



CPBM/TPM Pooled Fund

Quarterly Web Call

December 7, 2023



Agenda

- 2:00 **Welcome and Agenda.** Christos Xenophontos, AASHTO CPBM Chair, Rhode Island DOT.
- 2:05 **Preview Topics of Interest to Performance Mgt. Community at Upcoming TRB Annual Meeting.**
- **Critical Issues of Transportation & What to Expect at TRB Annual Meeting.** Victoria Sheehan, TRB.
- 2:35 **Summary of Workshop.**
- **Designing the Transportation Agency of the Future.** John Kaliski, Cambridge Systematics.
- 2:45 **Other Workshop, Lectern, & Poster Sessions of Interest.**
- **TRB AJE10 Strategic Management.** Steve Woelfel, Massachusetts DOT.
- **TRB AJE15 Workforce Development & Organizational Excellence.** Gary Vansuch, Colorado DOT.
- **TRB AJE20 Performance Management.** Peter Rafferty, Cambridge Systematics.
- **TRB AJE30 Asset Management.** Ister Morales, Gannett Fleming.
- **International Coordinating Council.** Bill Anderson, TRB.



Agenda

- 3:15 **AASHTO Updates.** Anna McLaughlin, AASHTO.
- 3:25 **FHWA Updates.** Msh Smith-Jackson, AASHTO.
- 3:35 **AASHTO CPBM Business Meeting.** Christos Xenophontos, Rhode Island DOT.
- Subcommittee, Task Force, Work Group Updates. Subcommittee & Workgroup Chairs.
- 4:15 **Discussion.** All.
- 4:25 **Action Items.** Karen Miller, Missouri DOT.
- 4:30 **Wrap-Up.** Christos Xenophontos, Rhode Island DOT.



Feature Presentation: Preview Topics of Interest to the Performance Management Community at the Upcoming TRB Annual Meeting



<https://www.trb.org/AnnualMeeting/AnnualMeeting.aspx>



Critical Issues of Transportation & What to Expect at Upcoming TRB Annual Meeting



Victoria Sheehan
Executive Director
Transportation Research Board



Workshop, Lectern, and Poster Sessions of Interest



Workshop: Designing the Transportation Agency of the Future





Designing the Transportation Agency of the Future

Workshop, Sunday, January 7, 1:30-430pm

Joint collaboration between TRB, PIARC, AASHTO

Sponsored by:

- Standing Committee on Strategic Management (AJE10)
- International Coordinating Council (A0020C)
- Standing Committee on Transportation Asset Management (AJE30)
- Standing Committee on Public Engagement and Communications (AJE40)
- Standing Committee on Information and Knowledge Management (AJE45)
- Standing Committee on Data for Decision Making (AJE70)



Designing the Transportation Agency of the Future

Purpose

- Describe how the mission/”north star” of transportation agencies is changing
- Identify how transportation agencies can evolve their structure, workforce, processes, and partnerships to address a changing mission
- Identify future research and collaboration opportunities

Format:

- Reports on recent research by TRB and PIARC
- Panel discussion of industry leaders
- Small group discussions



Designing the Transportation Agency of the Future

Research Updates

- Victoria Sheehan, Executive Director, TRB (*moderator*)
- Patrick McKenna, Director, Missouri DOT – *AASHTO transportation vision framework*
- Christos Xenophontos, Rhode Island DOT – *PIARC research: Toward the Transportation Agency of the Future*
- Deanna Belden, Minnesota DOT – *Highlights from the Prague Workshop*





Designing the Transportation Agency of the Future

Industry Leaders Panel Discussion

- Shailen Bhatt, FHWA Administrator, *moderator*
- Patrick Mallejacq, Secretary General, PIARC
- Meghan Haggerty, COO, Massachusetts DOT
- Jannine Miller, Executive Director, SRTA, GRTA, The ATL; Director of Planning, Georgia DOT
- Greg Slater, Executive Director, Tampa Hillsborough Expressway Authority
- Alex Walcher, Managing Director, ASFINAG Bau Management GmbH





TRB AJE10 - Strategic Management- Sponsored Sessions

Steve Woelfel
Massachusetts DOT

TRB Annual Meeting 2024 AJE10 Strategic Management Activities

Activity and presiding officer	Type	Date and Time
Strategic Management Committee, Steve Woelfel	Committee Meeting	Tuesday, Jan 09 3:45PM - 5:30PM
Designing the Transportation Agency of the Future, John Kaliski	Workshop	Sunday, Jan 07 1:30PM - 4:30PM
Non-Traditional Pathways to Leadership, Melrose Pan	Lectern session	Tuesday, Jan 09 1:30PM - 3:15PM
Resiliency in the Age of Disruption, Cole Kopca	Poster session	Tuesday, Jan 09 8:00AM - 9:45AM
Shaping the Agency of the Future: Adapting with Workforce, Technology, and Funding Challenges, Alyssa Ryan	Lectern session	Monday, Jan 08 10:15AM - 12:00PM

Non-Traditional Pathways to Leadership

Lecture

Panelists:

- **Liz Williams**, Massachusetts Department of Transportation
- **Sebastian Moreno**, NJ TRANSIT
- **Brandy Hendrickson**, Texas Department of Transportation
- **Nathan Higgins**, Slalom

Shaping the Agency of the Future: Adapting with Workforce, Technology, and Funding Challenges

Lecture

Panelists:

- **Monica Tibbits-Nutt**, Massachusetts Department of Transportation
- **Leslie Richards**, Southeastern Pennsylvania Transportation Authority (SEPTA)
- **Margaret Anderson Kelliher**, Minnesota Department of Transportation
- **Greg Stuart**, Broward MPO



TRB AJE15 - Workforce Development and Organizational Excellence - Sponsored Sessions

Gary Vansuch, AJE15 member
Colorado DOT

TRB 103rd

ANNUAL MEETING

January 7–11, 2024 • Washington, D.C.



