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TRANSPORTATION RESEARCH BOARD

Enter the Portal - The Transportation Performance Management (TPM) Portal

August 12, 2020

@NASEMTRB
#TRBwebinar

PDH Certification Information:

1.5 Professional Development Hour (PDH) – see follow-up email for instructions
You must attend the entire webinar to be eligible to receive PDH credits
Questions? Contact Reggie
Gillum at <u>RGillum@nas.edu</u>

#TRBwebinar

The Transportation Research Board has met the standards and requirements of the Registered **Continuing Education Providers** Program. Credit earned on completion of this program will be reported to RCEP. A certificate of completion will be issued to participants that have registered and attended the entire session. As such, it does not include content that may be deemed or construed to be an approval or endorsement by RCEP.



REGISTERED CONTINUING EDUCATION PROGRAM

Learning Objectives

List resources and utilize tools available on the TPM Portal





Introduction to the TPM Portal

Christos S. Xenophontos, *Rhode Island Department of Transportation* Perry Lubin, *Spy Pond Partners, LLC*

8/12/2020



The AASHTO TPM Portal helps to showcase best practices, foster collaboration, and serve as a repository for TPM resources.

AASHTO Transportation



Developed through the Transportation Pooled Fund Program

1. TPM Portal Introduction



A web application and knowledge hub

- Developed through NCHRP Project 20-24(97)
- Stewarded by AASHTO's CPBM
- Expanded and sustained by the TPM Pooled Fund



- Events
- Tools
- Trainings
- Community
- Videos
- Publications

"A one-stop-shop for TPM practitioners."



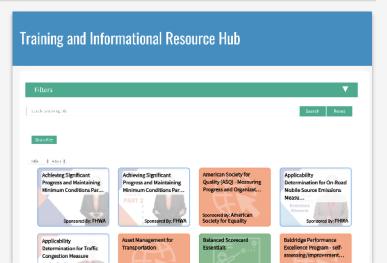
Three highlights:

- TPM Training Hub
- TPM Now! Video Series
- TPM Webinar Series



TPM Training Hub:

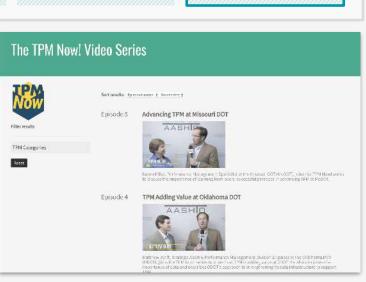
- Trainings from many providers, collected and indexed in one location
- Build TPM skills at your own pace





TPM Now! Video Series:

- Reflections from TPM practitioners and leaders
- Insightful, conversational, accessible



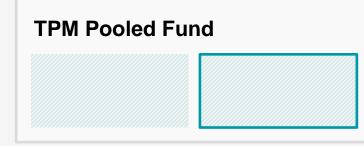


TPM Webinar Series:

- Highlight noteworthy practices and insights
- Introductions to key TPM topics







TPM Pooled Fund Page:

 Password-protected TPM Pooled Fund page TPM

The AASHTO TPM Portal helps to showcase best practices, foster collaboration, and serve as a repository for TPM resources.

AASHTO Transportation Management Hub AASHTO TAM Portal AASHTO ERM Portal

HOME RESOURCES EVENTS TOOLS COMMUNITY ABOUT About the TFM Pooled Fund About the Roadmap

TPM Transportation Pooled Fund

The focus of this pooled fund project is to research and assess training and educational needs of contributing members, develop and deliver training, and to facilitate the sharing and retention of performance management best practices. This website is being developed as part of this effort, to showcase PM best practices, foster collaboration, and serve as a repository for PM resources. The Transportation Pooled Fund (TPF) Program has existed for more than 20 years. It is a popular means for State Department of Transportation (DOT), commercial entities, and Federal Highway Administration (FHWA) program offices to combine resources and achieve common research goals.

Pooled fund members should log in here.

To request access to the TPM Pooled Fund page, please fill out the form here.

contact@tpmportal.com





AASHTO TRANSPORTATION PERFORMANCE MANAGEMENT PORTAL Developed through the Transportation Pooled Fund Program

Just released: The new MODAT Investment Decision Making Tool is now available. Learn more ...

