



14th National Conference on  
**Transportation Asset Management**

**JULY 8-11, 2023**

Boston, MA

*Convened by*  
Transportation Research Board

*Supported by*  
Federal Highway Administration  
Federal Transit Administration

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# A ROADMAP FOR EFFECTIVE ASSET MANAGEMENT

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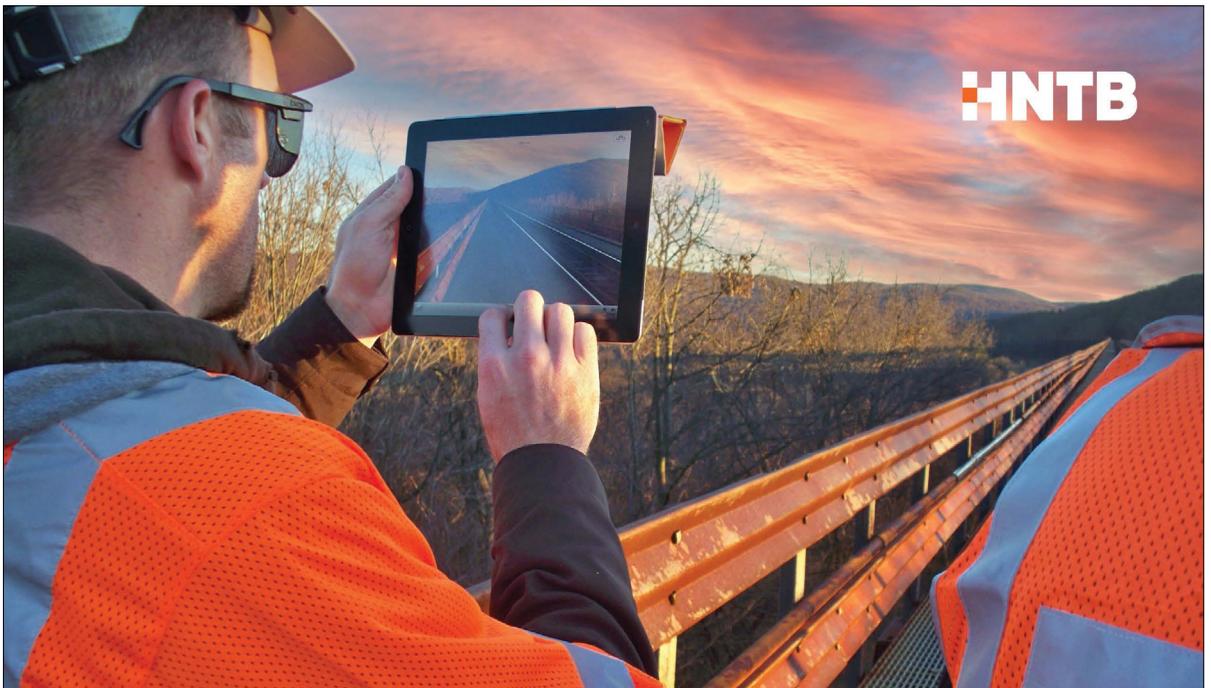
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### WELCOME FROM LAURA ZALE

CHAIR, CONFERENCE PLANNING COMMITTEE

#### Welcome to the Transportation Research Board's 14th Conference on Transportation Asset Management!

So much has happened since we last gathered in San Diego in 2018! Our industry continues to recover from a global pandemic that transformed the way that we work, learn, and engage with our communities. A new infrastructure bill prioritized state of good repair projects while promoting focus on equitable investments, use of clean energy, and hardening against the effects of climate change. At the same time, transportation agencies face the challenge of using limited funds to maintain the existing network, enhance safety and reliability, and shape it for the communities of tomorrow. Transportation asset management remains the key enabler to advance our nation's sustainability goals, by providing a framework for evaluating scenarios and incorporating lifecycle management strategies into planning and programing.



Laura Zale

In the five years that have passed since our last in-person conference, the practice of asset management has advanced in many ways. While first generation asset management plans focused on data collection and team building, current plans have started to include strategies to better align asset management plans with capital programming. The successful implementation of TAM into business process requires significant collaboration, both within the agency and with external stakeholders. The conference agenda provides best practices and lessons learned regarding the development of actionable asset management plans, including the incorporation of resilience, equity, and risk into decision-making. Several sessions focus on change management strategies for ensuring a successful program implementation. The rubber hits the road with our sessions on communication strategy—how to make the data that we collect speak to executive stakeholders.

After a five-year hiatus for in-person events, this conference has the flavor of a TAM-ily reunion. As we catch up with our friends, please extend a welcome to our new practitioners, especially the members of our younger members forum. Thank you for joining us in Boston and enjoy the conference!

**Laura Zale**

Chair, Conference Planning Committee

## PLANNING COMMITTEE

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This conference would not have been possible without the combined efforts of many individuals and organizations.

**Laura Zale, Chair**, Southeastern Pennsylvania Transportation Authority

**Adjo Amekudzi-Kennedy**, Georgia Institute of Technology

**Emily Burns**, Seattle Department of Transportation

**Tashia Clemons**, Federal Highway Administration

**Matthew Hardy**, Spy Pond Partners

**Matthew Haubrich**, Iowa Department of Transportation

**Suzie Heap**, KPMG

**William Johnson**, Colorado Department of Transportation

**Tamalynn Kennedy**, Federal Transit Administration

**John Moran**, Massachusetts Department of Transportation

**Victor Rivas**, Jacobs

### TRB STAFF

**Claire Randall**

**Freda Morgan**

**Mary Kissi**

**Bruce Millar**

**Kate Debelack**

**The Transportation Research Board** is one of seven major programs of the National Academies of Sciences, Engineering, and Medicine. The mission of the Transportation Research Board is to increase the benefits that transportation contributes to society by providing leadership in transportation innovation and progress through research and information exchange, conducted within a setting that is objective, interdisciplinary, and multimodal. The Board's varied committees, task forces, and panels annually engage about 7,000 engineers, scientists, and other transportation researchers and practitioners from the public and private sectors and academia, all of whom contribute their expertise in the public interest. The program is supported by state transportation departments, federal agencies including the component administrations of the U.S. Department of Transportation, and other organizations and individuals interested in the development of transportation.