Substituting for **Victoria Beale, Chair**
Ohio DOT



Workforce Management and Organizational Excellence – Join Us at the Sponsored sessions at the TRB Annual Meeting!! **Sunday!**

1008: Shaping the Future: ChatGPT and Other Artificial Intelligence Technologies in the Transportation Industry

Sunday, January 07 9:00 AM- 12:00 PM ET
Convention Center, 101Workshop | PDH

Part 1 - Presentation: Potentials of ChatGPT & AI Technologies

9:00 am – 10:20 am - Topics may be around, but are not limited to state-of-the-art/practice of GenAI and other AI Technologies in transportation applications

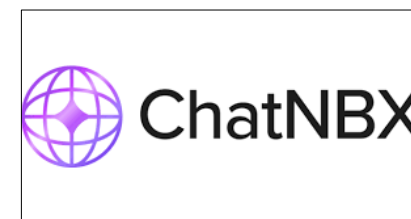
Part 2 – Panel Discussion: Impacts of ChatGPT & AI Technologies

10:30 am – 11:30 am Topics may be around but are not limited to impacts to workforce development, industry transformations in engineering design and maintenance, TSMO, planning and policy, etc.

Part 3 – Open Discussion, Audience Q&A

11:30 am – 12:00 pm

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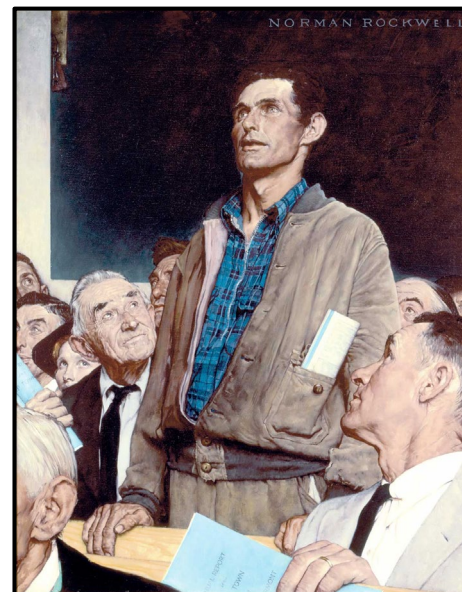


Workforce Management and Organizational Excellence – Join Us at the Sponsored sessions at the TRB Annual Meeting!! **Monday!**

Workforce Development and Organizational Excellence Committee Meeting

Monday, January 08 8:00 AM- 12:00 PM ET
Marriott Marquis, Liberty Salon K (M4)

“The ear of the leader must ring with the voices of the people.”



JANUARY 2024						
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Workforce Management and Organizational Excellence – Join Us at the Sponsored sessions at the TRB Annual Meeting!! **Monday!**

2130: Exploring Strategic Workforce Development Partnerships

Monday, January 08 1:30 PM- 3:15 PM ET
Convention Center, 152A

Overview of FHWA’s Strategic Workforce Development program
Christina Currier, Federal Highway Administration (FHWA)

ConnectU2 Jobs
Michael Bryant, Texas Department of Transportation

Successful Partnerships in Phoenix
Corey Foster, Arizona Associated General Contractors

Increasing Diversity in Oregon’s Heavy Highway Construction Workforce
Larry Williams, Oregon Bureau of Labor and Industries

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Workforce Management and Organizational Excellence – Join Us at the Sponsored sessions at the TRB Annual Meeting!! **Monday!**

2185- Why Risk Matters: A Fireside Chat with State Department of Transportation Leaders

Monday, January 08 3:45 PM- 5:30 PM ET
Convention Center, 152A

Nancy Daubenberger, Minnesota Department of Transportation

Toks Omishakin, California State Transportation Agency (CalSTA)

Garrett Eucalitto, Connecticut Department of Transportation

Russell McMurry, Georgia Department of Transportation

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Workforce Management and Organizational Excellence – Join Us at the Sponsored sessions at the TRB Annual Meeting!! **Tuesday!**

3010: Workforce Development: Challenges and Solutions

Tuesday, January 09 8:00 AM- 9:45 AM ET
Convention Center, 151B

Leading Forward: Developing Leadership Skills and Strong Safety Cultures Across the Rail Industry

Julia Leone, Short Line Safety Institute
Samantha Lacey, University of Connecticut

Skill Training Alliance For the Future European Rail system (STAFFER): Towards the Blueprint Strategy

Alice Consilvio, Università degli Studi di Genova
Angela Di Febbraro, University of Genoa
Nicola Sacco, University of Genoa

Do engineering instructors teach induced travel? If not, why not?

Kelcie Ralph, Rutgers University
Ellen White, State University of New York, ESF

Exploring Potential Critical Content of Connected and Autonomous Vehicles for

Transportation Engineering Courses: A National Survey

Md Mahmud Hossain, Auburn University
Huaguo Zhou, Auburn University
Rod Turochy, Auburn University

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Workforce Management and Organizational Excellence – Join Us at the Sponsored sessions at the TRB Annual Meeting!! **Tuesday!**

Poster session 3109: Workforce Development and Organizational Excellence

Tuesday, January 09 10:15 AM- 12:00 PM ET
Convention Center, Hall A

Such as this one:

COLORADO
Department of Transportation

Using Quantitative Research to Make Way for Wildlife
Presented by the Office of Process Improvement
Colorado Department of Transportation

The Innovation Challenge

The Wildlife Underpass Staging Project is a Lean Everyday Idea that was submitted to the Office of Process Improvement's 2023 Innovations Challenge. The Innovations Challenge sets out to highlight and reward CDOT employee's innovations to better improve the work we do here at CDOT. No innovation is too big or small for the challenge, and Regional Judges choose the most innovative idea based on specific criteria at the end of the event.

