

TPM Technical Implementation Workshop

---

# *Performance Based Planning and Programming (PBPP)*

Harlan Miller, Office of Planning

Phoenix, AZ

September 13 and 14, 2017



U.S. Department of Transportation  
Federal Highway Administration



---

## *Learning Objectives*

- Implementation timeline
- Federally required performance measures
- PBPP requirements
- PBPP guidance
- PBPP resources
- Hear from regional leaders
- Questions



## Implementation Timeline

Final Rule	Effective Date	States Set Targets By	MPOs Set Targets By	LRSTP, MTP, STIP and TIP Inclusion
Safety Performance Measures (PM1)	April 14, 2016	Aug. 31, 2017	Up to 180 days after the State sets targets, but not later than Feb. 27, 2018	Updates or amendments on or after May 27, 2018
Pavement/ Bridge Performance Measures (PM2)	May 20, 2017	May 20, 2018	No later than 180 days after the State(s) sets targets	Updates or amendments on or after May 20, 2019
System Performance Measures (PM3)	May 20, 2017	May 20, 2018	No later than 180 days after the State(s) sets targets	Updates or amendments on or after May 20, 2019



---

## *Safety Performance Measures*

Five annual safety targets are required for State DOTs and MPOs:

- Number of fatalities
- Number of serious injuries
- Rate of fatalities per 100 million VMT
- Rate of serious injuries per 100 million VMT
- Number of nonmotorized fatalities and nonmotorized serious injuries



---

# *Pavement Condition Performance Measures*

Four pavement measures:

- % of Interstate pavements in Good condition
- % of Interstate pavements in Poor condition
- % of non-Interstate NHS pavements in Good condition
- % of non-Interstate NHS pavements in Poor condition



---

# *Bridge Condition Performance Measures*

Two bridge measures:

- % of NHS bridges by deck area classified in Good condition
- % of NHS bridges by deck area classified in Poor condition



---

## *System Performance Measures*

Two system performance measures:

- % of reliable person-miles traveled on the Interstate
- % of reliable person-miles traveled on the non-interstate NHS



---

## ***Freight Movement on the Interstate Measure***

One freight performance measure:

- Truck travel time reliability on the Interstate system (average truck reliability index)



## ***CMAQ Measures***

Two measures:

- Traffic congestion
  - Peak Hour Excessive Delay (PHED) measure: annual hours of PHED per capita
  - Non-Single Occupancy Vehicle Travel (SOV) measure: % of non-SOV travel
- On-road mobile source emissions
  - Total emission reductions



# PBPP and TPM: Bringing It All Together



PBPP Framework	PBPP Element	TPM Framework	TPM Elements
<b>Strategic Direction</b> <i>(Where do we want to go?)</i>	Goals and Objectives Performance Measures	National Goals Measures	Goals and Objectives Performance Measures
<b>Performance Based-Planning (Analysis)</b> <i>(How are we going to get there?)</i>	Identify Targets and Trends Identify Strategies Develop Strategy/Investment Priorities <i>Results in long-range plans</i>	Targets Plans	Targets: Technical Approach and Business Process  Strategy Identification Investment Prioritization
<b>Performance Based-Programming</b> <i>(What will it take?)</i>	Investment Plan Resource Allocation Program of Projects	Plans	Programming Within Program Areas Programming Across Program Areas
<b>Implementation and Evaluation</b> <i>(How did we do?)</i>	Reporting Monitoring Evaluation	Reports Accountability Transparency	Monitoring & Adjustment (System, Program, Project) Reporting & Communication (Internal & External)
<b>Cross-Cutting Elements</b> <i>(Apply to Entire Framework)</i>	Public Involvement Data Management Data Analysis		Organizational Culture External Collaboration & Coordination Data Management Data Usability & Analysis



---

## ***PBPP: Target-Setting Coordination***

States and MPOs shall coordinate when setting targets to ensure consistency to the maximum extent practicable

---

## ***PBPP: Target-Setting Coordination***

### MPO Target Setting

- An MPO may establish its own quantifiable performance targets or
- An MPO may adopt a State's performance targets and support the State's efforts at achieving those targets

