Transportation Performance Management: What’s Next

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City of Hampton
What is Transportation Performance Management (TPM)?

A strategic approach that uses system information to make investment and policy decisions to achieve transportation system performance goals.
Performance Management is Not New

Federal-aid Highway Act, 1956

Project Oversight

ISTEA 1991

Process Review

MAP-21/FAST Act 2012/2015

Manage

Outcome Performance

Build

Expand
MAP-21/FAST Act is Consistent with Best Practice

- Goals/Objectives
- Performance Measures
- Target Setting
  - Evaluate Programs, Projects & Strategies
- Allocate Resources
  - Budget and Staff
- Measure, Evaluate and Report Results
  - Actual Performance Achieved
- Quality Data
MAP-21/FAST Act and TPM

• MAP-21/FAST Act contains several provisions that require USDOT and partner organizations to implement performance-based Federal-aid Programs

• Transportation performance management represents the opportunity to:
  – Prioritize needs
  – Align resources for optimizing system performance in a collaborative manner
TPM Elements

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

MAP-21 Enactment

Rulemaking

Planning & Target Setting

Reporting and Assessment
1. National Goal Areas

- Safety
- Infrastructure condition
- Congestion reduction
- System reliability
- Freight movement and economic vitality
- Environmental sustainability
- Reduced project delivery delays
MAP-21/FAST Act Performance Measure Requirements

USDOT establishes national performance measure areas within:

• Highway Safety Improvement Program (HSIP)
• National Highway Performance Program (NHPP)
• Congestion Mitigation and Air Quality Improvement (CMAQ) Program
• National Highway Freight Program (NHFP)
### MAP-21/FAST Act Requirements: HSIP

<table>
<thead>
<tr>
<th>Measure Area</th>
<th>Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of fatalities</td>
<td><em>All public roads</em></td>
</tr>
<tr>
<td>Rate of fatalities per vehicle miles traveled</td>
<td></td>
</tr>
<tr>
<td>Number of serious injuries</td>
<td></td>
</tr>
<tr>
<td>Rate of serious injuries per vehicle mile traveled</td>
<td></td>
</tr>
<tr>
<td>Number of Non-motorized Fatalities and Serious Injuries</td>
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</table>
## MAP-21/FAST Act Requirements: NHPP

<table>
<thead>
<tr>
<th>Measure Area</th>
<th>Scope</th>
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<tbody>
<tr>
<td>Pavement condition</td>
<td>• Interstate System</td>
</tr>
<tr>
<td></td>
<td>• National Highway System (NHS)</td>
</tr>
<tr>
<td>Bridge condition</td>
<td>• NHS</td>
</tr>
<tr>
<td>System Performance* (e.g., system reliability)</td>
<td>• Interstate System</td>
</tr>
<tr>
<td></td>
<td>• NHS</td>
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</table>
MAP-21/FAST Act Requirements:

**CMAQ**

<table>
<thead>
<tr>
<th>Measure Area</th>
<th>Scope</th>
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<tbody>
<tr>
<td>Traffic congestion</td>
<td>Defined in NPRM</td>
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<tr>
<td>On-road mobile source emissions</td>
<td>Define in NPRM</td>
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</table>
MAP-21/FAST Act Requirements: NHFP

<table>
<thead>
<tr>
<th>Measure Area</th>
<th>Scope</th>
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<tbody>
<tr>
<td>Freight movement</td>
<td>Interstate System</td>
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</table>

* ‘ Freight movement’ will be defined by rulemaking
# Data Sources for Proposed Performance Measures

<table>
<thead>
<tr>
<th>Data Sources</th>
<th>Applicable Measures (Proposed 23 CFR §490)</th>
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</thead>
<tbody>
<tr>
<td>Fatal Analysis Reporting System (FARS) and State Reported Serious Injury Data</td>
<td>• Safety Performance Measures</td>
</tr>
<tr>
<td>National Bridge Inventory (NBI)</td>
<td>• NHS Bridge Condition Performance Measures</td>
</tr>
<tr>
<td>Highway Performance Monitoring System (HPMS)</td>
<td>• Safety Performance Measures</td>
</tr>
<tr>
<td></td>
<td>• Pavement Condition Performance Measures</td>
</tr>
</tbody>
</table>

Note: Measures, data sources and calculations are all proposed and can change with Final Rule publication.
Roles and Responsibilities: USDOT

- Rulemaking to define measures, significant progress and reporting requirements
- Report to Congress
- Stewardship and oversight of the process
  - Capacity building support to State DOTs, MPOs and public transportation agencies

U.S. Department of Transportation
TPM Elements—What’s Next?

1. National Goals
2. Measures
3. Targets
4. Plans
5. Reports
6. Accountability and Transparency
What are Performance Targets?

• Specific numerical figures with expected future performance (e.g., X decrease in traffic fatalities in Y years)

• VDOT and MPOs set their own targets, but must coordinate

• Target setting is iterative and ongoing
Why Set a Target?

• Provide guidance on prioritization and allocation of resources
• Focus on the connection between actions and results
• Clarify outcomes the agency is trying to achieve
• Hold the agency accountable for performance
• Highlight where more resources are best deployed
• Manage expectations
• Foster conversation about performance
• Measure incremental progress towards achieving a goal or objective
What is Target Setting?