The Research Project

John Kronholm is a resident engineer for Eagle and Lake County in Region 3 who was tasked to improve the Interstate 70 Corridor with wildlife passages to meet the needs of the wildlife, and set out to put research together. Once a case was made for the need of this research, Colorado Department of Transportation (CDOT) desired to determine if there was a point of diminishing return of effectiveness based on target species success rates when it comes to sizing highway wildlife passages. The traditional line of thought was "bigger is better" for wildlife, but John Kronholm saw room to reduce budget expenditure if underpass sizes could be reduced while still giving wildlife the land they needed to safely traverse freeways.

Innovate Your State
2023 PEOPLE'S CHOICE WINNER
John Kronholm - Wildlife Underpass Staging

Innovate Your State
2023 JUDGES PANEL WINNER
Wildlife Underpass Staging Improvement

Data Analysis

A thorough review of scientific, professional, and less formal literature was conducted to evaluate how well Wildlife Crossing Structures work. An analysis was also performed to figure out how the physical characteristics of these structures, like their length, width, and height, affect their success in helping animals cross roads safely. Regression modeling was used to create a consistent method for understanding how changes in Wildlife Crossing Structures size relate to their effectiveness. To do this, a database with data for four different statistical analyses and regression models was created.

MODEL 4: UNDERPASS PREDICTED SUCCESS RATES FOR MULE DEER

To the left is Model #4 which shows Length and width are the strongest drivers of successful crossings for mule deer and elk may prefer bridge underpasses vs. culvert types, while mule deer did not have a preference. Tip: read this as the x axis is the length of an underpass, the lines themselves represent differing widths of underpasses, and the y axis is the success rate. Knowing this, you realize that success rate improves most drastically when the length is shorter and the bridge is wide, BUT the improvements decrease as you increase the width of the bridge... so at what point do you decide to no longer increase bridge width?

Model 4 Results: Deer Success Rate = $105.518 - (33.667)(\text{length}) + (11.428)(\text{width})$

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Workforce Management and Organizational Excellence – Join Us at the Sponsored sessions at the TRB Annual Meeting!! **Tuesday!**

3188: Implementation of Workforce Development Papers

Tuesday, January 09 3:45 PM- 5:30 PM ET
Convention Center, 151B

Framework for the Development of a Diverse Transportation Workforce in the Southeast Region

A Living Case Study: Plight of A New American Seeking Employment in the US Architecture, Engineering, and Construction (AEC) Industry

Workforce Forecasting for State Transportation Agencies: A Machine Learning Approach

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Workforce Management and Organizational Excellence – Join Us at the Sponsored sessions at the TRB Annual Meeting!! **Thursday!**

5009: The Future of the Transportation Workforce Development Life Cycle

Thursday, January 11 9:00 AM- 12:00 PM ET
Convention Center, 147A

Participants in this workshop will engage in a robust discussion concerning transportation's future workforce development life cycle.

Challenges presented by thought leaders will enable strategic planning on key impacts for the future workforce, its development, and how state departments of transportation respond. The impact of artificial intelligence with the current knowledge base, the innovation life cycle, including research, both home-grown and national improvements, will stimulate the conversation.

Proceedings will inform the 2025 Transportation Research Board Workforce Development National Conference planning

JANUARY 2024						
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TRB AJE20 - Performance Management- Sponsored Sessions

Peter Rafferty
Cambridge Systematics



Performance Management (AJE20) Schedule

Mon 1/8 at 8:00 AM Lectern 2009	How Well (or Not) Are We Doing?: Effective Performance Evaluation Practices [CC 152A] 
Mon 1/8 at 3:45 PM Lectern 2202	Evolving Transit Performance Metrics [CC 145B]
Tue 1/8 at 8:00 AM Lectern 3001	Modern TSMO: So Much More Than Travel Times and Vehicle Throughput [CC Salon A]
Tue 1/9 at 10:15 AM Lectern 3075	The Evolution of Performance Measurement: Are We Measuring Better? [CC 151B] 
Tue 1/9 at 1:30 PM Meeting	Performance Management Committee [MM Liberty K]
Tue 1/9 at 3:45 PM Poster 3217	Transportation Performance Management Posters [CC Hall A] 
Thr 1/11 at 9:00 AM Workshop 5010	Measuring What Matters: Emerging Transportation Performance Measures [CC 147B] 



AJE20: Better Outcome Evidence

Mon 1/8 at 8:00 AM
Lectern 2009

How Well (or Not) Are We Doing?: Effective Performance Evaluation Practices [CC 152A]

Are we moving the needle? Is performance-based planning working? Do we have the right evidence? Have we gone back to assess? These retrospectives are an honest look at what's working well (or not) and how we assess the effectiveness of our investments.

- ✓ **Performance Outcomes of the Accelerating Innovative Mobility and Integrated Mobility Innovation Demonstration Programs** – Justin John, FTA
- ✓ **Assessing Performance of Completed SMART SCALE Projects** – Margie Ray, VDOT
- ✓ **Moving the Needle: Connecting Outputs to Equitable Outcomes** – Samuel Marshall, Seattle
- ✓ **Evaluating the Delivery and Oversight of State-funded Local Bridge Projects** – Xiao Qin, UWM



AJE20: Evolving Measurement

Tue 1/9 at 10:15 AM
Lectern 3075

The Evolution of Performance Measurement: Are We Measuring Better? [CC 151B]

Performance evolution creates new or more robust measures, and traditional performance areas need not be static. This session shows examples of this evolution in different areas and will contrast the capability of those measures to provide more robust analyses.

