richard
(City of Montrose, Genesee County)

Nate Henry
(City of Swartz Creek, Genesee County)

Commissioner Meredith Davis
Commissioner Debra Newman
Danny Wells
Gregory Fenner

Eric Wiederhold
Bonnie Bare
Mayor Tim Bishop
Patricia Lockwood
Sean Sage
Mayor Sheldon Neeley
John Daly
Mark Adas
Brooke Good
Tony Nowiski
Chris Douglas
Mayor Susan Soderstrom
Don Becker

Ellen Glass

Dennis Heidenfeldt
John Gilbert
Robert Plumb

Argentine Township

Brian Saad
Leslie Renckly
Shirley Kautman-Jones

Atlas Township

Paulette Johnson
(Atlas Twp, Genesee County)

Katie Vick

Clayton Township

Shelley Thompson
(Clayton Twp, Genesee County)

Tom Spillane
Matthew Karr
Travis Howell
Kade Katrak

Davison Township

Fenton Township

Andrew Marko
(Fenton Twp, Genesee County)

Flint Township

John Whiteside
(Flint Twp, Genesee County)

Robert Kesler
Karyn Miller

Flushing Township

Forest Township

Gaines Township

Tod Sorensen
(Genesee Twp, Genesee County)
Robin Ackerman
(Genesee Twp, Genesee County)

Tracey Tucker
Bill Bain
Frederick Thorsby
Mary Ann Price
Rocky Fowler
Lee Purdy
Diane Hyrman

Genesee Township

Grand Blanc Township

Montrose Township

Mt. Morris Township

Robert Johnson
(Mt Morris Twp, Genesee County)

Joel Feick
Monica Shapiro
Tom Tithof
Mark Emmendorfer
Michele Loper

Mundy Township

Kimberly Jimenez
(Mundy Twp, Genesee County)

Elmer Wilson

Richfield Township

Thetford Township

Vienna Township
Goodrich Village

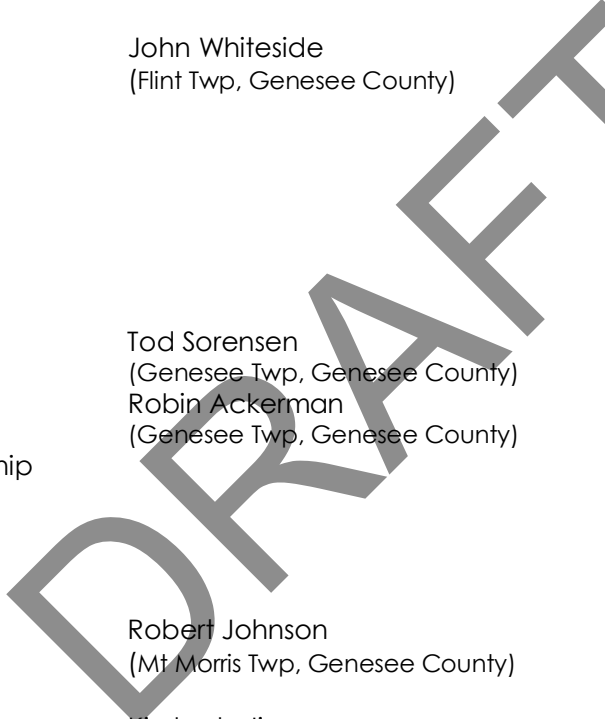
Gerry Masters
(Richfield Twp, Genesee County)
Pam Faris
(Vienna Twp, Genesee County)

Shane Towne
Debra Ridley

Otisville Village
Otter Lake Village
Lennon Village
Gaines Village

Sherry Moore
Angie Adamec
Melissa Schluentz

Joan Skias
Samuel Stiff
Bruce Ferris
Valerie Delauty



Federal Highway Admin

Andy Pickard

Gen Cty Drain Comm
Gen Cty Road Comm

Alex Patsy
(City of Flushing, Genesee County)

Jeff Wright

GCMPC

Derek Bradshaw
Christine Durgan
Ed Benning

Mass Trans Authority

Shawnice Dorsey
(City of Flint, Genesee County)

Mich Dept of Trans

Anita Boughner
Jay Reithel
Steven Katenhus
Trevor Block
Carissa McQuiston

OTHERS PRESENT: Jason Nordberg, Alicia Williams, and Jill Floeter.

IV. MINUTES OF THE JULY 21, 2021 REGULAR MEETING

Motion: Action: Approve, **Moved by** Gerald Masters, **Supported by** Mark Richard, to approve the minutes of the July 21, 2021 regular meeting as presented.

Motion carried unanimously.

V. INTRODUCTION OF GUESTS

None

VI. PUBLIC COMMENT

None

VII. PUBLIC HEARING

None

VIII. FINANCES

FY 2022 Dues for Local Units

Tod Sorenson noted that the Trustees will meet prior to the next Metropolitan Alliance meeting to discuss FY 2022 dues and will bring a recommendation to the October meeting.

IX. COMMITTEE REPORTS

None

X. OLD BUSINESS

A. Roundabout Implementation Study Update

Jack Wheatly, with Rowe Professional Services, was on hand via Zoom to give a presentation. Rowe Engineering has finished Time-of-Return for the 14 (fourteen) intersections and packaged the information individually for each jurisdiction. Educational print materials for the public are being assembled. The complete study will be available on the GCMPC website at gcmpc.org. In addition, Rowe is developing a project website to help organize the final report, early preliminary engineering, simulation videos, GIS data, and drone videos. Discussion ensued.