**[www.TRB.org](http://www.TRB.org)**



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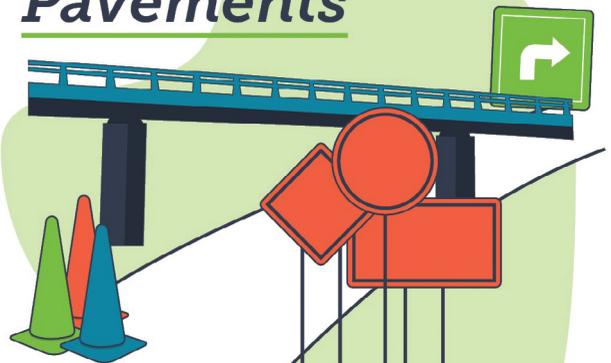


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## SCHEDULE AT-A-GLANCE

### KEY

**O**=Organizing for Asset Management; **P**=Actionable Asset Management Plans

**R**=Managing Risks through Asset Management; **S**=Advancing Sustainability in Asset Management

**W**=Wildcard (Emerging Topics, etc.)

Saturday, July 8		
12:00 PM–4:00 PM	Registration	4th Floor Convention Office
1:00 PM–5:00 PM	FHWA/AASHTO Peer Exchange (By invitation only)	Staffordshire

Sunday, July 9		
7:00 AM–8:00 AM	Coffee	America Ballroom Foyer
7:00 AM–4:00 PM	Registration	4th Floor Convention Office
8:00 AM–8:30 AM	Preconference Welcome: Coffee with the Secretaries	America North
8:30 AM–12:00 PM	FHWA/AASHTO Peer Exchange (By invitation only)	Staffordshire
	FTA TAM Roundtable (Public agencies only, pre registration required)	Essex South
	Workshop: Enterprise Data Life Cycle Management/Better Information Modeling (BIM)	America North
	Workshop: Data & Dollars: Crafting a Compelling Story about Asset Management	Essex Center
	Workshop: Scenario Planning for Asset Management	Essex North
10:00 AM–10:30 AM	Morning Break	America Ballroom Foyer
12:00 PM–1:30 PM	Lunch (On your own)	
1:30 PM–5:00 PM	Workshop: Input for the Updates to the Digital Edition of the AASHTO Transportation Asset Management Guide NCHRP 08-137 Project	Staffordshire
	FTA TAM Roundtable (Public agencies only, pre-registration required)	Essex South
	Workshop: Risk & Resilience Visualization	Essex North
3:00 PM–3:30 PM	Afternoon Break	America Ballroom Foyer

## SCHEDULE AT-A-GLANCE

Monday, July 10		
7:30 AM–8:30 AM	Continental Breakfast	America Ballroom Foyer
7:30 AM–4:00 PM	Registration	4th Floor Convention Office
8:30 AM–10:00 AM	Opening Plenary	America South
10:00 AM–10:30 AM	Morning Break	America Ballroom Foyer
10:00 AM–12:00 PM	TRB Standing Committee on Public Engagement and Communications (AJE40)	St. George A&B
10:30 AM–12:00 PM	(O) Leveraging TAM to Drive Organizational Change	America North
	(P) Worth It!	Essex Center
	(R) Uncertain Risks: Getting Comfortable with Uncertainty	Staffordshire
	(S) Sustainability and Resilience	Essex North
	(W) TAM Meets GAM: It Could be Love	Essex South
12:00 PM–1:30 PM	Networking Luncheon	America South
	Lunch – Meeting of the AASHTO Subcommittee on Asset Management and Iowa Pooled Fund (By invitation only)	Independence AB
1:30 PM–3:00 PM	(O) TAM-Travel: A Conversation with the Past, Present, and Future of TAM	America North
	(P) All Together Now	Essex Center
	(R) Building Infrastructure Resilience: How Do We Adapt to the Unknown Unknowns?	Staffordshire
	(P) The Route To Success	Essex North
	(W) Edge of TAMorrow	Essex South
3:00 PM–3:30 PM	Afternoon Break	America Ballroom Foyer
3:30 PM–5:00 PM	(O) Putting People at the Center of your Program Implementation	America North
	(P) Sweat the Small Stuff: Managing Ancillary Assets	Essex Center
	(R) The Buck Starts Here: Using Risks to Inform Decisions	Staffordshire
	(S) Sustainability and Social Equity	Essex North
	(W) Lightning Talks: Introduction to Poster Session	Essex South
3:30 PM–5:00 PM	TRB Standing Committee on Strategic Management (AJE10)	St. George A&B
5:00 PM–6:30 PM	Tom Palmerlee Celebratory Poster Reception	America Center

## SCHEDULE AT-A-GLANCE

Tuesday, July 11		
7:30 AM–8:30 AM	Continental Breakfast	America Ballroom Foyer
7:30 AM–3:00 PM	Registration	4th Floor Convention Office
8:30 AM–10:00 AM	(O) Achieving Goals through Effective Program Management	America North
	(P) Effective Bridge Management	Essex Center
	(R) Visualizing and Communicating Risk: Telling the Story of Why it Matters	Staffordshire
	(S) Pushing the Envelope: A Conversation on Emerging Topics with the TAM Expert Task Group	Essex North
	(W) TAM Competition: Innovative Approaches in Transportation Asset Management: Ideas from the Next Generation of Asset Managers	Essex South
10:00 AM–10:30 AM	Morning Break	America Ballroom Foyer
10:30 AM–12:00 PM	(O) The Role of the Asset Management Champion & Their Team	America North
	(P) TAMP Reporting	Essex Center
	(R) It's What's for Dinner! Your One-stop Shop for Interdisciplinary Risk Management	Staffordshire
	(S) Resilience Planning Framework for Transportation Systems	Essex North
	(W) Asset Management: The Boston Metropolitan Experience	Essex South
12:00 PM–1:30 PM	Networking Luncheon	America South
	Lunch – Meeting of TRB Standing Committee on Transportation Asset Management (AJE30) [By invitation only]	Independence AB
1:30PM–3:00 PM	(R) New Technologies will Revolutionize the use and Function of TAM in the Decision-Making Process: An Oxford-style Debate	Staffordshire
	(W) The Feedback Loop: Risk Based Decisions for Service Delivery with Zero Emission Vehicles	Essex South
	(W) TAM: The Final Frontier	Essex Center
	(W) FTA TAM Program Update and Support	Essex North
	(W) Back TAM the Future: Developing a Culture of Continuous Improvement	America North
3:00 PM–3:30 PM	Afternoon Break	America Ballroom Foyer
3:30 PM–5:00 PM	Closing Plenary	America South