- ✓ **Kicking the Big Data Tires**
– Timothy Canan, MWCOCG

- ✓ **Using Connected Vehicle Data to Support Pavement Performance Measurement**
– Mark Egge, High Street

- ✓ **Measures and Analytical Procedures to Assess Highway System Performance**
– Michigan State



AJE20: Performance Research

Tue 1/9 at 3:45 PM
Poster 3217

Transportation Performance Management Posters [CC Hall A]

This session includes poster presentations of new research in transportation performance management.

- ✓ **Measuring Performance of Transportation System in Texas Based on Transportation Planning Process Using Data Envelopment Analysis – Texas A&M and EDF**
- ✓ **Inference of Causal Relations between External Factors and Transportation System Performance Measures from Low-Frequency Time Series Data – Florida A&M**
- ✓ **Performance Measurement at USDOT under the Infrastructure Investment and Jobs Act – USDOT**
- ✓ **A Performance-Based Approach to Developing Capabilities for Building Resilience to Climate Hazards in Transportation Systems – Georgia Tech**



AJE20: Tackling Challenging Measures (Workshop)

Thr 1/11 at 9:00 AM
Workshop 5010

Measuring What Matters: Emerging Transportation Performance Measures [CC 147B]

Some important measures remain more challenging, e.g., access, resilience, sustainability, and equity. This INTERACTIVE workshop explores emerging measurement areas, why they are challenging, and potential alternative ways of assessing progress.

- ✓ **Including the Ends of the Trip: Using Access to Opportunity Measures for Transportation Network Performance**
– Eric Lind, U of MN
- ✓ **Performance + Equity: What Has Been Most Effective and How We Can Improve**
– Adrienne Heller, Cambridge Systematics
- ✓ **Measuring Community Outcomes: Reimagine the South Bronx!** – Charles Ukegbu, NYC DOT
- ✓ **Assessing Equity, Access, and Community Outcomes in the Atlanta Region** - Kyung-Hwa Kim, ARC
- ✓ **Colorado’s Transportation Pollution Reduction Planning Rule: A System to Account for Greenhouse Gas Pollution Impacts of Planning Choices in the Built Environment** - Chris Laplante, CDOT
- ✓ **Estimating GHG Performance for Transportation Planning and Meeting Emission Reduction Goals**
– James Bradbury, Georgetown Climate Center
- ✓ **International Lessons on Resilience and Disaster Management** – Yukio Adachi, Hanshin Expressway Research Institute for Advanced Technology, and Tomohiro Fujita, Public Works Research Institute
- ✓ **Challenges in Developing Resilience Performance Measures** – Brenda Dix, ICF



TRB AJE30 - Asset Management-Sponsored Sessions

Ister Morales
Gannett Fleming

TRB 103rd ANNUAL MEETING January 7-11, 2024

Walter E. Washington Convention Center
Washington, D.C.

Standing Committee on Transportation Asset Management (AJE30)

JOIN US AT THESE AJE30 EVENTS!

Committee Meetings

Liberty M MM	Monday, Jan 08 8:00 AM - 12:00 PM ET	Transportation Asset Management Committee (HYBRID) Meredith Hill, Maryland State Highway Administration, presiding
Liberty M MM	Monday, Jan 08 6:00 PM - 7:30 PM ET	Transportation Asset Management Education Subcommittee, AJE30(4) Gerardo Flintsch, Virginia Polytechnic Institute, presiding
Liberty K MM	Monday, Jan 08 1:30 PM - 5:15 PM ET	Risk Management Subcommittee, AJE00(1) Bağak Bektaş, Minnesota State University, Mankato, presiding
Independence B MM	Monday, Jan 08 1:30 PM - 5:15 PM ET	State of Good Repair Subcommittee AP010 (1) Jordan Holt, Washington Metropolitan Area Transit Authority, presiding

Lectern Sessions

2185 152A, CC	Monday, Jan 08 3:45 PM - 5:35 PM ET	Why Risk Matters: A Fireside Chat with State DOT Leaders Mara Campbell, Jacobs, presiding
3011 152A, CC	Tuesday, Jan 09 8:00 AM - 9:45 AM ET	Asset Management of Ancillary Assets Emily Burns, Seattle Department of Transportation, presiding
3187 152A, CC	Tuesday, Jan 09 3:45 PM - 5:30 PM ET	Transportation Asset Data Technology Systems Trisha Stefanski, Minnesota Department of Transportation, presiding

Poster Sessions

4074 Hall A, CC	Wednesday, Jan 10 10:15 AM - 12:00 PM ET	Tackling Asset Management Emerging Trends to Engage, Enrich & Empower Practitioners Richard Boadi, WSP, presiding
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Workshops

1009 150A, CC	Sunday, Jan 07 9:00 AM - 12:00 PM ET	Breaking Down Organizational Silos with Data Standards Jennifer Steen, HDR, presiding Shawn Blaesing, Iowa Department of Transportation, presiding
1013 152B, CC	Sunday, Jan 07 9:00 AM - 12:00 PM ET	Using Benefit-Cost Analysis in Today's Decision Making Susan Binder, Cambridge Systematics, presiding Nathan Macek, HDR, presiding
1050 147B, CC	Sunday, Jan 07 1:50 PM - 4:30 PM ET	Designing the Transportation Agency of the Future John Kaliski, Cambridge Systematics, presiding
5009 147A, CC	Thursday, Jan 11 9:00 AM - 12:00 PM ET	The Future of Transportation Workforce Development Life Cycle Victoria Beale, Ohio Department of Transportation, presiding
5010 147B, CC	Thursday, Jan 11 9:00 AM - 12:00 PM ET	Measuring What Matters: Emerging Transportation Performance Measures Deanne Belden, Minnesota Department of Transportation, presiding Michael Grant, ICF, presiding Peter Rafferty, Cambridge Systematics, presiding

Event Speakers



For more information visit:
<https://annualmeeting.mytrb.org/OnlineProgram/>



Would you like to learn more about a topic you heard?
Send ideas for future AJE30 session events to:
Meredith Hill (MHill8@mdot.maryland.gov) or
<https://forms.gle/358TwiVUdwSnbzFc8>



TRB 103rd ANNUAL MEETING January 7-11, 2024

JOIN US AT THE AJE30 TRANSPORTATION ASSET
MANAGEMENT COMMITTEE MEETING FEATURING A SPECIAL
KEYNOTE SPEAKER!



