

September 3, 2020

Agenda

- 2:00 Welcome. Tim Henkel, Minnesota DOT, Christos Xenophontos, Rhode Island DOT
- 2:10 AASHTO Update. Christos Xenophontos, Rhode Island DOT
- 2:20 FHWA Update. Nelson Hoffman, FHWA
- 2:25 Feature Presentation: TPM Training Roadmap & Action Plan. Hyun-A Park, Spy Pond Partners
- 2:55 CPBM Business.
 - CPBM Business. Tim Henkel, Minnesota DOT
 - CPBM Subcommittee Updates
 - Asset Management. Matt Haubrich
 - Organizational Management. Deanna Belden and Charlie Purcell
 - Risk Management. Jean Wallace and Nathan Lee
 - System Mobility and Emerging Technology. Daniela Bremmer and Jay Styles
 - Work Group Updates
 - Policy and Rulemaking. Matt Hardy
 - Professional Development and Technical Services. John Selmer
 - Research. Tammy Haas



- 3:40 TPM Pooled Fund Business. Christos Xenophontos, Rhode Island DOT
 - TPM Webinars
 - Agency Performance-Based Plans
 - COVID-19 and TPM Impacts Videos
 - CPBM/TPM Pooled Fund Newsletter
- 3:55 Wrap-Up. Matt Hardy, AASHTO



AASHTO Update

- AASHTO is primarily WFH through end of CY2020
- AASHTO Annual Meeting will be virtual
 - November 9-10 and 12-13, 2020
 - More information: http://meetings.transportation.org
- CPBM Annual Meeting
 - October 22, 2020; 1:00pm to 5:00pm EASTERN
 - Part I: Open House
 - Part II: Technical Discussions
 - Part III: Business Meeting
- Committee on Planning Annual Meeting
 - September 29-October 1, 2020
 - https://2020policyconference.transportation.org/
- Federal Legislation
 - Limited chance for reauthorization this year; focused on extension



FHWA TPM Capacity-Building Update

PMF Resources

- PMF Input Fields document on the <u>TPM Guidance web page</u>
- PMF Recorded Demo and July 30 PMF Webinar (for FHWA and State DOTs), on <u>TPM website</u>
- Sept. 9, 2-3:30pm ET: PMF Office Hours Webinar Register Now



FHWA TPM Capacity-Building Update

edX Training Pilot

- Launched on July 24th with invitations to FHWA PMA Discipline members and AASHTO Pooled Fund members (July 27th)
- As of August 26th:
 - 47 participants have signed up and received a course code
 - 13 participants have begun taking a course
 - 4 participants have completed a course
- Next Step: Expand the invitation to a wider audience within FHWA



September 3, 2020

Provide a comprehensive program for TPM capacity building for the transportation community.



TPM Training Needs

(from NCHRP 20-24(127) project and TPM **Pooled Fund Peer Exchange)**

- Using Tools
 - How to run management systems (understand how peer states are developing and running their models)
- Decision-Making
 - Conducting system-level investment scenario analyses
 - Comparing tradeoffs across projects, scenarios and performance areas
- Organizational Management
 - TPM overview for executives
 - Approaches for working across internal divisions (organizational management)
 - Building organizational buy-in and support for TPM (including financial support)
- Communication
 - Visualization techniques
 - SME working group
- Data (Quality of data, how will the data be used? who will use the data? different agencies have data - so selecting best data to use, define roles and responsibility, etc.)