Either way, the MPO is establishing targets



---

## *Group Exercise*

Discuss how the State and MPO(s) are coordinating in your State on:

- Target setting
- Data collection
- Data analysis
- Progress reporting
- Data for the NHS asset management plan

---

## ***PBPP: Planning Agreements***

MPO(s), State DOTs, and Public Transit Agencies shall establish written agreements for a metropolitan area describing roles and responsibilities for PBPP including:

- Coordination on target setting
- Data collection
- Data analysis
- Reporting on progress toward target achievement
- Data collection for the NHS asset management plan

---

## ***PBPP: Integration of Other PB Plans***

The goals, objectives, performance measures, and targets from other performance based plans and programs shall be integrated into the transportation planning process

- Examples:
  - Highway and transit asset management plans
  - Strategic Highway Safety Plan
  - Freight plans
  - Congestion management process (CMP) and plan

---

## ***PBPP: MTP and LRSTP***

The MTP and LRSTP shall include:

- Performance measures and targets
- A description of progress made toward target achievement since the plan's last update



---

## ***PBPP: STIP and TIP***

- The TIP shall be designed to promote achievement of the performance targets in the plan
- The STIP and TIP shall, to the maximum extent practicable, describe how the investments in the STIP and the TIP make progress toward achievement of the targets in the plan.



---

## ***PBPP: Guidance***

- LRSTP/MTP guidance
  - Measures and targets
  - Progress on target achievement
- STIP/TIP guidance
  - Description of how the STIP/TIP helps achieve targets in the LRSTP/MTP

---

## ***PBPP/TPM Resources***

- Planning Capacity Building Website:  
<http://www.planning.dot.gov>
- TPM Website: <http://www.fhwa.dot.gov/tpm/>
- Asset Management Website:  
<http://www.fhwa.dot.gov/asset/>
- FHWA MAP-21 Website:  
<http://www.fhwa.dot.gov/map21>



---

# ***PBPP/TPM Resources***

- **Currently Available**

- NHI-138007: Performance-based Planning and Programming
- NHI-151053: Transportation Planning Process
- NHI-138004: TPM Overview for the MAP-21 and FAST Acts
- NHI-138011: The Role of Data in TPM
- NHI-138006: TPM for Safety
- NHI-138012: Steps to Effective Target Setting for TPM

- **In Development**

- NHI-136106 and 136106B: TPM – Transportation Asset Management and Asset Management Plans (being revised)
- NHI 136002: Financial Planning for Transportation Asset Management
- NHI-138005: TPM Overview (web-based)
- NHI-138008: TPM for Bridges
- NHI-138009: TPM for Pavement
- NHI-138010: TPM for Congestion (Including Freight)



---

## ***PBPP/TPM Resources***

- TPM Capability/Maturity Model Workshop

## ***TPM Resources***

- Safety Performance Measures: Met or Made Significant Progress Determination Fact Sheet:  
[https://safety.fhwa.dot.gov/hsip/spm/pm\\_progress\\_fs.cfm](https://safety.fhwa.dot.gov/hsip/spm/pm_progress_fs.cfm)
- Technical Guidance to Support Local Computation of VMT-based Safety Performance Targets:  
[https://www.fhwa.dot.gov/planning/processes/tools/technical\\_guidance/index.cfm](https://www.fhwa.dot.gov/planning/processes/tools/technical_guidance/index.cfm)
- Operations Performance Management:  
[https://ops.fhwa.dot.gov/perf\\_measurement/](https://ops.fhwa.dot.gov/perf_measurement/)

# *Region Leaders: Local Examples*



U.S. Department of Transportation  
Federal Highway Administration



---

## *Contacts*

For questions or more information, please contact:

Office of Planning:

*Harlan Miller*, [Harlan.Miller@dot.gov](mailto:Harlan.Miller@dot.gov), 202-366-0847

*Corbin Davis*, [Corbin.Davis@dot.gov](mailto:Corbin.Davis@dot.gov), 202-366-6072





*Questions?*



U.S. Department of Transportation  
Federal Highway Administration