AASHTO TPM Portal

The AASHTO TPM Portal helps to showcase best practices, foster collaboration, and serve as a repository for TPM resources. See the FHWA TPM website for federal requirements.

News and Announcements

New TPM Target Setting Five-Part Webinar Miniseries This used at webinar miniseries features for epicodes, such covering a differensepter at TPM. Read more

New TPM Training Hub

The Training Hull Nation's a collection of TPM training and information remains...Read more

Featured Video

TPM Now! Episode 7



More videos...

Featured Resources













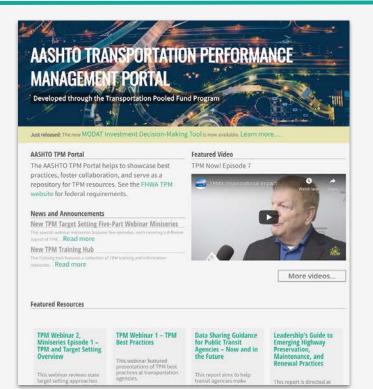


- Designed to help practitioners find what they need quickly
- The portal is organized into the following menu items:
 - Homepage
 - Resources
 - Events
 - Tools
 - Community
 - About





- News and Announcements
- Featured Resources
- Featured Events
- A Calendar of Upcoming Events
- Option to Subscribe for Portal Updates





- Resource Library
- Training and Informational Resource Hub
- TPM Now! Videos
- Legislative and Regulatory Requirements
- Transportation Agency Examples
- TPM Research Roadmap



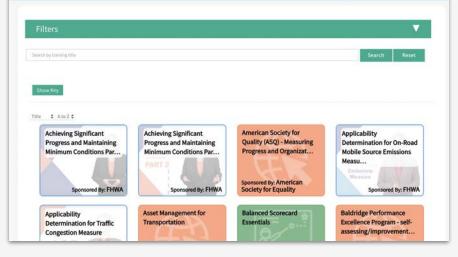
- Sort, Search, and Filter through the entire TPM Portal resource repository
- Resources can be filtered by:
 - Performance Area
 - TPM Category
 - \circ Location
 - Format
 - Focus

TPM Resource Library	
TPM Resources	
Filter results	Sort results: Post date • Newerfinit •
Search Results	Matching Resources
Search the library by title	1. TPM Webinar 2, Miniseries Episode 1 – TPM and Target Setting Overview
Search	This webinar reviews state target setting approaches and lessons learned leading up to the mid-performance period progress report. 2. State DOT COVID-19 Response Survey: Use of Transportation Data and Information for Decision Makers
Performance Area	This document summarizes results of an AASHTO survey on transportation agency responses to COVID-19. 3. TPM Webinar 1 – TPM Best Practices This webinar featured presentations of TPM best practices at transportation agencies.
TPM Category	4. "COVID-19 and Data" CPBM System Mobility and Emerging Technology Subcommittee Bi-Monthly Meeting In light of the current COVID-19 crisis, the CPBM System Mobility and Emerging Technology Subcommittee
Location	hosted a webinar-style meetingin place of their usual bi-monthly conference callto share resources relevant to the COVID-19 pandemic. 5. Data Sharing Guidance for Public Transit Agencies – Now and in the Future
Format	This report aims to help transit gencies make decisions about data sharing by outlining how agencies can evaluate the benefits, costs, and risks of sharing data. 6. A Guidebook for Sustainability Performance Measurement for Transportation
Focus	 A Guidebook for Sustainability Periormance Measurement for Transportation Agencies NCHRP Report 706 provides an overview of sustainability in relation to the transportation industry, including an exploration of performance measures that can help agencies assess their sustainability goals. Leadership's Guide to Emerging Highway Preservation, Maintenance, and
Reset	Renewal Practices This report is directed at transportation agency leaders with the goal of stimulating interest in emerging
	highway infrastructure practices. e. Practitioner's Guide to Emerging Highway Preservation, Maintenance, and Renewal Practices This report is directed at transportation practitioners and provides 16 best practices for highway preservation,
	 In steport is directed at transportation practicioners and provides to beet practices for highway preservation, maintenance, and renewal. Existing and Emerging Highway Infrastructure Preservation, Maintenance, and Renewal Definitions, Practices, and Scenarios This devices to the provides of the