Training Program Elements

TPM Training SME Working Boot Camps edX Classes Hub Groups (in person and virtual) **Executive Series** Regional Webinar In Person Workshop **TPM Managers Series** Series **Trainings Toolbox Data Series** TC3 **MODA** (Transportation Certification Other??? Curriculum **TAM Programs Coordination Council) TPM Program Communications**





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

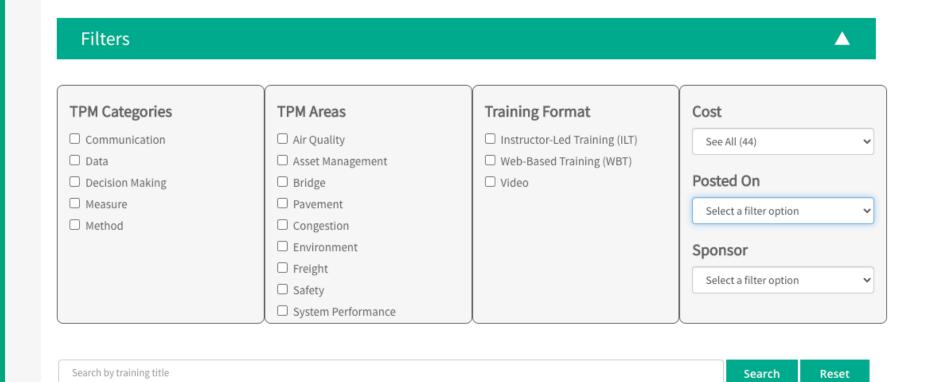
HOME

RESOURCES

Library

TPM Training Hub

Training and Informational Resource Hub





TPM Webinar Series

https://www.tpm-portal.com/tpm-webinars/



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AASHTO ERM Portal

HOME

RESOURCES

EVENTS

All TPM Events

TPM Webinar Series

TOOLS

COMMUNITY

ABOUT

TPM Webinar Series

The calendar includes listings for the TPM Webinar Series. Click on any webinar title to learn more about the webinar. TPM Webinar 2—the TPM Target Setting Five-Part Webinar Miniseries—has its own homepage! Check it out at https://www.tpm-portal.com/tpmmini/.

UPCOMING WEBINARS

PAST WEBINARS

JULY 2020

15

FEATUR

TPM WEBINAR 2 EPISODE 1 – TPM AND TARGET SETTING OVERVIEW 29

FEATURE

TPM WEBINAR 2 EPISODE 2 – SAFETY TARGET SETTING

Submit a new event

Submit an event...

Subscribe to calendar updates

AUGUST 2020

05

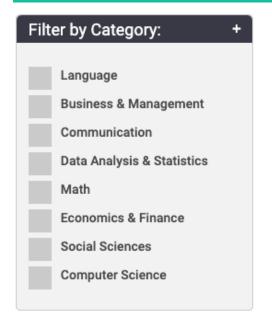
FEATURE

TPM WEBINAR 2 EPISODE 3 – HIGHWAY INFRASTRUCTURE TARGET SETTING 12 AUG

FEATURE

TPM WEBINAR 2 EPISODE 4 – TARGET SETTING FOR SYSTEM PERFORMANCE MEASURES AUG

TPM WEBINAR 2 EPISODE 5 – TRAFFIC CONGESTION AND EMISSIONS REDUCTIONS TARGET SETTING SUBSCRIBE



Free for Public Sector Employees

Language >

Conducting an Informational Interview

Course by: University of Washington

View Course

Free for Public Sector Employees

Communication >

Critical Thinking & Problem-Solving

Course by: Rochester Institute of Technology

View Course

Free for Public Sector Employees

Business & Management >

Finance for Everyone: Smart Tools for Decision-Making

Course by: University of Michigan

View Course

Free for Public Sector Employees

Data Analysis & Statistics >

Data Science: Capstone

Course by: Harvard University

View Course

Free for Public Sector Employees

Communication >

Business Communication

Course by: Rochester Institute of Technology

View Course

Free for Public Sector Employees

Data Analysis & Statistics >

Data Science: Inference and Modeling

Course by: Harvard University

View Course

Free for Public Sector Employees

Data Analysis & Statistics >

Data Science: Linear Regression

Course by: Harvard University

Free for Public Sector Employees

Data Analysis & Statistics >

Data Science: Machine Learning

Course by: Harvard University

Free for Public Sector Employees

Data Analysis & Statistics >

Data Science: Probability

Course by: Harvard University

View Course



AASHTO TC3 Training Program https://tc3.transportation.org/







TC3 – MODA Course



Performance-Based Prioritization Using **MODA**

Lesson 1: What is MODA?





