



# CPBM/TPM Pooled Fund Quarterly Web Call

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March 23, 2023



# Agenda

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- 1:30**    **Welcome and Agenda.** Christos Xenophontos, Chair, AASHTO CPBM and State DOT Lead for TPM Pool Fund, Rhode Island DOT.
- 1:35**    **Feature Topic: Collective and Individual Actions for State DOTs Envisioning and Realizing the Next Era of America's Transportation Infrastructure – Phase I.** Kirk Steudle, Steudle Executive Group, LLC.  
- **Facilitated Discussion.** Kirk Steudle, with John Kalinski & Leah Pickett, Cambridge Systematics.
- 2:15**    **Resolution of Appreciation.** Christos Xenophontos, Rhode Island DOT.
- 2:30**    **AASHTO Updates.** Matt Hardy, AASHTO.
- 2:40**    **FHWA Updates.** Mshadoni Smith-Jackson, FHWA.
- 2:50**    **TSP Activities and Next Steps.** Christos Xenophontos, Rhode Island DOT.



# Agenda

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- 3:00 Subcommittee, Task Force, and Work Group Updates.**
- **Policy and Rulemaking Coordinating Workgroup.** Chair Paul Degges, Tennessee DOT and Ryan Huff, Nebraska DOT.
  - **Organizational Management.** Gary Vansuch, Colorado DOT.
  - **System Mobility and Emerging Technology Joint Subcommittee.** Daniela Bremmer, Washington State DOT.
  - **Asset Management Subcommittee.** Chair Matt Haubrich, Iowa DOT.
  - **Organizational Management Task Force.** Kelly Travelbee, Michigan DOT.
  - **Research Coordinating Workgroup.** William Johnson, Colorado DOT.
- 3:20 Wrap Up.** AASHTO CPBM Chair Christos Xenophontos, Rhode Island DOT.

# COLLECTIVE AND INDIVIDUAL ACTIONS FOR STATE DOTs ENVISIONING AND REALIZING THE NEXT ERA OF AMERICA'S TRANSPORTATION INFRASTRUCTURE – PHASE I

## ***NCHRP 20-24 (138)***

*presented to*

*AASHTO Committee on Performance Based Management  
Transportation Performance Management  
AASHTO Technical Service Program*

*presented by*

*Kirk Steudle*  
*Steudle Executive Group, LLC*

March 23, 2023



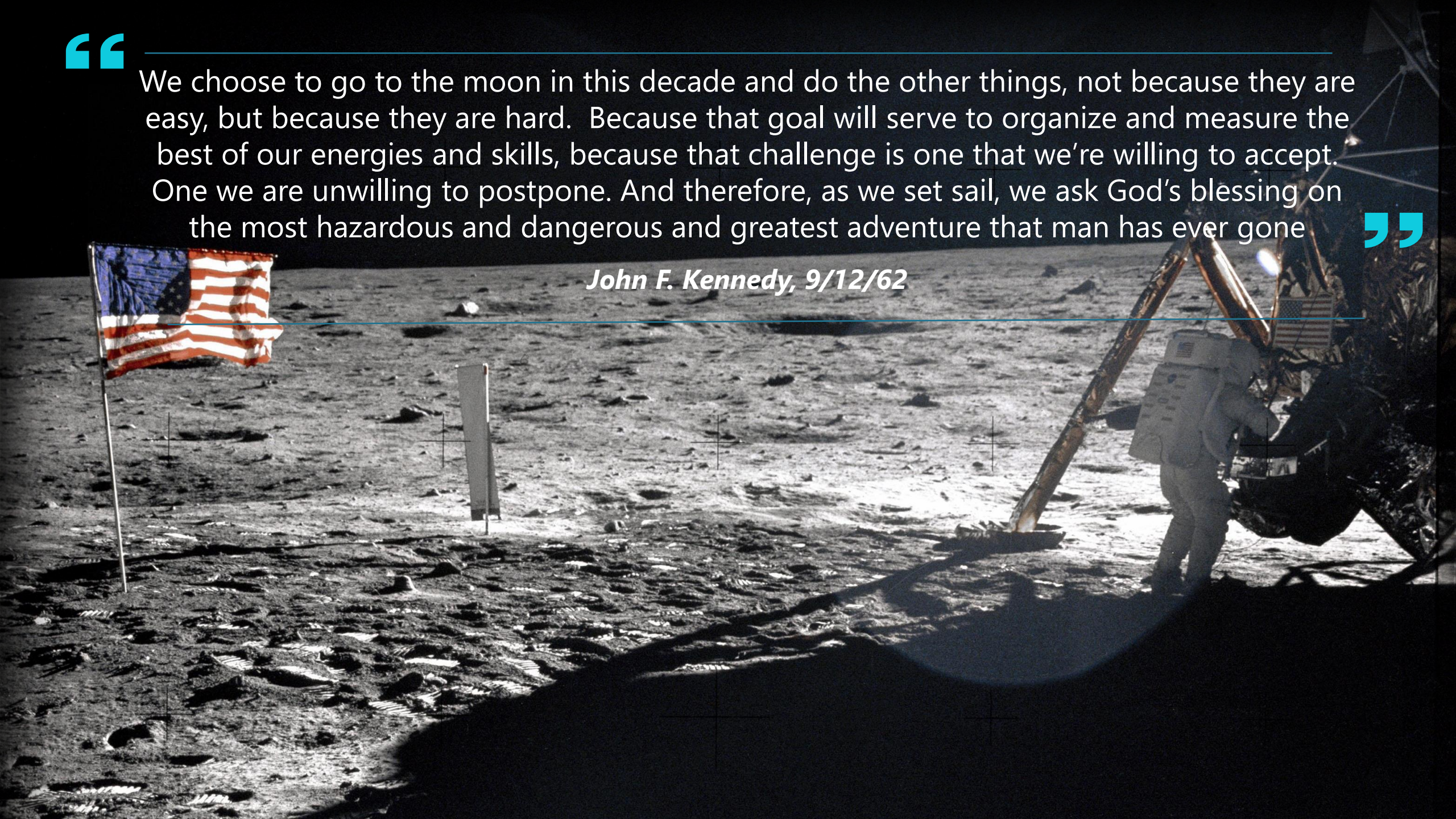


“

We choose to go to the moon in this decade and do the other things, not because they are easy, but because they are hard. Because that goal will serve to organize and measure the best of our energies and skills, because that challenge is one that we're willing to accept. One we are unwilling to postpone. And therefore, as we set sail, we ask God's blessing on the most hazardous and dangerous and greatest adventure that man has ever gone

