



June 17, 2021







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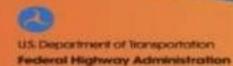
Agenda

- 1:00 Welcome and Agenda. Tim Henkel, Minnesota DOT.
- 1:10 FHWA Dashboard and Reports. Steve Gaj, Nelson Hoffman, and Bill Bolles, FHWA.
- 1:25 Feature Presentation: Final Guidance from NCHRP Project 08-113. Mara Campbell, Jacobs.
- 1:45 Discussion: New Performance Measures. Christos Xenophontos and Hyun-A Park, Spy Pond Partners.
- 2:15 CPBM Business.
 - CPBM Business. Tim Henkel, Minnesota DOT.
 - CPBM Subcommittee Updates
 - System Mobility and Emerging Technology. Daniela Bremmer and Jay Styles.
 - Asset Management. Anne-Marie McDonnell.
 - Organizational Management. Charlie Purcell and Deanna Belden.
 - Risk Management. Jean Wallace.
 - Work Group Updates
 - Research. Tammy Haas and William Johnson.
- 2:45 TPM Pooled Fund Business and Wrap Up. Christos Xenophontos.

Transportation Performance Management

CPBM/TPM Pooled Fund Quarterly Meeting FHWA Perspective / TPM Dashboard Updates June 17, 2021

Steve Gaj – Opening Bill Bolles – Key Messages Nelson Hoffman –TPM Dashboard Updates Steve Gaj – What's Next

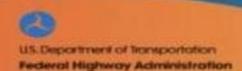


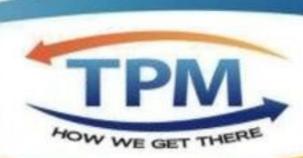


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Learning from the Performance Reporting Data



With several years of consistent national performance data, the TPM reporting process is:

- Complete. All 52 State DOTs continue to report performance data and targets for each of 17 performance measures. FHWA continues to update and published the <u>State Performance Dashboards and Reports</u>, sharing all data and targets in one place.
- Accountable. State DOTs and MPOs continue to work together to set datainformed targets. They are accountable for managing performance to make progress toward the targets they set. FHWA continues to facilitate the collaborative target-setting process, providing guidance, training, and technical assistance to State DOTs and MPOs.
- Consistent. With data from consistent measures across all 52 States, all stakeholders can more easily track trends and benchmark their performance. FHWA can uniformly track performance data and tell a national story.



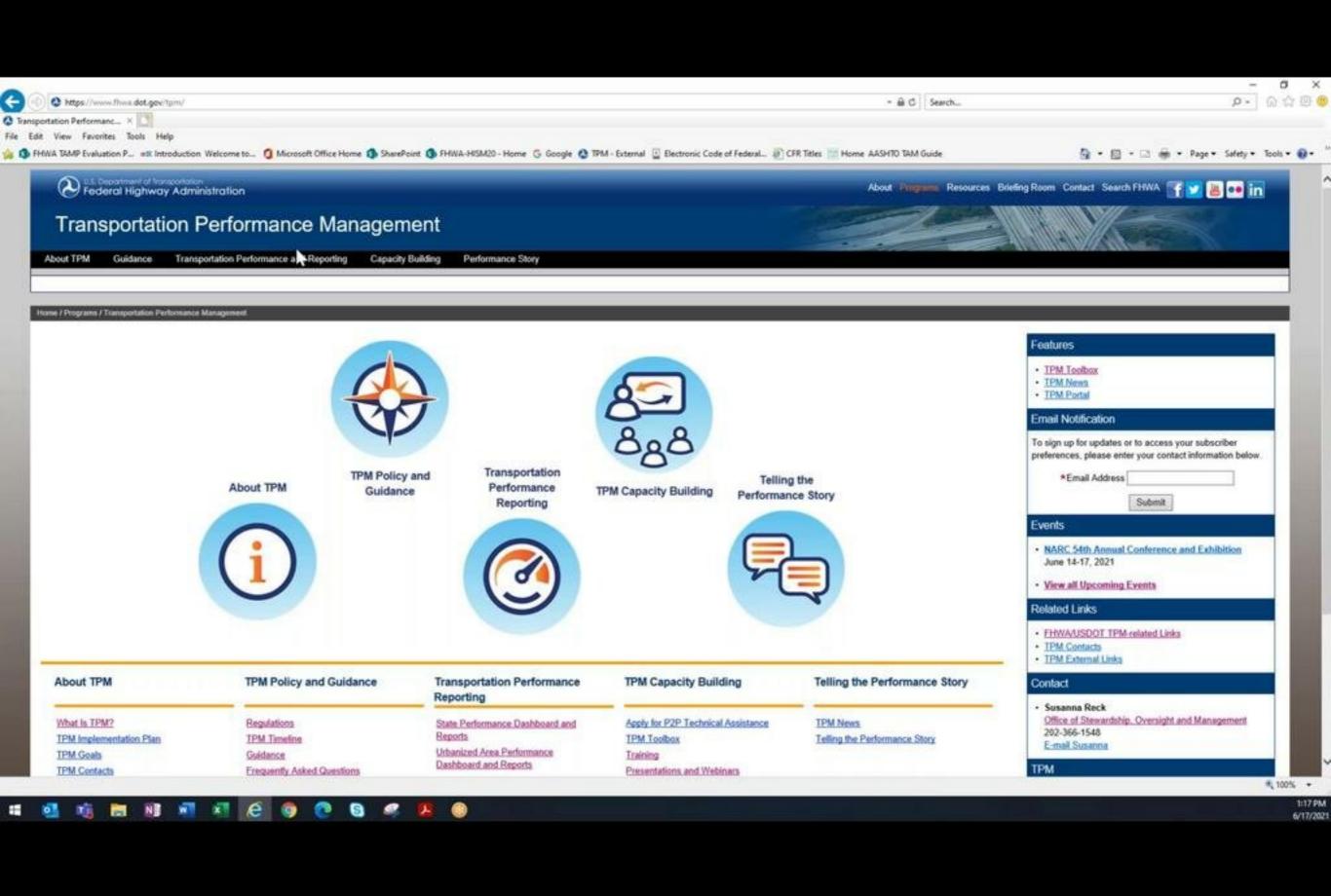
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What's Next



- FHWA recognizes the tremendous amount of work by stakeholders to make the TPM dashboard a reality.
- Thank you for all your efforts that made this possible.
- FHWA is working now to provide resources to make the annual HSIP reporting and the 2022 Full/Baseline Performance Period reporting as smooth as possible.