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# CONFERENCE PROGRAM

## KEY

**O**=Organizing for Asset Management

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**R**=Managing Risks through Asset Management

**S**=Advancing Sustainability in Asset Management

**W**=Wildcard (Emerging Topics, etc.)

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## SATURDAY, JULY 8, 2023

Noon-4:00 PM

### **Registration**

4th Floor Convention Office

1:00 PM-5:00 PM

### **FHWA/AASHTO Peer Exchange (By invitation only)**

Staffordshire

## SUNDAY, JULY 9, 2023

7:00 AM-8:00 AM

### **Coffee**

America Ballroom Foyer

7:00 AM-4:00 PM

### **Registration**

4th Floor Convention Office

8:00 AM-8:30 AM

### **Preconference Welcome: Coffee with the Secretaries**

America North

**Moderator:** Stephen Woelfel, Massachusetts DOT

- Secretary Gina Fiandaca, Massachusetts DOT
- Secretary Roger Millar, Washington State DOT

8:30 AM-Noon

### **Workshop: Enterprise Data Life Cycle Management/Better Information Modeling (BIM)**

America North

*Better Information Modeling (BIM) is growing and runs parallel to many initiatives to better support decision making. These activities are part of a larger data life cycle strategy for gathering and sharing asset data. The focus of this workshop is to continue the conversation with BIM, GIS, and AM teams.*

#### **Enterprise Asset Data Lifecycle Management**

- Simon Lewis, AECOM
- Michael Warren, AECOM

8:30 AM-Noon

### **Workshop: Data & Dollars: Crafting a Compelling Story about Asset Management**

Essex Center

**Moderators:** Walter Jeffery Moore, Michael Baker International; Michael Garau, Kimley-Horn and Associates

*Asset Management practitioners are tasked with collecting data for use by internal and external stakeholders. However, identifying the correct data to tell the right story is a challenge. The TRB Committee on Public Engagement and Communications (AJE40) has developed this workshop to demonstrate agile communication strategies for TAM teams.*

8:30 AM-Noon

### **Workshop: Scenario Planning for Asset Management**

Essex North

**Moderator:** John Kaliski, Cambridge Systematics

*Unpredictable costs, uncertain funding, supply chain disruptions, changing customer needs, growing climate risks—how do we make informed asset management decisions in a period of uncertainty? Join an interactive workshop to apply scenario planning techniques to asset management decisions—and identify approaches and tools that could be adapted for your agency.*

#### **Speakers**

- Laura Zale, Southeastern Pennsylvania Transportation Authority
- John Moran, Massachusetts DOT
- Jonathan Fok, Washington State DOT

8:30 AM-Noon

### **FHWA/AASHTO Peer Exchange (By invitation only)**

Staffordshire

8:30 AM-Noon

**FTA TAM Roundtable (Public agencies only,  
pre registration required)**

Essex South

1:30 PM-5:00 PM

**Workshop: Input for the Updates to the Digital Edition  
of the AASHTO Transportation Asset Management Guide  
NCHRP 08-137 Project**

Staffordshire

**Moderator:** Hyun-A Park, Spy Pond Partners

*Preview the new Digital Edition of the AASHTO TAM Guide, and provide feedback for additional enhancements to make the guide more effective.*

1:30 PM-5:00 PM

**Workshop: Risk & Resilience Visualization**

Essex North

**Moderator:** Matthew Hardy, Spy Pond Partners

*What visualization techniques communicate the importance of transportation resilience and investment value? What tools and techniques tell the resilience business case story to leaders? This hands-on workshop engages in a friendly visualization and business case development competition to answer some of these questions and more!*

**NCHRP 584 Visualizing Highway Performance Measures**

- Frank Broen, Metro Analytics

**Business Case and Communications Strategies  
for State DOT Resilience Efforts**

- Suseel Indrakanti, Cambridge Systematics, Inc.
- Mara Campbell, Jacobs

1:30 PM-5:00 PM

**FTA TAM Roundtable (Public agencies only,  
pre registration required)**

Essex South



## MONDAY, JULY 10, 2023

7:30 AM-8:30 AM

### **Continental Breakfast**

America Ballroom Foyer

7:30 AM-4:00 PM

### **Registration**

4th Floor Convention Office

8:30 AM-10:00 AM

### **Opening Plenary**

America South

**Moderator:** Laura Zale, Southeastern Pennsylvania Transportation Authority

- **Keynote Speaker:** Joi Singh, FHWA Massachusetts Division Administrator
- **Keynote Speaker:** Jonathan Gulliver, Highway Administrator, Massachusetts DOT
- **Keynote Speaker:** Phillip Eng, General Manager and CEO, Massachusetts Bay Transportation Authority

10:00 AM-10:30 AM

### **Morning Break**

America Ballroom Foyer

10:00 AM-Noon

### **TRB Standing Committee on Public Engagement and Communications (AJE40)**

St. George A&B

10:30 AM-Noon

### **(O) Leveraging TAM to Drive Organizational Change**

America North

**Moderator:** Tamalynn Kennedy, Federal Transit Administration

*Implementing a TAM program is about much more than collecting asset condition and performance data; rather, using this data to make decisions requires buy-in from all levels of the agency. This session showcases examples of how agencies used their TAMPs to influence cultural change.*