B. FY 2022 Transportation Improvement Program (TIP) Overview

Ms. Williams explained beginning in October, staff will be contacting road agencies a week early regarding TIP project amendments and administrative modifications. Amendments to the TIP and long-range plan require review by the Interagency Work Group (IAWG). Staff will draft an assessment of air quality exempt/non-exempt status for the amended projects. IAWG members will respond to staff as to whether they agree with the assessment and any changes to planning assumptions. Most project amendments can be done via email, however, if further discussion is needed the IAWG Committee will meet. Ms. Williams also stated the MDOT Local Agency Programs (LAP) Project Schedule for FY 2022 has been released. Also, effective October 1, 2021, all final project submittals to MDOT Local Agency Programs (LAP) will require an LAP Project Certification. The MDOT Staff Engineer will provide the form to the local agency when the final revisions to the project documents have been completed. The Project Certification form also will serve as the local agency's request to obligate and advertise the project. The reason for this process change is to address findings identified by the Federal Highway Administration (FHWA) Michigan Division as part of their FY 2020 Compliance Assessment Program (CAP).

*****C. FY 2023-2026 Transportation Improvement Program (TIP) Call for Projects Policies and Procedures and Applications Approval**

Ms. Williams explained the Transportation System Management Subcommittee (TSM) met on August 26, 2021, and August 31, 2021 to discuss updates to the Transportation Improvement Program (TIP) Policies and Procedures and Applications for the FY 2023-2026 TIP. The Technical Advisory Committee reviewed and approved the proposed document at the September 2nd, 2021, meeting. Ms. Williams gave an overview of applications which consisted of: Non-Motorized Application, Transit Application, CMAQ Application, Preservation/Reconstruction/ PASER 5 Application, Expand Application, and Project Funding Levels. Jason Nordberg stated that the main goal of these policies, procedures, and due dates are to make sure the money that is allocated is spent. At this time, the Technical Advisory Committee (TAC) is recommending approval from the Metropolitan Alliance for the attached TIP Policies and Procedures and the Applications for the FY 2023-2026 TIP Call for Projects.

Motion: Action: Approve, **Moved by** Gerald Masters, **Supported by** Mark Richard, to approve the attached TIP Policies and Procedures and the Applications for the FY 2023-2026 TIP Call for Projects.

Motion carried unanimously.

XI. New Business

A. Transportation Reauthorization

Mr. Nordberg stated once the Transportation Bill is finalized, and we see our allocations, we will have a better estimate. Staff will keep you updated as more information becomes available.

*****B. Mass Transportation Authority (MTA): State-of-Good-Repair Targets Adoption**

Ms. Williams stated The Mass Transportation Authority (MTA) has provided estimated transit State-of-Good-Repair targets for 2022. Transit targets are required by the Federal Transit Administration (FTA) and are based on the transit performance measures established under the National Public Transportation Safety Plan. The Genesee County Metropolitan Alliance (GCMA) may choose to either adopt and support the MTA's estimated targets or set their own targets. Staff has reviewed the estimated targets provided by the MTA. Ms. Williams also stated an MTA staff member is present to answer any questions. At this time, the Technical Advisory Committee (TAC) is recommending approval to the Metropolitan Alliance to adopt both the summarized and expanded versions of the Mass Transportation Authority's (MTA) estimated 2022 State-of-Good-Repair targets through the attached Resolution of Support and authorization for Chairperson Johnson to sign the Resolution.

Motion: Action: Approve, **Moved by** Pam Faris, **Supported by** Mark Richard, to adopt both the summarized and expanded versions of the Mass Transportation Authority's (MTA) estimated 2022 State-of-Good-Repair targets through the attached Resolution of Support and authorization for Chairperson Johnson to sign the Resolution.

Motion carried unanimously.

XII. OTHER BUSINESS

None

XIII. ANNOUNCEMENTS

None

XIV. ADJOURNMENT

Chairperson Johnson adjourned the meeting at 7:39 p.m.

Respectfully submitted,
Jill Floeter, Secretary
Genesee County Metropolitan Planning Commission



MEMORANDUM

TO: Members of the Genesee County Metropolitan Alliance

FROM: Alicia Williams, Planner
Genesee County Metropolitan Planning Commission

DATE: October 20, 2021

SUBJECT: **FY 2023-2026 Transportation Improvement Program Call Update**

Staff is requesting projects for the FY 2023-2026 Genesee County Transportation Improvement Program (TIP) starting **October 11, 2021**. Staff has notified all local road agencies of the call and is meeting with all cities, villages, townships, and transportation agencies to go over the applications and answer any questions.

All project applications, including Congestion Mitigation Air Quality (CMAQ) applications, must be received by the Genesee County Metropolitan Planning Commission by **Friday, November 12, 2021 at 5:00 p.m.** TIP applications and supporting information are available on our website by visiting the following link: <http://gcmpc.org/fy-23-26-tip-call-for-projects/>.

If you have any questions regarding the TIP Call for Projects, please feel free to contact Ms. Alicia Williams at (810) 766-6564 or by email at awilliams1@geneseecountymi.gov.