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Challenging today. Reinventing tomorrow.

Management Integration Matters

NCHRP 08-113: Integrating Effective Transportation Performance, Risk and Asset Management Practices

Presented by: Mara Campbell, Principal Investigator June 17, 2021



Agenda

- 1. Why Integrate?
- 2. Fundamental Agency Questions for Integration
- 3. The Integration Framework 5 Key Areas
- 4. Integration Maturity Assessment
- 5. Developing a Roadmap
- 6. Using the Integration Guidance
- 7. Key Integration Observations



Why Integrate? How Does an Agency Benefit?

- More comprehensive and trustworthy decision-making process
- Advance capital improvement planning with more complete data
- Improve system performance and resiliency with a more holistic risk consideration
- Enhance agency structure and management efficiency with data transparency and an agency culture of cooperation and collaboration
- Reduce data or effort redundancies and make better decisions that optimize agency position
- Allow all parts of the organization to move in the same direction

"A proven way to raise morale, reduce costs of maintaining the transportation network, and improve customer service."

VTrans Asset Manager

"We need to clearly stretch and maximize taxpayer dollars."

MnDOT Systems Planner

"We own \$68 worth of assets and spend \$100M per year on replacement. If we can't maximize performance under uncertainty for the whole lifecycle, we'll be wasting a lot of money"

TriMet Director

Fundamental Questions when Integrating Management Practices in your Transportation Agency:

How can your agency develop a less siloed, more collaborative environment?

Is your agency able to access and share data across the enterprise and are data and process owners identified and understood?

How is project and operational risk being incorporated into your agency's investment strategy?

These are some of the realities agencies are facing all over the world as their organizations are becoming more sophisticated and complex.

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Integrating Performance, Risk and Asset Management

As transportation agencies mature, recognizing process, data, and staffing synergies in the different ways the organization is managed – move to a more holistic perspective.

A synergistic perspective does more than reduce inefficiencies, it drives overall agency performance forward.



Available Integrated Management Resources

Agencies will soon be able to utilize this NCHRP research to take initial integration steps or identify next steps on their integrated management journey.

Primary research objectives were to provide agencies with practical guidance, recommendations, and implementation practices for:

- Integrating performance, risk, and asset management into transportation agencies
- Identifying, evaluating, and selecting appropriate management frameworks
- Recruiting, training, and retaining human capital to support these integrated management functions



Shared efforts and challenges consistently fall into one or more of 5 Key Areas

"If we had a cross-silo task force for integrated asset, performance, and risk management, we could share data and collaborate more"



"Our annual capital planning process is what gets everyone's attention around here. To make a difference, let's call out projects that address climate resilience"

"Singular assets that are shared across divisions allow for actual life-cycle costing, analysis and staffing requirements"

Fitting the Key Areas to YOUR Agency

Each agency is on a unique integration journey, however using the 5 Key Areas as a framework for the discussion can be fruitful:

- Cross-department conversations on potential process, effort, or data synergies
- Identified gaps in training, organizational structure, etc.
- Immediate and longer-term ideas for tasks and objectives to follow-up on
- A more holistic understanding of agency maturity in integrating management







The Integration Maturity Assessment was developed for the Guidance to:

- Enable agencies to self-assess progress in each of the 5
 Key Areas
- Standardize (generally) agency maturity assessment metrics

Results from a group of diverse agency staff show where integration efforts are progressing and highlight where challenges remain.



Developing an Integration Roadmap

Making observations of challenges and opportunities from maturity assessment actionable and trackable.

Roadmap development includes:

- Vision statement consistent with enterprise strategic direction
- Time-bound goals that break down the vision into actionable components
- Strategies and an action plan that achieve those goals
- Clear strategy to evaluate progress, re-assess maturity and optimize efforts



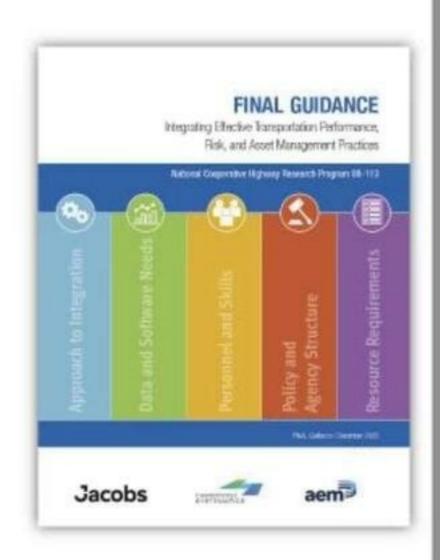


A Guidance developed around these 5 Key Areas will be available for agencies to reference in their individual efforts – "pre-release in August"

Agencies can understand what they need to do (regardless of progress) and the "Value Add" of integrating management practices

Agencies will understand the "how" of integration:

- Frameworks for effective integration
- Strategies to promote organizational and workforce readiness
- Benefits of integration and common challenges agencies face
- Checklist to assess level of maturity variations based on existing practices



Guidance Resource Proof of Concept

Guidance was "Test Driven" during workshops with agencies of varying size and situations. The case study examples, common challenges, and implementation ideas from these workshops can help YOUR agency.

Core implementation discussion features when following the Guidance:

- Organized scope of discussion within Key Areas
- Identifying gaps and opportunities with the Integration Maturity Assessment
- Development of a Roadmap to set the vision, identify tasks, and track progress











Key Observations from the Research

Observations that guided conversations and/or were shared between many agencies are included as lessons learned including

- ✓ The critical need for a Champion someone to drive the change
- Underlying agency culture has significant impact on integration level-of-effort, complexity, feasibility and success
- ✓ The common need for enterprise standards and data glossaries

- Champions are the voice of "why" and the force of "how"!
- Champions have walk-in privileges with the people who control bridge and pavement inventories, GIS systems, etc.
- Champions facilitate the documentation of current practices and the development of a critical path
- Champions secure financial resources and executive-level endorsement for change to business practices and standard operating procedures
- Champions ensure that if they leave the organization, others can continue their work.