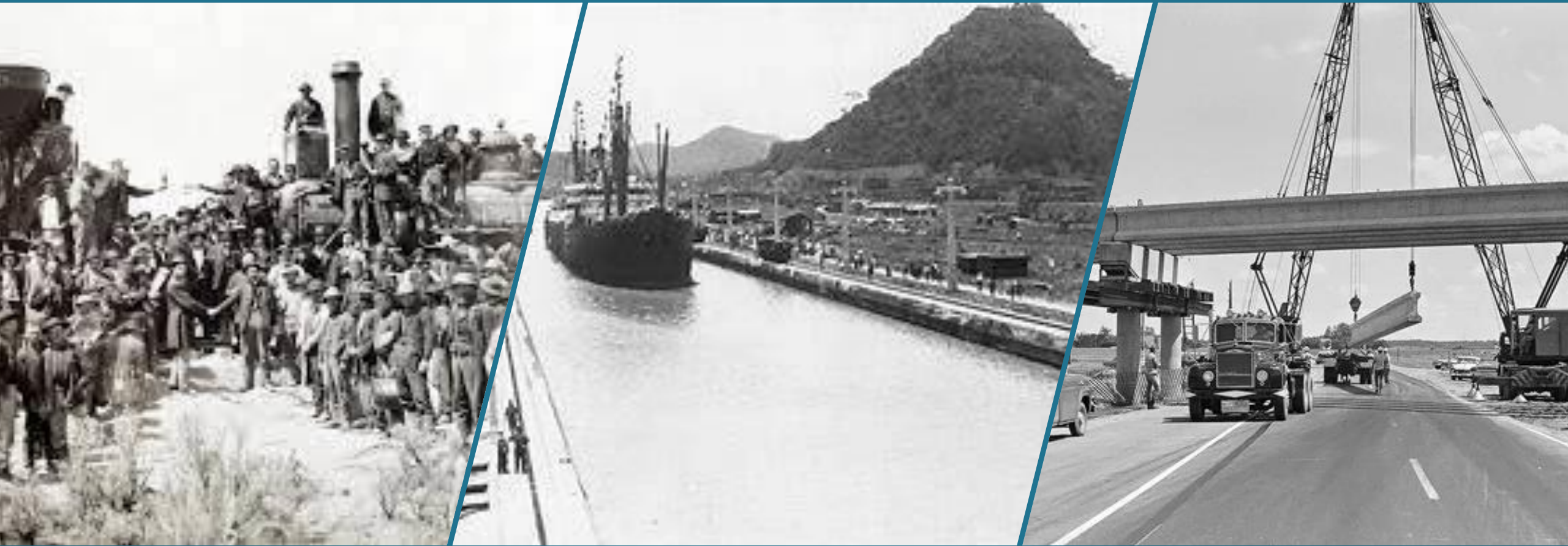
”

*John F. Kennedy, 9/12/62*





# WE TOOK A LOOK BACK...





# WE LOOKED AT OTHER INDUSTRIES ...



# WE EXAMINED TRENDS & UNCERTAINTIES...



*DEMOGRAPHICS*

*PROSPERITY*



*FUTURE OF  
WORK*

*TRADE &  
LOGISTICS*



*REGIONS &  
MEGAREGIONS*

*COMMUNITIES*



*TECHNOLOGY*

*ENERGY*



*RISK &  
RESILIENCE*

*CIVIC &  
GOVERNANCE  
SYSTEMS*

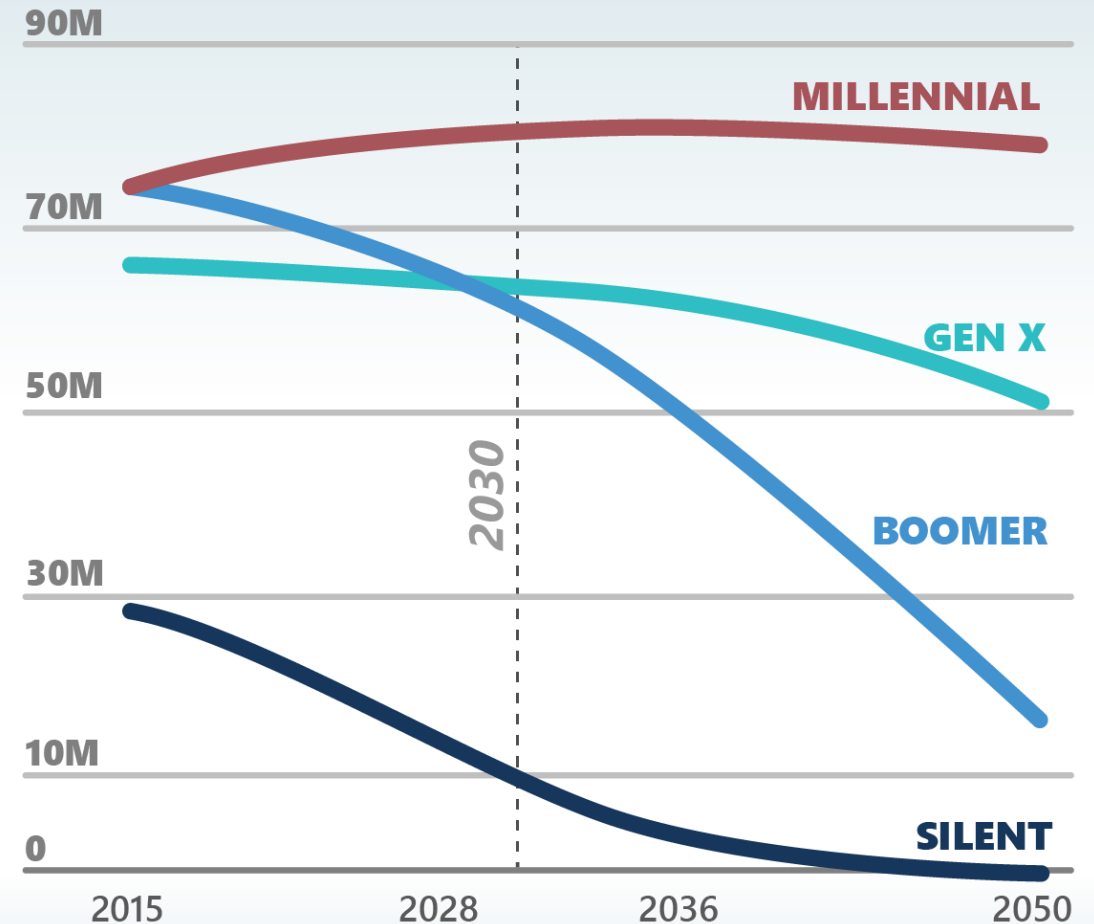


# POPULATION: GROWING AND CHANGING

**Net immigration >  
natural increase (~2030)**

**More seniors than  
children (mid 2030s)**

**Non-Hispanic White  
<50% of total (2040s)**



Source: Pew Research Center, 2020.