TC3 – TAM Course



Transportation Asset Management Overview

Lesson 1: Introduction to Transportation Asset Management (TAM)



TC3 – TPM Communications Series

- Visualization 101
- Visualization Techniques Using the NPRMDS
- Visualization Case Studies
- Building Communication Products



CPBM Business Meeting

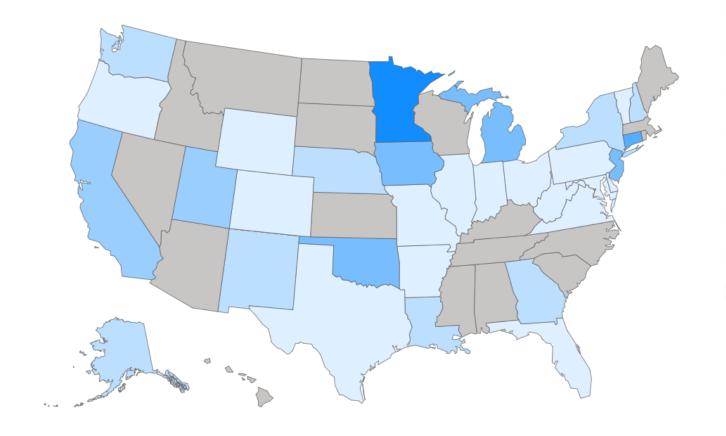


Asset Management

- Focused on the needs of Asset Management professionals at DOTs
 - Community
 - Research
 - Communication
 - Resources
- Close collaboration with TRB TAM Committee
 - Monthly meetings
 - Many members/friends in common
 - Strong volunteer involvement

Transportation Asset Management Committee Activities

State DOTs represented



The A) CPBM-AM list was last updated 07/10/2020
The B) AJE30 Contact list was last updated 07/22/2020
The C) FHWA AM Contact list was last updated 06/26/2020

For corrections or comments, please email matthew.haubrich@iowadot.us

Meeting/List

- A) CPBM-AM
- B) AJE3
- C) FHWA AM Contacts
- D) Joint Meeting July 15, 2018
- E) Joint Meeting September 7, 2018
- F) Joint Meeting November 2, 2018
- G) Joint Meeting February 8, 2019
- H) Joint Meeting March 8, 2019
- I) Joint Meeting April 5, 2019
- J) Joint Meeting June 21, 2019
- K) Joint Meeting September 6, 2019
- L) Joint Meeting October 4, 2019
- M) Joint Meeting November 1, 2019
- N) Joint Meeting December 6, 2019
- O) ABC40 Annual Meeting Jan 13, 2020
- P) Joint Meeting February 12, 2020
- Q) Joint Meeting March 11, 2020
- R) Joint Meeting May 13, 2020
- S) Joint Meeting June 10, 2020
- T) MegaMeeting July 14, 2020