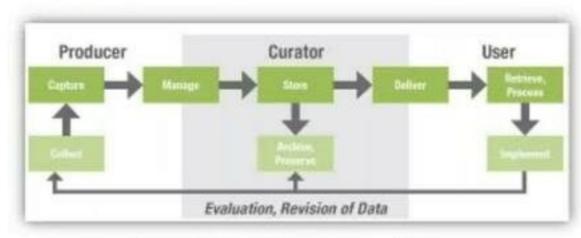
Other Key Observations

- Necessity of executive level buy-in and a supportive organizational structure for integration management
- The need to modify or change agency culture to support a more inclusive working process and enable integration efforts
- The need to motivate agencies to integrate performance, asset, and risk management while recognizing the need for standardized methods of modeling how threats may undermine performance goals or accelerate asset deterioration

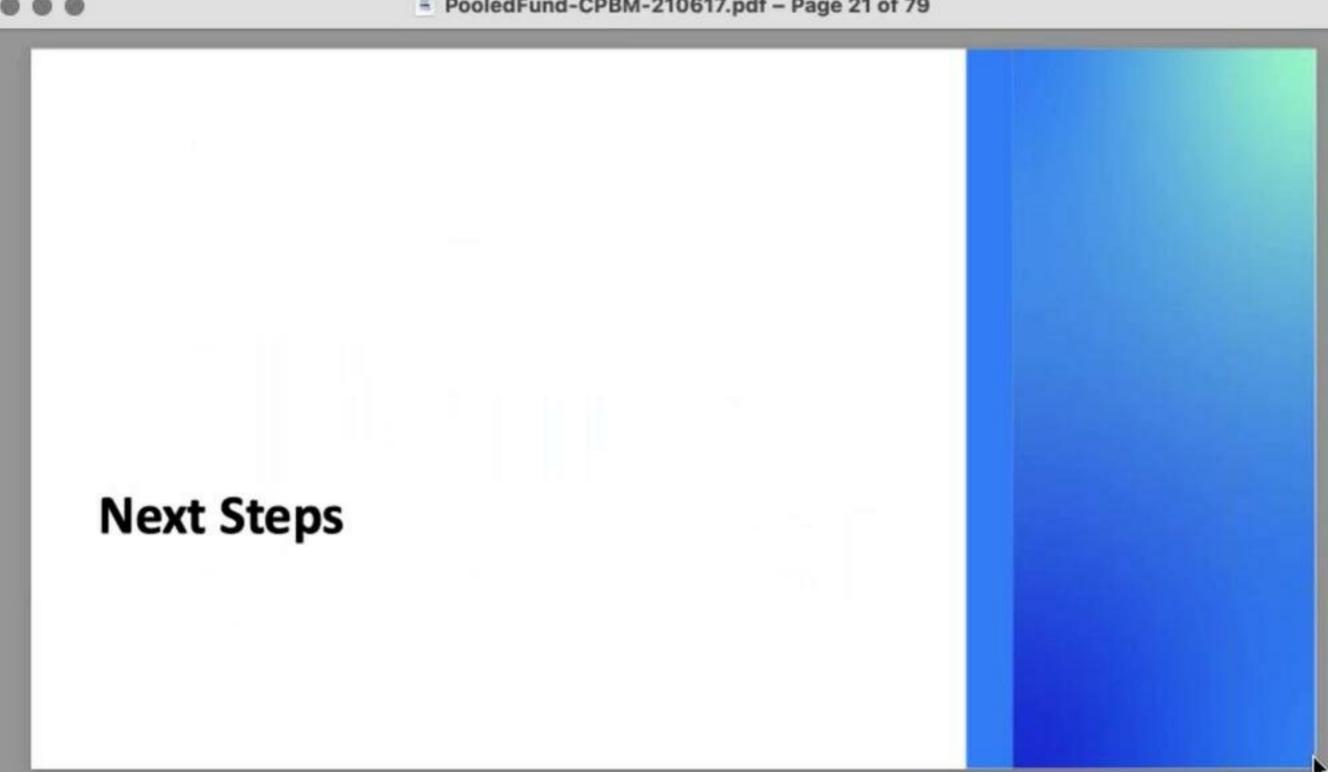


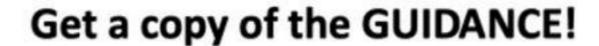
Other Key Observations

- The important role of enterprise standards to lay the foundation for integrated processes, communications, data and resource sharing
- Data governance can play a pivotal role in identifying integration strengths and barriers
- The impact of an ongoing discussion of data needs and access support the evolution of an agency's integrated framework
- Identifying and building policy frameworks for management area integration that are most effective for transportation agencies



Sample Data Governance Map





- ✓ Read the GUIDANCE!
- ✓ Use the Maturity Self-Assessment
- Create a Roadmap
 - Communicate need for executive buy-in for a push for more effective decision-making
 - Identify an Integration Champion, they will collect others to the effort and drive these changes.
 - ✓ Give authority and responsibility to the Integration Champion to bring the right people, use the Guidance as a framework and develop a Roadmap
- Utilize the Maturity Self- Assessment on a periodic bases to identify growth opportunities on a continuous basis

Questions?

THANK YOU!

Mara Campbell Mara.Campbell@jacobs.com (573) 353-0253

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Challenging today. Reinventing tomorrow.



NATIONAL COOPERATIVE HIGHWAY RESEARCH

New Performance Measures DISCUSSION

Christos S. Xenophontos, Rhode Island DOT Hyun-A Park, Spy Pond Partners, LLC

June 17, 2021





Why do we need new performance measures?

