Transportation Performance Management: A New Era of Accountability and Reporting

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FHWA - Indiana
Transportation Performance Management is...
Evolution of the Federal Program

- Build
- Expand
- Manage

ISTEA
Program Oversight & Eligibility
Performance Management Oversight

MAP-21

Transportation Performance Management
Example: Evolution of Bridge Program

Pre MAP-21 (Program Oversight & Eligibility)
• HBRRP
• Goal: Reduce ft^2 deficient bridges (On/Off)
• Rehab/Replacement
• Eligibility criteria
• Funding only for bridges

Post MAP-21 (PM Oversight)
• Goal: Maintain bridges in state of good repair
• Focus on the NHS
• Measures: % Good; % Poor; minimum condition level
• New/Rehab/Replacement/PM – BMS
• NHPP: Funding is flexible between all asset classes
### The MAP-21 Charge (23 USC 150(a) - Declaration of Policy)

**Performance Management**

**Will:**
- transform the Federal-aid highway program
- provide a means to the most efficient investment of funds

**By:**
- refocusing on national transportation goals,
- increasing accountability & transparency, and
- improving project decision making
TPM Elements

1. National Goals
2. Measures
3. Targets
4. Plans
5. Reports
6. Accountability and Transparency
National Goal Areas

- Safety
- Infrastructure condition
- Congestion reduction
- System reliability
- Freight movement and economic vitality
- Environmental sustainability
- Reduced project delivery delays
## Rulemakings

<table>
<thead>
<tr>
<th>TPM-Related Rulemakings</th>
<th>Rule Effective Date</th>
<th>Regulatory Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety Performance Measures (PM1)</td>
<td>April 14, 2016</td>
<td>23 CFR 490 (Subpart B)</td>
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<tr>
<td>Highway Safety Improvement Program (HSIP)</td>
<td>April 14, 2016</td>
<td>23 CFR 924</td>
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<tr>
<td>Statewide and Non-Metropolitan Planning; Metropolitan Planning</td>
<td>June 27, 2016</td>
<td>23 CFR 450</td>
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<tr>
<td>Pavement and Bridge Condition Measures (PM2)</td>
<td>May 20, 2017</td>
<td>23 CFR 490 (Subpart C &amp; D)</td>
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<tr>
<td>Performance of the NHS, Freight, and CMAQ Measures (PM3)</td>
<td>May 20, 2017</td>
<td>23 CFR 490 (Subpart E, F, G, H)</td>
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# Measures: Safety (PM1)

<table>
<thead>
<tr>
<th>Measure Area</th>
<th>Performance Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety</td>
<td>• Number of fatalities</td>
</tr>
<tr>
<td></td>
<td>• Fatalities per million vehicle miles traveled</td>
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<tr>
<td></td>
<td>• Number of serious injuries</td>
</tr>
<tr>
<td></td>
<td>• Serious injuries per million vehicle miles traveled</td>
</tr>
<tr>
<td></td>
<td>• Number of non-motorized fatalities and non-motorized serious injuries</td>
</tr>
</tbody>
</table>

The Office of Safety has a website dedicated to this rule:

[https://safety.fhwa.dot.gov/hsip/spm/](https://safety.fhwa.dot.gov/hsip/spm/)
# Measures: Pavement & Bridge Condition (PM2)

<table>
<thead>
<tr>
<th>Measure Area</th>
<th>Performance Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Performance Management Measures to Assess <strong>Pavement Condition</strong></td>
<td>• Percentage of pavements of the Interstate System in Good condition</td>
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<tr>
<td></td>
<td>• Percentage of pavements of the Interstate System in Poor condition</td>
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<tr>
<td></td>
<td>• Percentage of pavements of the non-Interstate NHS in Good condition</td>
</tr>
<tr>
<td></td>
<td>• Percentage of pavements of the non-Interstate NHS in Poor condition</td>
</tr>
<tr>
<td>National Performance Management Measures to Assess <strong>Bridge Condition</strong></td>
<td>• Percentage of NHS bridges classified as in Good condition</td>
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<tr>
<td></td>
<td>• Percentage of NHS bridges classified as in Poor condition</td>
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</tbody>
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# Measures: System Performance & Freight (PM3)

<table>
<thead>
<tr>
<th>Measure Area</th>
<th>Performance Measures</th>
</tr>
</thead>
</table>
| Performance of the National Highway System (NHS) (System Performance) | • **Interstate Travel Time Reliability Measure**: Percent of person-miles traveled on the Interstate that are reliable  
• **Non-Interstate Travel Time Reliability Measure**: Percent of person-miles traveled on the non-Interstate NHS that are reliable |
| Freight Movement on the Interstate System | • **Freight Reliability Measure**: Truck Travel Time Reliability (TTTR) Index |
## Measures: CMAQ Program (PM3)

<table>
<thead>
<tr>
<th>Measure Area</th>
<th>Performance Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measures to Assess the CMAQ Program: Traffic Congestion</td>
<td>• <strong>Peak Hour Excessive Delay (PHED) Measure:</strong> Annual Hours of Peak Hour Excessive Delay (PHED) Per Capita</td>
</tr>
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<td></td>
<td>• <strong>Non-Single Occupancy Vehicle Travel (SOV) Measure:</strong> Percent of Non-Single Occupancy Vehicle (SOV) Travel</td>
</tr>
<tr>
<td>Measure to Assess the CMAQ Program: On-Road Mobile Source Emissions</td>
<td>• <strong>Emissions Measure:</strong> Total Emission Reductions</td>
</tr>
</tbody>
</table>
Performance Reporting

State DOT Progress Reporting Portal

Performance Storytelling

System Performance

U.S. Department of Transportation
Federal Highway Administration
PM1, PM2, and PM3 Reporting Requirements

- PM1 via Annual HSIP Report
- PM2 & PM3 via Biennial Reports
  - Baseline/2-year/4-year (Performance Period Report)
- State and MPO reports on performance targets through planning process

![Graph showing bridge and pavement conditions with percentages for Good, Fair, and Poor categories.](image)
Reported Safety Targets - IN

What was reported to NHTSA and FHWA?

- Indiana Highway Safety Plan (HSA) & Highway Safety Improvement Program (HSIP)
  - Fatalities 846 projected in 2018
    - Target 5-Year Avg. 814.9
  - Fatality rate 1.065 projected in 2018
    - Target 5-Year Avg. 1.036
  - Serious injuries 3,577 projected in 2018
    - Target 5-Year Avg. 3479.8

- HSIP only
  - Serious injury rate 4.379 projected in 2018
    - Target 5-Year Avg. 4.347
  - Non-motorist fatalities & serious injuries 497 projected in 2018
    - Target 5-Year Avg. 417.0
**Transportation Asset Management Plan Rule**

- **Initial** plan due April 30, 2018
- 10-year period
- Bridge and Pavement assets on the NHS
- Relies on Pavement and Bridge Management Systems
  - Meet minimum requirements and
  - Must be used to develop the asset management plan

![Projected Funding Levels]

- Pavement Program
- Bridge Program
- Culvert Program

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U.S. Department of Transportation
Federal Highway Administration
TPM Roles and Responsibilities

• USDOT: Establish Target Setting Rules
  o Establish measures; identify data sources; define metrics
  o Report to Congress/others
  o Stewardship and oversight

• States and MPOs: Implement Target Setting Rules
  o Establish and report on targets
  o Support national goals in the planning process and consider measures and targets in long range plans and programs
Your Go-To Resource for TPM