Continued >>

**NMDOT's Asset Management Executive Steering Committee and the Development of the 2022 TAMP**

- Virginia Stubella, New Mexico DOT
- Phillip Montoya, New Mexico DOT

**Practical Experiences Using The AASHTO TAM Data Guide to Advance and Sustain DOT Asset Management Programs**

- Chris Whipple, Utah DOT
- William Duke, Spy Pond Partners

10:30 AM-Noon

**(P) Worth It!**

Essex Center

**Moderator:** Laura Heckel, Illinois DOT

*The value of assets is an important input as agencies plan for investment, and can be a critical value to track. This session will investigate the challenges and offer approaches to establishment of asset value, with practical examples from several agencies.*

**Asset Valuation and Whole Life Cost Analysis for Informed Business Decision-Making**

- Kambiz Rasoulkhani, AMCL

**Guide to Computation and Use of System Level Valuation of Transportation Assets**

- William Robert, Spy Pond Partners

**The Iowa Example**

- Louis Cripps, Regional Transportation District (Denver)

**The Denver RTD Example**

- Jeremy Vortherms, Iowa DOT

10:30 AM-Noon

**(R) Uncertain Risks: Getting Comfortable with Uncertainty**

Staffordshire

**Moderator:** Todd Shepherd, AMCL

*This interactive mini workshop on tactical risk management aligns risk assessments, decision processes, performance management, and information system requirements to capture data that inform decision-making models and demonstrate how Asset Management brings value to the organization.*

10:30 AM-Noon

## **(S) Sustainability and Resilience**

Essex North

**Moderator: Gerardo Flintsch, Virginia Tech**

*This session discusses approaches to building resilience in highway and public transit systems as well as identifying approaches to decarbonize to ensure sustainable resilience in the long term.*

### **Transportation Resiliency Framework Study**

- Levi Stewart-Figueroa, Broward Metropolitan Planning Organization
- John Patrick O'Har, Gannett Fleming

### **Addressing Resilience to Climate Change and Extreme Weather in TAM**

- Elizabeth Habic, Federal Highway Administration
- Tashia Clemons, Federal Highway Administration
- Robert Kafalenos, Federal Highway Administration
- Peter Doan, Federal Highway Administration

### **Highways Asset Management as a Path to Decarbonisation**

- Thomas Goodyer, WSP

10:30 AM-Noon

## **(W) TAM Meets GAM: It Could be Love**

Essex South

**Moderator: Ben Rivers, Federal Highway Administration**

*Geotechnical asset management (GAM) is a rapidly developing discipline. Incorporating earth management structures into broader TAM programs is viable and effective. This session will explore ways to account for geotechnical assets, focusing on implementation challenges, management strategies, and resilience implications of GAM.*

### **Geotechnical Asset Management at MnDOT**

- Douglas Maki, Minnesota DOT

### **Geohazards in Colorado's TAM Program**

- Toby Manthey, Colorado DOT
- William Johnson, Colorado DOT

### **Panel Presentation**

- Darren Beckstrand, Landslide Technology

### **Put your TAMP on Stable Ground**

- Scott Anderson, BGC Engineering, Inc.

Noon-1:30 PM

### **Networking Luncheon**

America South

1:30 PM-3:00 PM

### **(O) TAM-Travel: A Conversation with the Past, Present, and Future of TAM**

America North

**Moderator:** Simon Smith, AMCL

**Panel Discussion:**

- William Johnson, Colorado DOT
- John Kitchens, TriMet
- Chi Chow, Golden Gate Transit
- Todd Lang, Baltimore Metropolitan Council

1:30 PM-3:00 PM

### **(P) All Together Now**

Essex Center

**Moderator:** Derek Krevat, Mass DOT

*This session provides best practices in the collaboration of DOTs, MPO's, Transit Agencies, and local governments in the use of safety and performance targets to improve the transportation network.*

#### **Building a Collaborative and Impactful Program MD DOT's Asset Management Journey**

- David Sklar, WSP
- Meredith Hill, Maryland DOT State Highway Administration

#### **Organization For Indiana Asset Management**

- Louis Feagans, Indiana DOT

#### **All Together Now: How Transit Agencies, MPOs, and State DOTs are Collaborating to Use TAM and Safety Performance to Guide Regional Investment**

- Herbert Higginbotham, Cambridge Systematics

1:30 PM-3:00 PM

### **(P) The Route To Success**

Essex North

**Moderator:** Brandon Strohl, Federal Highway Administration

*Linear assets such as pavements or tracks have their own unique issues. This session will provide examples of good practices in measuring and managing linear*

*assets, with practical information to help you improve how you manage through effective performance management.*

### **Use of the OnTrack System for Integrating Track Condition Data to Improve Asset Management and Reduce Risk**

- William Robert, Spy Pond Partners

### **Measuring and Managing Pavement Performance at Massachusetts DOT**

- Ed Naras, Massachusetts DOT

### **TXDOT's TAMP Risk Management and Resilience Building**

- Jenny Li, TxDOT
- Hyun-A Park, Spy Pond Partners

### **Looking at the Big Picture: Opportunities and Challenges of Using Satellite Data in Pavement Condition Evaluations**

- Cristina Torres-Machi, University of Colorado, Boulder

1:30 PM-3:00 PM

## **(R) Building Infrastructure Resilience: How Do We Adapt to the Unknown Unknowns?**

Staffordshire

**Moderator:** Prashant Ram, Applied Pavement Technology, Inc.

*With the goal of moving towards a more sustainable and resilient surface transportation system to pass on to future generations of earth's humans and ecosystems, this session explores how three teams developed tools to adapt to the unknowns. Facilitated panel discussion on key topics to ensure success will follow the presentations.*