- Transportation agencies are changing
- New priorities are emerging
- Customers are more demanding and less patient
- Need for agility and nimbleness
- Our performance management abilities are evolving



and the environment

Advance equity and

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Align transportation

partners and regions

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Build transportation workforce capabilities

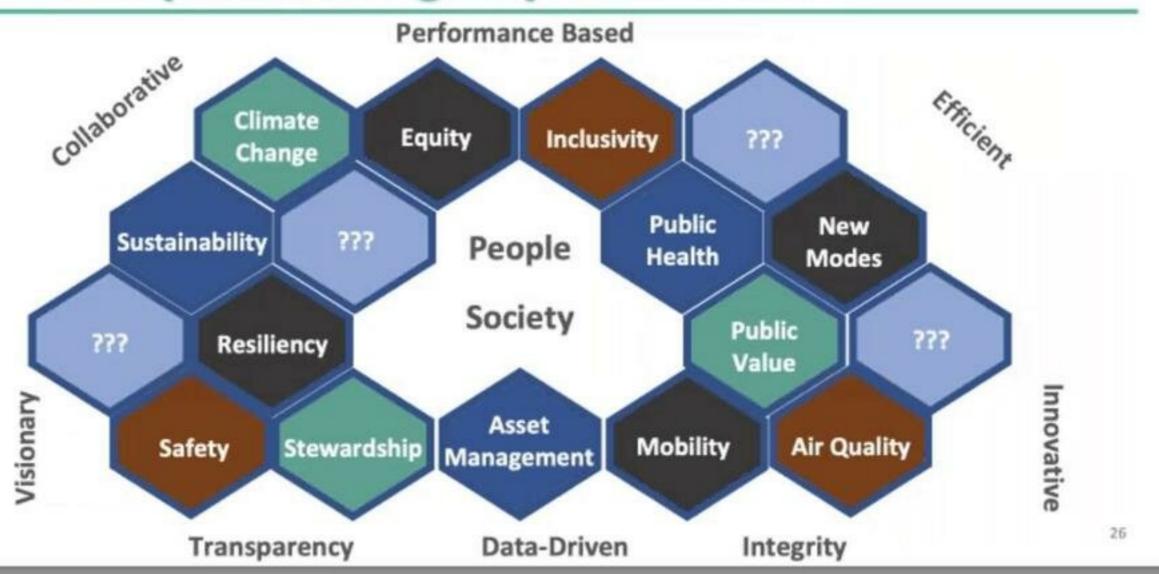
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Strategic Framework for the Transportation Agency of the Future







What are your thoughts on new performance measures?

- Do you think we need new performance measures?
- What areas of a transportation agency need new measures? Why?
- Do the new measures need to relate to a national view?
- What are our greatest challenges with implementing new measures?
- What can we do through the AASHTO Committee on Performance-Başed Management and the TPM Pooled Fund to make progress with new measures?





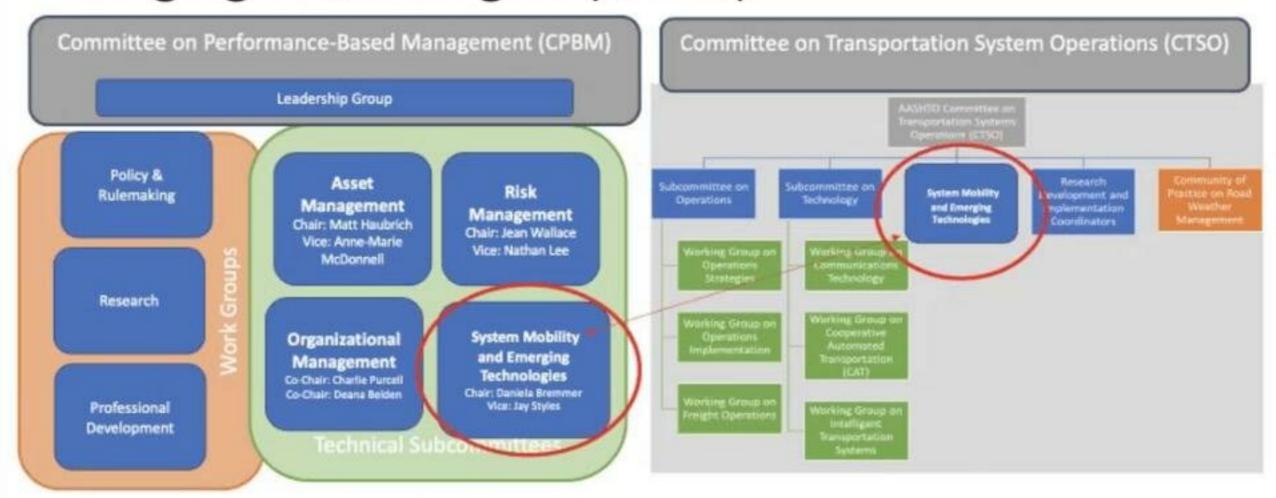
CPBM Business

Joint Subcommittee on System Mobility and Emerging Technologies (SMET) Quarterly Update-Pooled Fund Meeting 06-17-2021

Daniela Bremmer, WSDOT, Chair (CTSO) Jay Styles, VDOT, Vice-Chair (CPBM)



Joint Subcommittee on System Mobility and Emerging Technologies (SMET)



System Mobility and Emerging Technologies - Joint Subcommittee (SMET) Overview

- Joint subcommittee of the AASHTO Standing Committees on Transportation System
 Operations (CTSO) and Performance-Based Management (CPBM).
 - Collaborative relationship with the Committee on Data Management and Analytics (CDMA)
- Forum to share how state DOTs are managing system operation and system mobility and how performance is impacted due to current and emerging transportation technologies, operational strategies and connected environments
- Explores system and mobility related performance, data and analytical tools, performance communication, reporting approaches, research and related, private sector partnerships
- Examines the impacts of current and emerging system management approaches such as Connected and Automated Vehicle (CAV) technology, Cooperative Automated Transportation (CAT) and Mobility on Demand (MOD) programs.



System Mobility and Emerging Technologies (SMET) 2020 Accomplishments and Resources

NEW Website: Joint Subcommittee on System Mobility and Emerging Technologies (SMET) – The TPM Portal (tpm-portal.com)

Covid-19 Related System Impact/Data Projects:

- Survey: State DOT COVID-19 Response: Use of Transportation Data and Information for Decision Makers: State DOT COVID-19 Response Survey: Use of Transportation Data and Information for Decision Makers – The TPM Portal (tpm-portal.com)
- Special Webinar Covid-19 Data Accessibility and Free Data Sources https://attendee.gotowebinar.com/recording/2019291993716040707

Partnership with AASHTO's State AV Task Force Community of Practice group

· Identified and documented over 46 national CAV-AV-CAT Related Committees and Working Groups

Developed NCHRP Project 20-123 Research Proposal: Strategic Planning and Research Roadmap Proposal;

System Mobility and Emerging Technologies (SMET) 2021 Action Plan Highlights to Date