7 2

66

State DOT participants

208
Total participants

Asset Management

Research

- NCHRP 20-100: Return on Investment in Transportation Asset Management Systems and Practices (FY2016), Report 866
- NCHRP 19-12: Guide for Financial Planning and Management in Support of Transportation Asset Management (FY2016), Report 898
- NCHRP 08-108: Developing National Performance Management Data Strategies to Address Data Gaps, Standards and Quality, Report 920
- NCHRP 20-118: Effective Performance Management by Transportation Agencies: Benchmarking and Comparative Measurement (FY2017), Report 902
- NCHRP 08-109: Updating the AASHTO Transportation Asset Management Guide-A Focus on Implementation (FY2017) Synthesis Report 528
- NCHRP 20-24(124): Communicating Performance Management Peer Exchange (FY2018) NCHRP Report 920
- NCHRP 08-113: Effective Transportation Asset Management Practices at State DOTs, Regional Organizations and Local Agencies (FY2018)
- NCHRP 08-115: Framework for Designing and Managing Data and Information Workflows for Transportation Assets (FY2018)
- NCHRP 03-128: Business Intelligence for Transportation System Management and Operations and Agency Decision Making (FY2018)
- NCHRP 02-26: Implementation of Life-Cycle Planning Analysis in a Transportation Asset Management Framework (FY2019)
- NCHRP 08-118 Risk Assessment Techniques for Transportation Asset Management (FY2019)
- NCHRP 02-27: Making Targets Matter: Managing Performance to Enhance Decision-Making (FY2019)
- NCHRP Synthesis 20-05/Topic 50-15: Asset Management Approaches to Identifying and Evaluating Assets Damaged Due to Emergency Events (FY2019) Synthesis Report 556
- NCHRP 20-24(127): Performance Management Implementation Concerns, Issues and Challenges (FY2019)
- NCHRP 20-123(01): Transportation Asset Management Strategic Planning and Research Roadmap Development (FY2019)
- NCHRP 20-24(125): Scoping Study to Develop the Basis for a Highway Standard to Conduct an All-Hazards Risk and Resilience Analysis (FY2020)
- NCHRP Synthesis 20-05/Topic 51-05: State DOT and MPO Coordination on Performance Management (FY2020)
- NCHRP 23-06: Developing an AASHTO Guide to System Level Asset Valuation in Support of Transportation Asset Management Decision Making (FY2020)
- NCHRP 08-127: Emerging Issues: Impact of New Disruptive Technologies on the Performance of DOTs (FY2020)
- NCHRP 23-07: Guidebook for Identifying and Implementing Forecasting Techniques for Effective Target Setting (FY2020)
- NCHRP 23-08: Guidelines for Incorporating Maintenance Costs into a Transportation Asset Management Plan (FY2020)



Asset Management

- Bi-annual TRB TAM Conference
 - Aug 2021 in Boston (www.trb.org/Conferences/AssetMgt2020.aspx)
 - Pooled Fund (https://www.pooledfund.org/Details/Solicitation/1539)
- TAM Portal (https://www.tam-portal.com/)
 - Document library
 - Calendar of events
 - Tools
 - Research Roadmap
- TAM Guide (https://www.tamguide.com/)
- FHWA/AASHTO TAM Webinar Series
 - Next: #46 TAM & System Resilience Oct 21, 2020
- TAM Community Survey (Issue Tracking)



Organizational Management

Work Plan Update

- Activity 1 Process Improvement, Gary Vansuch, Colorado DOT
 - The Transportation Lean Forum (TLF) is entering its ninth year and continues to have webinars and host the "Lean Interchange" website
 - Next TLF webinar is on October 29 at 9 a.m. MDT
- Activity 2 Non-system Performance Measures, Deanna Belden, Minnesota DOT
 - Supporting TRB workshop planning on advancing organizational excellence with AJE15 Workforce Development & Organizational Excellence Committee
 - Workshop will be interactive; will feature US and international panelists, and virtual breakout rooms



Organizational Management

Work Plan Update

- Activity 3 Support the Agency Capability Building (ACB) Portal, Charlie Purcell, Iowa DOT
 - Link to the ACB Portal is now provided on the AASHTO Transportation Management Hub
 - Plan to continue to support the ACB Portal; working on approach and level of support

Subcommittee co-chairs: Charlie Purcell, Deanna Belden



Purpose

Risk management is defined as the evaluation of the probability of positive or negative effects of uncertainty or variability on agency objectives and the ability of the agency to be more resilient. Risk management includes the cultures, processes, and structures that are directed toward the effective management of potential risks. *The focus of this subcommittee is on the development, implementation, and use of tools, methods, and strategies by a state transportation agency in order to take advantage of opportunities and mitigate potential threats.*

Goals

- 1. Serve as the forum to engage subcommittee members on the sharing of ideas and examples of how state transportation agencies are implementing risk management within their organizations.
- 2. Develop needed guidelines, guidance, training, and educational resources to facilitate the implementation of risk management approaches within a state transportation agency.
- 3. Research, develop, and disseminate tools and techniques associated with risk management such as risk analysis, vulnerability assessments, etc.