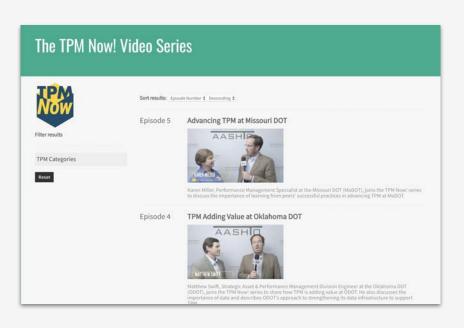
 Sort, Search, and Filter through the best selection of instructor-led training, web-based TPM training and video information

Training and Informational Resource Hub





- A web video series created to share transportation performance management (TPM) insights and experiences
- Each episode features an interview with a leader in the TPM community





Legislative and Regulatory Requirements

 A page for resources specifically relevant to legislative and regulatory provisions related to TPM

Legislative and Regulatory Resources

This page includes resources addressing legislative and regulatory requirements pertaining to performance management.

See the FHWA TPM website for federal requirements.

Resources

- 1. 2019 Transportation Performance Management Peer Exchange Summary Report TPM Pooled Fund / 2020 2. Performance Management Reporting Peer Exchange Final Report – NCHRP Project 20-24 Task 124 TBM / 20-24 Task 124 / 2019
- Missouri CAMPO MPO Safety and Transit Targets TIP Update MoDOT / 2018
- 4. Ohio DOT: Making the Pavement Management System Work to Support Asset Management 2018 San Diego TRB TAM Conference / 2018
- NYSDOT's System of Engagement 2018 San Diego TRB TAM Conference (2018)
- 6. Rural County Pavement Preservation Planning in Minnesota 2018 San Diego TRB TAM Conference
- Implementation of a MODA Approach for Prioritization of Asset Investments for Caltrans 2018 San Diego TRB TAM Conference (2014)
- 8. Asset Management Coordination in North Central Texas 2018 San Diego TRB TAM Conference
- 9. Hawaii DOT: "Good Roads Cost Less" 2018 San Diego TRB TAM Conference
- /2018 A Minesente DOT, Deside de la festa utura Life Cuela Dispeting - 2010 Cen Dises TOP TAM Conference



Transportation Agency Examples

- Curated agency examples
- Focuses primarily on TPM documents sourced from
 - State DOTs
 - MPOs
 - and transit agencies

Transportation Agency Examples	
Transportation Agend	cy Examples Submit a new example!
Filter results	Sort results: Foul date 5 Never lint 2
Performance Area Location Format	Matching Resources 1. FD0T Source Book The 2015 FD0T Source Book is a summary of Florida's current and historical mobility data, which features numerous charts and diagrams for data visualization. 2. PenDOT TSMO Performance Report 2020 The 4th Edition of the TSMO Performance Report provides several analyses and data comparisons of recent Pennsylvania transportation system performance data. 3. MnDOT — Understanding Performance databaser, describes how MnDOT uses state and federal
Text Search Submit	performance measures 4. Missouri CAMPO MPO Safety and Transit Targets – TIP Update This example MPO TIP update from the Missouri Capital Area Metropolitan Planning Organization (CAMPO) includes coordinated safety and transit targets. 5. MODOT LRTP System Performance Report Example An example of the system performance Report Example An example of the system performance Report Software (CAMPO) includes coordinated An example of the system Performance Report Example An example of the system Deformance Report Example An example of the system Deformance Report Example This brief factbare from Avianasa DOT (ABOT) collects a variety of Information on ARDOT's performance measure target setting for target Setting – System Performance This brief factbare from Avianasa DOT (ABOT) collects a variety of Information on ARDOT's performance measure target setting for target time reliability, per 23 CR 490, a. ARDOT Target Setting – CMAQ



- The roadmap seeks to help TPM practitioners:
 - See research needs
 - Prioritize candidate projects
 - And see a complete view of active projects

Transportation Performance Management Research Roadmap

Filter

Project Status

El Concept

Candidate

Timeframe

Short-Term

II Mid-Term

Active

Funding Source NCHRP Full Program ASHTO Committee Research NCHRP 06-36 NCHRP 05-36 NCHRP 25-25 FINAL Transportation Pooled Fund Project

Results



Compendium of TPM Best Practi

Transportation agencies are now required under Federal Authorization to measure and report performance in seven national goal areas. Highlighting best practices could help states move toward certain standards consistent with the intent of MAP-21. This research will compile best practices in all aspects of TPM.

