



TRANSIT PROGRAM



Photo: Southeastern Pennsylvania Transportation Authority and Bay Area Rapid Transit

Transit Asset Management

11th National Conference on Transportation Asset Management

July 10–12, 2016

Minneapolis Marriott City Center
30 South 7th Street
Minneapolis, Minnesota 55402

Organized by
Transportation Research Board

Supported by
Federal Highway Administration
Federal Transit Administration

Hosted by
Minnesota Department of Transportation

www.trb.org/Conferences/AssetMgt2016.aspx

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WELCOME

On behalf of the conference planning committee, I would like to invite you to attend the Transportation Research Board's 11th National Transportation Asset Management Conference.

During the conference, transit professionals will share strategies for developing practical solutions for asset management. Presenters will discuss the ways in which data has been converted to information that has helped to make improvements to their organization's business processes, manage performance, mitigate risk, and improve the customer experience. Attendees will not only hear best practices for achieving regulatory compliance, but will also learn how to create sustainable asset management programs at their own organizations.



Zale

Come and be a part of the national dialogue on transit asset management. Sessions that may be of interest to the transit community are summarized herein. The full conference program is available on the website, www.trb.org/Conferences/AssetMgt2016.aspx. If you have any questions about the conference, please contact me.

I look forward to meeting you in Minneapolis!

—Laura J. Zale, *Transportation Asset Management Implementation Track Chair*
Southeastern Pennsylvania Transportation Authority

Transit Team

Laura Zale, Southeastern Pennsylvania Transportation Authority, *Team Leader*
John McCormick, Bay Area Rapid Transit
Mshadoni Smith, Federal Transit Administration
David Springstead, Metropolitan Atlanta Rapid Transit Authority
Jennifer Weeks, Washington Metropolitan Area Transit Authority
Shayne Gill, American Association of State Highway and Transportation Officials
Katelyn Dwyer, American Association of State Highway and Transportation Officials

TRB Staff

Thomas Palmerlee, Assistant Division Director
Michael Miller, Associate Program Officer

July 9–12, 2016



CONFERENCE AT A GLANCE

CONFERENCE AT A GLANCE: TRANSIT FOCUS			
	Sunday, July 10	Monday, July 11	Tuesday, July 12
8:00 AM			Breakout: Transit Asset Management Implementation (Ballroom 2)
8:30 AM		Opening Session (Ballroom 1/2)	
9:00 AM			
9:30 AM			
10:00 AM			
10:30 AM		Breakout: Data Collection Practices for Implementation (Trees Theater)	Breakout: Moving the Dial (Ballroom 2)
11:00 AM			Luncheon
11:30 AM			
12:00 PM		Luncheon	Breakout(s): Spread the Word on TAM (Ballroom 1) Looking Forward (Deer/ Elk Lake)
12:30 PM			
1:00 PM		Breakout: How to Manage Your Transit Assets (Ballroom 1)	
1:30 PM	Workshops: - Return on Investment on Transit Asset Management - Improving Resiliency of Transit Systems - TAM Research Roadmap Workshop		Closing Session (Ballroom 1/2)
2:00 PM			
2:30 PM			
3:00 PM		Breakouts (2): Giving Infrastructure a Voice (Ballroom 2) Connecting TAM and Risk Analysis (Excel/ Lafayette Bay)	
3:30 PM			
4:00 PM			
4:30 PM			
5:00 PM			
5:30 PM		Poster Presentation and Reception	
6:00 PM			
6:30 PM			
7:00 PM			

TRANSIT FOCUS SESSIONS

Laura Zale, Southeastern Pennsylvania Transportation Authority, *Team Leader*

Monday:

- Data Collection Practices and Experiences for Improving TAM (10:30 a.m.–noon)
- How to Manage Your Transit Assets (1:00 p.m.–2:30 p.m.)
- Theory to Practice in Connecting TAM and Risk Analysis (3:00 p.m.–4:30 p.m.)
- All Together Now: Giving the Infrastructure a Voice at the Local, Regional, and State Level (3:00 p.m.– 4:30 p.m.)

