Transportation Performance Management

Safety Performance Management
Target Setting Roles and Responsibilities

December 12, 2016
California’s Target Setting Workshop
Pete Stephanos, FHWA
Agenda

• Overview of Safety PM Regulation
• Target Setting Roles and Responsibilities
  o State DOT
  o MPOs
• Integrating TPM into the planning process
• Questions
Major Provisions in the FHWA Safety PM Final Rule (23 CFR 490)

- 5 Safety Performance Measures
  - Number of Fatalities
  - Rate of Fatalities per 100 M VMT
  - Number of Serious Injuries
  - Rate of Serious Injuries per 100 M VMT
  - Number of Non-motorized Fatalities and Non-motorized serious injuries

- Process for State DOTs and MPOs to establish & report on their targets

- Process for FHWA to assess whether a State has met or made significant progress in achieving targets

- Established a common national definition for serious injuries
Safety Target Setting

• TPM is designed to increase transparency and accountability
• Targets should be data-driven and evidence based
• States should communicate the data and available resources to the public and decision makers
• Targets will be shared on a national website along with targets from all other States.
• The State and MPOs are responsible for establishing targets.
Caltrans’ TPM Noteworthy Practices

- Created TPM work groups
- Established a working relationship with Federal and State agencies
- Hosted several TPM related workshops
- Being transparent to the public (Mile Marker publication)
Target Setting Coordination Roles and Responsibilities

- Inclusive collaboration with all stakeholders
- Everyone has a seat at the table
- Engagement and input from all
- Partners determine target setting coordination process
Most States are assembling work groups (process)
Meeting regularly to discuss methodology and gain consensus on targets
Good coordination requires regular interaction, periodic meetings
As targets are set, partners should discuss a plan to ensure targets are met
Remember:
  - It will take time to master a process
  - Always look for process improvement opportunities
  - Process and methodologies might look different as annual targets are set
State DOT Targets

- The State DOT owns the State target
  - Assembles all stakeholders to work together during process
  - Ensures coordination between State DOT and MPOs
  - Ensures coordination between State DOT and SHSO
  - Reports the target to FHWA
  - Monitors and works to ensure targets are achieved
MPO Targets

- Assembles stakeholders to work together during target setting process
- Ensures coordination between State DOT and MPOs
- Reports targets to State DOT
- Monitors and works to ensure targets are achieved
MPO Targets Continued

• If a MPO decides to support the State DOT target:
  o MPO works with the State and safety stakeholders to address areas of concern within their MPO planning area
  o MPO continues to implement projects in their MTP and TIP to improve safety

• If a MPO establishes their own target:
  o MPO establishes the target for all public roads in the planning area
  o MPO owns their target
  o MPO continues to implement projects in their MTP and TIP to improve safety
Accountability - State DOT

• State DOTs are held accountable to meeting targets through the safety performance regulation.
• 4 out of 5 safety performance measures must either be:
  o Met
  o Better than baseline

• Consequence for not meeting targets:
  o Submit Implementation Plan
  o Use HSIP safety funds only for safety projects
Accountability - MPOs

- MPOs are held accountable to achieving targets through the planning process not the safety PM regulation
- As part of the TMA certification review and Federal Planning Finding
- FHWA will offer technical assistance to MPOs
MPO Documents

• MPOs are required to include their targets in:
  o MTP and TIP
  o A description of the measures and targets and their anticipated effects
  o This can be more general and include information on how the goals, objectives and strategies in the MTP or the program of projects in the TIP work towards meeting MPOs targets or supporting the State DOT targets

• System Performance Report
  o Must include information about baseline data and progress the MPO has made in achieving their targets
Purpose and scope of the planning process

• Continuing, cooperative, and comprehensive performance-based multimodal transportation planning process that supports national goals
• State and MPO coordination to select performance targets
• Goals, objectives, performance measures, and performance targets from other processes, programs, and plans integrated into the planning process
• Measures and targets considered in policies, programs, and investment priorities

Planning agreements

• Written provisions for cooperatively developing and sharing information related to performance data, target selection and reporting, performance reporting, and data collection for the State asset management plan

Long-range transportation plans

• Description of performance measures and targets
• System performance reports evaluating condition and performance

Transportation improvement programs

• Investment priorities linked to performance targets
• Discussion of program’s anticipated effect toward achieving targets
Integrating Target Setting into the Planning Process

- Aligning performance targets with long-term planning goals
- Balancing performance tradeoffs
### Integrating Target Setting into the Planning Process

18 months until safety targets required in planning processes

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<td><strong>18 months</strong></td>
<td><strong>15 months</strong></td>
<td><strong>9 months</strong></td>
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### MPO Safety Targets

- **27**

### State Safety Targets

- **31**

### Planning Rule Phase-in

- **27**
TPM Capacity Building Program
What is the TPM Toolbox?