TPM Categories

Organization

E Method

III Measure

10 Data

II National Context

Decision Making

Communication



- Navigate through the portal's collection of meetings, conferences, important deadlines, virtual meetings, webinars, and more
- Filter the calendar by event formats or event topics
- Look ahead to future months or event to past months with our **Full**

Calendar at the bottom of the main Events page



- This events page features episodes of the TPM Webinar Series
- Register for upcoming webinars
- Download slides or video from past TPM webinars





- MODAT
- TPM Toolbox
- Communicating Performance
- TPM Benchmarking Tool
- Calendar of TPM Deadlines
- TPM Corridor Tool
- TPM Timeline Tool

	Performance Management Timeline To
PM	Step 1. Get Started Step 2. View Timeline Step 3. View Table Learn More TPM Por
ome	
Basic Filters Advanced	The Performance Management Timeline Tool is a web-based interactive tool for State DOTs, MPCs and transit agencies to visualize the requirements established by the federal rules that implement the MAP-20 and FAST Act - reflecting the
Apply Filter	milestenes and deadlines for the rules that are final as of July 207. While several of the deadline items are set on a fixed data by the rules, others are dependent upon agency-topolic cycles.
1000	Please stort with the User Guide to understand how to use the tool.
MPO	Next, please answer the following questions as they apply to your agency. Note that if you do not answer them, default values will be used to fill input-dependent deadlines.
State DOT	Role *
Tier 1 Transit Agency	
Tier II Transit Agency	_ MPO
Rule	O State DOT
H5IP & Safety	Tier I Transit Agency
Performance Measures (PM1)	
Bridge & Pavement	When did[/does your 2017 Fiscal year end?
Performance Measures (PM2)	12/31/2017
System Performance Measures (PM3)	When was your last LRTP approved?
Transit Asset Management	06/01/2014
Asset Management Plan	
State Freight Plan	How often is your LRTP updated? (in number of years)
Planning	5



- AASHTO CPBM Home, Subcommittee, and Work Group Pages
- TPM Pooled Fund (Member-only) page
- A link to the FHWA TPM Homepage
- Transportation Lean Forum Homepage
- Links to the TRB ABC10, ABC20, ABC30, and ABC40 pages



- Allows you to learn more about:
 - \circ the TPM Pooled Fund
 - And the Research Roadmap

Interacting and Adding to the Portal

 To further the objectives of the portal (showcasing best practices, fostering collaboration, and holding a repository of TPM resources), we encourage you to submit candidate resources or events to the TPM Portal

• You'll find these buttons posted all over the site

Submit a resource...

Submit an event...



Current





Independent Sites. Manually linked. Custom Software.