- Sponsored four Best Practice Workshops with FHWA on MAP21 System/Congestion Analysis (PM3) requirements- completed spring 2021
 - Approaches to Calculating and Setting Targets for PM3 Travel Time-Based Measures and Data Issues for the PM3 Travel Time-Based Measures
- Partnered for NOCoE Data Governance and TSMO peer exchange (3-day session), completed April 2021
- NCHRP Project 20-123 Research Proposal: Strategic Planning and Research Roadmap Development, approved and panel formation under way;
- Engage with AASHTO Inter-Committee Working Groups for Emerging Technologies to support cross committee research and work alignments
 - Connected and Automated Vehicles (CAV) WG collaborate to update CAT/CAV policy principles - currently underway

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Updating the AASHTO CAV/CAT Policy Principles

- National Strategy and Vision are needed
- Safety is Paramount
- A Connected and Automated Future
- Innovative Federal Infrastructure Investment
- Sustainability
- Equity, Access, and Quality of Life
- Preserve Traditional State and Federal Roles
- 8. Uniform National Policy
- Federal Leadership to Foster Collaboration and Community Engagement
- Data Sharing

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Draft CAV/CAT Policy Guiding Principles document sent via email



System Mobility and Emerging Technologies (SMET) 2021 Action Plan Highlights to Date (cont.)

- Engage with the other three AASHTO Inter-Committee Working Groups
 - Shared Mobility/ Mobility as a Service WG (TBD)
 - Drones WG (TBD)
 - Electric Vehicles WG (TBD)
- Revisit the COVID-19 data survey- (Include impacts on system analysis and technology budgets)-under consideration
- Collaborate with National Operations center of Excellence (NOCoE) and TPM Pooled Fund (now on developing case studies that exemplify the importance and use of system data for decision making beyond the traditional applications (TBD)
- Continue to hold bi-monthly subcommittee meetings that promote partnering sessions and the exchange of best practices (underway)
- Identify TRB partner committees
- Reach out to the subcommittees and working groups of both AASHTO standing committees to identify work plan priorities and opportunities for collaboration, (underway)

Joint Subcommittee on System Mobility and Emerging Technologies (SMET)

Reach out and join us:

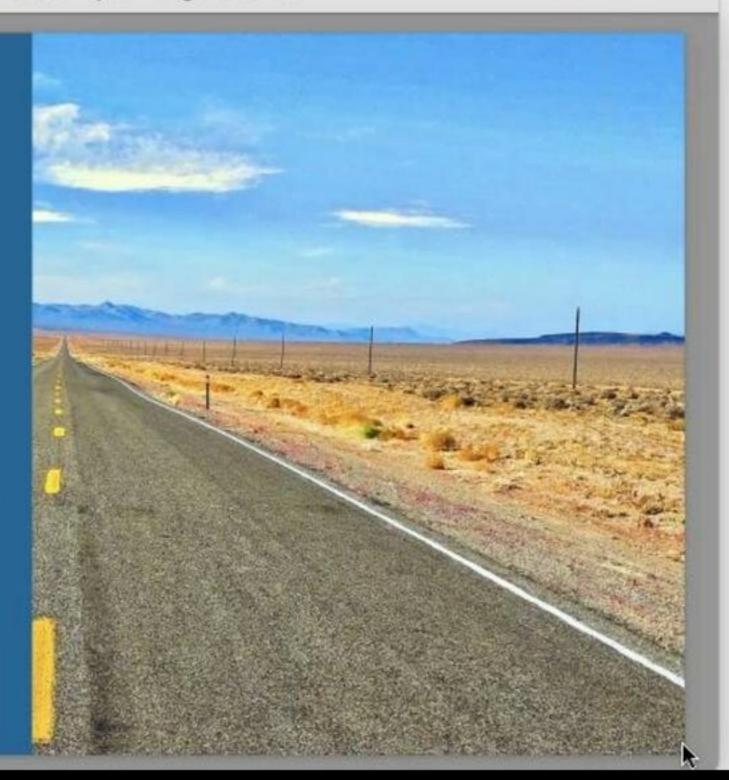
- Chair, Daniela Bremmer (WSDOT), bremmed@wsdot.wa.gov;
- Vice-chair, Jay Styles (VDOT), jay.styles@vdot.virginia.gov;
- Patrick Zelinski, (AASHTO CTSO staff lead), PZelinski@aashto.org;
- Matt Hardy (AASHTO CPBM staff lead), mhardy@aashto.org
- Rich Taylor, (FHWA, Liaison), <u>Rich.Taylor@dot.gov</u>
- Bi-Monthly Webinars/Virtual Meetings:
 - Meetings: Even Months, third Tuesday at 2:30 pm EASTERN (joint with AASHTO-CTSO)
 - Next meeting: Tuesday, August 17th, 2021, 2:30 EASTERN
- NEW Website:
 - Joint Subcommittee on System Mobility and Emerging Technologies (SMET) The TPM Portal (tpm-portal.com)

AASHTO CPBM/TPM Pooled Fund Joint Quarterly Membership Meeting

AASHTO Subcommittee on

Asset Management

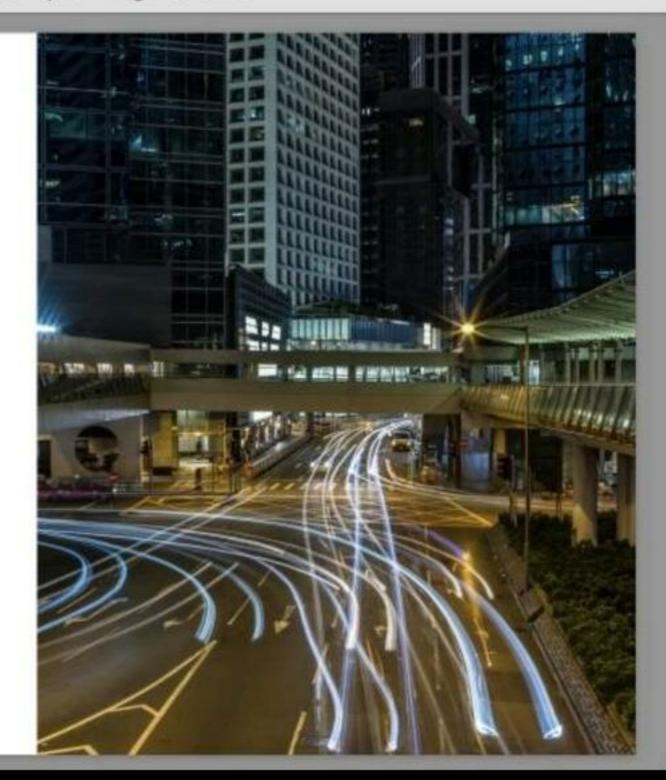
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TAM Update