Tuesday:

- Take an “A” Train: Transit Asset Management Implementation (8:00 a.m.–9:30 a.m.)
- Moving the Dial (10:00 a.m.–11:30 a.m.)
- Spread the Word of Transportation Asset Management (TAM) (12:30 p.m.–2:00 p.m.)
- Conform, Reform, or Transform: Building a Forward Looking TAM Organization (12:30 p.m.–2:00 p.m.)
- On the Road Again: Implementing a Sustainable Asset Management Program at Your Agency (12:30 p.m.–2:00 p.m.)

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ADVANCE WORKSHOPS

Sunday, July 10

1:30 p.m.–5:00 p.m.

Return on Investment in Transportation Asset Management Systems and Practices Workshop (NCHRP 20-100)

Bill Robert, Spy Pond Partners, *presiding*

The objectives of Project 20-100, “Return on Investment in Transportation Asset Management Systems and Practices,” are to assess the experience of selected agencies that have adopted TAM systems and develop guidance for estimating the return on investment (ROI) for adopting or expanding TAM systems in an agency. This workshop will review the research, including illustrative examples of the ROI of investments in TAM. Also, the workshop will test and review the draft guidance prepared through the project.

Improving the Resiliency of Transit Systems Threatened by Natural Disasters Workshop (TCRP A-41)

Deborah Matherly, Louis Berger, *presiding*

Project 1-41, “Improving the Resiliency of Transit Systems Threatened by Natural Disasters,” is a research study under the Transit Cooperative Research Program (TCRP). The outcome of the work will be a concise “how-to” guide for transit agencies working to improve resilience and get better outcomes in bouncing back from major events, and building on existing transit agency strengths in asset management and safety culture, among others. The purpose of the workshop is to review an interim draft of the proposed guidebook and provide substantive comments in a highly interactive format. The workshop will be very hands-on and will generate active discussion and debate on the meaning and implementation of resilience for transit systems, within the context of asset management and other transit system domains.

Transportation Asset Management Research Roadmap Workshop

Hyun-A Park, Spy Pond Partners, *presiding*

A transportation asset management research roadmap is being developed to better respond to the needs of transportation agencies’ asset management progress and to coordinate across entities that are generating research products. This workshop will focus on identifying research needs, determining candidate research projects, and prioritizing the most important needs and projects. Participants at this workshop will be encouraged to share their experiences and needs.

COMMITTEE MEETINGS

Sunday, July 10

5:30 p.m.–7:00 p.m.

Joint Meeting: TRB Asset Management Committee and AASHTO Asset Management Subcommittee

Timothy Henkel, Minnesota Department of Transportation, *presiding*

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Monday, July 11

8:30 a.m.–10:00 a.m.

Opening Session

Katie Zimmerman, Applied Pavement Technology, Inc., Conference Chair, *presiding*

The interactive panel will address the following themes:

- The role of the federal government to provide stewardship to transportation agencies,
- The demand for increased government accountability,
- The evolution of agency investment priorities to better meet economic and societal demands,
- The need for stronger collaboration across modes and jurisdictions, and
- The growing importance of climate change and extreme weather events in agency decisions.

Panelists:

1. Frank Hornstein, Co-DFL Lead of the House Transportation Policy and Finance Committee, Minnesota House of Representatives
2. Paul Trombino, Director, Iowa Department of Transportation
3. David Springstead, Interim Assistant General Manager of Capital Programs and Development, Metropolitan Atlanta Rapid Transit Authority
4. Gregory Nadeau, Administrator, Federal Highway Administration (*Invited*)

10:30 a.m.–noon

Data Collection Practices and Experiences for Improving TAM (Data, Performance Measurement, and Target Setting)

Michael Bridges, Louisiana Department of Transportation, *presiding*

This session will explore the ways that data have been collected, managed, and visualized by four transportation agencies: Massachusetts Department of Transportation; the City of Manchester, New Hampshire; West Virginia Department of Transportation; and the Massachusetts Bay Transportation Authority.

Data Knowledge and Knowing What to Do Next

David Hurst, Rob Zilay, Dye Management Group

Utilizing Geospatial Tools to Collect and Analyze Asset Data in the City of Manchester, New Hampshire

Katherine Keegan, Jonathan Gould, AECOM

A Case Study from Huntington, WV—Collecting, Extracting, and Visualizing Assets Using a Mobile Mapping Foundation

Hussein Elkhansa, West Virginia Department of Transportation; Connie Gurchiek, Transcend Spatial Solutions

Use of Sensors and Scanning Technology for Asset Inventory, Condition, and Service Reliability

Satyen Patel, Massachusetts Bay Transportation Authority

1:00 p.m.–2:30 p.m.