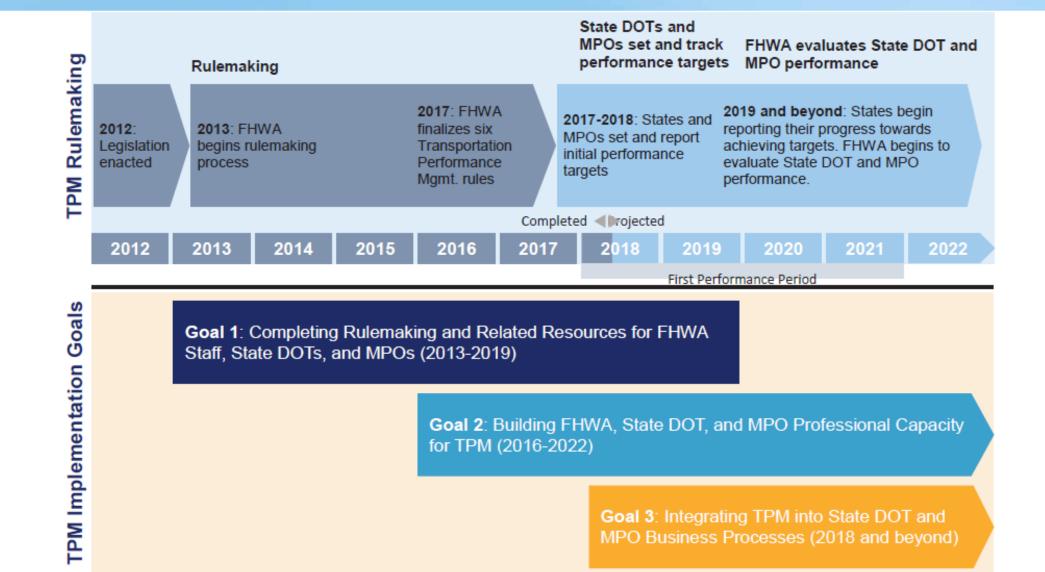


Networked Sites. Automatically linked. Common Software.

Challenges in Measuring Performance: Safety Case Study

Matthew Hardy, Ph.D. Program Director for Planning and Performance Management AASHTO

Performance Management Journey



Performance Management Paradigm

1. Establishing Targets

- **§** Aggressive versus Achievable Targets
- Maximizing Performance versus Paying the Game

2. Communication

- S Telling the Story
- S Creating transparency regardless of the results
- 3. Balance
 - § Federal—State—Local Measures
 - Sot "versus" but "and"
- 4. Accountability
 - **§** Data-Driven Decisions

PM1: Safety Performance Measures

- Transportation Performance Management (TPM) program
- Safety Performance Management (Safety PM)
- Safety PM Final Rule 23 CFR 924; 23 CFR 490 (Subpart A & B)
 - 1. Number of fatalities
 - 2. Fatalities per 100 million vehicle miles traveled
 - 3. Number of serious injuries
 - 4. Serious injuries per 100 million vehicle miles traveled
 - 5. Number of non-motorized fatalities and non-motorized serious injuries

PM Safety Assessments

- FHWA Significant Progress Assessment
 - § Did a state meet their targets?
 - ✓ Actual Performance is better than the Target; or
 - Actual Performance is better than the Baseline
 - **§** Did a state meet their targets for 4 our of the 5 performance measures?
 - **v** Yes **à** State DOT Made Significant Progress
 - **v** No **à** State DOT Did Not Make Significant Progress
- Letters sent to each State DOT on Friday, April 24, 2020
 - § 27 State DOTs Made Significant Progress
 - § 25 State DOTs Did Not Make Significant Progress

If a State did not make significant progress

- Use obligation authority equal to the HSIP apportionment for the year prior to the year for which the targets were not met or significant progress was not made, only for HSIP projects; and
- Submit an annual HSIP Implementation Plan that describes actions the State will take to meet or make significant progress toward meeting its subsequent targets. Under 23 U.S.C. 148(i), the HSIP Implementation Plan must:
 - Identify roadway features that constitute a hazard to road users;
 - Identify highway safety improvement projects on the basis of crash experience, crash potential, or other data supported means;
 - Solution Describe how HSIP funds will be allocated, including projects, activities, and strategies to be implemented;
 - Solution State to make projects, activities, and strategies funded under the State HSIP will allow the State to make progress toward achieving the safety performance targets; and
 - Solution State will undertake to achieve the performance targets.

Preliminary Analysis

- How did State DOTs meet significant progress?
 - § 16 states met or exceeded their targets for at least 4 of the 5 performance measures.
 - § 36 states needed to use the Baseline Assessment as an alternative to assess meeting significant progress.
 - ✓ Of the 36, only 11 had the Baseline Assessment help them in meeting significant progress.

Conclusions

- 1. 40% of the states needed the Baseline Assessment to ensure they made significant progress
- 2. Baseline Assessment is an important backstop to enable State DOTs to establish more aggressive targets.