MEMORANDUM

TO: Members of the Genesee County Metropolitan Alliance

FROM: Alicia Williams, Planner
Genesee County Metropolitan Planning Commission

DATE: October 20, 2021

SUBJECT: **FY 2021 Asset Management PASER Update**

Between July and August of 2021, staff worked with Local Road Agencies (LRA), to comply with the State of Michigan Transportation Asset Management Council's mandate that all federal aid roads be rated using the PASER Road Rating System at least once every other year. In 2021, staff and LRA's surveyed the condition of all federal aid roads in Genesee County. Below are preliminary results of the 2021 PASER survey, showing the percentage of total lane miles in each rating category:

Federal Aid pavement conditions improved slightly between 2018 and 2021, with a decrease in percentage of poor roads, an increase in fair roads and good roads.

2018-2021 Genesee County Federal Aid PASER Ratings:

PASER Rating	2018 Survey	2021 Survey
Poor (1 to 4)	37%	28%
Fair (5 to 7)	53%	56%
Good (8 to 10)	10%	16%

Further analysis of the information collected during this survey will be distributed through the 2021 Genesee County PASER Report. If you have any questions regarding the PASER survey, please feel free to contact Ms. Alicia Williams at (810) 766-6564 or by email at awilliams1@geneseecountymi.gov.

MEMORANDUM

TO: Members of the Genesee County Metropolitan Alliance

FROM: Alicia Williams, Planner
Genesee County Metropolitan Planning Commission

DATE: October 20, 2021

SUBJECT: **FY 2023 List of Approved Safety Projects**

During the month of September, the Michigan Department of Transportation (MDOT) released an approved list of Safety Projects and High-Risk Rural Road (HRRR) Projects to all local road agencies for the 2023 fiscal year. The total approximate funding that is expected for the four (4) approved projects is nearly \$1,923,000, please see attached list of those safety projects.

Staff will have an amendment in November to update the TIP to include these safety projects.

If you have any questions regarding the approved safety projects, please feel free to contact Ms. Alicia Williams at (810) 766-6564 or by email at awilliams1@geneseecountymi.gov.

Projects approved for the FY 2023 Safety Program:

Lead Agency	Project Name	Project Limits	Work Description	Total Project Funds
City of Burton	Intersection Signing	Belsay Road at Bristol Road, Lippincott Road at Belsay Road	Intersection Signing	\$ 22,940.00
Genesee County	Beecher Road	Beecher Road from Graham Road to Ballenger Highway	Road Diet (4 lanes to 3 lane conversion), cold milling and resurfacing, guardrail upgrades if necessary, possible signal removal at Beecher/Calkins intersection	\$ 800,000.00
Genesee County	Linden Road	Linden Road from Hill Road to Linden Creek Parkway	HMA micro surface, road diet (4 lane to 3 lane conversion), drain structure and curb repairs	\$ 250,000.00
Genesee County	Morrish Road at Lennon Road	Morrish Road at Lennon Road	Construct a Roundabout	\$ 850,000.00

MEMORANDUM

TO: Members of the Genesee County Metropolitan Alliance

FROM: Sharon Gregory, Lead Planner
Genesee County Metropolitan Planning Commission

DATE: October 20, 2021

SUBJECT: State Safety Targets FY 2022

On August 31st, The Michigan Department of Transportation (MDOT) submitted statewide safety targets for calendar year 2022 as required to meet annual performance measure requirements of the FAST Act. The Genesee County Metropolitan Alliance (GCMA) previously adopted the 2021 Statewide Safety Targets last year. GCMA has until February 27, 2022 (180 days after State targets are set) to either adopt the statewide targets or set our own local targets. The five statewide performance targets are listed below, with the baseline condition being 2016-2020.

Safety Performance Measure (5-year rolling average)	Baseline Condition (2016-2020)	Calendar Year 2022 State Safety Targets
Fatalities	1,028.2	1,065.2
Fatality Rate Per 100 million Vehicle Miles Traveled (VMT)	1.051	1.098
Serious Injuries	5,673.2	5,733.2
Serious Injury Rate Per 100 million VMT	5.778	5.892
Non-Motorized Fatalities & Serious Injuries (Pedestrian and Bicycle)	762.8	791.6

Staff is in the process of reviewing local crash trends in Genesee County and will see how they relate to the statewide trends. Staff's recommendation on the 2022 Safety Performance Targets will be brought through this committee for approval in November. We have included the State Safety Targets and a letter from MDOT to the MPO.

Should you have any questions regarding these performance measures, please feel free to contact me at sgregory@geneseecountymi.gov or 810-766-6545.



STATE OF MICHIGAN
DEPARTMENT OF TRANSPORTATION
 LANSING

GRETCHEN WHITMER
 GOVERNOR

PAUL C. AJEGBA
 DIRECTOR

September 8, 2021

Dear Metropolitan Planning Organization Director:

The Michigan Department of Transportation (MDOT) is pleased to provide you with the state targets for the federally required safety performance measures for calendar year 2022. MDOT appreciates the efforts your Metropolitan Planning Organization (MPO) has made to participate in the coordination process for the safety performance measure.

State Safety Targets for Calendar Year 2022:

Safety Performance Measure (5 year rolling average)	Baseline Condition (2016-2020)	Calendar Year 2022 State Safety Targets
Fatalities	1,028.2	1,065.2
Fatality Rate Per 100 million Vehicle Miles Traveled (VMT)	1.051	1.098
Serious Injuries	5,673.2	5,733.2
Serious Injury Rate per 100 million VMT	5.778	5.892
Nonmotorized Fatalities and Serious Injuries (Pedestrian and Bicycle)	762.8	791.6

Federal Law and regulations require that MPOs establish targets not later than 180 days after the State Department of Transportation establishes and reports state safety targets in the State Highway Safety Improvement Program (HSIP) annual report. MDOT submitted Michigan’s HSIP annual report on August 31, 2021. MPOs are now required to decide on their MPO safety targets for calendar year 2022 no later than February 27, 2022.