# PROSPERITY: LEAVING PEOPLE BEHIND?

**13% of households  
earn incomes below  
the poverty line**

**29% are asset limited,  
income constrained and  
employed (ALICE)**

**88M** Americans live  
in areas with a  
**SHORTAGE OF PRIMARY  
HEALTHCARE PROFESSIONALS**



*More than*  
**42M** Americans  
**DO NOT HAVE ACCESS  
TO BROADBAND INTERNET**

**19M** Americans  
live in  
**LOW-INCOME,  
LOW-ACCESS-TO-FOOD AREAS**



*Source: United for ALICE, 2021; Health Resources and Services Administration, 2021; Broadband Now, 2021; U.S. Department of Agriculture, 2019*

# TECHNOLOGY: TRANSFORMING & ACCELERATING

**2.5 quintillion bytes of data per day (2020)**

**64 billion connected IoT devices (2025)**

**\$360 billion in artificial intelligence market (2028)**

## WHAT ARE THE NEXT "MOONSHOT" TECHNOLOGIES?

**COMPUTATIONAL  
TECH**

**6G**

**Emotional  
AI**

**Brain Computer  
Interfaces**

**HUMAN  
TECH**

**Bionic  
Humans**

**Immortality**

**Synthetic  
Biology**

**CONSUMER  
TECH**

**Wireless  
Electricity**

**Holograms**

**Metaverse**

**eVTOL**

**GREEN  
TECH**

**Ocean-  
tech**

**Nextgen  
Batteries**

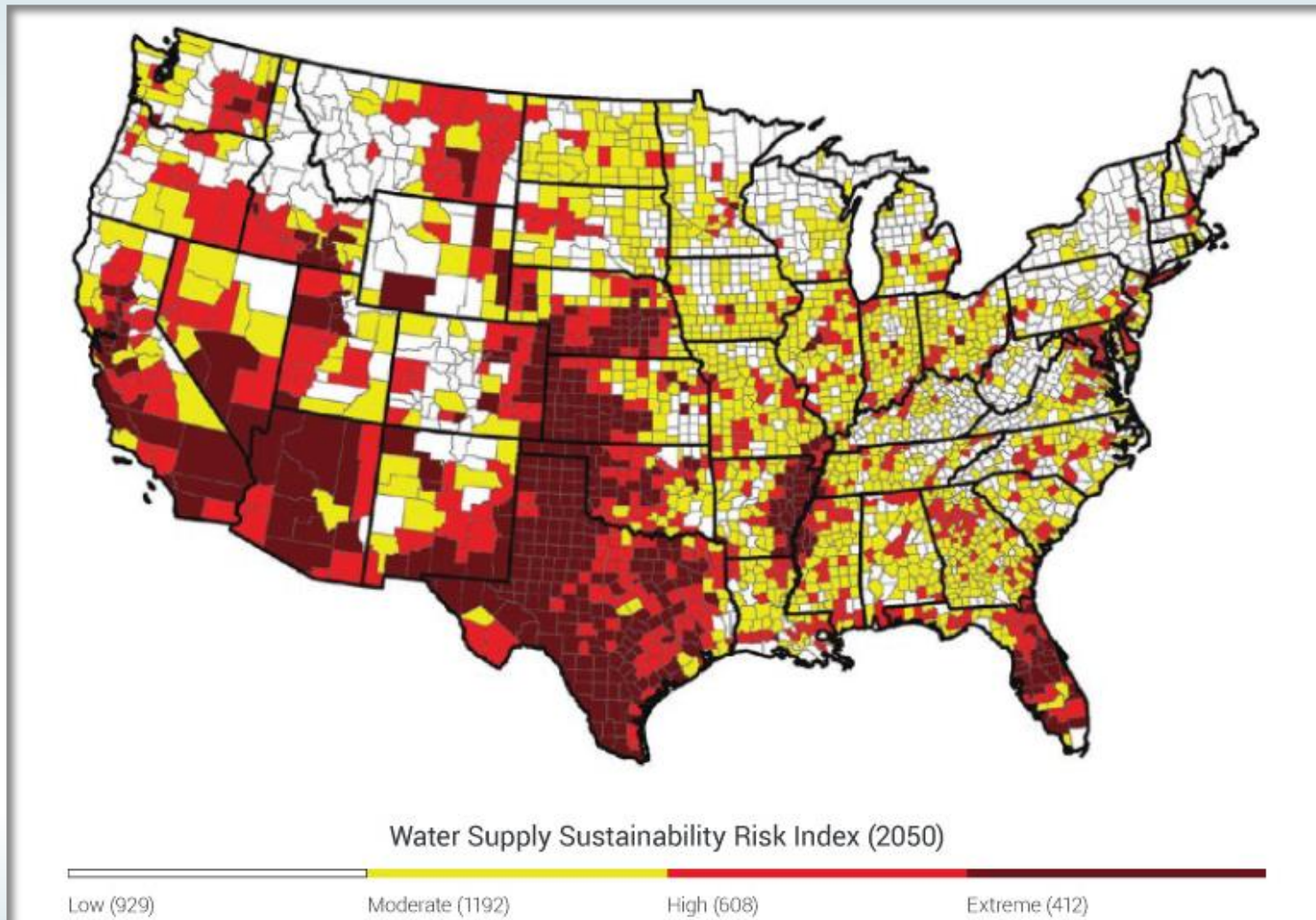
**Green  
Mining**

**Carbon  
Capture &  
Storage**

*Source: BoA Global Research, 2021.*



# RISKS: REACHING THE TIPPING POINT?

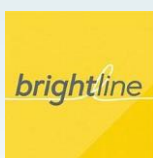


*"IDENTIFY THE MOST SEVERE RISKS ON A GLOBAL SCALE OVER THE NEXT 10 YEARS"*

1. CLIMATE ACTION FAILURE
2. EXTREME WEATHER
3. BIODIVERSITY LOSS
4. SOCIAL COHESION EROSION
5. LIVELIHOOD CRISES
6. INFECTIOUS DISEASES
7. HUMAN ENVIRONMENTAL DAMAGE
8. NATURAL RESOURCE CRISES
9. DEBT CRISES
10. GEOECONOMIC CONFRONTATION

**ECONOMIC**   **ENVIRONMENTAL**  
**GEOPOLITICAL**   **SOCIETAL**

# WE ENGAGED MANY PARTNERS...



# WHAT'S OUR VISION?

## COMMUNITY-CENTERED TRANSPORTATION



A transportation system focused on ***connecting communities, moving people and goods, and meeting customer needs*** at all scales, from local to global – delivered as a ***partnership*** between state departments of transportation and other public, private, and civic sector partners.