Performance Measurement Achievement

Met Targets

- Fatalities: 22
- Fatality Rate: 23
- Serious Injuries: 31
- Serious Injury Rate: 33
- Non-Motorized: 23

Met Targets or Baseline

- Fatalities: 29
- Fatality Rate: 32
- Serious Injuries: 43
- Serious Injury Rate: 47
- Non-Motorized: 28

Other Questions to be Addressed

- **ü** How far off were the targets from the actual numbers?
- **ü** What is the impact on the 25 states that did not make significant progress?
- ü How many states' targets showed improvement.
- **q** What kind of targets did states establish?
- **q** What is the correlation between target setting technique and making significant progress?
- Q What was the impact of Toward Zero Deaths goals on target achievement and making significant process?
- **q** Are there other techniques that could be used to determine making significant progress?

Difference Between Actual and Target

Ø Aggressive Targets

- Florida set the most aggressive targets (0 deaths or serious injuries).
- No other state set targets this aggressive (or aspirational).
- They did better than the baseline on only 2 of the 5 performance measures.
- Ø Oklahoma had the highest difference between their target and the actual number
 - Serious Injuries, Serious Injury Rates, and Non-Motorized saw a difference upwards of 300%
- Excluding Florida and Oklahoma, these are how much, on average, a state overestimated (met their targets) or underestimated (did not meet their target)

- Fatality
 - Solution Overestimate: 3.67%
 - **§** Underestimate: -6.47%

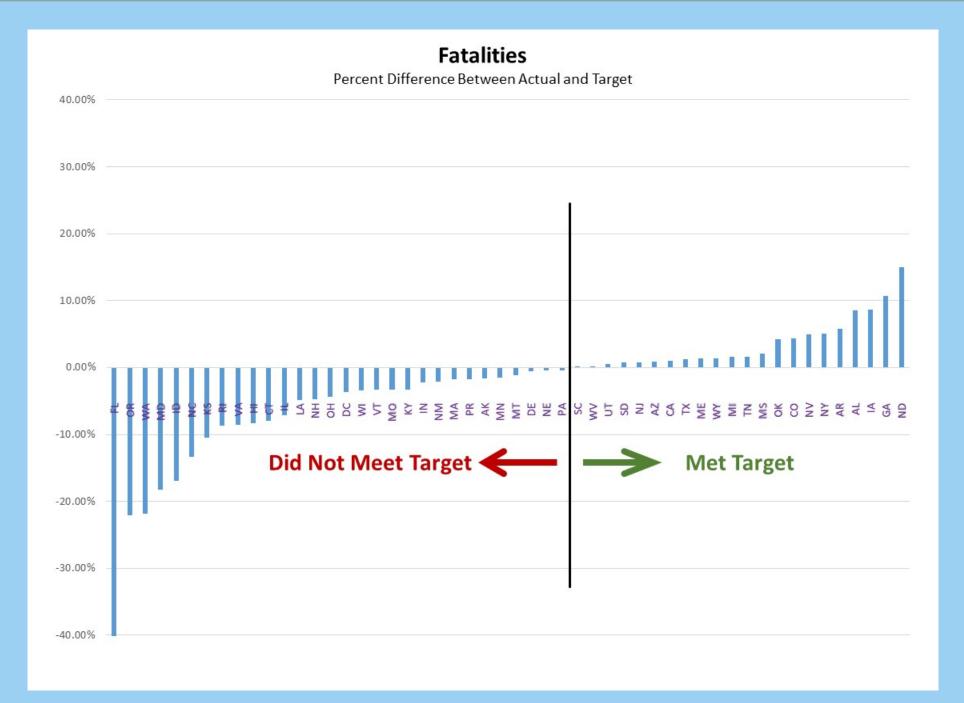
• Fatality Rate

- S Overestimate: 4.62%
- SUnderestimate: -7.01%

• Serious Injuries

- Soverestimate: 10.15%
- **§** Underestimate: -7.10%
- Serious Injury Rate
 - Soverestimate: 8.85%
 - S Underestimate: -7.38%
- Non-Motorized
 - Solution Overestimate: 6.91%
 - Underestimate: -7.43%

Conclusionsà Vast majority of the State DOTs set targets that were close to the actual. The difference between meeting a target and not meeting a target was sometimes less than 0.03%