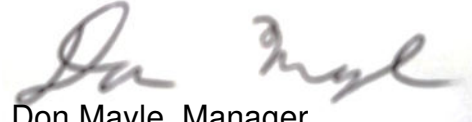
MPOs may support all the state safety targets, establish their own specific numeric targets for all the performance measures, or any combination. MPOs may support the state safety target for one or more individual performance measures and establish specific numeric targets for the other performance measures. Enclosed is a report documenting the background and analysis for the development of the safety targets.

Thank you for your participation in the performance measure coordination process.

Metropolitan Planning Organization Director
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September 8, 2021

If you have questions, please contact either me, or John Lanum, Supervisor, Statewide Planning Section, at LanumJ@michigan.gov or 517-335-2949.

Sincerely,

A handwritten signature in black ink, appearing to read "Don Mayle". The signature is written in a cursive style with a large initial "D" and "M".

Don Mayle, Manager
Statewide Planning Section

Enclosure(s)

cc: John Lanum, MDOT

TRANSPORTATION PERFORMANCE MANAGEMENT

HIGHWAY SAFETY IMPROVEMENT PROGRAM

SAFETY PERFORMANCE MEASURES

In March 2016, the Federal Highway Administration (FHWA) published in the Federal Register ([81 FR 13722](#)) a final rule revising [23 CFR part 924](#) and [23 U.S.C. 148](#) Highway Safety Improvement Program (HSIP) to incorporate new statutory requirements of MAP-21 and the FAST Act. The HSIP focuses on reducing fatalities and serious injuries on all public roads through targeted investment in infrastructure programs and projects to improve safety.

On the same date, FHWA published a companion Safety Performance Management (Safety PM) final rule ([81 FR 13881](#)) to support national safety goals and carryout the HSIP. The safety PM final rule has been codified in a new regulation [23 CFR Part 490, Subpart B](#). The purpose of the Safety PM is to improve transparency through use of a public reporting system using common data standards and elements, and aggregating progress toward the national goal of reducing traffic fatalities and serious injuries. The five safety performance measures identified in the regulation are applicable to all public roads regardless of jurisdiction.

In 2018, the National Highway Traffic Safety Administration (NHTSA) published the final Uniform Procedures for State Highway Safety Grants Program ([83 FR 3466](#)) and updated Highway Safety Plan (HSP) requirements. The purpose of the safety grants is to focus investments on reducing fatalities, injuries, and economic loss resulting from vehicle crashes through behavioral traffic safety programs.

The FHWA and NHTSA coordinated the final rules to identify three common performance measures (1 through 3 below) for which the annual performance targets must be identical as reported in the HSIP and HSP. The measures/targets are reported as five-year rolling averages.

1. **Number of Fatalities**
2. **Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT)**
3. **Number of Serious Injuries**
4. Rate of Serious Injuries per 100 million VMT
5. Number of Non-motorized Fatalities and Serious Injuries

TARGET SETTING COORDINATION

The 23 CFR Part 490, Subpart B communicates the process for which State DOTs and Metropolitan Planning Organizations (MPOs) are to establish and report on the five HSIP safety targets, and the criteria FHWA will use to assess whether State DOTs have met or made significant progress toward meeting their safety targets.

With three common safety performance measures that must have identical targets reported in the annual HSIP and HSP, establishing targets is a coordinated effort between the Michigan Department of Transportation (MDOT), the Strategic Highway Safety Office (SHSO), and Michigan Metropolitan Planning Organizations (MPOs). The coordination and target requirements promotes working collaboratively to achieve the targets.

The annual timeline for establishing and reporting targets is as follows:

April/May: One or more coordination sessions between MDOT and MTPA members to develop safety targets for the next calendar year.

July 1: SHSO reports targets for the next calendar year to NHTSA through the HSP, including “identical” targets for the three common performance measures.

August 31: MDOT reports targets for the next calendar year to FHWA through the HSIP.

February 27 (following year): MPOs report targets for the current calendar year to MDOT. Refer to the MPO section for details regarding MPO target elections and reporting. MDOT must provide FHWA MPO targets, upon request. [Regulation Timeline: August 31 + 180 Days]

Annual targets should support the Long-Range Transportation Plan and Strategic Highway Safety Plan (SHSP) goals.

MPO TARGET SETTING

The MPO must report their safety targets to MDOT by February 27 of the year following MDOT reporting the State safety targets to FHWA (August 31 + 180 days). The target establishment and reporting process for MPOs was jointly developed, documented, and mutually agreed upon by the MPO and MDOT.

The MPO must establish annual targets for each of the five measures by either (1) agreeing to plan and program projects so that they contribute toward the accomplishment of the State safety target for that performance measure, or (2) committing to a quantifiable target for that performance measure for their metropolitan planning area. For each of the five measures, the MPO can make different elections to agree to support the State's targets or establish a quantifiable target.

MPOs must also report safety targets in their System Performance Report.

TARGET ACHIEVEMENT, CONSEQUENCE/PENALTY

FHWA will determine whether a State has met or made significant progress at the end of the following calendar year when target-year data is available and will report findings to the State and the public. A State is considered to have met or made progress when at least four out of five safety targets are met, or the actual safety performance is better than the baseline performance for the period for four out of five measures.