*WHAT'S OUR VISION?*  
**ASPIRATIONAL  
GOALS**



# MOONSHOTS: WHAT IF WE...



## **Make aggressive progress toward Vision Zero?**

Could we reduce fatalities to post-World War II levels through systemic solutions involving engineering, technology, behavioral change, and community design?

# MOONSHOTS: WHAT IF WE...



**Work with partners to reduce the share of households who cannot afford basic survival costs?**

Could we identify and close critical gaps in access to health care and education for ALICE households?



# MOONSHOTS: WHAT IF WE...



**Change how we operate  
and manage the  
transportation system?**

Could we light up the Interstates  
as corridors for broadband and  
next-gen technologies?

# CREATING A SPECTRUM OF ACTIONS/ LEVERS OF CHANGE

## » External

- Partnerships
- Communications/customer service
- Land use coordination
- Multi-state/megaregional coordination


## » Internal

- Policies/regulations
- Plans/programs
- Assets/right of way
- Investments
- Technology/data
- Human resources
- Organization/governance

# FROM MODEST TO TRANSFORMATIVE...

## *ASSETS/RIGHT OF WAY*

**Maintain assets in  
state of good  
repair; identify  
vulnerabilities**



**Strategically  
make decisions  
to renew,  
repurpose, or  
decommission  
assets based on  
changing needs**



# FROM MODEST TO TRANSFORMATIVE...

## *PLANS/PROGRAMS*

**Increasing  
emphasis on  
community values  
in planning process**



**Redesign the  
planning process  
with community  
vision at the  
center**

# SPECTRUM OF ACTIONS

## STATE "B"

Lever of Change	Modest	Significant	Transformative
Partnerships		●	
Communications & customer service		●	
Land use coordination	●		
Multi-state coordination	●		
Policies & regulations	●		
Plans and programs	●		
Assets & right of way		●	
Investments		●	
Technology & data	●		
Human resources			●
Organization & governance	●		

# SPECTRUM OF ACTIONS

*STATE "A"*

Modest	Significant	Transformative
		●
	●	
●		
	●	
		●
	●	
	●	
	●	
		●
	●	
●		

*STATE "B"*

Modest	Significant	Transformative
	●	
		●
	●	
		●
		●
●		
●		
	●	
	●	
		●
	●	

*STATE "C"*

Modest	Significant	Transformative
	●	
	●	
●		
●		
●		
●		
	●	
	●	
●		
		●
●		



# WHAT'S NEXT?

## 2023: Implementation

- » Continue engagement with partners through Challenge Network(s)
- » Advance moonshot concepts through demonstration projects
- » Identify individual and collective actions for state DOTs in collaboration with partners



# Resolution of Appreciation

Christos Xenophontos, Rhode Island DOT

# RESOLUTION OF APPRECIATION

Resolution of Appreciation Presented to **Matthew H. Hardy, Ph.D.**, American Association of State Highway and Transportation Officials.

**WHEREAS**, Dr. Matthew H. Hardy, Ph.D. has faithfully served the American Association of State Highway and Transportation Officials' Committee on Performance-Based Management for the past 13 years; and

**WHEREAS**, Matt, in his role as Program Director for Planning and Performance Management, is recognized for outstanding initiative and success in exceeding expectations and results; and

**WHEREAS**, Matt's impact to national transportation will be experienced for decades, especially due to his leadership through the first set of national performance measures implemented from MAP-21; and

**WHEREAS**, Matt, through continuous efforts and insights, has advanced transportation agencies nationwide in their practices of asset management, organizational management, performance management, risk management and system mobility; and

**WHEREAS**, Matt has facilitated critical connections amongst the national and international transportation communities through his leadership in planning, developing and supporting conferences and meetings which brought together diverse stakeholders for robust discussions; and

**WHEREAS**, Matt's influence is recognized beyond the arena of performance management and has benefited state departments of transportation as well as the transportation sector of the United States,

**NOW, THEREFORE, BE IT RESOLVED** that we, the Leadership of the Committee on Performance-Based Management, extend our sincere appreciation and gratitude to Dr. Matthew H. Hardy, Ph.D. for his outstanding service and contributions

**BE IT FURTHER RESOLVED** that we extend our most hearty congratulations on his next adventure in life and wish him the best in the years to come.

**Approved by the AASHTO Committee on Performance-Based Management on March 21, 2023.**

Christos S. Xenophontos, Rhode Island DOT, Chair

Christos S. Xenophontos

Jean Wallace P.E., PMP, Minnesota DOT, Vice Chair

Jean Wallace

Karen S. Miller, Missouri DOT, Secretary

Karen S. Miller





# Leadership Updates & Opportunities

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## Leadership Updates

- Workgroup on Policy & Rulemaking – Co-Chair Ryan Huff, Nebraska DOT (with Paul Degges)
- Organizational Management Subcommittee – Co-Chairs David Putz, Iowa DOT and Gehan Elsayed, West Virginia DOT (with Gary Vansuch, Colorado DOT)

## Leadership Vacancies

- Professional Development Working Group – Chair Vacant
- Joint Subcommittee on System Mobility and Emerging Technologies – Vice Chair Vacant



# Save the Date

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## **Annual CPBM Business Meeting and TPM Peer Exchange**

- When: Monday, September 11, 2023 – Wednesday, September 13
- Where: Colorado DOT, Denver, CO

More details to follow - Mark your calendar and plan to join us!



