

TRANSPORTATION PERFORMANCE MANAGEMENT

HIGHWAY SAFETY IMPROVEMENT PROGRAM SAFETY PERFORMANCE MEASURES

In 2012, the Moving Ahead for Progress in the 21st Century Act (MAP-21) established a performance-and out-come based program to achieve <u>national</u> <u>performance goals</u>, including a safety goal to "achieve a significant reduction in traffic fatalities and serious injuries on all public roads." Congress directed the U.S. Department of Transportation to establish performance measures in support of the national goals and in consultation with States, metropolitan planning organizations (MPOS), and other stakeholders. Reauthorizations since MAP-21 have reaffirmed the national goals and the supporting performance measurement and target requirements.

As directed by Congress, through rulemaking [81 FR 13913] and 81 FR 13882] the Federal Highway Administration (FHWA) codified the annual Highway Safety Improvement Program (HSIP) performance measurement and target requirements in 23 CFR Part 490, National Performance Management Measures, Subpart B. The purpose of safety performance measurement 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 safety performance measures identified in the regulation are applicable to all public roads regardless of jurisdiction.

The HSIP, legislated under 23 U.S.C. 148 and regulated under 23 CFR Part 924, is a core federal-aid program to achieve a significant reduction of fatalities and serious injuries on all public roads through targeted investment in infrastructure programs and projects to improve safety. The annual HSIP report communicates the annual safety performance targets to FHWA.

In coordination with FHWA, the National Highway Traffic Safety Administration (NHTSA) also codified MAP-21 safety performance measurement and target requirements as part of the annual Highway Safety Plan (HSP). The HSP is regulated by 23 CFR §1300, Uniform Procedures for State Highway Safety Grant Programs. The HSP focuses on behavioral traffic safety programs working in concert with the HSIP infrastructure investments.

In 2016, the FHWA identified five safety outcome measures, as follows, and the FHWA and NHTSA selected three measures in common (number 1-3) requiring identical targets be developed and reported in the HSIP and the HSP, respectively.⁽¹⁾

- 1. Number of Fatalities
- 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

In 2021, the Infrastructure Investment and Jobs Act (IIJA) provided substantive changes to 23 U.S.C. §402 Highway Safety Programs not limited to modifying the HSP from an annual to a triennial plan, and modified performance target requirements. The change in U.S. Code created conflict between HSIP and HSP regulations. Through rulemaking [88 FR 7804], NHTSA modified 23 CFR §1300, Uniform Procedures for State Highway Safety Grant Programs effective March 2023, as directed by 23 U.S.C. §402. In January 2024, FHWA published an NPRM [89 FR 4857] to propose changes to 23 CFR §490, including potential paths to realign the HSIP and HSP for performance measurement. In May 2025, FHWA withdrew the proposed NPRM (reference Secretary Duffy memo dated May 29, 2025.)

(1) On January 13, 2025 FHWA distributed a waiver of identical state safety targets for common measures for calendar year 2026.

STRATEGIC HIGHWAY SAFETY PLAN



Figure 1 - Relationship between the SHSP, HSIP and HSP

The Michigan Strategic Highway Safety Plan (SHSP) is legislated and regulated under the HSIP and spearheaded by the Michigan Governor's Traffic Safety Advisory Commission (GTSAC) in coordination with public and private stakeholders. The SHSP is updated on a four-year basis, and each edition builds upon the previous versions to reflect current conditions and safety needs.

The SHSP provides the framework for all Michigan highway safety programs to work in concert to align and leverage resources and guide investment decisions to collectively address the state's safety challenges.

The SHSP incorporates the <u>Safe System Approach</u> (SSA) to mitigate risks by building and reinforcing layers of protection to prevent crashes and minimize the harm caused when they do occur. The SHSP mission applies the SSA through statewide strategies to move Michigan <u>Toward Zero Deaths</u>, as even one death is not acceptable.

The Michigan SHSP safety goal is to eliminate fatalities and serious injuries by 2050

TARGET SETTING COORDINATION

The National Performance Management Measures regulation, 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.