If the State did not meet or make significant progress toward targets, the State (MDOT) must (1) submit an HSIP Implementation Plan (consequence) and (2) use obligation authority equal to or greater than the HSIP apportionment for the prior year only for highway safety improvement projects (penalty).

There is no federal- or state-imposed consequence or penalty for an MPO that does not demonstrate they have met or made significant progress toward target achievement.

2022 MICHIGAN SAFETY TARGETS

Existing Trend

The first step in developing annual safety targets is to establish the 5-year rolling average baseline trend. FHWA prescribes the calculation as follows: For each measure, sum the most recent five consecutive years actual performance, ending in the year the targets for the next year are being developed, divide by five, and round to the tenth decimal place. For each rate measure, first calculate the number of fatalities or serious injuries per 100 million VMT, then divide by five, and round to the thousandth decimal place.

Data for calculation: The Fatalities Analysis Report System (FARS) is to be used for fatality related measures, and the State of Michigan Crash database is used for serious injury related measures. The VMT is calculated annually from the Highway Performance Monitoring System (HPMS).

Exogenous Factors

The next step in the target development process is to consider how exogenous factors influence/impact traffic fatalities and serious injuries. The respective parties have agreed to utilize a fatality prediction model developed and maintained by the University of Michigan Transportation Research Institute (UMTRI). The UMTRI model relies on results of a completed research report titled [Identification of Factors Contributing to the Decline of Traffic Fatalities in the United States](#), which was completed as part of the National Cooperative Highway Research Program project 17-67 ([presentation](#)). The model, predicting the change in counts of fatalities, relies on the correlation between traffic crashes, vehicle miles traveled (VMT), and risk. UMTRI identified four factors that can influence the outcome: the economy, safety and capital expenditures, vehicle safety, and safety regulations. Within the model, economic factors such as the Gross Domestic Product (GDP) per capita, median annual income, the unemployment rate among 16 to 24-year old's, and alcohol consumption had the greatest impact at approximately 85 percent. Preliminary findings indicate individual acceptance of

risk appears to have a greater impact on the number of fatalities and serious injuries than fluctuations in traffic volume. In other words, the better the economy, the greater the level of risk individuals are willing to take.

2021-2022 Target Overview

To determine a forecasted value for the five-year rolling average for the first four measures listed above, the decision was made to use the change model created by UMTRI used for establishing previous targets. UMTRI predicts 1,123 fatalities in CY 2021, and 1,158 in 2022.

The change model predicts change in fatalities from the previous year based on several predictors. This log-change regression model is tied closely to whatever happened recently, so it cannot diverge very far from the current time unless we predict many years out into the future. The change model predicts a steady (slow) decrease in fatalities. The dataset is a collection of differences from one year to the next within the state, expressed as a percentage of the previous year. Thus, the predictors can influence exposure and/or risk.

Alternatively, the count model directly predicts counts so it could diverge from observed by a lot if the patterns change in the real world. Based on known factors the count model shows a steady increase in fatalities through 2025. As this is not what is expected the change model was selected in developing the targets.

While serious injuries have fluctuated over the past several years, the linear relationship of the ratio of serious injuries and fatalities (A/K) going back to 2003 is still evident. However, this trend suggests a greater reduction in serious injuries than being observed. Therefore, a quadratic model was used which projects an increase in relation to the increase of fatalities. The model predicts 5,928 serious injuries in CY 2021, and 6,090 in 2022.

VMT values have been predicted for CYs 2020, 2021 and 2022. VMT estimates for CY 2020 and CY 2021 are reduced due to COVID-19. Using the fatal and serious injury values, along with the respective predicted VMT, the forecasted fatality rates are 1.187 for CY 2021, and 1.133 for CY 2022, and annual serious injury rates of 6.266 for CY 2021, and 5.959 for CY 2022.

Results from the UMTRI model (the fatality and serious injury relationship) were also used to generate non-motorized forecasted annual values of 828 for CY 2021, and 854 for CY 2022.

The above annual forecasted values for CY 2021 and CY 2022 along with the actual values from CY 2018 to 2020 to determine the 2022 Targets (five-year rolling average) are shown in the 2022 Target Summary table. In addition, actual values dating back to CY 2016 are included as part of the determination of the 2020 baseline condition.

2022 Predictions (Targets)

Number of Fatalities	1,065.2
Rate of Fatalities per 100M VMT	1.098
Number of Serious Injuries	5,733.2
Rate of Serious Injuries per 100M VMT	5.892
Number of Non-Motorized Fatalities and Serious Injuries	791.6

Strategic Highway Safety Plan (SHSP)

While MDOT and the SHSO are responsible for setting the targets in collaboration with Metropolitan Planning Organizations (MPOs), traffic fatalities and serious injuries are a State of Michigan issue that requires awareness and intentional action from all levels of government and the public to change the overall safety culture. Over 90 percent of fatal crashes are the result of human behavior and the most effective safety feature is changing user behavior to be more risk adverse. Crashes are not accidents.