- FHWA TAM DUE DATES (for states):
 - Implementation Documentation for Annual
 Consistency Review (6/30/21)
 - NEXT TAMP DUE 2022
- TAM Book Club 2021 Webinar Mini-Series (Video Recordings Available Now!)
- AASHTO TAM Guide (tamguide.com)



TAM National Conference 2021

VIRTUAL Conference

- Aug 10 12
- Daily Themes
 - Strategic Planning
 - Managing the Day-to-day
 - The Future of TAM
- 3 plenary sessions and 18 breakouts
- Early-bird registration thru July 10
- State DOTs may have free registration via a Pooled Fund. Contact Matt Haubrich with questions

(matthew.haubrich@iowadot.us)

13th National Conference on Transportation Asset Management

Day 1 (Aug 10) Strategic Planning Through TAM

- Opening Plenary Session
- Breakout Sessions
- · Potential Federal Infrastructure Bill
- . Setting Actional able Targets for Use in Your TAMP
- Asset Valuation to Support TAM
- · Breaking down Silos Can we use the tools we currently have, or do we need more?
- · Managing Assets for a Resilient
- From Cradle to Grave: Life Cycle Planning for TAMP

Day 2 (Aug 11) Supporting TAM Operations: Managing the Day-to-day

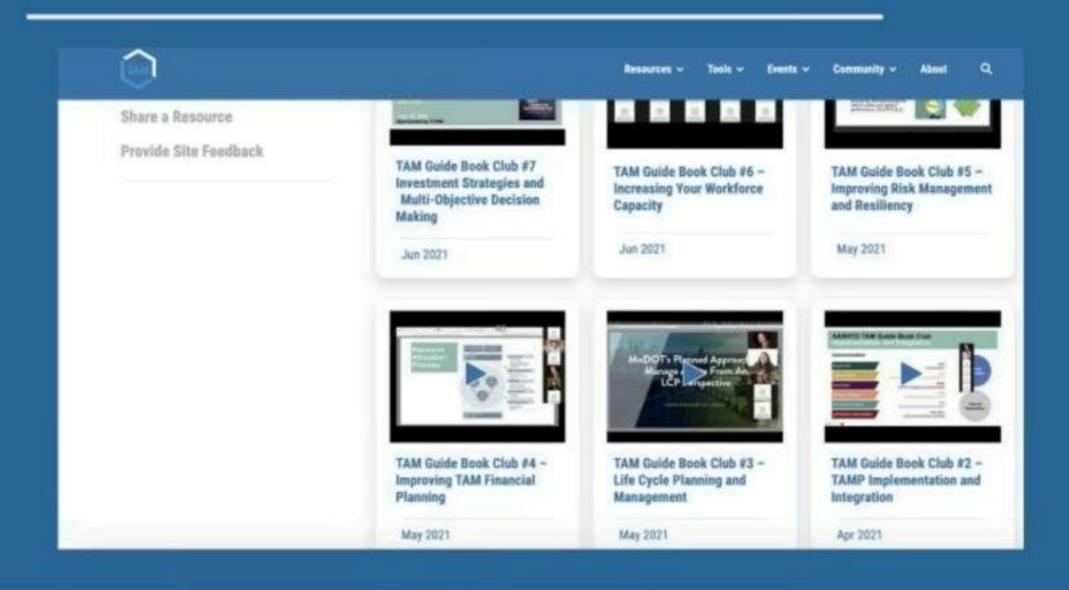
- Morning Plenary Session
- Breakout Sessions
- . Transportation finances after the pandemic. Experiences from federal, state, local, transit, authority.
- Integrating Risk Management into Agency Practices, a Roadmap
- . TAMping the way to the Next Transit Asset Management Plans
- 2022 TAMP What are agencies planning?
- · More than checking a box. Making your TAMP foundational to your agency practices.
- * Effectively Communicating Asset Management Information

Day 3 (Aug 12) Preparing for the Future of Asset Management

- Breakout Sessions
- What's next for asset management? Next generation of asset management approaches to address or capitalize advancements in technology and changes in funding streams.
- TAM and Equity
- Making Your TAMP Address Resilience to Truly Extreme Weather
- Organizational Transformation and Improved Asset Decision Making
- . Communicating TAM to Expand Public and Agency Buy-in
- Exploring the Frontiers of Asset Management Modeling and Analysis
- Closing Plenary

https://trb.secure-platform.com/a/page/assetmanagement2021

https://www.tam-portal.com/collections/tam-webinars/



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TAM Research

In Collaboration with TRB ABJ(30)

Current efforts

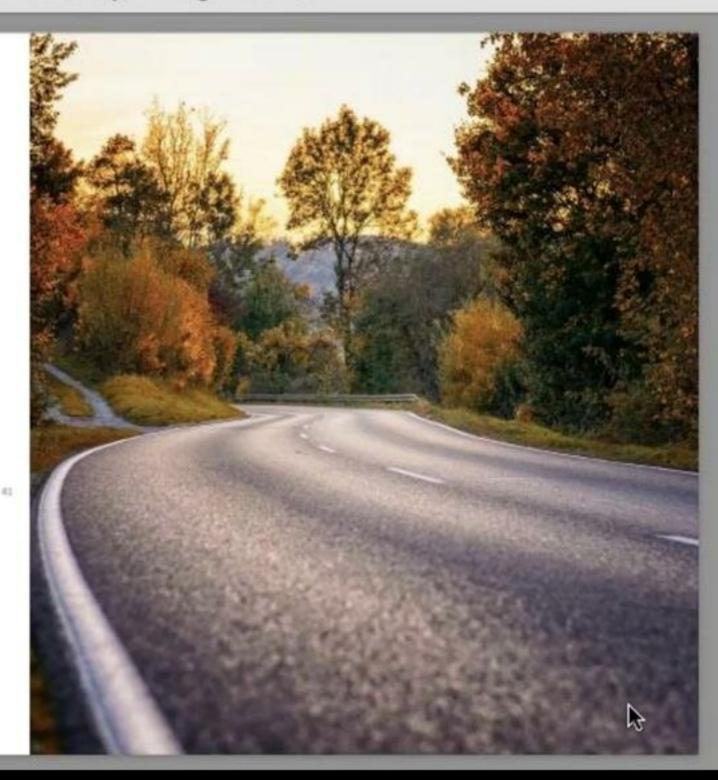
Development of Research Needs Statement (RNS)

Ongoing Research

- Past projects coming to fruition
- 2020 projects just now getting started
 - 08-137: Enhancement to TAM Guide III
 - 08-138: Connecting TAM & TSMO

TRB AJ30 Launched TAM Competition to identify innovative approaches to current challenges in Transportation Asset Management

- 2021 Theme: Social Equity and TAM
- https://www.tam-portal.com/wpcontent/uploads/2021/01/AJE-30-TAM-competitionguidelines.pdf





Join Us!