Stephanie Pollack

*Coordinator for Project Delivery Support
USDOT*

Unlocking Progress: Navigating the Ongoing Implementation of IIJA/BIL Initiatives

**TRB AJE 30 Transportation Asset Management
Committee Meeting**

Monday, Jan 8, 8:00 AM - 12:00 PM ET
Meredith Hill, MDOT SHA, presiding

JOIN AJE30 at these events!
(Link to the TRB Flyer)



SCAN ME



International Coordinating Council Updates

Bill Anderson

Senior Program Officer

Transportation Research Board



AASHTO Updates

Anna McLaughlin, AASHTO

July 1, 2023 – October 31, 2023

TPM TSP Contributions

1. Arkansas
2. Connecticut
3. Delaware
4. Georgia
5. Idaho
6. Indiana
7. Kansas
8. Kentucky
9. Maryland
10. Michigan
11. Mississippi
12. Missouri
13. Montana
14. Nebraska
15. New Mexico
16. North Dakota
17. Ohio
18. Oklahoma
19. Rhode Island
20. South Dakota
21. Utah
22. Washington



FHWA Updates

Mshadoni Smith-Jackson, FHWA



CPBM Business Meeting:

CPBM Subcommittee, Task Force, and Work Group Updates

Christos Xenophontos, Rhode Island DOT
AASHTO CPBM Chair



Research Work Group

Edgardo Block, Connecticut DOT
Alma Mujkanovic, Georgia DOT

Getting ready for TRB Annual Meeting

- Elicitation of performance-management-related RNSs at the TRB Annual Meeting at several committee meetings
 - AJE10 Strategic Management
 - AJE15 Workforce Development and Organizational Excellence
 - AJE20 Performance Management
 - AJE30 Transportation Asset Management
 - AJE00(1) Risk Management Subcommittee
 - AMR10 Critical Infrastructure Security and Protection

Getting ready for TRB Annual Meeting

- Pre-meeting survey proposed for distribution through each committee (if committee is willing)
 - RNS title and concept, contact information, TRB committee that it came from
 - Results presented at each committee meeting along with a request for any other RNSs
 - If Committee already prefers to submit their own list to us they can do that instead
- Should make the discussion at the committee meeting(s) more focused and highlighting areas with potential gaps
- Results will be shared with each TRB committee

Other activities

- Learn to navigate the RMS (with a view to focus on synthesis statements) (schedule a session)
- Start the RNS process with our subcommittees in areas where we can get going (schedule a virtual meeting to start)
- Monthly Research Work Group Call scheduling (Schedule for second Friday of every month except January, 2PM Eastern)



Policy and Rulemaking Work Group

Ryan Huff, Nebraska DOT
Lori Fiset, Rhode Island DOT



Policy and Rulemaking

<https://www.tpm-portal.com/community/policy-and-rulemaking>

The screenshot displays the TPM Portal website with a yellow callout box highlighting the navigation menu. The menu includes 'Resources', 'Tools', 'Events', 'Community', and 'About'. The 'Community' dropdown menu is expanded, showing a list of subcommittees and work groups. A red arrow points to the 'CPBM' link in the menu. Below the menu, the main content area features a banner for 'AASHTO Transportation Performance Management Portal' and a 'Featured Resources' section with several document cards. A second red arrow points to the 'Policy and Rulemaking Work Group' link in the 'Community' dropdown menu. At the bottom of the page, a URL is visible: <https://www.tpm-portal.com/community/policy-and-rulemaking-work-group/>



Policy and Rulemaking

An official website of the United States government [Here's how you know](#)

United States Department of Transportation

U.S. Department of Transportation
Federal Highway Administration

U.S. Department of Transportation
Federal Highway Administration

Office of Planning, Environment, & Realty (HEP)

Planning Environment Real Estate

HEP Events Guidance Publications Glossary Awards Contacts

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Newsroom

Press Releases

Speeches & Testimony

Media Contacts

Connect with Us

Biden Emissions Performance

Wednesday, *Whole-of-G*

FHWA 40-23
Contact: [FHWA](#)
Tel.: (202) 36

Related Links

- [GHG Performance Measure](#)

Resources and Data

Joint Target Applicability Tables

Presentations and Training

Contacts

For more information, please contact [John Davies](#).

FHWA → Environment

GHG Performance Measure

FHWA has issued a [final rule](#) that establishes a greenhouse gas (GHG) performance measure for State Departments of Transportation (State DOTs) and Metropolitan Planning Organizations (MPOs). The measure is part of the National Highway Performance Program and assesses the percent change in carbon dioxide (CO₂) emissions on the National Highway System relative to 2022 levels (23 CFR 490.507(b)).

Consistent with the framework of [Transportation Performance Management \(TPM\)](#), State DOTs will establish 2- and 4-year statewide emissions reduction targets, and MPOs will establish 4-year emissions reduction targets for their metropolitan planning areas (§ 490.105(e)-(f)). In addition, the rule requires certain MPOs serving UZAs with populations of 50,000 or more to establish additional joint targets. FHWA will soon be posting applicability tables to help identify MPOs that are required to set joint UZA targets.