- A data-driven collaborative **process** that determines what an agency realistically expects to achieve within a specific time frame.
- Targets are used in relation to measures to assess progress toward achieving strategic goals and objectives, inform programmatic adjustments, consider tradeoffs and risks in achieving objectives, and communicate with stakeholders.
Steps to Effective Target Setting for Transportation Performance Management

- Pavements
- Bridges
- Safety
- Mobility
- Freight Movement
- Congestion Mitigation and Air Quality
- Project Delivery
Target Setting in Every Day Life

New Year’s Resolution

Athletic Improvement
Roles and Responsibilities: VDOT

- Set targets for each performance measure
- Report performance and targets to FHWA (USDOT)
- Incorporate national goals, performance measures and targets into Long-Range Statewide Transportation Plans and STIPs
- Develop performance plans in other program areas
- Oversee collaborative TPM process
MAP-21/FAST Act Performance Target Setting Requirements: States

After the USDOT Final Rule, States:

• Are required to set performance targets for all measures within one year

• May set different targets for urbanized and non-urbanized areas

• Coordinate with MPOs and public transportation providers when setting performance targets

• Incorporate measures and targets into plans
MAP-21/FAST Act Performance Target Setting: Related Requirements

- Infrastructure Condition – minimum thresholds for bridge and pavement condition
- Safety – special rules for high risk rural roads and drivers/pedestrians 65 and over
Roles and Responsibilities: MPOs

- Set targets for each performance measure
- Report performance and targets to State DOTs
- Incorporate national goals, performance measures and targets into Metropolitan Transportation Plans and TIPs
MAP-21/FAST Act Performance Target Setting Requirements: MPOs

After States set targets, MPOs are required to:

• Set performance targets for all measures within **180 days** of VDOT-set targets
• Coordinate with VDOT and other agencies or partners when setting targets
• Communicate their targets to VDOT for inclusion in the Long-Range Statewide Transportation Plan
• Develop a system performance report as part of the MPO Metropolitan Transportation Plan
Considerations for Target Setting

- Define current conditions
- Examine factors influencing target setting:
  - External trends
  - Organizational culture and goals
  - Policy considerations
  - Availability of funding and other resources
Considerations for Target Setting (cont.)

• Establish target performance level
  – Policy-driven
  – Consensus-based
  – Customer feedback
  – Benchmarking

• Monitor and assess progress
Data Trend Analysis for Target Setting

- Assemble historical measure data
- Plot Data and Draw Trend
- Decide on the best trend line to represent that data
Targets Support TPM and Performance-based Planning

Quality Data and Public Involvement

PLANNING

Strategic Direction
Where do we want to go?
- Goals and Objectives
- Performance Measures

Analysis
How are we going to get there?
- Identify Trends and Targets
- Identify Strategies and Analyze Alternatives
- Develop Investment Priorities

Programming
What will it take?
- Investment Plan
- Resource Allocation
- Program of Projects

Implementation and Evaluation
How did we do?
- Monitoring
- Evaluation
- Reporting
Purpose of MAP-21 Target Setting

- Communicate what can be achieved with the resources available
- Connect plans, programs, and delivery to achieve targets
- Coordinate with all stakeholders to set targets, where appropriate
Coordination on Target Setting

• States, MPOs and transit agencies have overlapping responsibility for performance measurement

• Collaborating on target setting is critical – States and MPOs will draw from the same data sources and will want to collaborate on assumptions

• Agencies may have different priorities

• Target setting implies tradeoffs across program areas -- made through the planning process
Role of USDOT in Target Setting

- Provide assistance to State DOTs, MPOs & public transportation providers
- Provide oversight of target setting and coordination
- Assess progress towards targets
Target Setting Coordination – Missouri DOT

- Overall Summary
- Survey of MPO needs
- Regular coordination calls

Status of National Performance Measures

**How it Started**
In 2012, the Moving Ahead for Progress in the 21st Century Act became the first surface transportation act to require national performance measures. Specific measures were required for seven goal areas:
- Safety
- Infrastructure Condition
- System Reliability
- Congestion Reduction
- Environmental Sustainability
- Freight Movement and Economic Vitality
- Reduced Project Delivery Delays

**What’s Happened So Far**
Over the past 18 months, the Federal Highway Administration has used the rulemaking process to collect inputs from national, state, and local agencies regarding the most practical data collection, analysis and target setting toward reporting progress. To date, the safety goal has completed its initial rulemaking process with final rule expected by September 2015. The infrastructure condition goal has a process and the remaining system performance goal areas are expected to begin this spring. In addition to the performance measure goals, the metropolitan and statewide planning process has completed final rule expected by September 2015.

**What’s Next**
Once the final rules are published, the development process will turn to target setting. Staff from MoDOT and local planning partners will work together to establish targets and then to integrate those targets into performance-based plans.

The areas where most assistance is needed are listed below in rank order:

<table>
<thead>
<tr>
<th>Assistance Needed in</th>
<th>A lot</th>
<th>Some</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrating data</td>
<td>6</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Setting targets</td>
<td>5</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Driving organizational change through effective performance management</td>
<td>5</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Processing data to develop metrics</td>
<td>4</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Reporting performance</td>
<td>4</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Understanding MAP-21 requirements/expectations</td>
<td>3</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Coordinating with other entities</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

**System Performance Measures**

MoDOT May 2015
Target Setting Coordination – Washington State DOT
TPM and Performance-Based Planning and Programming

**Definition of Transportation Performance Management:**
A strategic approach that uses system information to make investment and policy decisions to achieve system performance goals.

*Focus of MAP-21/FAST Act*

*Focus of the planning and programming process*

*Focus of performance management and planning*
• A by-product of target setting is that it helps to see how much there is available to invest in each goal area
• For more information, contact:

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