# AASHTO Updates

Matt Hardy, AASHTO



# Policy Actions

## 1. GHG Emissions Final Regulation

- New sections to 23 CFR Part 490

## 2. National Performance Management Measures

- General updates to existing 23 CFR Part 490
- Safety Performance Measures, HPMS, Pavement Penalty
- Bridge Terminology: replacing “structurally deficient” with “in poor condition”
- IIJA/BIL general cleanup

## 3. Planning Assistance and Research

- General updates to 23 CFR Part 450
- Housing and Transportation Linkages (optional)
- IIJA/BIL general cleanup

## 4. Transportation Asset Management

- General updates to 23 CFR Part 515
- Resilience, Risk, Extreme Weather
- IIJA/BIL general cleanup

## 5. Highway Safety Improvement Program

- Conflict with three common safety performance measures (FHWA/NHTSA)



# Transportation Performance Management Research Symposium

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When: Monday, March 27, 2023 from 1-3 PM ET

## Agenda

- Welcome and Overview
- Background, History and Status of TPM Research Projects
- Topical Breakout Groups
- Reports Out
- Action Item

Register:

<https://us02web.zoom.us/meeting/register/tZ0kdO2hqD8oHtA2HaUduwtfBCBWDtPh7UrE>



# FHWA Updates

Mshadoni Smith-Jackson, FHWA





# TSP Activities and Next Steps

Christos Xenophontos, Rhode Island DOT



# CPBM Business Meeting:

## CPBM Subcommittee, Task Force, and Work Group Updates

Christos Xenophontos, Rhode Island DOT  
AASHTO CPBM Chair



# Workgroup on Policy and Rulemaking

Paul Degges, Tennessee DOT



# What Rulemakings to Watch For?

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## **GHG Final Rule**

### **Updates needed based on passage of IIJA/BIL to:**

- Performance Management
- TAMP
- Statewide Planning Requirements
- MPO Planning Requirements





# Organizational Management Subcommittee

Gary Vansuch, Colorado DOT





# Subcommittee on Organizational Management (SCOM)



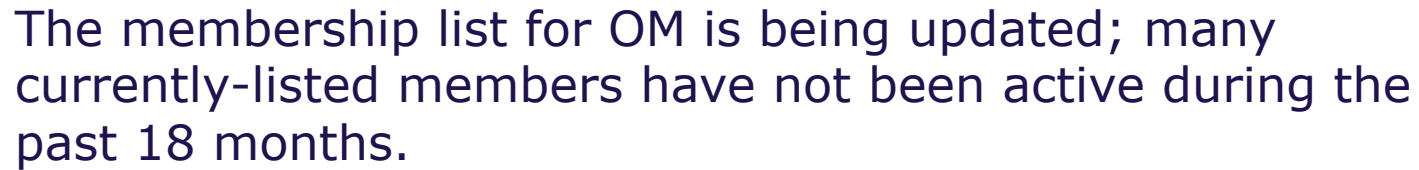
## **0. Mission and Focus**

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.



SCOM 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)



## 2. Organizational–management-focused webinars

The AASHTO Transportation Performance Management (TPM) features webinars from time to time, and the OM Subcommittee sponsored the TPM Webinar 14 back in November.

<https://www.tpm-portal.com/video/tpm-webinar-14/>

SCOM will be sponsoring at least one additional TPM webinar in 2023, and possibly several. OM is working with SpyPond Partners, the AASHTO vendor which operates the TPM Portal, to identify possible dates/times for a first webinar, potentially in May and/or in July.

<https://www.tpm-portal.com/event-directory/tpm-webinars/>





# Subcommittee on Organizational Management (SCOM)



## 3. Organizational–management-focused articles for the TPM Newsletter

SCOM will be providing content to our Spy Pond Partners for potential inclusion in the next issue of the TPM newsletter.

[https://www.tpm-portal.com/wp-content/uploads/sites/13/2022/10/CPBM\\_Newsletter\\_2022-10-13c.pdf](https://www.tpm-portal.com/wp-content/uploads/sites/13/2022/10/CPBM_Newsletter_2022-10-13c.pdf)







# Subcommittee on Organizational Management (SCOM)



## 4. Partnerships

SCOM has had partnerships in the past, and OM is working to reignite former partnerships, and to forge new ones with organizations which have missions that intersect with the OM mission, including:

a. The AJE15 Committee of the Transportation Research Board (TRB), the Committee on Workforce Management and Organizational Excellence.

<https://anotheryoung38.wordpress.com/>

b. The AASHTO Innovation Community of Practice (ICoP). ICoP is affiliated with the "Special Committee on Research & Innovation" (SCRI) ....

<https://scri.transportation.org/membership-directory/>

... as well as the AASHTO Innovation Initiative (AII).

<https://aii.transportation.org/Pages/default.aspx>

c. The Transportation Lean Forum (TLF) Community of Practice (CoP).

<https://sites.google.com/state.co.us/leaninterchange/home>

d. The Public Sector Change Practitioners (PSCP) Community of Practice (CoP)

<https://sites.google.com/pscpractitioners.org/home/home>





# Subcommittee on Organizational Management (SCOM)

## 5. Managing and improving the ACB portal

In 2022 and in prior years, the "Activity 3" team from the OM Subcommittee was engaged in developing and deploying the "Agency Capability Building" (ACB) Portal, which was part of NCHRP Project 20-24(95), "Ensuring Capability for the Future Transportation Agency".

<https://www.agencycapability.com/about/>

ACB is also linked on the TPM Portal here:

<https://www.transportationmanagement.us/>

Recently, we have confirmed that our colleagues at SpyPond Partners administer the ACB Portal, and have determined that the OM Subcommittee is the owner of the Portal; that was not apparent until recently.

The folks at SpyPond Partners have recently added an "activity tracker" app to the ACB Portal at the OM Subcommittee's request, as well as adding a link to the ACB Portal on our Subcommittee website. It appears that ACB receives very-limited usage - it is now on our issues list for the Subcommittee, and will be part of our work plan for 2023.

From initial data and analysis:

>> ACB is averaging between 20 and 40 users per day.

>> Users do not return to the site; they stay for an average of approximately 35 seconds and typically visit one page.

>> Analysis of some of the data from SpyPond: *"... the trouble with these things is usually distinguishing between bots and real user traffic. However, the page views report shows some promising user traffic under the ACB Community Related Sites, which links back to the CPBM OM subcommittee homepage on the TPM Portal. This leads me to believe that the linkage between the OM homepage and the ACB portal is getting some real user traffic. ..."*





# Subcommittee on Organizational Management (SCOM)

## 6. AASHTO Awards related to Organizational Management

Back in the day, the AASHTO Subcommittee on Organizational Management was engaged in helping with the selection process for various AASHTO Awards, including the Francis B. Francois Innovation Award and the former "National Performance Excellence Award", as noted on this webpage:

<https://soom.transportation.org/Pages/awards.aspx>

SCOM's work for 2023 includes a determination of what the role of SCOM could be for some of the current AASHTO Awards.