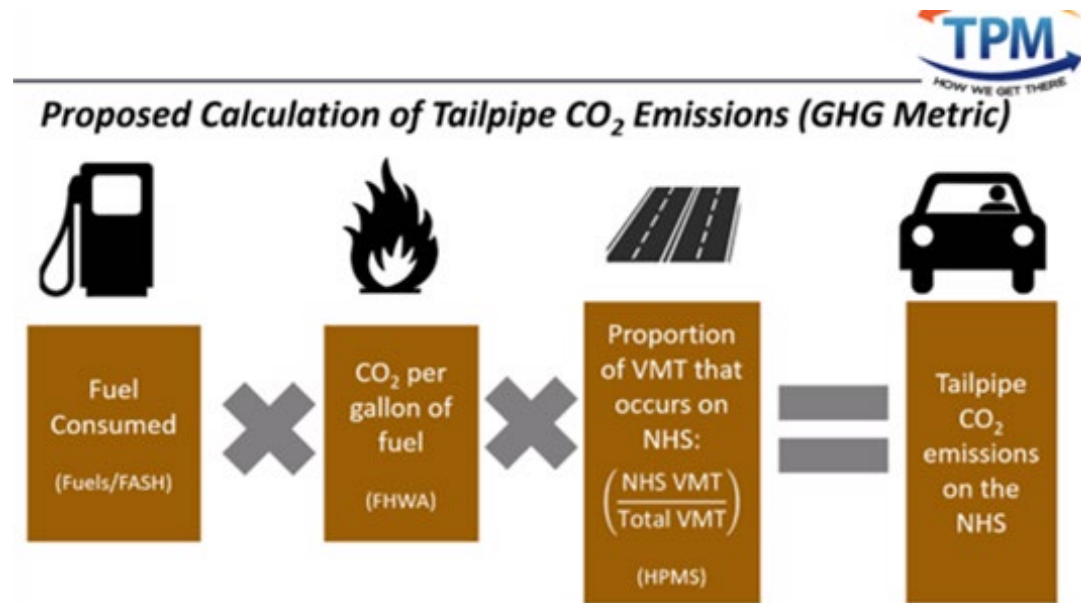
State DOTs and MPOs have the flexibility to set targets that work for their respective climate change policies and other policy priorities, so long as they are declining. State DOTs and MPOs are also required to report on their progress in meeting the targets. The final rule applies to the 50 States, the District of Columbia, and Puerto Rico. To realize the benefits of a GHG measure as soon as is practicable, State DOTs will first establish targets and report those targets by February 1, 2024. Subsequent targets will be established and reported no later than October 1, 2026, in line with other TPM measures (§490.107(b)-(d)).

The U.S. Department of Transportation Climate Change Center webpage lists a number of [GHG analysis tools and resources](#) that can be used to evaluate the impact of GHG reduction strategies and help set targets. CO₂ emissions factors for use in State reporting in 2024 are available on the State Initial GHG Report form, which will be available through the docket of the final rule.



Policy and Rulemaking

Metric: Tailpipe CO2 Emissions



- Simple calculation
- Data readily available from all states and already reported
- Nationally consistent for States
- Proportion of VMT on NHS is proxy for proportion of CO₂ on NHS
- MPOs may use other methods, such as VMT from travel demand model & MOVES

$$(\text{Tailpipe CO}_2 \text{ Emissions on NHS})_{CY} =$$

$$\left(\sum_{t=1}^T (\text{Fuel Consumed})_t \times (\text{CO}_2 \text{ Factor})_t \right) \times \left(\frac{\text{NHS VMT}}{\text{Total VMT}} \right)$$

Fuel Consumed = Federal Fuels/Fash System

CO₂ Factor = CO₂ per gallon of Fuel (*The CO₂ emissions factor would be posted on FHWA's website no later than August 15 each year*)

VMT Proportion = HPMS



Policy and Rulemaking

Measure: percent change between the current year and the reference year

$$\frac{(\text{Tailpipe CO}_2\text{Emissions on NHS})_{\text{CY}} - (\text{Tailpipe CO}_2\text{Emissions on NHS})_{\text{reference year}}}{(\text{Tailpipe CO}_2\text{Emissions on NHS})_{\text{reference year}}} \times 100$$

TP CO2 Emissions on NHS = see metric (previous slide)

CY = Calendar Year

Reference Year = To begin with, it will be 2022



Policy and Rulemaking

Other Important Details:

- **Targets:** Must be declining; but no penalty if the DOT or MPO does not make significant progress (aside from reporting the Actions it will take to achieve the target)
- **Targets Due:** February 1, 2024 (for State DOTs)
- **Mid Performance Period Progress Report Due:** October 1, 2024, but FHWA will classify progress as “progress not determined”.
- **Full Performance Period Progress Report Due:** October 1, 2026, this is when significant progress will be determined



Policy and Rulemaking

Other Important Details (Continued):

- **MPOs Calculations:** Do not need to agree with State DOT methods; but must document their preferred methods of calculation if different
- **MPO Targets Targets:** May adopt State DOT targets, or set their own
- **MPO Target Reporting:** Once every 4 years, rather than every 2 required for State DOTs

More to come.....



Subcommittee on Organizational Management

Gary Vansuch, Colorado DOT
David Putz, Iowa DOT
Gehan Elsayed, West Virginia DOT





Subcommittee on Organizational Management (OM)



Mission and Focus

The focus of the OM Subcommittee is on the development and implementation of

- >> organizational performance management processes,
- >> measures,
- >> improvement frameworks and
- >> strategies

... in order to optimize the efficiency and effectiveness of transportation agencies.