How to Manage Your Transit Assets (“How To:” Technical Sessions to Advance the State of Practice)

Jennifer Weeks, Washington Metropolitan Area Transit Authority, *presiding*

Heather Holsinger, Federal Highway Administration, *recording*

With FHWA MAP-21 rule-making approaching completion, many transit agencies are quickly adapting innovative asset management practices. This session is dedicated to the unique challenges of managing rolling stock, rail, and transit facilities.

Asset Management Challenges: Moving from Construction to Revenue Operations

Marcia Sagami, Jerauld Oxsen, CH2M Hill

Transit Asset Management Gap Assessment for the State of Connecticut

Sharon Okoye, Connecticut Department of Transportation; William Robert, Spy Pond Partners, LLC

The MTC TERM Lite Scenario Manager: Making Multiple Scenario Runs Easy

Nicholas Richter, Metropolitan Transportation Commission

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3:00 p.m.–4:30 p.m.

Theory to Practice in Connecting TAM and Risk Analysis (Connecting Risk and Asset Management)

David Ooten, Oklahoma Department of Transportation, *presiding*

Kartik Manda, Applied Pavement Technology, Inc., *recording*

A broad discussion on various aspects of TAM and risk, ranging from risk and transit to making the business case for risk analysis to flexibility in asset risk management.

An Outcome-Based Scenario Approach for Analyzing Risk in Infrastructure Asset Management

Amir Hessami, Roger Smith, Texas A&M University

Risk-Informed Transit Asset Management: Best Practices and Approach

John Holak, Urban Engineers, Inc.

Making the Business Case for Risk-Based Asset Management

Brenda Dix, Anne Choate, ICF International

Flexibility as a Decision Support Strategy for Asset Risk Management

Vivek Sakhrani, CPCS Transcom Inc.

3:00 p.m.–4:30 p.m.

All Together Now: Giving the Infrastructure a Voice at the Local, Regional, and State Level (TAM Implementation)

David Springstead, Metropolitan Rapid Transit Authority, *presiding*

John McCormick, Bay Area Rapid Transit, *recording*

An asset management program can provide the data that are necessary to align your organization's goals to those of the department of transportation. This session highlights presenters from the DOT, MPO, and transit agency perspective. The agencies will describe the creation of asset management programs that support their organization as well as regional stakeholders.

Turning Data into Action: Mobilizing Transit Asset Management at a Regional Scale

Melanie Choy, Metropolitan Transportation Commission

Development of a Transit Asset Management Plan at Metra

Robert Peskin, AECOM; Michael Rowe, Metra

Collaboration to Support Regional and Statewide TAM: Lessons Learned in Greater Cleveland, Ohio

Sam Van Hecke, Cambridge Systematics; Kathy Sarli, Northeast Ohio Areawide Coordinating Agency

California's Update on Its Transportation Asset Management Pilot Program

Michael Johnson, Hamid Sadraie, California Department of Transportation (CALTRANS)

5:30 p.m.–7:00 p.m.

Poster and Reception

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Tuesday, July 12

8:00 a.m.–9:30 a.m.

Take an “A” Train: Transit Asset Management Implementation (TAM Implementation)

Mshadoni Smith, John Giorgis, Federal Transit Administration, *presiding*

Jennifer Weeks, Washington Metropolitan Area Transit Authority, *recording*

This session provides an overview of the implementation of asset management programs at transit agencies. Presenters will highlight modifications to business processes, the establishment of performance targets, and lessons learned through implementation.

CTA’s Linear Asset Management Implementation

Bill Mooney, Power & Way Maintenance

Target Setting in Transit: Using Data to Involve Staff Across an Agency

Yvonne Carney, Washington Metropolitan Area Transit Authority

Implementing an Asset Management Program at a Legacy Transit System

Laura Zale, Southeastern Pennsylvania Transportation Authority

TAM Implementation: Lessons Learned

Rick Laver, CH2M Hill

10:00 a.m.–11:30 a.m.

Moving the Dial (TAM Implementation)

David Rose, Gannett Fleming, *presiding*

Laura Zale, Southeastern Pennsylvania Transportation Authority, *recording*

This panel provides specific examples of asset management that is moving the dial—resulting in improved reliability, reduce life-cycle cost, reduced safety risk, and improved customer experience.