SRM meetings: 2nd Monday of even-numbered months, 1-2 p.m. Eastern

Chair, Jean Wallace, MnDOT; Vice-Chair, Nathan Lee, Utah DOT

AASHTO Liaison, Matt Hardy; FHWA Liaison, Daniel Fodera

Launched two new research projects:

- NCHRP 20-123(04), <u>Strategic Planning Session and Development of a Risk-Management Research Roadmap</u>. Status: Contract has been executed and initial kickoff meeting has been held.
- NCHRP 23-09, <u>Scoping Study to Develop the Basis for a Highway Standard to Conduct an All-Hazards Risk and Resilience Analysis</u>. Status: the contractor has been selected and the contract is getting close to execution.



FY21 NCHRP Problem Statements Selected for Funding:

 Prioritization of Risks Related to Connected and Automated Vehicles and Emerging Technologies - Status: selection of panel members is underway.

Ongoing projects: NCHRP 20-44 Implementation of the AASHTO Guide for Enterprise Risk Management

- Objective: advance the practice of ERM within state DOTs
- The project is funding three states for ERM pilot implementation, plus forming a Community of Practice (CoP) for ongoing peer implementation support
- CoP members have been formally invited to join the SRM as the NCHRP project winds down.

Annual Subcommittee Meeting

 Planned to occur during the CPBM Business Meeting in October – watch for more details!



- New Joint Subcommittee: We are setting up shop and gaining traction!
 - Survey regarding use of transportation data and data needs for decision makers, measuring on COVID-19 system mobility impacts
 - Where data is available, it is being used as a metric of economic activity
 - If data is available, it can be used to track the (in)effectiveness/ compliance of "stay at home" orders
 - Not all states have the ability to track trends, particularly in regards to truck traffic or real time data access
 - Some states created COVID-19 system performance dashboards



- Collaborative Information sharing sessions thus far:
 - National Operations Center of Excellence Patrick Son
 - FREE Data related to COVID-19 Impacts
 - Google: <u>COVID-19 Community Mobility Reports</u> Community Mobility Reports – Monali Shah
 - Inrix: National Traffic Volume Synopis Rick Shuman
 - University of Maryland CATT Lab <u>COVID-19 Impact Analysis</u> <u>Platform</u>



Issues of Importance

- FCC 5.9 GHz Spectrum Reallocation
 - AASHTO and private sector partners are lobbying to preserve this space for transportation use
- AASHTO Inner-Committee working groups for Emerging Technologies
 - Connected and Automated Vehicles (CAV)
 - Shared Mobility/ Mobility as a Service
 - Drones
 - Electric Vehicles



Next Steps

- Considering to revisit the COVID-19 data survey to possibly include impacts on system analysis and technology budgets due to COVID-19 funding shortfalls
- Continue to hold bi-monthly subcommittee meetings that include information sharing and partnering sessions
- Developing a NCHRP 20-123 proposal to develop a strategic action plan and a research strategy roadmap for the subcommittee



Policy and Rulemaking

- Reauthorization
 - Activity in both chambers of commerce, unlikely to complete this year
 - AASHTO focus relative to performance:
 - no new measures, less burden, more state flexibility
 - for communication purposes only (no tie to funding)
- Transportation Policy Forum Efforts
 - COVID backstop
 - Long-Term Extension (In absence of reauthorization)