Focused on supporting State DOT needs related to Asset Management.

- Implementation Activities
- Research
- Federal Requirements
- Peer community & information sharing

Contacts

- Chair: Matt Haubrich, Iowa DOT
- Vice-chair: Anne-Marie McDonnell, Connecticut DOT
- Membership Coordinator: Louis Feagans, Indiana DOT
- FHWA Liaison: Steve Gaj

Monthly joint meetings with TRB Asset Management Committee, second Wednesday of each month (https://www.tam-portal.com/event/)



Mission

 Help agencies achieve organizational excellence and advance the practice of performance excellence by identifying, analyzing and sharing information to improve organizational performance at the strategic, tactical and operational levels of the organization.

Goals

- Assist agencies to achieve strategic goals and improve performance in the most effective and efficient way.
- Examine and share effective organizational models, leadership structures and competencies used to monitor, respond to and implement organizational improvement.
- Provide agencies with best practices in the application of process/quality improvement tools and methodologies





Meetings: 3rd Tuesday monthly, 11am - 12:30 pm Central

Co-Chairs: Deanna Belden, MnDOT; Charlie Purcell, Iowa DOT

Secretary: Stacey Houston, Iowa DOT

AASHTO Liaison: Matt Hardy

FHWA Liaison: Alexis Kuklenski

Strategic partnership with TRB AJE15 Workforce Development & Organizational Excellence Committee

Chair: Victoria Beale, Ohio DOT



Activity 1 – Process Improvement, Gary Vansuch, Colorado DOT

- Much of the work of Activity 1 is built around the community of practice called the "Transportation Lean Forum" (TLF)
 - Most recent webinar in May featured key improvement-related presentations from Illinois, Michigan, and Saskatchewan, and lots of robust discussion - webinar is archived here: https://sites.google.com/state.co.us/leaninterchange/home
- Next TLF webinar is scheduled for July 13, 11:00 AM- 12:15 PM ET
 - This webinar marks the Forum's ninth anniversary



Activity 2 – Non-system Performance Measures, Deanna Belden, Minnesota DOT

- Considering work on customer centered measures, potentially tying to public value creation
- NCHRP synthesis study on program and project delivery performance measures used for decision making in State DOTs
 - Problem statement will be resubmitted for next year



Activity 3 - Support the Agency Capability Building (ACB) Portal, Charlie Purcell, Iowa DOT

- Implementation project for NCHRP 20-24(95)A, Ensuring Essential Capability for the Future Transportation Agency
- Outreach to other AASHTO committees



How can you get involved?

- Participate in our monthly subcommittee web conferences. Join in the conversation. Offer your insight and perspectives. Learn from others.
- Attend our annual or mid-year subcommittee meetings, usually held in conjunction with an AAHSTO or TRB conference.
- Assist with or lead one of the subcommittee activities
- E-mail deanna.belden@state.mn.us or charlie.purcell@iowadot.us

Next meeting

July 20, 2021, 11:00-12:30 Central Time



Risk Management

Mission

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.
- Develop needed guidelines, guidance, training, and educational resources to facilitate the implementation of risk management approaches within a state transportation agency.
- 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; AASHTO Liaison, Matt Hardy; Vice-Chair, Nathan Lee, Utah DOT FHWA Liaison, Daniel Fodera



Risk Management

SRM-sponsored research projects:

- NCHRP 20-123(04), Strategic Planning Session and Development of a Risk-Management Research Roadmap. Status: several meetings held with SRM and good progress being made on research priorities and strategic planning. Looking for participation in risk management research roadmap workshop in early Aug.
- NCHRP 23-09, Scoping Study to Develop the Basis for a Highway Standard to Conduct an All-Hazards Risk and Resilience Analysis. Two workshops held in March and April with members of CTSSR, SRM and SAM participating. Interim project meeting held last week.
- NCHRP 23-15, Prioritization of Risks Related to Connected and Automated
 Vehicles and Emerging Technologies. Panel has selected a contractor but work
 has not yet started.



Risk Management

FY22 NCHRP Approved Projects – Panel Nominations by June 30th!

- NCHRP 23-24 Develop Methods to Allow Agencies to Incorporate Quantitative Risk Assessment at Project and Network Level (developed with the Subcommittee on Asset Management)
- NCHRP 08-151 Building Risk-Management Momentum in Agencies

Upcoming Events

- Next SRM Bi-monthly meeting Monday, August 9, 1-2 pm Eastern
- TRB TAM Conference, August 10-12

AASHTO CPBM SRM Website: https://www.tpm-portal.com/community/cpbm/rm/



Mission: Provide information related to proposed, ongoing, and completed research in order to keep the AASHTO Committee on Performance Based Management membership updated, and ensure that the research development process aligns with the TAM Research road map

Leadership/Key Roles:

Work Group Chair Tammy Haas, New Mexico DOT

Email: tamarap.haas@state.nm.us

Work Group Vice-Chair, William Johnson, Colorado DOT

Email: will.johnson@state.co.us

Meeting Cycle: 2nd Friday each month, 10 am Eastern

Tasks: Track Research, Coordinate development of Research Needs Statements, provide contact information for Subcommittees of CPBM



FY2022 NCHRP Problem Statements – 2 Approved – Nominate to be on the Panel

- NCHRP 23-24, Develop Methods to Allow Agencies to Incorporate Quantitative Risk Assessment at Project and Network Level (Risk Management: Jean Wallace, Nathan Lee)
- NCHRP 08-151 Building Risk-Management Momentum in Agencies (Risk Management: Jean Wallace, Nathan Lee)