Michigan’s [Strategic Highway Safety Plan \(SHSP\)](#) is the blueprint for addressing both fatalities and serious injuries. Under the guidance of the Governors Traffic Safety Advisory Commission (GTSAC) the SHSP has adopted the vision of Toward Zero Deaths. The strategy is a statewide campaign to positively enhance road user’s behavior and safety. Nearly 1,000 people do not return home in Michigan annually due to traffic crashes. The TZD strategy invokes enhancing driver

education, emergency response, enforcement, engineering, policy, communications, and other efforts that will move Michigan closer to zero fatalities. By incorporating safety into all facets of transportation, Michigan can achieve this vision. But to get there the GTSAC has adopted interim goals to reach every four years. To carry forth the SHSP is focused on four broad emphasis areas:

1. High-Risk Behaviors
2. At-Risk Road Users
3. Engineering Infrastructure
4. System Administration

Within these emphasis areas, 11 action teams provide more targeted guidance on area-specific safety issues. Structuring these action teams under the broad umbrella of these four emphasis areas creates efficiencies given the degree of overlap amongst the teams. Updated goals, strategies, objectives, and activities for each are based on current traffic crash data. More information on the GTSAC and the SHSP can be found at the GTSAC website.

All citizens of Michigan are welcome and encouraged to participate in the action teams and attend the annual Safety Summit to learn more about the SHSP and what part they can play in changing the safety culture of Michigan. MDOT offers scholarships for local officials and MPOs to attend the summit.

Michigan is committed to the goal of reducing traffic crashes and resulting injuries and fatalities. MDOT implements countermeasures such as intersection-related improvements including signalization and geometric changes by converting traditional intersections to roundabouts where feasible. Other improvements include converting four-lane roadways to three lanes, restriping improvements, the installation of centerline and shoulder rumble strips, guardrail upgrades, clear zone improvements, delineation, signing and other projects that target locations that have experienced fatal and incapacitating injury crashes. These projects, along with other research and systemic and systematic safety improvements, including safety funding for local agencies for road safety audits, have provided the foundation for deeper understanding of crash characteristics and prospective countermeasures.

Regarding the numbers, annual fatalities had decreased from 1,031 in 2017 to 985 in 2019 (as reported by FARS) but made an increase in 2020 with 1,083. This is reflected in the five-year average or target of 1,065.2 for 2022. For the same time serious injuries have decreased from 6,084 to 5,433 and is reflected in the five-year target of 5,733.2.

Below is a chart comparing the targets since their inception. In addition, the crash data for 2014 to 2020 are shown. Imagine what these could be if all participated in driving the numbers down.

Targets Reported to FHWA (5-Year Moving Average)

Year	Fatality	Fatality Rate	Serious Injury	Serious Injury Rate	Non-Motorized Fatality/Serious Injury
Year	Reported Target	Reported Target	Reported Target	Reported Target	Reported Target
2018	1,003.2	1.020	5,136.4	5.230	743.6
2019	1,023.2	1.020	5,406.8	5.410	759.8
2020	999.4	0.970	5,520.4	5.340	735.8
2021	968.6	0.982	5,533.6	5.609	771.2
2022	1,065.2	1.098	5,733.2	5.892	791.6

Targets as reported to FHWA for the respective year

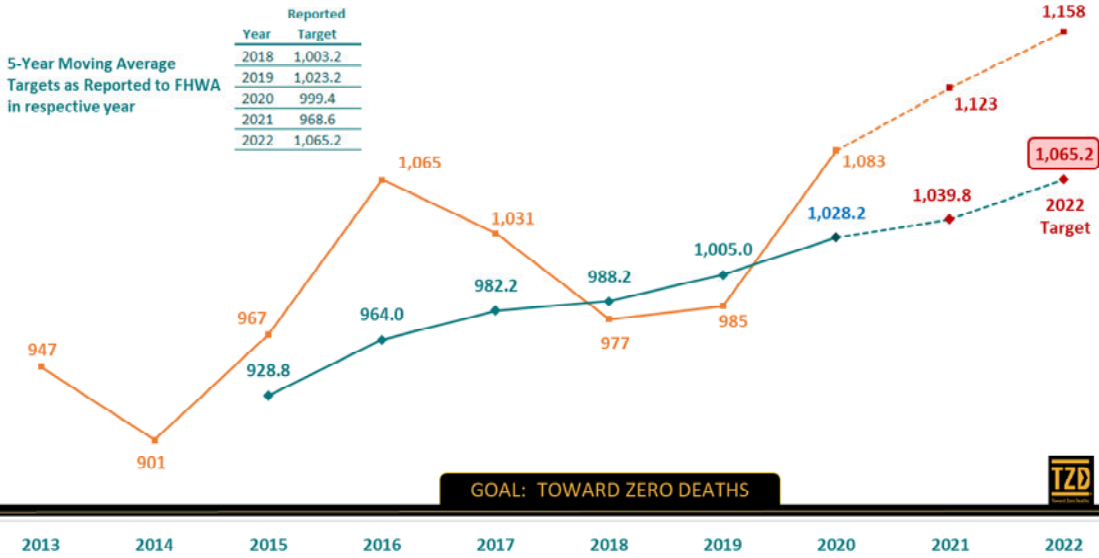
Annual Crash Data

Year	Fatality	Fatality Rate	Serious Injury	Serious Injury Rate	Non-Motorized Fatality/Serious Injury
2014	901	0.925	4,909	5.040	691
2015	967	0.989	4,865	4.974	761
2016	1,065	1.074	5,634	5.679	740
2017	1,031	1.013	6,084	5.976	798
2018	977	0.954	5,586	5.455	740
2019	985	0.964	5,629	5.508	794
2020	1,083	1.251	5,433	6.274	742

Reference:

- [Safety Performance Measure Final Rule](#)
- [HSIP Final Rule](#)
- [Planning Final Rule](#)
- [NHTSA Uniform Procedures for Safety Highway Safety Grants Program Final Rule](#)
- [FHWA Procedure for Safety Performance Measure Computation and State Target Achievement Assessment](#)
- [Strategic Highway Safety Plan](#)
- [FARS](#)
- [Michigan Traffic Crash Facts](#)
- [Highway Safety Improvement Program/Dashboard](#)

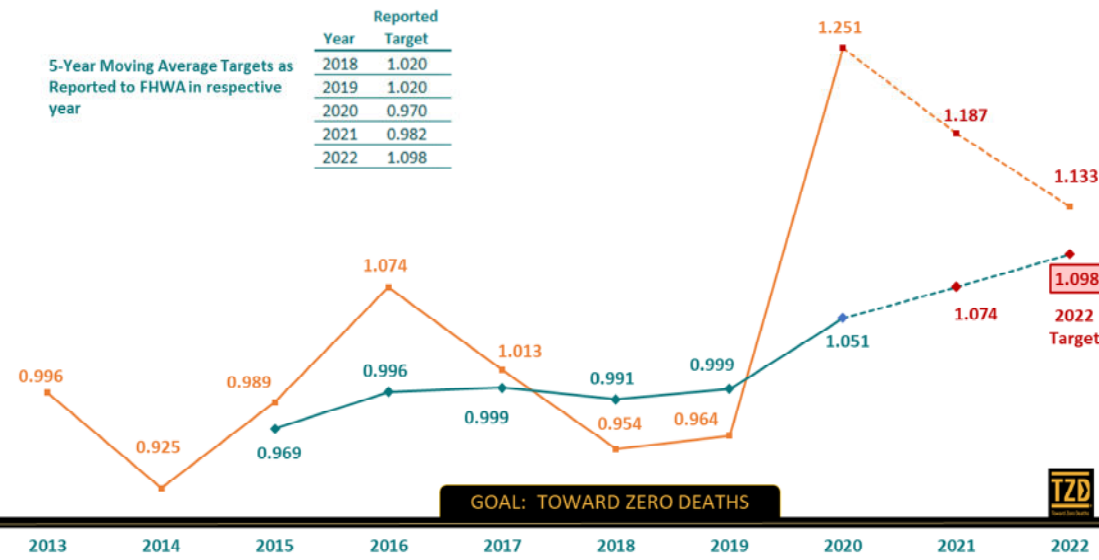
Highway Safety Improvement Program
 Number of Fatalities
 2022 5-Year Moving Average Prediction



NOTE: 2021 and 2022 forecasted values are based on (1) 2015-2019 5-year rolling average, (2) UMTRI Change-Model prediction for establishing the CY 2022 target, and (3) accounts for exogenous factors and safety programming outcomes

All Michigan public roads

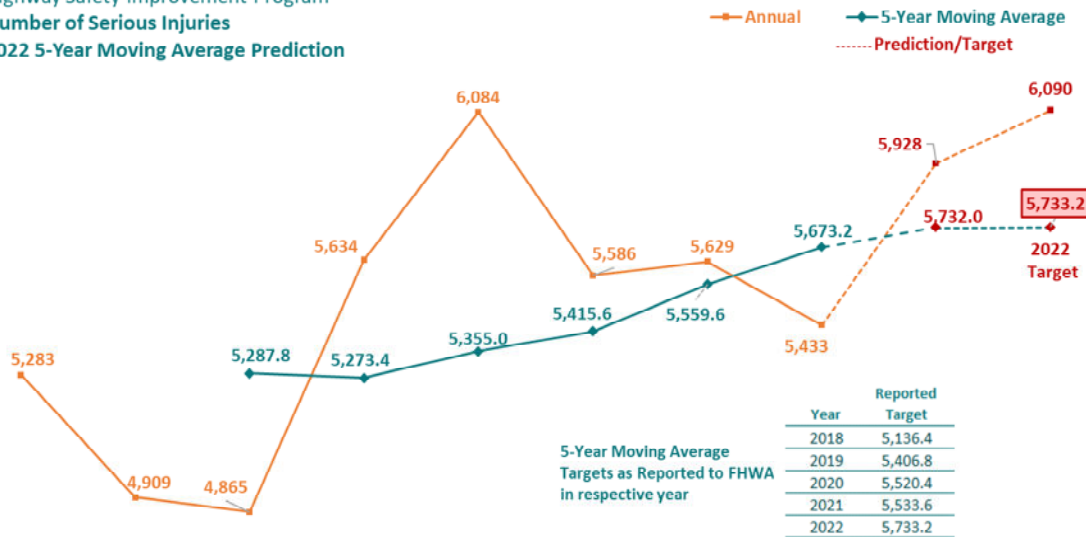
Highway Safety Improvement Program
 Rate of Fatalities per 100m VMT
 2022 5-Year Moving Average Prediction



NOTE: 2021 and 2022 forecasted values are based on (1) 2016-2020 5-year rolling average, (2) UMTRI Change-Model prediction for establishing the CY 2022 target, and (3) accounts for exogenous factors and safety programming outcomes

All Michigan public roads

Highway Safety Improvement Program
Number of Serious Injuries
2022 5-Year Moving Average Prediction