Professional Development



- Research Work Group meets 2nd Friday, 10 am ET email Mhardy@aashto.org or Tamarap.Haas@state.nm.us to get on our invitation list, all welcome to participate
- Like representative from each Technical Committee to participate on Research Work Group calls
- Research Ideas need to be indicate which funding program so CPBM can prioritized for each:
 - NCHRP Project
 - Committee Support Program (NCHRP 20-123)
 - DOT Executive Research Needs (NCHRP 20-24)
 - Off-Cycle, Time-Sensitive Research Needs
 - Implementation Program (NCHRP 20-44)
 - Domestic Scan Program (NCHRP 20-68)
 - Synthesis Program (NCHRP 20-05)
 - Legal Problems Arising Out of Highway Programs (NCHRP 20-06)



- Each CPBM Technical Committee should be working on the Research Problem Statements for ranking by CPBM at the Oct Meeting
- NCHRP Problem Statements due on Nov 2.
- Recent Totals

FY2017: 2 projects

FY2018: 3 projects

FY2019: 7 projects

FY2020: 6 projects

FY2021: 4 projects (but tracking 6 others)



- Need ideas on how to track ongoing Research and letting CPBM membership know when project complete and publication number
 - Designate CPBM panel member send key milestone information to <u>Tamarap.haas@state.nm.us</u>?
- Also, how to ensure our research is being implemented.
- Separate word document with all Research CPBM submitted for NCHRP programs and status (getting started, active, recently completed)



Prob No.	Title	Amount	Subcommittee
08-113	Integrating Effective Transportation Performance, Risk, and Asset Management Practices	\$146,000	Risk Management
08-138	Connecting Transportation Asset Management (TAM) and Transportation System and Management Operations (TSMO)	\$500,000	Asset Management and System Mobility and Emerging Technologies
08-136	Guidance on Using Performance-Based Management Approaches for Maintenance	\$500,000	Asset Management
08-137	Further Enhancements and Content for the AASHTO Transportation Asset Management Guide—A Focus on Implementation (TAM Guide III	\$450,000	Asset Management
23-15	Prioritization of Risks Related to Connected and Automated Vehicles and Emerging Technologies	\$250,000	Risk Management
23-16	Implementing and leveraging Artificial Intelligence and Machine Learning at Departments of Transportation	\$350,000	System Mobility and Emerging Technologies
23-14	Research Roadmap for Knowledge Management	\$300,000	СРВМ
19-18	Transitioning Fuel Tax Assessments to Road Usage Charge	\$600,000	System Mobility and Emerging Technologies
08-145	Utilizing Cooperative Automated Transportation (CAT) Data to Enhance the Use of Freeway Operational Strategies	\$500,000	System Mobility and Emerging Technologies
08-146	Integrating Resiliency into Transportation System Operations	\$350,000	Risk Management
08-143	Impact of Spatial Segmentation on Travel Time Reliability Performance Measures	\$150,000	System Mobility and Emerging Technologies
Syn 52-02	Current Practices in Bridge Asset Management for Decision Making	\$45,000	Asset Management
Syn 52-07	Assessing the Impact of Evolving Pavement Data Collection Technology	\$45,000	Asset Management
Syn 52-16	Visualization of Performance Measures	\$45,000	СРВМ



TPM Pooled Fund Business



TPM Webinars

- TPM Webinars
 - Target setting webinar miniseries resources
 - Bi-monthly TPM webinar series
 - TRB Webinar: Enter the
 Portal The
 Transportation
 Performance Management
 (TPM) Portal

Save the Dates!

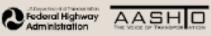
A bimonthly webinar series, Wednesdays at 2:00 PM EST

September 16, 2020 2:00 PM Eastern Time TPM Communications

November 18, 2020 2:00 PM Eastern Time System Performance Management

Please let us know about future topics of interest to you in 2021!