### **Maryland's Resiliency Initiatives and Challenges in Achieving a State of Good Repair**

- Sutapa Samanta, Maryland DOT State Highway Administration
- Meredith Hill, Maryland DOT State Highway Administration

### **Impact of Wildfires on Pavement Systems**

- Prashant Ram, Applied Pavement Technology, Inc.
- Amir Gotalipour, Federal Highway Administration

### **ShakeCast: An Automated Warning System for Monitoring Seismic Activity and Alerting Stakeholders to the Possible need for Post event Inspections**

- Drake Bulta, Texas DOT



1:30 PM-3:00 PM

### **(W) Edge of TAMorrow**

Essex South

**Moderator:** Lauren Gardner, Vanderbilt University

*This networking session has been set up for our younger and first time attendees. Learn how you can expand your professional network and get involved with TRB activities.*

3:00 PM-3:30 PM

### **Afternoon Break**

America Ballroom Foyer

3:30 PM-5:00 PM

### **(O) Putting People at the Center of your Program Implementation**

America North

**Moderator:** Stephanie Amoaning-Yankson, AECOM

*This session showcases the importance of putting people and processes in place to ensure a successful and sustainable program implementation. Hear from three agencies as they discuss the implementation of EAMs, geospatial information, and a quality management system to enhance their asset management strategies.*

#### **Promoting Collaboration between Assets and Departments with GIS and other Tools**

- Louis Feagans, Indiana DOT

#### **Applying Agile Project Management Methodologies to EAM Implementation: A SEPTA Case Study**

- Cody Barrett, HNTB Corporation
- Joseph Schade, Southeastern Pennsylvania Transportation Authority
- Dan Mihalov, HNTB Corporation
- James Madera, HNTB Corporation

#### **MBTA's Linear Asset EAMS Management and Configuration**

- Hugh Quinn, MBTA

#### **Asset Management for Airports; Massport's Asset Management and Recently Launched MICA Programs**

- Mark Ricketson, Massport

3:30 PM-5:00 PM

### **(P) Sweat the Small Stuff: Managing Ancillary Assets**

Essex Center

**Moderator:** Christopher Senesi, HDR

*Transportation assets such as pavement and bridges command a large share of investment needs and are typically the assets prioritized in Federally-compliant*

*asset management plans. In reality, modern transportation networks require a collection of assets working in harmony, and effective processes and plans in place to ensure full life cycle management. This panel will evaluate high priority ancillary assets, and outline effective management strategies in use today.*

### **Michigan DOT Ancillary Asset Management System**

- Laura Wagner-Bartz, HNTB

### **How Do We Get Included in the Next TAMP? A Playbook For Ancillary Assets**

- Katie Zimmerman, Applied Pavement Technology, Inc.
- Trisha Stefanski, Minnesota DOT
- Chris Harris, Tennessee DOT

### **PANY&NJ Data Management for Enterprise Asset Management**

- Robert Kumapley, The Port Authority of New York & New Jersey
- Xifan Chen, Microdesk
- George Broadbent, Microdesk
- Baris Salman, Syracuse University

### **Ancillary Assets in CDOT's 2022 TAMP**

- Toby Manthey, Colorado DOT

3:30 PM-5:00 PM

## **(R) The Buck Starts Here: Using Risks to Inform Decisions**

Staffordshire

**Moderator:** William Johnson, Colorado DOT

*What methods do agencies use to convey the benefits of incorporating risk into the decision-making process? Learn about workshop approaches to inform multi-modal transportation risk assessment, maximizing capital spending for network level resiliency and highway lifecycle management, and programmatic risk assessment and environmental hazard risk analysis to prioritize funding TAMP implementation.*

### **Risk Workshop Development and Progress**

- Rebekka Apardian, University of Toledo

### **Compiling Data and Developing Tools to Identify Risks, Inform Asset Management, Improve Business Practices and Achieve Resiliency Objectives**

- Ister Morales, Gannett Fleming

### **The Feedback Loop: Better Decisions for Service Delivery by Managing Asset Risk, Cost, and Performance**

- Herbert Higginbotham, Cambridge Systematics
- Rob Zilay, Dye Management Group, Inc.
- Wendy Platanitis, Valley Metro

### **Managing Asset Risks through the UDOT TAMP**

- Patrick Cowley, Utah DOT

3:30 PM-5:00 PM

### **(S) Sustainability and Social Equity**

Essex North

**Moderator:** Jocelyn Jones, Federal Highway Administration

*This session focuses on highway and transit experiences to address equity considerations - including how TAM practitioners perceive equity; how equity is centered in a state DOT strategic plan; how goals are achieved equitably across the community; and how to engage stakeholders inclusively in project prioritization and decision making.*

#### **Transforming Transportation Asset Management (TAM) to Incorporate Social Equity: A Survey of Asset Managers**

- Fawzi Khalife, Colorado State University
- Mehmet Ozbek, Colorado State University
- Rebecca Atadero, Colorado State University
- Erin Arneson, Colorado State University

#### **Implementing Equity into Capital Prioritization for MTA**

- Krae Stieffenhofer, Kimley-Horn and Associates

#### **Incorporating Equity into Asset Management System Analysis**

- Caroline Dickey, Mott MacDonald
- Aaron Gerber, Mott MacDonald

#### **Elevating Voices of Equity Priority Communities into Decision Making Process for the Interstate Bridge Replacement Program, a Transportation Project of National Significance**

- Johnell Bell, Interstate Bridge Replacement Program
- Greg Johnson, Interstate Bridge Replacement Program

3:30 PM-5:00 PM

### **(W) Lightning Talks: Introduction to Poster Session**

Essex South

**Moderator:** Matthew Hardy, Spy Pond Partners

*Meet our Poster Presenters before they share their work at the welcome reception.*

