The Transportation Performance Management (TPM) requirements for coordination among State Departments of Transportation, Metropolitan Planning Organizations, and operators of public transportation are designed to guide investment of public funds, by using data for better informed decision-making and ensuring accountability and transparency. The rules include performance measures for the nation's highway infrastructure.

how the infrastructure performance measures are used

What the measures assess

Why certain other measures were excluded

Federal transportation performance management rules that became effective in 2016 and 2017 are designed to guide investment of public funds, by using data for better informed decision-making and ensuring accountability and transparency. The rules include performance measures for the nation's highway infrastructure.

This video covers:

• How the infrastructure performance measures are used;
• What the measures assess; and
• Why certain other measures were excluded.

Statutes & Regulations

23 CFR 490.301
23 CFR 490.307
23 CFR 490.307(b)
23 CFR 490.313(b)
23 CFR 490.401
23 CFR 490.407
23 CFR 490.409
23 USC 119

What the Measures Assess

Four of the six measures assess the percentage of pavements in “Good” or “Poor” condition. Two of these four measures focus on the Interstate System while the other two focus on the Non-Interstate NHS. In addition, there are two bridge condition performance measures that assess the percentage of NHS bridges in Good or Poor condition by deck area.

These six measures are system-level measures. While individual sections of pavement and individual bridges deteriorate slowly, changes to the overall system can be identified more quickly.

During the development of these measures, FHWA examined historic pavement and bridge condition trends and found noticeable changes over 2-year and 4-year periods. This analysis confirmed that meaningful changes to the system can happen in short periods.

How Infrastructure Performance Measures Are Used

Six national infrastructure performance measures assess the condition of pavement and bridge assets on the National Highway System (NHS), both on the Interstate and Non-Interstate Systems. The purpose is to ensure that Federal-aid fund investments help achieve the goals of the State's asset management plan.
The establishment of 2-year and 4-year targets for the infrastructure condition measures could be considered objectives that lead toward the accomplishment of longer-term performance expectations in State DOT long-range statewide transportation plans and asset management plans.

What Was Not Included and Why

The FHWA made a few decisions to focus the scope of these six national measures.

For example, FHWA excluded traffic volume from the pavement condition performance measures. The FHWA believes incorporating traffic volume could unintentionally cause State DOTs and MPOs to focus on high-trafficked highway sections. Instead, FHWA believes local partners should determine if and how to incorporate traffic volumes into their decision-making.

Another critical decision was to not include “Fair” as a pavement condition measure. The FHWA believes the net increase or decrease of percent of the network in Fair condition does not easily indicate improving or declining condition. For example, if there were an increase in the percent of pavement sections assessed to be in Fair condition, it could be a result either of previously Good conditions declining, or previously Poor conditions improving. Instead, FHWA believes that focusing only on Good and Poor conditions will better indicate improvement or decline of network condition.

For bridges, although the classification of bridges in Fair condition and its calculation are in the regulations, State DOTs and MPOs are not required to establish or report on performance targets for the Fair classification. However, it is expected that States will monitor and manage the percentage of assets within all three classifications, Good, Fair, and Poor.

Finally, data reporting systems were a major influence on the selection of these six national infrastructure performance measures and their associated metrics. FHWA’s partners were familiar with submitting pavement metric data to the Highway Performance Monitoring System (HPMS) and bridge metric data to the National Bridge Inventory (NBI) database. Incorporating new metric data reporting requirements into established workflows was deemed an efficient solution.

For additional information on how to implement the infrastructure condition performance measures, contact your local FHWA Division Office and visit www.fhwa.dot.gov/tpm.

For a more detailed discussion on how these measures were selected and weighed against stakeholder input, you may review the summary and discussion of comments in the final rule. Links to all the TPM related rulemakings are at www.fhwa.dot.gov/tpm/rule.cfm.

Working together, we can provide strategies to improve our nation and people’s lives through great transportation planning.
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:

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.