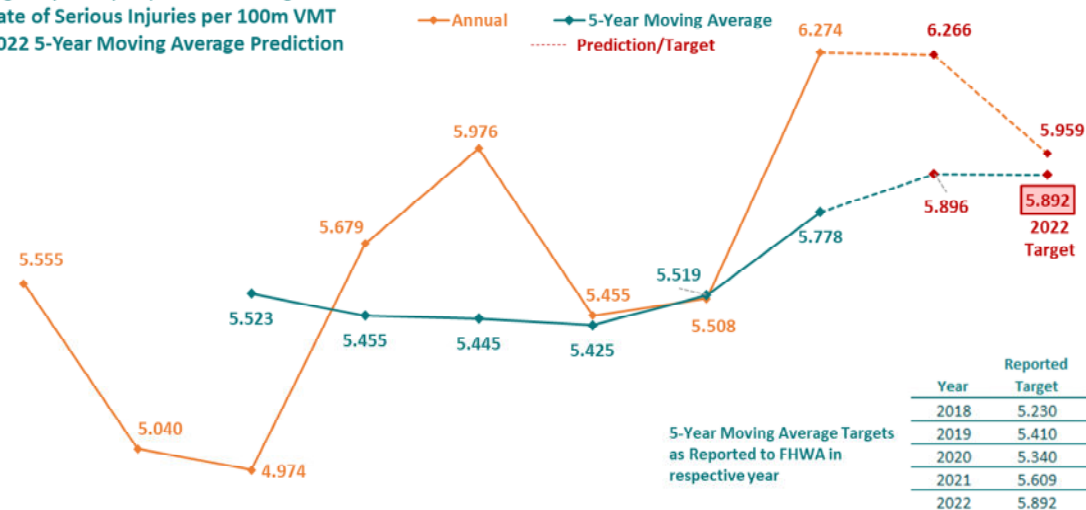


GOAL: TOWARD ZERO DEATHS



2013 2014 2015 2016 2017 2018 2019 2020 2021 2022
 NOTE: 2021 and 2022 forecasted values are based on (1) 2016-2020 5-year rolling average, (2) UMTRI Change-Model prediction for establishing the CY 2022 target, and (3) accounts for exogenous factors and safety programming outcomes
 All Michigan public roads

Highway Safety Improvement Program
Rate of Serious Injuries per 100m VMT
2022 5-Year Moving Average Prediction



GOAL: TOWARD ZERO DEATHS

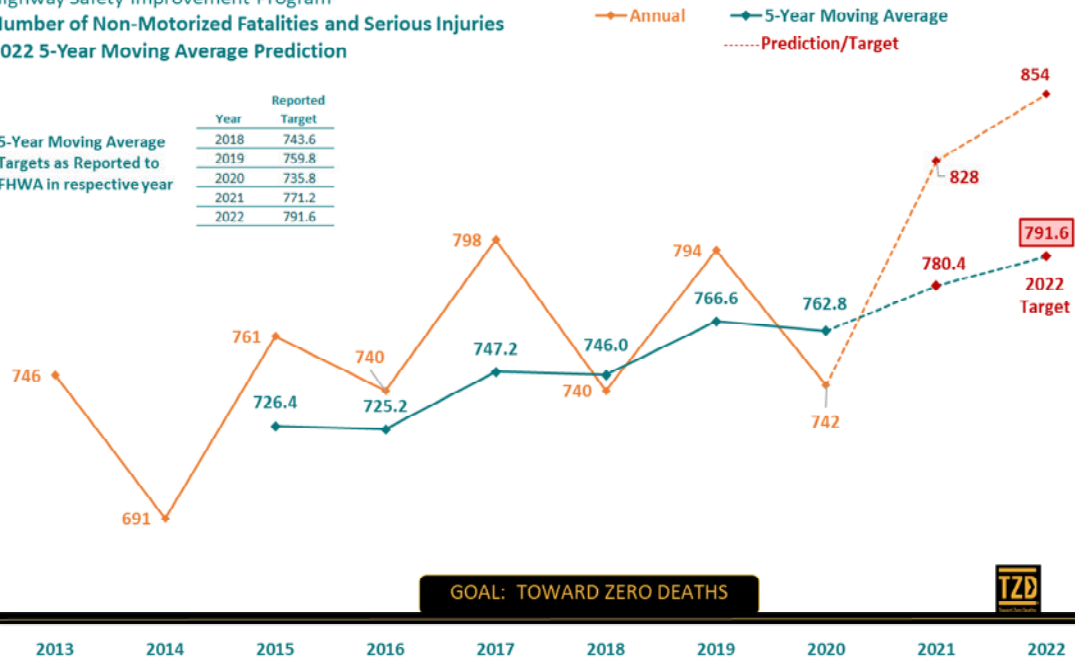


2013 2014 2015 2016 2017 2018 2019 2020 2021 2022
 NOTE: 2021 and 2022 forecasted values are based on (1) 2016-2020 5-year rolling average, (2) UMTRI Change-Model prediction for establishing the CY 2022 target, and (3) accounts for exogenous factors and safety programming outcomes
 All Michigan public roads

Highway Safety Improvement Program
 Number of Non-Motorized Fatalities and Serious Injuries
 2022 5-Year Moving Average Prediction

5-Year Moving Average
 Targets as Reported to
 FHWA in respective year

Year	Reported Target
2018	743.6
2019	759.8
2020	735.8
2021	771.2
2022	791.6



GOAL: TOWARD ZERO DEATHS



NOTE: 2021 and 2022 forecasted values are based on (1) 2016-2020 5-year rolling average, (2) UIMTRI Change-Model prediction for establishing the CY 2022 target, and (3) accounts for exogenous factors and safety programming outcomes

All Michigan public roads