3:30 PM-5:00 PM

### **TRB Standing Committee on Strategic Management (AJE10)**

St. George A&B



5:00 PM-6:30 PM

## Tom Palmerlee Celebratory Poster Reception

### America Center

- ***Sustaining TAM through Comprehensive Data Collection***  
Jonathan Groeger, Transconomy, LLC
- ***Improving Pavement Assessment for Effective Asset Management***  
Jerry Daleiden, ARRB Systems
- ***The Possibilities of Using a Mobile Mapping System (MMS) to Collect Retroreflectivity of Signs and Pavement Markings***  
Ray Mandli, Mandli Communications, Inc.
- ***Development of Road Asset Maintenance technique for Transportation Planning in Botswana***  
Simon Oladele, Morgan State University
- ***TAMP Rapid Entry of Asset Data and Intelligence Book (READI Book): Creating a Data Pipeline for TAMP Implementation***  
Richard Boadi, WSP
- ***Sequenced Diagnostic Steps for Condition Assessment of Transportation Assets***  
Antonios Vytiniotis, Geocomp
- ***Asset Tracking and Historical Data Comparisons***  
Larry Mattke, Mandli Communications, Inc.
- ***Leveraging LiDAR Data for Multiple Divisions within an Agency Including Satisfaction of MIRE Requirements***  
Sam Skog, Mandli Communications, Inc.
- ***Risk Tolerance Framework for Coastal Highway Infrastructure Assets in New Hampshire***  
Suseel Indrakanti, Cambridge Systematics  
Nicholas Alexander, New Hampshire DOT  
Pedro Serigos, Cambridge Systematics  
Daniel Ramola, Cambridge Systematics
- ***Scenario-Based Cross-Asset Optimization for Long-Range Investment Planning of Transportation Asset Portfolios***  
Mahmoud Halfawy, IDS Infrastructure Data Solutions, Inc.
- ***Operational Modal Analysis and High Resolution Near Surface Imaging for Cost Efficient Structural Health Evaluation and Monitoring***  
Oleg Valishin, Sercel
- ***Development of a Framework for Sustainable Asset Management of Electrified Roads***  
Kamalen Diaz, University of Texas, El Paso
- ***Big Data in Asset Management – Collecting Network-Level Pavement Structural Capacity And Blurring The Line Between Network And Project Level Pavement Asset Management***  
Gerardo Flintsch, Virginia Tech

Continued >>

### Tom Palmerlee Celebratory Poster Reception, *continued*

- *Implementation of an Integrated Transit Asset Management Database to Support Group Asset Management Plan*  
Sharon Okoye, Connecticut DOT  
William Robert, Spy Pond Partners
- *Discovering Your Inner Platypus: What It Takes to Build and Sustain an Asset Management Team*  
Brian ten Siethoff, AMCL
- *Outside The (Six) Box: Aligning Purpose to Outcomes and everything in between using the IAM '10-box Model'*  
Sam Steffes, AMCL
- *The Business Case for Resilience and Security In Infrastructure and Continuity of Function*  
Frank Broen, Metro Analytics  
Chris Huffman, Huffman Corridor Consulting  
Silvana Croope, Alabama Transportation Institute

## TUESDAY, JULY 11, 2023

7:30 AM-8:30 AM

### Continental Breakfast

America Ballroom Foyer

7:30 AM-3:00 PM

### Registration

4th Floor Convention Office

8:30 AM-10:00 AM

### (0) Achieving Goals through Effective Program Management

America North

**Moderator:** Simon Lewis, AECOM

*You cannot achieve a target that you have not established. Learn how three agencies identified their long-term TAM goals to support long range plans and strategy.*

#### Pilot Asset Management System

- Justin Barclay, JMT

#### Integrating Long Range Transportation Plan Scenarios into TAMP Gap Analyses

- Jack Smith, North Dakota DOT

### **A Blueprint for Change – Using the Metro Capability Model to Support Asset Management Business Transformation**

- Maxwell Brown, AMCL
- Jessie Wang, King County Metro

8:30 AM-10:00 AM

### **(P) Effective Bridge Management**

Essex Center

**Moderator:** Michael Johnson, California DOT

*This session provides best practices in the collaboration of DOTs, MPO's, Transit Agencies, and local governments in the use of safety and performance targets to improve the transportation network.*

#### **Asset Management and Bridge Management**

- Justin Bruner, Pennsylvania DOT
- Harjit Bal, New Jersey DOT

#### **Bridge Management and Asset Management: Integration of AASHTO Element Data into the Bridge Management System for Highway and Transit Agencies**

- Kathryn Malarich, Gannett Fleming

#### **Panel Presentation**

- Michael Johnson, California DOT

#### **MassDOT's Experience Tying Asset Management to Bridge Preservation**

- Alyson Bedard, MassDOT

8:30 AM-10:00 AM

### **(R) Visualizing and Communicating Risk: Telling the Story of Why it Matters**

Staffordshire

**Moderator:** Emily Burns, Seattle Office of the Waterfront & Civic Projects

*Session includes an overview of NCHRP Synthesis 584 Visualization Best Practices, results of the top three team visualizations from the Visualizing Risk & Resilience Workshop, and NCHRP project 20-127 agency risk visualization and storytelling case studies. Learn what methods are catching fire for organizational buy-in and vote on Workshop team risk visualizations.*

#### **NCHRP Synthesis 584: Visualization of Highway Performance Measures**

- Frank Broen, Metro Analytics
- Adam Chapdelaine, Boston Green Ribbon Commission
- Matthew Hardy, Spy Pond Partners
- Suseel Indrakanti, Cambridge Systematics

8:30 AM-10:00 AM

### **(S) Pushing the Envelope: A Conversation on Emerging Topics with the TAM Expert Task Group**

Essex North

**Moderator:** Brad Allen, Applied Pavement

*The TAM ETG is developing a new strategic plan and products to support the asset management community in the post-pandemic 21st century. This session will provide an overview of the TAM ETG's most recent efforts and give participants an opportunity to provide input on forthcoming work products.*