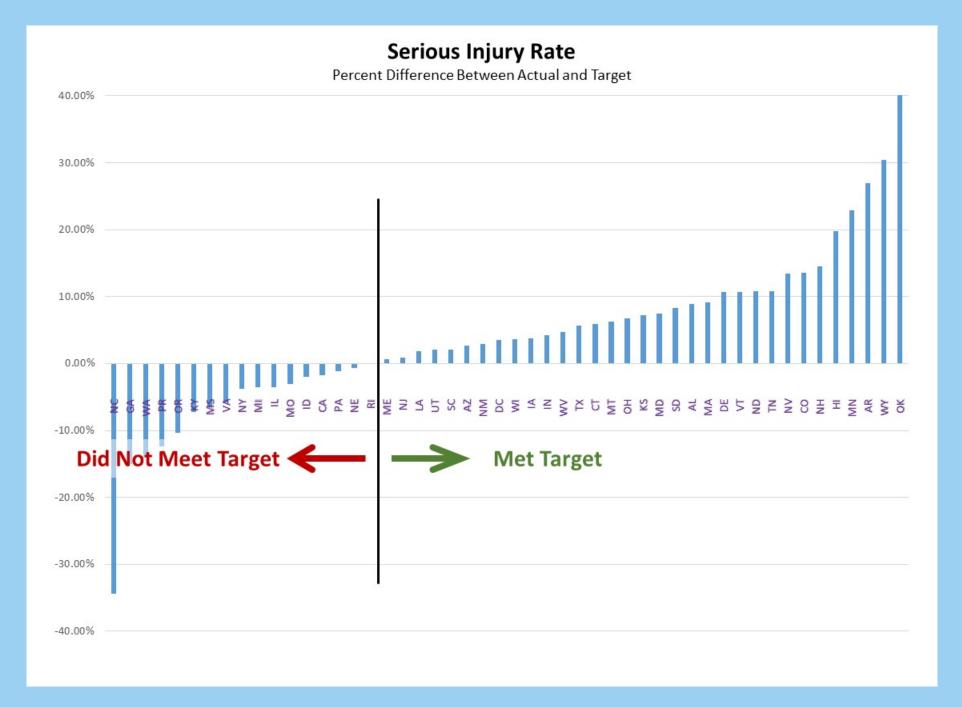


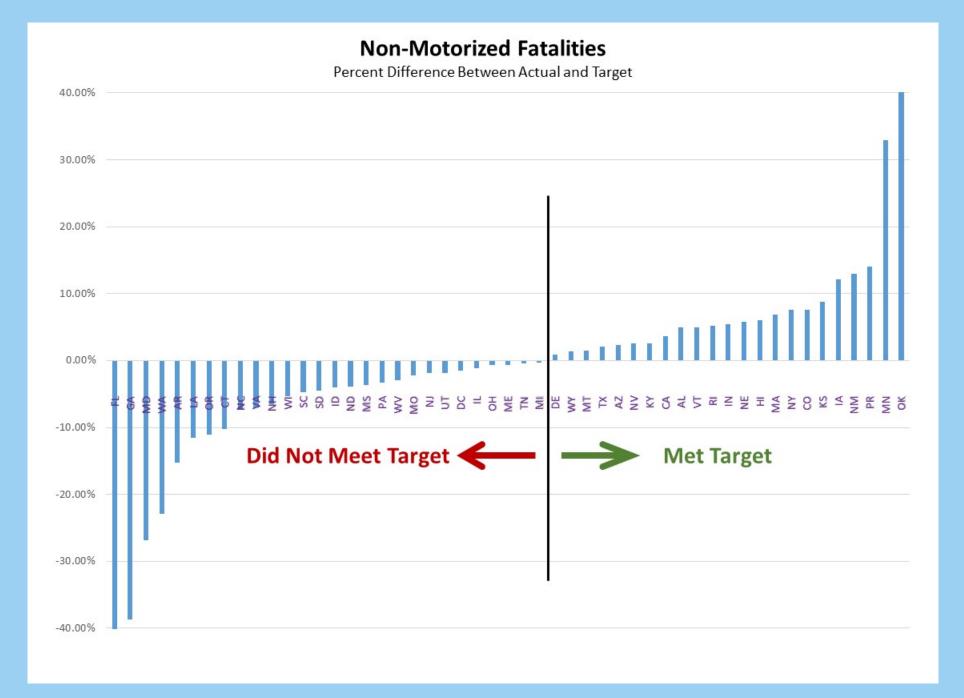


Serious Injury

Percent Difference Between Actual and Target







Impact on State DOTs

Question: Asked the 25 State DOTs who did not make significant progress...