<https://meetings.transportation.org/aashto-awards/>





# Subcommittee on Organizational Management (SCOM)



## 7. Organizational Management sessions for the TRB Annual Meeting

As we reignite the partnership with TRB's AJE15 Committee, we will be working to queue-up a session for the TRB Annual Meeting in January 2024 pertaining to cutting-edge principles and practices in Organizational Management. The key dates for this are in the summer, and it is on our Subcommittee's work plan.

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





# Subcommittee on Organizational Management (SCOM)



## 8. Transportation Lean Forum (TLF) session on Wednesday, March 29

The next teleconference session of the TLF is next Wednesday, March 29 I am hopeful you will be able to participate!







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# System Mobility and Emerging Technologies Joint Task Force

Daniela Bremmer, Washington DOT



# System Mobility and Emerging Technologies

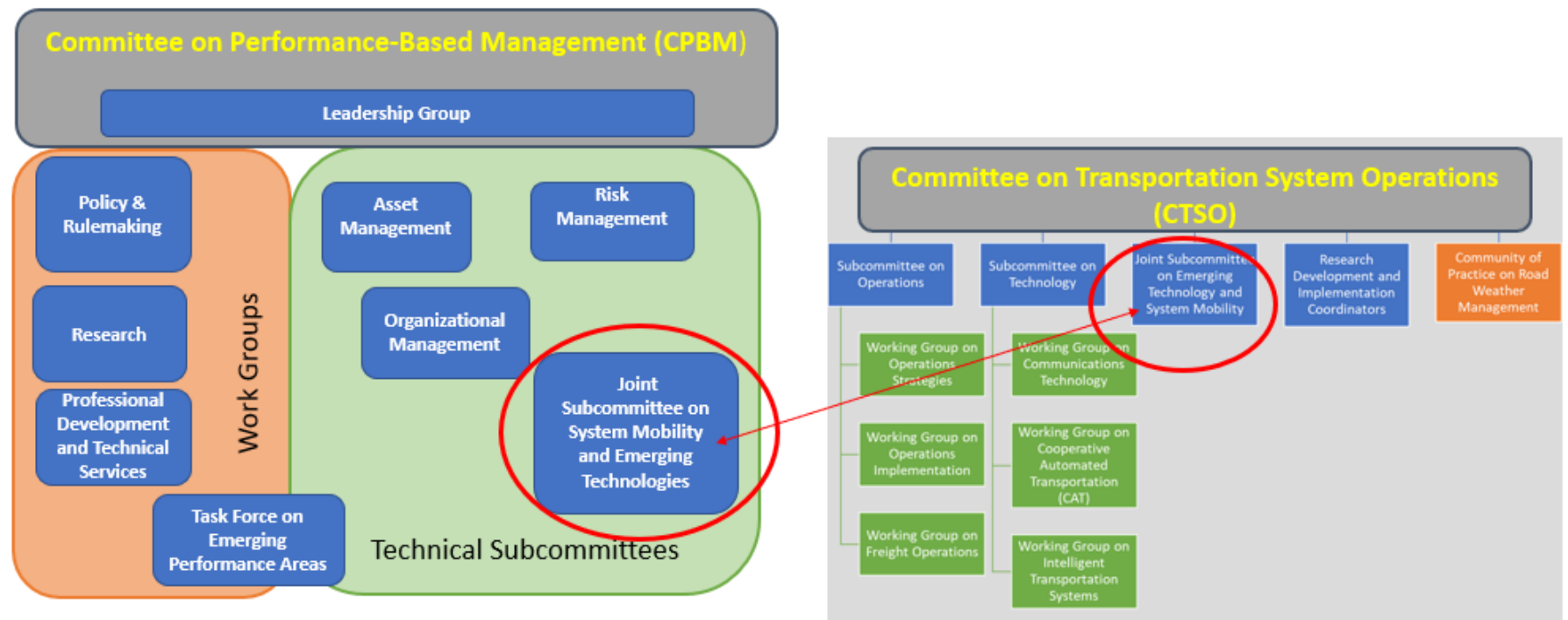
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Daniela Bremmer, Washington State DOT - Chair, SMET Joint Subcommittee,

- Overview of SMET Scope
- NCHRP 20-123(12) SMET: Strategic Planning and Research Roadmap Development \_ project status update

# System Mobility and Emerging Technologies

- The AASHTO joint subcommittee on System Mobility and Emerging Technologies (SMET) was created to formally merge the related work of the
    - Committee on Transportation System Operations (CTSO)
    - Committee on Performance-Based Management (CPBM)
- With a collaborative relationship with the Committee on Data Management and Analytics (CDMA)





# System Mobility and Emerging Technologies

- SMET serves as a forum to share how state departments of transportation (DOTs) are managing system operation and surface transportation system mobility and how system performance is impacted due to current and emerging transportation technologies, operational strategies, and connected environments.
- Explores surface transportation 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

## **NCHRP 20-123(12) SMET: Strategic Planning and Research Roadmap**

### **Development: project status update**

began in May, 2022- since we began, some important market changes include :

- Consolidation of the automated vehicle industry (21 companies stepping back or closing)
- Concept of “Digital infrastructure” is gaining momentum
- Institutionalizing equity is important but metrics/assessments are unclear

Work To Date includes:

- Completion of the Strategic Planning and Research Roadmap Scan
- Technology Identification Matrix
  - This analysis supported the development of a survey
  - 160 +responses across different sectors