**Panel Discussion:**

- Tashia Clemons, Federal Highway Administration
- Laura Mester, Michigan DOT
- Matt Haubrich, Iowa DOT
- William Johnson, Colorado DOT
- Jeffrey Neal, North Central Texas Council of Governments
- Michael Johnson, California DOT
- Justin Bruner, Pennsylvania DOT

8:30 AM-10:00 AM

### **(W) TAM Competition: Innovative Approaches in Transportation Asset Management: Ideas from the Next Generation of Asset Managers**

Essex South

**Moderators:** Cristina Torres-Machi, University of Colorado, Boulder; Meredith Hill, Maryland DOT State Highway Administration; and Lauren Gardner, Vanderbilt University

*Our next generation of asset managers was given the opportunity to participate in a TAM competition sponsored by AJE30. Learn how our younger members utilized modern technology and data science to evaluate the stormwater management systems on interstate and rail corridors for current and future climate conditions.*

**Developing SEPTA's Culvert Management Strategy**

- Katherine Riffle, Southeastern Pennsylvania Transportation Authority

**Panel Presentation**

- Michael Harrell, Texas State University

**TAM Competition Winner: Undergraduate Student Category**

- Irshad Moalim, Minnesota DOT

**TAM Competition Winner: Graduate Student and Young Professional Category: Risk-Based Asset Management Approach for Effective Culvert Management in Changing Climates**

- Bukola Oni, Iowa State University
- Maria Rojas, Iowa State University
- Rosy Adhikari, Iowa State University
- Yazan Alatoom, Iowa State University

10:00 AM-10:30 AM

## Morning Break

America Ballroom Foyer

10:30 AM-Noon

## (O) The Role of the Asset Management Champion & Their Team

America North

**Moderator:** Amir Golalipour, Federal Highway Administration

*A successful asset management program implementation requires the use of dedicated staff in order to champion agency objectives while ensuring that deliverables are produced. This session focuses on building asset management competencies and shaping messaging around the concept of TAM.*

### Creating Support for TAM through Stakeholder Engagement

- Justin Barclay, JMT

### Making Asset Management an Asset – Adjusting Strategies for Differing Levels of Maturity

- Rebekka Apardian, University of Toledo

### Is Leadership Commitment Earned, or Given

- Louis Cripps, Regional Transportation District (Denver)

### TAM and Quality: Setting the Foundation for Success

- Laura Zale, Southeastern Pennsylvania Transportation Authority

10:30 AM-Noon

## (P) TAMP Reporting

Essex Center

**Moderator:** Scott Zainhofsky, North Dakota DOT

*Considerable organizational effort and process are necessary to maintain compliant TAMPs, participate in annual consistency reviews and manage to state and federal performance metrics. However, these comprehensive documents and processes may not be the best vehicles for communication to key external stakeholders on actual performance and need. This panel will investigate effective alternative asset management communication strategies in use today.*

### Connecticut DOT's TAMP Journey: Online Fact Sheets

- Stephanie Shippee, Connecticut DOT

### MBTA's Asset Prioritization Framework

- Ronnie E. Valdivia, MBTA

### Caltrans Annual Performance Reporting

- Michael Johnson, California DOT

Continued >>

**TAMP Implementation and Consistency – A Check-in on Progress**

- Shaker Rabban, Minnesota DOT

10:30 AM-Noon

**(R) It's What's For Dinner! Your One-stop Shop for Interdisciplinary Risk Management**

Staffordshire

**Moderator:** Mara Campbell, Jacobs

*What is your appetite for risk? What risk and resiliency needs are on your plate? Come join us to learn from and collaboratively engage with our partners in academia, stormwater, and internationally on best practices and techniques to address and quantify risks.*

**North Central Texas Regional Transportation and Stormwater Management Integration (TSI) Study**

- Jeffrey Neal, North Central Texas Council of Government
- Kate Zielke, North Central Texas Council of Governments
- Matthew Lepinski, United States Army Corps of Engineers
- Nick Jaber, Texas A&M AgriLife Extension
- Craig Ottman, Tarrant Regional Water District

**Incorporating Resilience into Asset Management: International Experience**

- Gerardo Flintsch, Virginia Tech

**Quantifying Transportation Resilience to Flooding: A Focus on Community Mobility**

- Cristina Torres-Machi, University of Colorado, Boulder
- Francisco Contreras, University of Colorado, Boulder

10:30 AM-Noon

**(S) Resilience Planning Framework for Transportation Systems**

Essex North

**Moderator:** Victor Rivas, Jacobs Engineering Group Inc.

*To effectively adapt their network infrastructure to be more resilient, transportation agencies may consider the benefits of adopting a Systems engineering approach inclusive of a solid organizational framework with robust coordination and cooperation protocols among their business units. The session features lessons learned from transportation and other industries.*

**Leveraging Systems Practices to Achieve Resilient Outcomes**

- Anne O'Neil, AOC Systems Consortium

**Organizational Resilience: The Relational Coordination Factor**

- Jody Hoffer Gittel, Heller School for Social Policy and Management, Brandeis University

10:30 AM-Noon

## **(W) Asset Management: The Boston Metropolitan Experience**

Essex South

**Moderator:** Ken Miller, Federal Highway Administration

*The Boston region relies upon and benefits from a multimodal transportation system that crosses jurisdictional boundaries. Each responsible agency must contend with the unique challenges of their respective systems while supporting an overall vision for regional mobility. This panel will review key milestones that have shaped today's system, discuss approaches to system management and highlight interagency partnerships.*

### **Panel Presentation**

- Carrie Lavalley, Massachusetts DOT

### **Panel Presentation**

- Jeffrey Gonneville, MBTA

Noon-1:30 PM

## **Networking Luncheon**

America South

Noon-1:30 PM

## **Lunch – Meeting of TRB Standing Committee on Transportation Asset Management (AJE30) (By invitation only)**

Independence AB

1:30 PM-3:00 PM

## **(R) New Technologies will Revolutionize the use and Function of TAM in the Decision-Making Process: An Oxford-style Debate**