- 1. Do you anticipate the restriction in obligation authority as a barrier to implementing your safety program?
 - § General Response—No. Most already fully obligate all HSIP funding on safety projects
- 2. Does your state have concerns with the HSIP Implementation Plan reporting requirements?
 - **§** Mixed response and most State DOTs do not see this as a major hurdle.
 - Sut, given the current COVID-19 pandemic and this being a new requirement, flexibility in terms of the due date would be welcome.
 - Some question the value of doing the plan given all of the other safety planning requirements. What is the value added of doing the HSIP Implementation Plan?

...Discussion...

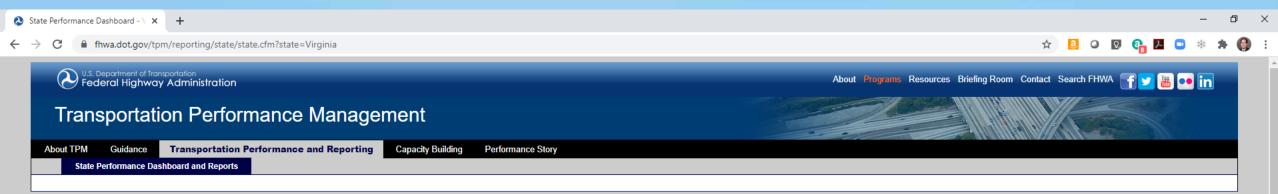
Performance Management Paradigm

1. Why *establish targets*?

- S Aggressive versus Achievable Targets
- Maximizing Performance versus Paying the Game

2. Who should do the *communications*?

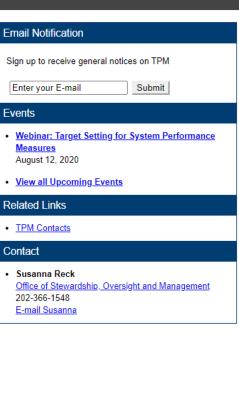
- Story
- S Creating transparency regardless of the results
- 3. How do we create the right **<u>balance</u>**?
 - § Federal—State—Local Measures
 - Sot "versus" but "and"
- 4. How do achieve *accountability*?
 - **§** Data-Driven Decisions



Home / Programs / Transportation Performance Management / Reporting / State / State Performance Dashboard - Virginia

State Performance Dashboard - Virginia





C Denchmarking.tpm-portal.com

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ben(t)SHmärk

The ongoing process of comparing outcomes and practices to those of similar organizations, with the intention of continuously improving quality and performance.

This platform is intended to facilitate continuous benchmarking among state DOTs. Here, transportation practitioners can find appropriate peers, compare performance across a number of measures, and most importantly, connect with other practitioners to discover what works for performance improvement. Register for full site access, or browse publicly available performance and improvement information.



😤 Find Peers

Compare Performance

form a benchmarking network to compare

performance using custom measures.

With the Peer Selection tool you can find agencies like you. Use the predefined peer grouping for your agency, or select the characteristics most important to you to create custom. Compare performance over time and across L agencies with a number of chart options. Or, T

Users registered with a Department of Transportation email address can share successful practices in a particular performance area, or ask other highperforming agencies their secrets using Noteworthy Practice Narratives.

Learn & Improve

Why Benchmark?

Transportation system performance involves a diverse set of agencies that operate at all levels of government; with varied spans of responsibilities across transportation modes; and within the context of different laws, regulations, and public priorities. These agencies increasingly are pressed to publicly report statistics on performance of the systems they manage, but there are very few commonly applicable definitions, criteria, or standards for how system performance is to be measured. Benchmarking—comparing one's performance with that of carefully selected peers—uses appropriate comparisons to assist in identifying desirable levels of performance, and perhaps more importantly, learning how to achieve them.

Contact

Matt Hardy 202-624-3625 mhardy@aashto.org



Today's Panelists #TRBWebinar

Perry Lubin, Spy Pond Partners, LLC







Matthew Hardy, AASHTO

Moderator: Steve Guenther, Caltrans

Christos Xenophontos, Rhode Island DOT





Thank you

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