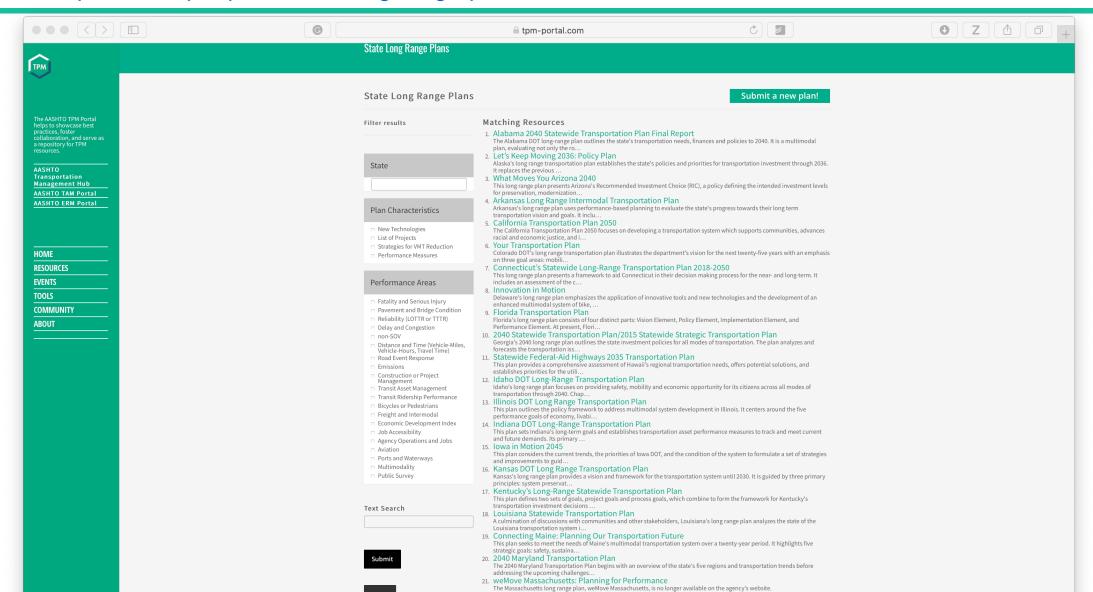
For more information or to register:

https://www.tpm-portal.com/tpm-webinars/



Agency Performance-Based Plans

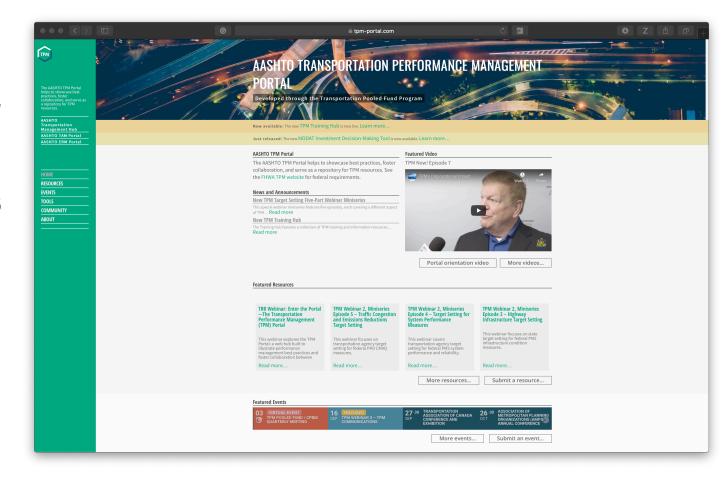
https://www.tpm-portal.com/long-range-plans/





Coming Soon

- CPBM/TPM Pooled Fund Newsletter Relaunch
 - Edition 1: COVID-19 and TPM Impacts
- COVID-19 and TPM Impacts videos
- Roll-Out of Additional Training Program Elements





Review Action Items



- We hope you will join us for our next joint CPBM/TPM Pooled Fund Quarterly web call on Thursday, December 3, 2020 at 2:00 PM Eastern Time.
- We also hope you will attend the Pooled Fund Webinar on September 16, 2020 on TPM Communications.
- Notes and materials from this meeting will be sent to all invitees. They will also be posted on the CPBM landing page and TPM Pooled Fund Members Only page on the TPM Portal.
- Visit the TPM Portal for tools and resources, including links to the TPM Training Hub, TPM Webinar Series slides and recorded session, videos, state performance-based plans, and much more content for the TPM Community!