Staffordshire

**Moderator:** Matthew Hardy, Spy Pond Partners

*Join us for a unique take on an Oxford-style debate focused on new technologies and how they will (or won't?) revolutionize the TAM decision-making process. Participate in this fun and interactive session while also learning about agencies optimizing capital programs, using digital twins, and applying BIM in practice.*

### **Development of a System for Recommending an Optimized Capital Program Incorporating Life Cycle Cost, Risk and Sustainability**

- Justin Bruner, Pennsylvania DOT

### **Confessions of a BIM Skeptic**

- Matthew Haubrich, Iowa DOT

### **Risk Management for Transportation Infrastructure with Digital Twin**

- Joshua Johnson, Bentley Systems

1:30 PM-3:00 PM

### **(W) Back TAM the Future: Developing a Culture of Continuous Improvement**

America North

**Moderator:** Laura Zale, Southeastern Pennsylvania Transportation Authority

*To move from planning to implementation, asset management strategy must be supported by other business entities, including project delivery and maintenance. Process improvement and change management is a key component of implementation. This session will discuss the use of agile project management to drive process improvement at MassDOT and deliver key asset management objectives through the Bipartisan Infrastructure Law.*

#### **Panel Presentation**

- Tracy Osimboni, Massachusetts DOT

1:30 PM-3:00 PM

### **(W) FTA TAM Program Update and Support**

Essex North

**Moderator:** Tamalynn Kennedy, Federal Transit Administration

*Join FTA's Transit Asset Management Program Manager for an update on the TAM program and an opportunity to receive one-on-one support on your TAM Plan. FTA staff from various Regional offices will also be on hand to meet attendees.*

1:30 PM-3:00 PM

### **(W) TAM: The Final Frontier**

Essex Center

**Moderator:** Liz Williams, Massachusetts DOT

*This panel will discuss how to approach and understand Asset Management beyond quantitative, present-day condition and State of Good Repair assessments. The panelists in this workshop will discuss how to think about infrastructure management with an eye towards future viability, impacts on abutters, and the incorporation of emerging transportation technologies.*

#### **Asset Management and Environmental Justice: Water Quality and Resiliency Consideration**

- Annie Bastoni, VHB

#### **Getting with the Program: System Modernization at MassDOT**

- Hung Pham, Massachusetts DOT

#### **Measuring Asset Criticality for Transit Ridership and Beyond**

- Ronnie Valdivia, Massachusetts Bay Transportation Authority

1:30 PM-3:00 PM

## **(W) The Feedback Loop: Risk Based Decisions for Service Delivery with Zero Emission Vehicles**

Essex South

**Moderator:** Satyen Patel, Cambridge Systematics

*This session features a conversation with transit professionals about the adoption of zero emission buses (ZEB's). The discussion will highlight performance monitoring and management for both vehicles and infrastructure. This feedback loop provides a framework for evaluating emerging technologies while maintaining the existing asset portfolio.*

### **Invited Presentation**

- Virgle Beeler, IndyGO

### **Journey to Electrification**

- Joseph Sanchez, Antelope Valley Transit Authority

3:00 PM-3:30 PM

## **Afternoon Break**

America Ballroom Foyer

3:30 PM-5:00 PM

## **Closing Plenary**

America South

**Moderator:** Laura Zale, Southeastern Pennsylvania Transportation Authority

*During the conference, attendees have been asked the following questions:*

- *What would prevent me from beginning to implement something like [insert great idea from the conference] in my organization?*
- *Whose help do I need to make it happen?*
- *If I could wave a magic wand that gave me one thing to help my organization, what would that be?*

*In this closing session, Dr. Art Markman, an expert in organizational change management, will help you identify strategies to be more successful in your next attempt at change. What are specific actions you can take? What is your implementation intention?*

### **Turning Your Conference Learning Into Organizational Change**

- Dr. Arthur Markman, University of Texas, Austin

### **Hot Tub TAM Machine**

- The Conference Planning Committee

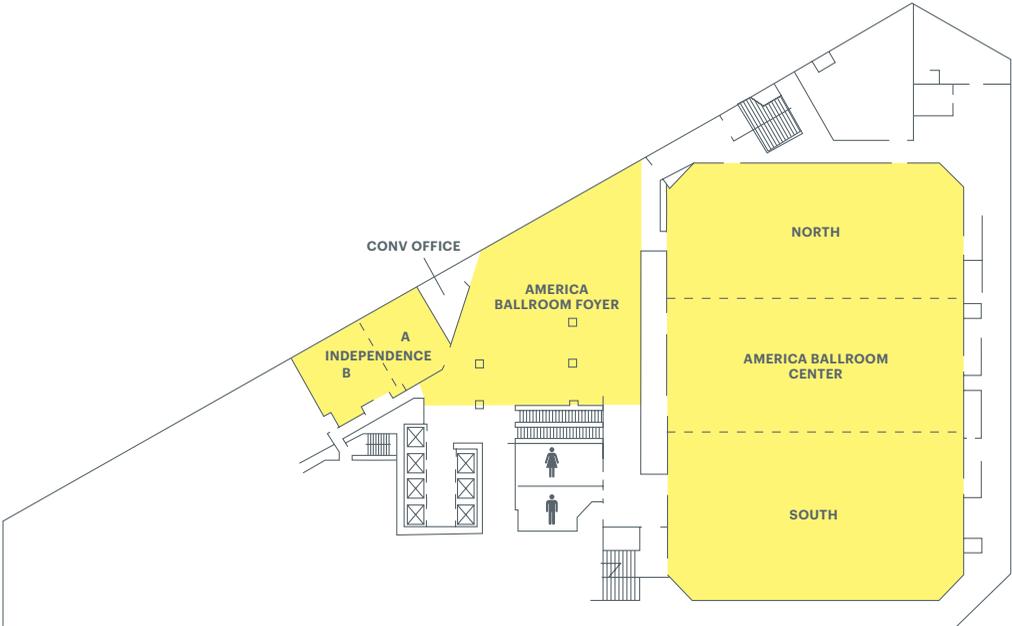


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