And we employ this definition of “Organizational Management”: the process of organizing, planning, leading and optimizing resources within an agency with the overall aim of achieving its goals and objectives. The concept of organizational management is based on the idea that there is a correlation between an agency’s capabilities in people, operations, and agency strategies to successfully implement their goals and objectives.



Subcommittee on Organizational Management (SCOM)



Subcommittee membership

This is the current membership list.

<https://www.tpm-portal.com/community/cpbm-om/>

OM has been reaching out to the members of CPBM, to solicit their support in finding people from their transportation departments who may be interested in being active members of OM.

A quick request: *If your state is not one of 12 on the "count me in" list, would you be available to check within your transportation department to determine whether there are folks who may be interested in contributing to the work of the OM Subcommittee?*





Subcommittee on Organizational Management (SCOM)



Pursuing joint work through partnerships!



CPBM System Mobility and Emerging Technologies (SMET) Subcommittee





Task Force on Emerging Performance Areas

Deanna Belden, Minnesota DOT

Kelly Travelbee, Michigan DOT



Task Force on Emerging Performance Areas

Background & Purpose

- Transportation agency goals and objectives are focusing on broad societal goals spanning across sectors. This has created a need to consider impacts and performance in a range of dimensions that have not been the traditional focus.
- The Task Force works to improve how State DOTs conduct performance management by identifying emerging performing areas, making recommendations for research, and creates a platform for knowledge exchange.
- Areas of interest include multimodal accessibility/destination access, equity, resilience, climate change impacts, health, etc.



Emerging Performance Areas – Current Activities

- Focus for the next 12 to 18 months is to advance performance consideration and state of practice in the following emerging topics:
 - **A**ccessibility/multimodal mobility
 - **C**limate/GHG and carbon reduction
 - **E**quity/Affordability





Emerging Performance Areas – Research

FY24 Funded

- NCHRP 23-34 Advancing Comprehensive Performance Measurement of Transportation Outcomes

FY25 Submitted

- Advancing Methods to Evaluate Greenhouse Gas Emissions During Transportation Decision Making and Performance Management
- Understanding, Creating and Measuring Public Value; lessons learned from public agencies

Under consideration as a future implementation project

- Implementing Effective Resilience Performance Management



Emerging Performance Areas

Please join us! Offer your insight and perspectives. Learn from others.

- Regular monthly meetings held the first Wednesday of the month from 2:00p to 3:00p, eastern time.
- Meeting link at TPM portal: <https://www.tpm-portal.com/community/tfepa/>

Deanna Belden, Minnesota DOT
deanna.belden@state.mn.us

Kelly Travelbee, Michigan DOT
travelbeek@michigan.gov



Joint Subcommittee on System Mobility and Emerging Technologies (SMET)

Daniela Bremmer, Washington DOT



SMET Meeting Highlights @Annual Meeting

- **Attendance:** provided a hybrid approach; good attendance; standing room only for those attending in person (20 plus 4 virtually).
- **SMET Strategic Plan Update :** NCHRP Project 20-123(12)
 - Strong interest in the survey results of emerging and current technology deployments State DOTs are now using or considering and related challenges
 - Received permission to share some of the highlights during the meeting
 - Once the NCHRP project is completed, we will share the full results of the survey



SMET: Other Discussions

Data: lively discussion with strong emphasis and need around the data topic, including

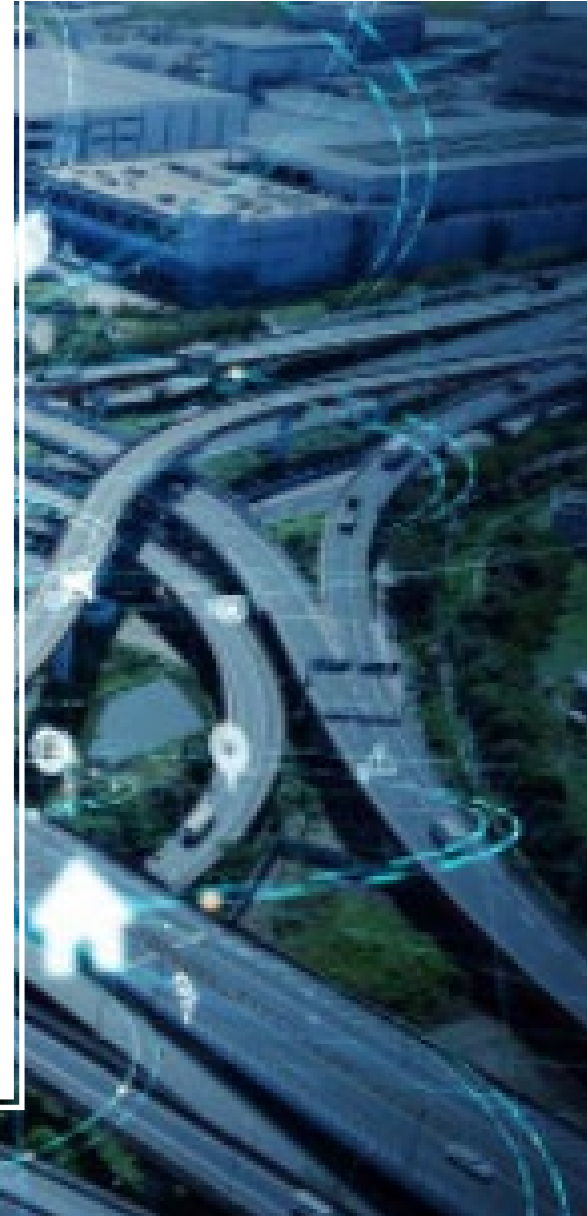
- ❑ standardized ways to look at before and after interventions/strategies, e.g. at intersections.
- ❑ bias based on data we can gather vs. data we can't gather
- ❑ application of comprehensive data sets (experience, where, how, what, results?)
- ❑ what data do we actually need to make decisions? What kind of decisions? Will more or more detailed data actually impact our decisions?
- ❑ share experiences/data in technology deployments, tested and used (i.e. RSUs, AV/CAV, AI /ML etc.)