NCHRP Synthesis (submitted but not selected for FY22 Funding)

- Program and Project Delivery Performance Measures (Organizational Management, Deanna Belden, Charlie Purcell)
- Lessons Learned from Consistency Determination (Asset Management, Matt Haubrich, Anne-Marie McDonald, William Johnson, Todd Shields)



Committee and subcommittee members begin to work with TRB partner committees and others to solicit and generate research project ideas for the following research programs:

Legal Studies (October 1)— https://apps.trb.org/cmsfeed/TRBNetProjectDisplay.asp?ProjectID=508

Domestic Scan (late October)—http://web.transportation.org/nchrp/20-68A/Default.aspx

NCHRP (November 1)—http://www.trb.org/NCHRP/NCHRP.aspx

Synthesis (mid-February)

http://www.trb.org/SynthesisPrograms/SynthesesNCHRP.aspx

Implementation (rolling)—http://www.trb.org/NCHRP/NCHRPImplementationSupportProgram.aspx

AASHTO Committee Support (rolling)

See separate document on NCHRP Problem Statement Timeline for 2021.





Near Future Activities

 FY 2023 Research Problem Statement, Synthesis development in coordination with AJE 30 Asset Management

Web resources

 NCHRP Project 08-36(134) Transportation Asset Management Research Roadmap – <u>tam-portal.com/roadmap/</u>

Research Needs Statements

FY 2023 Portfolio of Proposed Projects

June 2021

Proposed Synthesis Projects

FY 2023 Proposed Research Portfolio

(#) Best Practices of Linking Required Planning/Performance Documents/Processes.

- Project Description: A State DOT TAMP documents the investment strategies and expected outcomes for various asset classes that have been incorporated into the TAMP. The State DOT TAMP does not replace any existing state transportation plan (e.g., LRTP, freight plan, operations plan, etc.) but does provide critical inputs to existing plans, linking capital and maintenance expenditures related to asset preservation. At the same time that State DOTs were developing their TAMPs, states also implemented a performance-based planning and programming approach which applies performance management principles to transportation system policy and investment decisions. Performance-based planning and programming is a system-level, data-driven process to identify strategies and investments. The results of this new performance-based planning and programming approach are performance-based long range transportation plans and statewide transportation improvement programs (similar for MPOs) that define key goals and objectives and analyze and evaluate strategies and scenarios for meeting the defined goals and objectives. Fundamental to both developing the TAMPs and implementing a performance-based planning and programming approach is the connection of performance measures to goals and objectives through target setting to provide a basis for understanding and sharing information with stakeholders and the public. Currently, the development of the TAMP and the function of the traditional planning process are not well documented or understood.
- Project Objective: The objectives of this research will examine broadly:
 - How State DOTs and MPOs are linking and including asset management decision in their traditional planning processes
 - How asset management and the TAMP can be better integrated within an agency's traditional planning process,
 - What resources are needed to support State DOTs and MPOs to better connecting their TAMPs with the required planning documents.
- Related Projects/Efforts:
- Funding Amount:
- Funding Program: NCHRP Synthesis
- Champions:

Jeff Neal

NCTCOG

Meredith Hill

Maryland SHA

Proposed Implementation Projects

FY 2023 Proposed Resear Portfolio

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(#) Application and Use of BIM to Support Data Governance Procedures for Transportation Agencies

- Project Description: Research is needed on the importance of data governance from the conception of a project's data dictionary, through the inventory and condition assessment and continuing with the data management and integration into transportation asset management systems. A question worth pursuing is whether all aspects of language, wording, numbering, and measurement units should be standardized or if template guides could be developed for each agency to standardize their unique asset type requirements, but in a nationally recognized format for easy translation.
- After establishing governance routines for asset data collection and management, the next phase of research would involve the security aspects of an agency's data as well as the quality assurance measures applicable to grow confidence in the data's quality. A full review of best practices for data security procedures could break the barrier of IT to asset manager. Additionally, once definitions and governance procedures are established, the quality assurance process becomes more stream-lined and gives better confidence to the decision makers.
- Project Objective:
- Related Projects/Efforts:
- Funding Amount:
- Funding Program:
- Champions: None idetified



Next Steps

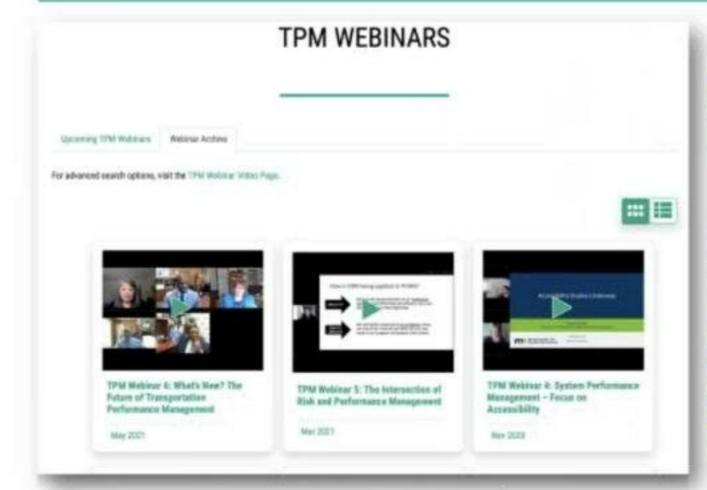
- Seek volunteers to complete Research Needs Statements
- Monthly check-ins July 15; August 15; Sept 15 must be submitted to Matt Hardy at AASHTO before Sept 30
- Will use the Research Management System to store statements not making adequate progress throughout summer
- Final delivery of statements to AASHTO/Matt Hardy September 30



TPM Pooled Fund Business



TPM Webinar Series



Bi-monthly Webinar Series https://www.tpmportal.com/tpm-webinars/

Register for July 21 TPM Webinar Roundtable –

https://register.gotowebinar.c om/register/575179642456630 3502





Review Action Items



Wrap Up

- We hope you will join us for our next joint CPBM/TPM Pooled Fund Quarterly web call on Thursday, September 2, 2021 at 2:00 PM Eastern Time.
- Notes and materials from this meeting will be sent to all invitees.
 They will also be posted on the TPM Portal tpm-portal.com
- 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!

