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 the video



Transportation Performance Management Safety Performance Measures

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TPM requirements for coordination among State Departments of Transportation, Metropolitan Planning Organizations, and operators of public transportation



Topics Covered in Video

- What the safety measures are
- What the safety performance measures assess
- Insight into how the measures were established

Statutes & Regulations

- 23 CFR 450
- 23 CFR 490.203
- 23 CFR 490.205
- 23 CFR 490.207
- 23 CFR 490.209(b)
- 23 CFR 490.209(c)
- 23 CFR 490.211
- 23 CFR 924

The Transportation Performance Management Topic Videos series, produced by the Federal Highway Administration (FHWA), provides State Departments of Transportation, Metropolitan Planning Organizations, operators of public transportation, and other interested parties guidance for implementing Transportation Performance Management (TPM).

National performance measures are a central part of Transportation Performance Management, or TPM. Of these measures, the national safety performance measures support the data-driven performance focus of the Highway Safety Improvement Program (HSIP). HSIP is a core Federal-aid program with the purpose of achieving a significant reduction in fatalities and serious injuries on all public roads.

To help explain why these safety performance measures were established, this video covers:

- What the safety measures are;
- What the safety performance measures assess; and
- Insight into how the measures were established.

What Are the Safety Performance Measures?

There are five national safety performance measures. They are:

- Number of Fatalities;
- Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT);
- Number of Serious Injuries;
- Rate of Serious Injuries per 100 million VMT; and
- Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries.

What Do the Safety Performance Measures Assess?

The five safety performance measures are applicable to all public roads regardless of road ownership or design, including speed, capacity, and/or relationship to land use development. The five measures provide State Departments of Transportation (DOTs) and FHWA information to assess progress made in reducing roadway fatalities and serious injuries. While uniform guidance for defining a crash that results in fatalities has been well established by USDOT, the safety performance measure rulemaking also established uniform guidance for defining crash events that result in suspected serious injuries.

Each of the five safety performance measures uses a 5-year rolling average in its calculations. The 5-year rolling average covers the 5-year period that ends the year for which targets are established. For example, the measures for target year 2020 cover the years 2016 through 2020.

State DOTs must establish statewide targets annually for each of the safety performance measures. State DOTs also have the option to establish additional Urbanized Area targets and one Non-Urbanized Area target for any or all of the five measures, if they choose.



Metropolitan Planning Organizations (MPOs) must also establish targets for each of the performance measures. State DOTs and MPOs must coordinate on the establishment of safety targets to ensure consistency, to the maximum extent practicable. MPOs can either agree to support the State DOT target or establish a numerical target specific to the MPO planning area. MPOs' targets are reported to the State DOT, which must provide the targets to FHWA upon request. State DOTs report statewide targets to the FHWA in the HSIP annual report due each August.

A State DOT is considered to have met or made significant progress toward meeting its safety performance targets when at least four of the five targets are met, or the outcome for the performance measure is better than the baseline performance the year prior to the target year. Optional Urbanized Area or Non-Urbanized Area targets will not be evaluated by FHWA. If the FHWA determines a State DOT has not met or made significant progress toward meeting its safety performance targets, the State DOT will be required to use obligation authority equal to the baseline year HSIP apportionment only for safety projects. State DOTs must also develop a HSIP Implementation Plan. For example, if a State DOT does not meet or make significant progress towards meeting its 2018 safety targets, in Fiscal Year 2021 (FY 2021), the State DOT must use obligation authority equal to the Fiscal Year 2017 HSIP apportionment only for HSIP projects and submit an HSIP Implementation Plan by June 30, 2020.

Insight into How Measures Were Established

The FHWA determined that a 5-year rolling average provided the appropriate balance between data stability (by averaging multiple years) and providing an accurate data trend (by minimizing how far back in time data is considered).



In response to stakeholder feedback during the rulemaking process on the use of Highway Performance Monitoring System (HPMS) data to calculate VMT for the Rate of Serious Injuries and Rate of Fatalities per VMT measures, FHWA clarified the limitations of that data. While the data collected via HPMS can derive VMT data for all public roads within the entire State boundary, it cannot provide VMT estimates within a metropolitan planning area because it may not contain volume data on enough local roads within these areas. Therefore, FHWA identifies the HPMS as the data source for the State VMT. If an MPO sets a rate target, it submits an MPO VMT estimate for its planning area. This estimate serves as the VMT source data.

FHWA established the Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries performance measure to encourage all States to prioritize and address pedestrian and bicycle safety, as well as recognize that walking and biking are modes of transportation with unique crash countermeasures distinct from motor vehicles.

For additional information on how to implement the five national safety performance measures, contact your local FHWA Division Office and visit <https://safety.fhwa.dot.gov/hsip/spm>. For a more detailed discussion on how these performance measures were established, please review the summary and discussion of comments in the final rule found at <https://safety.fhwa.dot.gov/hsip/rulemaking>.

Working together, we can provide changes to achieve significant reduction in roadway fatalities and serious injuries.

Additional Resources

Extend your learning through more detailed resources and through interactive learning methods.

TPM Training:

<https://www.fhwa.dot.gov/tpm/resources/training.cfm>

TPM Website:

<http://www.fhwa.dot.gov/tpm/about/index.cfm>

General Portal for FHWA Resources:

<https://www.fhwa.dot.gov/research/library/>

National Highway Institute (NHI) Course Catalogue on Transportation Performance Management:

https://www.nhi.fhwa.dot.gov/downloads/catalog/transportation-performance-management_all-delivery-types_sorted-by-title.pdf

You may also learn more at:

<https://highways.dot.gov/research>

<http://www.facebook.com/FederalHighwayAdmin>

<http://www.flickr.com/photos/fhwa>

<http://www.linkedin.com/company/federal-highway-administration>

<http://www.twitter.com/USDOTFHWA>

<http://www.youtube.com/user/USDOTFHWA>

The content of this document is not a substitute for information obtained from State departments of transportation, appropriate FHWA Division Offices, and applicable laws. Scenarios have been simplified for emphasis and do not necessarily reflect the actual range of requirements applicable to the scenario or this topic.

This document was created under contract number DTFH61-13-D-0004 by the Federal Highway Administration, U.S. Department of Transportation, and is offered to the public to heighten and focus awareness of Federal-aid requirements within the local public agencies community and reinforces the importance of the necessary policies, procedures, and practices. This companion resource contains the script content for the video production of the same name.