SMET: Artificial Intelligence & Machine Learning

National Highway Research Program (NCHRP)

Research currently underway includes:

- NCHRP 23-16 : Implementing and Leveraging Machine Learning at State Departments of Transportation
- NCHRP 07-34: Toward Artificial Intelligence-Enabled Decision Support Systems for TSMO (Transportation System Management and Operations) Applications



Artificial Intelligence (AI) and Machine Learning (ML) Policy and Usage at State Transportation Agencies

(Informal AASHTO Survey* of State DOTs (Nov 2023) 22 responses)

- Does your state currently have a policy or guidance on the use of Artificial Intelligence (AI) or Machine Learning (ML)? (4 y)
- Does your state or department have an inventory of projects that utilize AI/ML? (3 y)
- Is there an AI/ML lead in your department or agency? (7 y)
- Is your department or agency looking at using AI to help with Asset Management? (4 y)

*survey conducted by California Department of Transportation on behalf of AASHTO Standing Committee on Data Management and Analytics (CDMA) -Transportation Cybersecurity Community of Practice, November 2023

SMET: Planning a joint webinar on AI/ML and Technology Applications



Subcommittee on Risk Management

Nathan Lee, Utah DOT
William Johnson, Colorado DOT
Monica Aleman-Smoot, Texas DOT
Patrick Cowley, Utah DOT



Risk Management



CPBM Risk Management Sponsored Research

FY24 Projects:

- Developing New Performance Metrics for Risk Management - [NCHRP 23-35](#)
- A Guide to Integrating Performance Management, Risk Management, and Process Improvement - [NCHRP 23-37](#)
- Incorporating Risk Management into Maintenance Practice - [NCHRP 23-38](#)

Active Research:

- Transportation Asset Risk and Resilience (Risk & Resilience Manual) - [NCHRP 23-32](#)



Risk Management



ERM Portal

- Opportunities for enhancements:
 - Documents - like RIPs, PMs, policy
 - Research - specific to Risk Management
 - Tools - BCA models, assessment calcs
 - AASHTO ERM Guide - **update on activities**

Transportation Management Hub | TPM Portal | TAM Portal

Resources | Events | Community | About | Search

AASHTO Enterprise Risk Management Portal

Browse the latest documents, videos, tools, trainings, and events for the ERM community.

[Check out the Resilience Improvement Plan \(RIP\) Community Page](#)

New Topic: October 2020 TAM Webinar | 2020 TAM MegaMeeting Highlights

We would love to hear your suggestions and feedback, so please [Provide Site Feedback](#) for anything you think can be enhanced or improved!

Resources

Browse recent documents | [See All Documents](#)

- New Mexico RIP - Interim Briefing**
NMDOT seeks to develop a Resilience Improvement Plan to meet the requirements and cost share incentive of the PROTECT
- Informal Worksheet with RIP Checklist**
Informal worksheet to provide state DOTs with a checklist on what to include in their RIP.
- Vermont RIP Process**
Description of the process Vermont is going through to develop their RIP.





Risk Management



Cross Committee Collaboration

- US DOT Coalition on Resilience
- AASHTO RIP Meeting
- AASHTO Risk Task Force
- AASHTO Committee on Transportation System Security and Resilience
- TRB Risk Subcommittee



TRB Resilience 2023: International Conference on Extreme Weather and Climate Change Challenges

November 13-15, 2023

Rough notes:

- [Climate Assessment Tool](#) - US DOT
- Design Standards for Resilient Transportation
 - VDOT
 - TXDOT
- Adaptation Planning Around the World - World Bank Presentations
 - Africa
 - Honduras
 - Micronesia



Work Plan - Risk Management



Ongoing Efforts:

- Monthly ERM Community Meetings
- Research project development/support

RM Work Plan Items:

1. ERM Guide
2. Research Updates
3. Community of Practice



Subcommittee on Asset Management

Matt Haubrich, Iowa DOT
Michael Johnson, California DOT



Annual Meeting - Asset Management

Asset Management Subcommittee (CPBM-AM): We held our annual meeting in July in conjunction with the 14th National Conference on Transportation Asset Management in Boston.

Conference presentations are available from the conference website.





Work Plan - Asset Management

Ongoing Efforts:

- Monthly TAM Community Meetings (joint with TRB AJE30)
- Website Organization and Updates
- Research project development/support

AM Work Plan Update: Our work plan for the year includes three new initiatives on top of our existing efforts.

1. **TAM Resource Guide Team** is starting to form - working to schedule a kick-off meeting
2. **TAMP Review Rubric Team** has not formed yet, but is a priority
3. **Demonstration of Progress Team** led by Michael Johnson (Caltrans); the team has collected quite a few of the the state documents. Next step will be to begin review.



Discussion



Review Action Items



Wrap Up

- Notes and materials from this meeting will be posted on the TPM Portal at [TPM-portal.com](https://www.tpm-portal.com)
- Visit the TPM Portal for tools and resources, including links to the TPM Training Hub, TPM Webinar Series slides and recorded sessions, videos, state performance-based plans, and much more content for the TPM Community!
- Watch your email for the latest TPM Newsletter with a theme of the Future Transportation Agency
- Join us in March 2024 for TPM Webinar 21 - The Future Transportation Agency: Pioneering a Performance Path from 2:00-3:30 PM ET.
 - Register: <https://www.tpm-portal.com/events/tpm-webinar-21/>