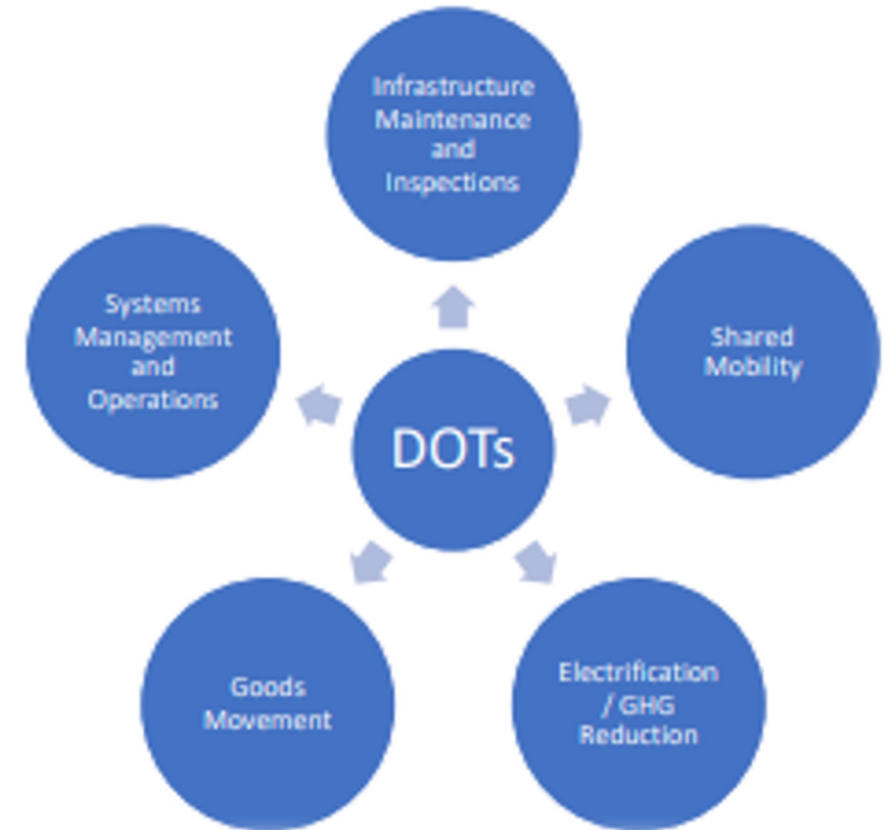




# System Mobility and Emerging Technologies

## Survey Responses and Use Cases:

ANSWER CHOICES ▼	RESPONSES ▼	
▼ State Department of Transportation	52.41%	87
▼ Academic or non-profit organization (i.e. university, community organization, advocacy group, international organization)	9.64%	16
▼ Private sector company (i.e. OEM, manufacturer, technology company, or company providing products or services)	11.45%	19
▼ Local government / MPO / Transit (i.e. city, county, transit agency, municipal planning organization, school district, quasi-governmental organization)	22.29%	37
▼ Federal agency	2.41%	4
▼ Other (please specify) <span>Responses</span>	1.81%	3
TOTAL	166	





# System Mobility and Emerging Technologies

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## NCHRP 20-123(12) SMET: Strategic Planning and Research Roadmap

**Development:** project status update

Next Steps include:

- Interim project meeting with project panel
- **Stakeholder Engagement Workshop**
  - Survey findings will be used to develop agenda for the Stakeholder Engagement Workshop (May 2<sup>nd</sup> -tentative)
- Refinement and finalization of strategies and research recommendations
- Development and finalization of deliverables-  
will be basis for future SMET work plan(s) and research proposals



# System Mobility and Emerging Technologies

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- Chair: Daniela Bremmer (WSDOT), [bremmed@wsdot.wa.gov](mailto:bremmed@wsdot.wa.gov)
- Vice-Chair: vacant
- AASHTO Liaison CPBM: Matt Hardy, [MHardy@aashto.org](mailto:MHardy@aashto.org) (TBD)
- AASHTO Liaison CTSO: Gummada Murthy, [gmurthy@aashto.org](mailto:gmurthy@aashto.org) (interim)
- FHWA Liaison: Rich Taylor, [Rich.Taylor@dot.gov](mailto:Rich.Taylor@dot.gov)
- <https://www.tpm-portal.com/community/smet/>
- Virtual Meetings: third Tuesday/even month
- Next meeting: **April 18<sup>th</sup>, 2023, 2:30-3:30 PM Eastern**
  - Zoom (<https://us02web.zoom.us/j/85178495458?pwd=ejJrYVZCRFV6Yi91Y25hcGNJQ1Jodz09>)
- Please Join Us!



# Asset Management Subcommittee

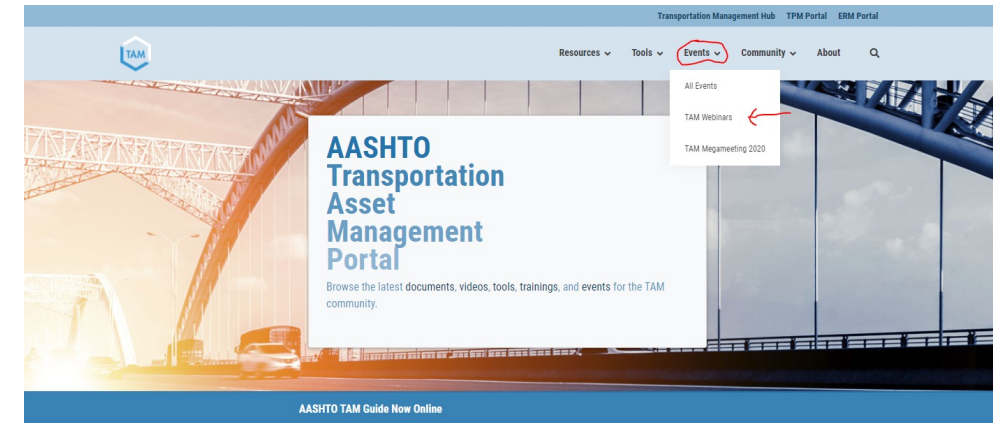
Matt Haubrich, Iowa DOT



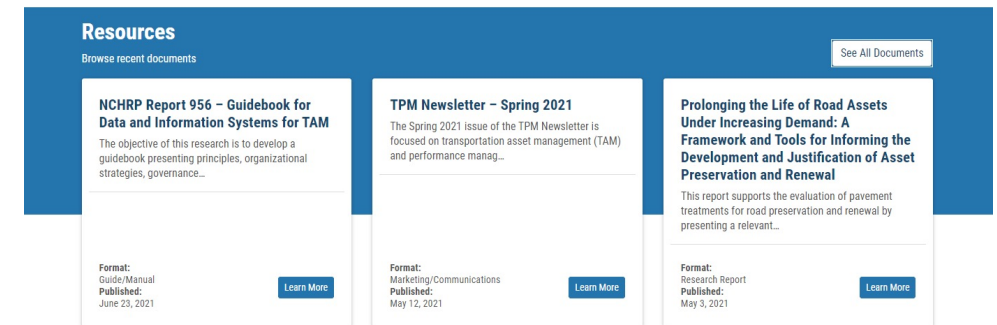
# Asset Management

## Get involved!

- Monthly joint meetings with TRB (<https://www.tam-portal.com/event/>)
- Bi-monthly TAM Webinar Series (in cooperation with FHWA)
- Upcoming 14<sup>th</sup> National Conference
  - Boston, July 8-11
  - [https://trb.secure-platform.com/a/page/asset\\_management](https://trb.secure-platform.com/a/page/asset_management)
  - Peer Exchange and Subcmte Meeting



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







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# Task Force on Emerging Performance Areas

Deanna Belden, Minnesota DOT

Kelly Travelbee, Michigan DOT



# Task Force on Emerging Performance Areas

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## Background & Purpose

- Transportation agency goals and objectives are now including more broad societal goals spanning across sectors, there is a need to consider impacts and performance in a range of dimensions state DOTs have not traditionally focused on
- The Task Force works to improve how State DOTs conduct performance management by identifying emerging performing areas, making recommendations about research, and creating a platform for knowledge exchange.
- Areas of interest include multimodal accessibility/destination access, equity, resilience, greenhouse gas and other measures of climate change impacts, health, etc.