Panelists

Collete Erricson, New York Metropolitan Transportation Authority Bus Operations

John McCormick, Bay Area Rapid Transit

Mike Hubbell, Dallas Area Rapid Transit

Lou Cripps, RTD Denver

Paul Edwards, Utah Transit Authority

Satyen Patel, Massachusetts Bay Transportation Authority

12:30 p.m.–2:00 p.m.

Spread the Word of Transportation Asset Management (“How To:” Technical Sessions to Advance the State of Practice)

Scott Richrath, Spy Pond Partners, *presiding*

Heather Holsinger, Federal Highway Administration, *recording*

The session will close the “How To” discussion at the 11th Transportation Asset Management Conference, sharing what we’ve learned about how to manage our assets with those unable to attend. Presenters in this closing session will help you communicate the methods and benefits of asset management.

Wanted: Asset Managers Who Can Tell a Good Story

Melaina Voss, Opus International Consultants

A Practical Option for Managing Transit Facility and Infrastructure Assets

Jim Sutton, Chuck Austin, RTD Denver

How Transportation Asset Management Transforms the Business Process at the Ohio Department of Transportation

Eddie Chou, University of Toledo; Andrew Williams, Ohio Department of Transportation

12:30 p.m.–2:00 p.m.

Conform, Reform, or Transform: Building a Forward-Looking TAM Organization (Moving Beyond MAP-21)

Rod Sechrist, New York State Department of Transportation, *presiding*

Mshadoni Smith, Federal Transit Administration, *recording*

There are as many different approaches to implementing asset management as there are transportation

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agencies. Although every agency is different and faces different challenges, there are lessons to be learned in the successes and struggles of every asset management implementation effort. This session explores some of these lessons while looking forward at common challenges all agencies will face.

The Seven Habits of Highly Effective Transit Asset Management Organizations

Herbert Higginbotham, Accenture

Applying International Standards Beyond MAP-21 and Toward Global Best Practice in Asset Management

Margaret-Avis Akofio-Sowah, Christian Roberts, WSP-Parsons Brinkerhoff

MBTA's Advanced Asset Management Program

Satyen Patel, Massachusetts Bay Transportation Authority

Developing the Long Island Rail Road (LIRR) Roadmap to Advance Asset Management Capability

John O'Har, Brenden Duffy, WSP-Parsons Brinkerhoff

12:30 p.m.–2:00 p.m.

On the Road Again: Implementing a Sustainable Asset Management Program at Your Agency (TAM Implementation)

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

Shayne Gill, AASHTO, *recording*

This panel will provide examples of aligning the agency's business practice to better create a sustainable asset management program.

Creating a Sustained Implementation of MassDOT's Asset Management Strategic Plan

Patricia Leavenworth, Massachusetts Department of Transportation; Nathan Higgins, Cambridge Systematics

Framework and Case Studies for Calculating the Return on Investment for Transportation Asset Management Systems and Process Improvements

William Robert, Spy Pond Partners, LLC; Chris Williges, HDR, Inc.

Organizational Issues in Performance Management and Transportation Asset Management: Are You Prepared?

Jonathan Groeger, Deepa Thandaveswara, Amec Foster Wheeler

A Framework for Enhancing TAM Implementation for Sustained TAM Programs

Margaret-Avis Akofio-Sowah, WSP-Parsons Brinkerhoff; Adjo Amekudzi-Kennedy, Georgia Institute of Technology

2:30 p.m.–4:00 p.m.

Closing Session

Katie Zimmerman, Applied Pavement Technology, Inc., Conference Chair, *presiding*

From Inception to Evolution

The conference presentations demonstrate the evolution that is taking place in asset management today. Just a few years ago, most agencies were identifying an asset management champion and focusing on building an asset management culture. Today, agencies are moving towards a more sustainable, cross-cutting, and evolved program.

During the closing session, each of the Track Chairs will share highlights from their sessions related to ways in which:

- The practice of asset management is evolving,
- Agencies are creating sustainable asset management programs that are embedded in the organization's culture,
- Technology is influencing the way decisions are made, and
- Data is being used to speak to multiple audiences.

The session will conclude with a summary of gaps that would benefit from further research or technology transfer efforts.

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Hotel Information

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