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

August 31: MDOT reports to FHWA statewide safety targets for all Michigan public roads, regardless of jurisdictional ownership, for the next calendar year 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 safety targets reflect the State of Michigan Long-Range Transportation Plan and Strategic Highway Safety Plan (SHSP) goals.

MPO TARGET SETTING

In accordance with federal regulation, the safety 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 safety 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 provide MDOT an official significant progress determination within 18 months following the Statewide target calendar year (e.g., in 2028 FHWA will provide MDOT a significant progress determination letter for 2026 safety targets). 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) <u>and</u> (2) use obligation authority equal to or greater than the HSIP apportionment for the prior year for highway safety improvement projects (penalty).

There is no federal or state evaluation of significant progress toward MPO safety targets, nor is there a consequence or penalty for an MPO that does not demonstrate they have met or made significant progress toward target achievement.

2025 MICHIGAN SAFETY TARGETS

Data

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

2025 Target Development

The 2025 State safety targets are guided by the SHSP Mission, Vision and Goal to eliminate fatalities and serious injuries on Michigan roadways by 2050. Aligned with the goal of Zero by 2050, the 2026 targets are developed on a curved slope wherein targets established from the current 5-year rolling average initially decline more slowly than the straight-line approach, and gain momentum over the timeline as reduction strategies are implemented.

Calculation Steps

Reference <u>FHWA Procedure for Safety Performance</u> <u>Measure Computation and State Target Achievement</u> Assessment guidance document.

The following steps were used by MDOT to calculate the baseline and establish the 2026 State targets. The steps outline the calculation for the annual and five-year rolling average of predicated fatalities, noting the same steps are utilized for all five safety performance measures.

		5-Year
	57	Rolling
	Annual	Average
Year	Fatalities	Fatalities
2020	1,086	1,029.0
2021	1,136	1,043.2
2022	1,123	1,061.6
2023	1,095	1,085.2
2024	1,099	1,107.8

- 1. Calculate the baseline. For establishing the 2026 targets, the 5-year average for the latest full year of data is 2024. The baseline 5-year average of annual fatalities is 1,107.8 (2020-2024).
- 2. Calculate the declining projection for 2025 annual fatalities and 5-year rolling average.
 - a. Multiply baseline (2024 actual performance) by 0.98814 = 1,086
 - b. Calculate the 5-year rolling average for 2021 through 2025 using the 1,086 declining projection for 2025 = 1,108.0
- 3. Calculate the declining projection for 2026 fatalities and 5-year rolling average.
 - a. Multiply 2025 projection by 0.98593 = 1,071
 - b. Calculate 5-year rolling average for 2022 through 2026 using 1,071 declining projection for 2025 = 1,094.7

Repeat steps for remaining four measures. The multiplication rate as demonstrated in Steps 2 and 3 above will change annually based on the most recent baseline and the number of years between the target year and 2050.

2026 Safety Target Summary (5-Year Rolling Average)

Number of Fatalities	1,094.7
Rate of Fatalities per 100M VMT	1.100
Number of Serious Injuries	5,744.5
Rate of Serious Injuries per 100M VMT	5.772
Number of Non-Motorized Fatalities and Serious Injuries	789.8

Targets Reported to FHWA 5-Year Rolling Average

Year	Fatality	Fatality Rate	Serious Injury	Serious Injury Rate	Motorized Fatality/ Serious Injury
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
2023	1,105.6	1.136	5,909.2	6.058	743.4
2024	1,109.2	1.152	5,785.0	5.999	710.8
2025*	1,098.0	1.113	5,770.1	5.850	728.3
2026*	1,094.7	1.037	5,744.5	5.457	789.8

Ann	ual Cra	sh Data	Serious	Serious	Non- Motorized Fatality/ Serious
Year	Fatality	Rate	Injury	Injury Rate	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	986	0.965	5,629	5.508	794
2020	1,086	1.258	5,433	6.295	742
2021	1,136	1.175	5,979	6.183	674
2022	1,123	1.172	5,782	6.035	720
2023	1,095	1.114	5,816	5.917	785
2024	1,099	1.106	5,781	5.816	825
2025*	1,086	1.071	5,712	5.633	815
2026*	1,071	1.037	5,631	5.457	804

* 2025 and 2026 reflect calculated predicted outcomes using an accelerating decline curve from target year to 2050 in alignment with the ZERO goal communicated in Michigan's Strategic Highway Safety Plan.

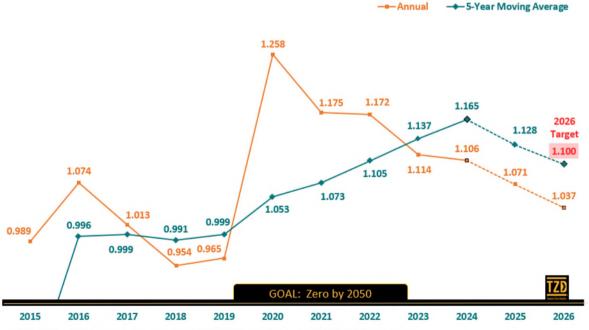
References:

Non-

- Strategic Highway Safety Plan (2023-2026)
- Safety Performance Measure Final Rule (23 CFR §490, Subpart B)
- HSIP Final Rule (23 CFR §924)
- Planning Final Rule (23 CFR §450)
- FARS
- Michigan Traffic Crash Facts
- NHTSA Uniform Procedures for Safety
 Highway Safety Grants Program Final Rule
 (2023 Update)
- FHWA Procedure for Safety Performance Measure Computation and State Target Achievement Assessment
- Highway Safety Improvement Program/ Dashboard



Highway Safety Improvement Program Rate of Fatalities per 100m VMT 2026 5-Year Moving Average Target



NOTE: 2025 and 2026 forecasted values are based on (1) 2020-2024 5-year rolling overage, (2) 2023-2026 Strategic Highway Safety Plan Goal of Zero Fatalities by 2050, (3) Year to year increase in percent reduction (non-linear).

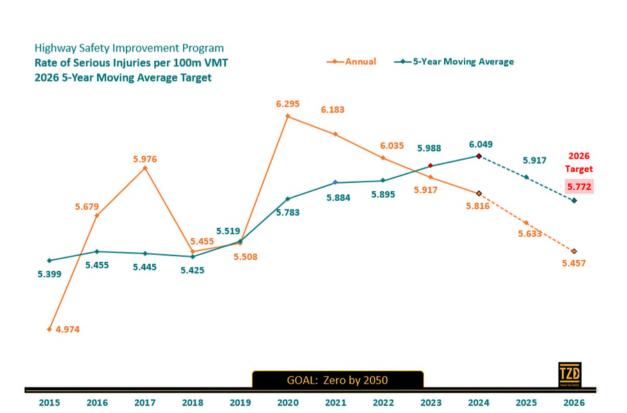
All Michigan public roads

All Michigan public roads

All Michigan public roads



Safety Plan Goal of Zero Fatalities by 2050, (3) Year to year increase in percent reduction (non-linear).



NOTE: 2025 and 2026 forecasted values are based on (1) 2020-2024 5-year rolling average, (2) 2023-2026 Strategic Highway

Safety Plan Goal of Zero Fatalities by 2050, (3) Year to year increase in percent reduction (non-linear).

Highway Safety Improvement Program

Number of Non-Motorized Fatalities and Serious Injuries
2026 5-Year Moving Average Target



FATALITIES AND SERIOUS INJURIES IN MICHIGAN
LAST 10 YEARS

Fatalities # Serious Injuries

8,000

7,000

6,084

5,979

5,782

5,816

5,781

6,000

4,000

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RELATIONSHIP BETWEEN MICHIGAN'S SHSP AND OTHER SAFETY AND REGIONAL PLANS Modified from Strategic Highway Safety Plans: A Champion's Guidebook to Saving Lives

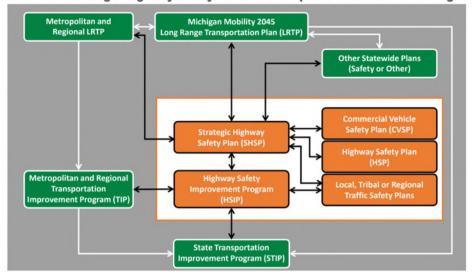


Figure 2 - 2023-2026 Michigan Strategic Highway Safety Plan (page 6)