# Emerging Performance Areas – Current Activities

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Continuing monthly conversations

Preparing for task force work plan development

Identifying upcoming areas we should lead or collaborate on

## Research problem statements

- Research statement submitted for FY24: Advancing Comprehensive Performance Measurement of Transportation Outcomes
- Revisit for FY25: Using State and Local Stakeholder-Driven Performance Measures to Monitor Progress Toward National Goals

## Research Synthesis proposals submitted for FY24

- Multi-Objective Resource Allocation
- Creating and Measuring Public Value; lessons learned from non-transportation agencies



# Emerging Performance Areas

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

- Regular monthly meetings held the first Wednesday of the month from 2-3pm eastern time.

Co-chairs: Deanna Belden, Minnesota DOT and Kelly Travelbee, Michigan DOT

- Contact Deanna or Kelly to be added to the meeting invitations.

E-mail [deanna.belden@state.mn.us](mailto:deanna.belden@state.mn.us) and [travelbeek@michigan.gov](mailto:travelbeek@michigan.gov)



# Research Work Group

William Johnson, Colorado DOT



# Research - FY24 Submitted Needs

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## AASHTO CPBM Priority

1. A-10 - Incorporating Risk Management into Maintenance Practice
2. A-01 - Advancing Comprehensive Performance Measurement of Transportation Outcomes
3. A-02 - Developing New Performance Metrics for Risk Management
4. A-05 - Guide for Effectively Linking Performance Measures, Risk Management, and Process Improvement
5. A-15 - Using Emerging Technologies to Capture, Process, and Optimize Asset Inventory and Condition Data

DOT ballots Due March 30

R&I meet on April 13-14.





# Research - FY24 Synthesis Needs

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- Multi Objective Resource Allocation
- Creating and Measuring Public Value
- Incorporating Resilience Into TAMPs
- Best Practices for Managing Ancillary Assets



# Research Coordination

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## Research Coordination - 2<sup>nd</sup> Friday of the month 2PM Eastern

- William Johnson - AASHTO CPBM and AJE20 (TPM) [will.johnson@state.co.us](mailto:will.johnson@state.co.us)
- Edgardo Block - AASHTO CPBM Research Vice Chair [edgardo.block@ct.gov](mailto:edgardo.block@ct.gov)
- Aimee Flannery - AJE30 (TAM) [aimee.flannery@jacobs.com](mailto:aimee.flannery@jacobs.com)
- Alyssa Ryan - AJE10 (Strategic Management) [alyssaryan@arizona.edu](mailto:alyssaryan@arizona.edu)

Research Management System - <https://www.tam-portal.com/rms-about/>

Upcoming - CPBM Research Symposium March 27 1-3 Eastern



# Research Symposium Action Items

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Five breakout rooms that are focused on the five technical sub-groups of the committee:

1. Asset Management
2. Enterprise, Risk and Resilience Management
3. System Mobility and Emerging Technologies
4. Organizational Management
5. Emerging Performance Areas

## Subcommittee Chairs ACTION ITEM:

- Quick summary of the existing research.
- Brainstorm/discussion on new research topics.
- Identification of desired/needed research projects for consideration for FY2025 NCHRP funding.
  - MentiMeter support from Spy Pond and AASHTO
- Group of people willing to help/assist with authoring the research projects.
- Provide a report to the broader groups after the breakout session.



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# Risk Management Subcommittee

Nathan Lee, Utah DOT



# Risk Management Subcommittee

Nathan Lee, Utah DOT

Completed work:

1. NCHRP 20-123(04), Development of a Risk-Management Research Roadmap
2. NCHRP 23-09, Scoping Study to Develop the Basis for a Highway Standard to Conduct an All-Hazards Risk and Resilience Analysis (3 phased projects funded to continue effort (NCHRP 23-32 Phase 1))


Sponsored Research Projects:

1. NCHRP 23-32, Transportation Asset Risk and Resilience, status: Panel meets in March to select a contractor, sponsored by this Subcommittee and TSSR.
2. NCHRP 23-15, Guidance on risks related to emerging and disruptive transportation technologies, status: RAND Corporation; \$500k; Complete by June 2023
3. NCHRP 08-151, Risk Management at State DOTs: Building Momentum and Sustaining the Practice, status: Jacobs Engineering; \$350k, Complete by June 2024
4. NCHRP 23-24, Methods to Allow Agencies to Incorporate Quantitative Risk Assessment at Project and Network Level, status: Contract awarded to UCLA, Kickoff meeting in March 2023.



# TAM Portal [Subcommittee on Risk Management](#)

Transportation Management HubTPM PortalTAM Portal



Resources ▾Events ▾Community ▾AboutQ

## Subcommittee on Risk Management

Risk is the positive or negative effects of uncertainty or variability on agency objectives. Risk management is the cultures, processes, and structures that are directed toward the effective management of potential risks. The focus of the Subcommittee on Risk Management 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. Risk and Risk Management are specifically identified in federal requirements and best practices. The management of risks is applicable to performance metrics through the identification of threats and opportunities that will hinder or enhance the ability to meet established performance measures. Risk-based asset management plans are also a requirement for State DOT Transportation Asset Management Plans. Both the Committees on Performance-Based Management and Transportation System Security and Resilience address the topic of transportation resilience through a better understanding of how risk management techniques can be used to better support a resilience approach to managing the transportation system.

Mission & Vision

How Do I Participate?

Meetings & Events

Membership

Resources

## Leadership

Chair: Jean Wallace, Minnesota DOT

Vice-Chair: Nathan Lee, Utah DOT

Secretary: Vacant

AASHTO Liaison: [Matt Hardy](#)

FHWA Liaison: [Daniel Fodera, FHWA](#)

[AASHTO Portal](#)

[Committee on  
Performance Based  
Management  
\(Membership list\)](#)





# Review Action Items



# Wrap Up

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- Notes and materials from this meeting will be posted on the TPM Portal ([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!
- Join us tomorrow for TPM Webinar 16: Innovations in Caltrans' Performance Management Framework from 1:00-2:30 PM ET.
  - Register: <https://www.tpm-portal.com/events/tpm-webinar-16/>