Peer Exchange  
(May 9-10, 2016)

Workshops  
(Missouri – Pilot, Aug 24-25, Michigan –Sept. 29-30)

Spur adoption and advancement of TPM
TPM Framework

A1 Leadership Team Support
A2 Roles & Responsibilities
A3 Training & Workforce Capacity
A4 Management Process Integration

A Organization & Culture
A1 Leadership Team Support
A2 Roles & Responsibilities
A3 Training & Workforce Capacity
A4 Management Process Integration

B External Collaboration & Coordination
B1 Planning & Programming
B2 Monitoring & Reporting

C Data Management
C1 Data Quality
C2 Data Accessibility
C3 Data Standardization & Integration
C4 Data Collection Efficiency
C5 Data Governance

D Data Usability & Analysis
D1 Data Exploration & Visualization
D2 Performance Diagnostics
D3 Predictive Capabilities

01 Strategic Direction
1.1 Goals & Objectives
1.2 Performance Measures

02 Target Setting
2.1 Technical Methodology
2.2 Business Process

03 Performance-Based Planning
3.1 Strategy Identification
3.2 Investment Prioritization

04 Performance-Based Programming
4.1 Programming Within Performance Areas
4.2 Programming Across Performance Areas

05 Monitoring & Adjustment
5.1 System Level
5.2 Program/Project Level

06 Reporting & Communication
6.1 Internal Reporting & Communication
6.2 External Reporting & Communication
CMM: Capability Maturity Model

Each Component and subcomponent has common elements:

**Definition**
- A set of coordinated activities for maximizing the value of data to an organization. It includes data collection, creation, processing, storage, backup, organization, documentation, protection, integration, dissemination, archiving, and disposal. Well-managed data are essential for a robust TPM practice.

**C.1. Data Quality**
- Processes and organizational functions to ensure data are accurate, complete, timely, consistent with requirements and business rules, and relevant for a given use.

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<th>Level</th>
<th>Description</th>
<th>ACTIONS to move to next level</th>
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<td>INITIAL</td>
<td>Performance data quality issues that are identified are addressed on an ad-hoc basis rather than through a systematic process. Metrics for data quality have not been established and quality expectations have not been discussed.</td>
<td>Initiate an effort to develop data quality standards based on anticipated uses for each performance data set.</td>
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<td>DEVELOPING</td>
<td>Data quality metrics and minimum acceptable standards are being defined for performance data sets - considering accuracy, completeness, consistency, and timeliness. Data quality assurance and validation methods are being developed.</td>
<td>Define and document data quality standards and protocols for data quality assurance and certification.</td>
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<td>DEFINED</td>
<td>Data quality metrics and standards have been defined and documented for performance data sets. Baseline data quality has been measured and a plan for data quality improvement is in place. Business rules for assessing data validity have been defined. Standard protocols for data quality assurance and certification or acceptance have been established.</td>
<td>Share information about the quality of performance data sets with data users. Implement data quality assurance and certification processes.</td>
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<td>FUNCTIONING</td>
<td>Users of performance data have an understanding of their level of accuracy, completeness, consistency and timeliness. Standard data quality assurance processes are routinely followed. New data collected are reviewed against historical data to identify unexpected changes warranting investigation. Data collection personnel are trained and certified based on demonstrated understanding of standard practices.</td>
<td>Automate data quality assessment and cleansing processes, and modify data entry applications (where practical) to validate data at the point of input. Regularly assess data quality processes to identify improvements.</td>
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<td>SUSTAINED</td>
<td>Data quality assurance processes are regularly improved based on experience and user feedback. Data validation and cleansing tools are used to identify and address missing, or invalid values. Business rules for data validity are built into data entry and collection applications.</td>
<td>Initiate an effort to develop data quality standards based on anticipated uses for each performance data set.</td>
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5 maturity level descriptions
TPM Guidebook

- Focuses on “how” rather than “what”
- Majority of guidebook devoted to implementation steps and related agency examples
- Self-contained and modular
- Note: *not intended for regulatory compliance*
Toolbox - [https://www.tpmtools.org/](https://www.tpmtools.org/)

TPM Toolbox
Development site. Demo only.

This is a draft web site for the FHWA Transportation Performance Management (TPM) Technical Assistance Program.

Learn more about the TPM tools

TPM Guidebook
The TPM Implementation Guidebook provides clear practical actionable steps that state DOT leadership, management, and staff can implement to enhance performance management practices.

Self-Assessment
The TPM self-assessment helps to determine your organization's level of performance management maturity. You can customize the self-assessment using the tools on this site.

TPM Resources
The TPM Resources Library contains best practices, precedents, and other helpful resources. Browse the library or quickly navigate to a specific document using our search tools.

About the site
This is a preliminary draft of the web resource for the FHWA Transportation Performance Management (TPM) Technical Assistance Program. It contains the first pieces of the proposed outline and content of the TPM Implementation Guidebook. This document is intended to provide clear practical actionable steps that state DOT leadership, management, and staff can implement to enhance performance-management practices. The Guidebook will use case studies and illustrative examples to demonstrate how performance management results in improved decision-making through better-informed planning, programming, monitoring and reporting.
8 Training Courses

MAP-21 TPM 101 Course

MAP-21 TPM 201 Courses

Target Setting

Data Management

Safety
Pavement
Bridge
Planning
Congestion/Air Quality/Freight

Delivery Models
Pooled Fund Coordination
Other Training Needs
Capacity Building Assistance Requests

TPM Professional Capacity Building Assistance Request Form

The overarching goal of the Federal Highway Administration (FHWA) Transportation Performance Management (TPM) Professional Capacity Building Program (PCB) is to ensure that federal, state departments of transportation (SDOT), metropolitan planning organizations (MPO), transit, and local partners are prepared to carry out performance-based transportation decision-making. Training and programmatic assistance is primarily provided through:

- Training opportunities (pdf, 0.2 mb)
- TPM Workshops and Peer-to-Peer assistance (pdf, 0.2 mb)
- Direct programmatic assistance from FHWA, other partner agencies, and other organizations via phone calls, web conferences, emails, general instruction, or site visits.

Eligibility

Any public authority or transportation entity may apply for programmatic assistance for the TPM PCB assistance.

TPM Request Form

Please complete the form below to request TPM programmatic assistance. FHWA will respond to all requests with recommendations on options for support and assistance.

* Required Fields

- First Name:
- Last Name:
- Organization:
- City: