Conference on Performance and Data in Transportation Decision Making

September 15-18, 2019
Atlanta, Georgia
Omni Hotel at CNN Center

Organized by
Transportation Research Board

Sponsoring TRB Committees
Committee on Statewide Multimodal Transportation Planning (ADA10)
Committee on Metropolitan Policy, Planning, and Processes (ADA20)
Committee on Transportation Programming and Investment Decision-Making (ADA50)
Task Force on Data for Decisions and Performance Measures (A0030T)
Committee on Performance Management (ABC30)
Committee on Transportation Asset Management (ABC40)
Committee on Transit Management and Performance (AP010)

In Partnership with
American Association of State Highway and Transportation Officials (AASHTO)
Welcome to the TRB Conference on Performance and Data in Transportation Decision Making!

Let’s face it. Each of us is continually quizzed on the best and most groundbreaking means to meet the ever-increasing demand for transportation infrastructure and services in a continuously evolving industry paradigm. Five years ago there was very little discussion of applying such innovations as Mobility-as-a-Service or vehicle automation and connectivity. Yet these are becoming household words, and the industry is still challenged on knowing when and how to apply innovation in the transportation planning and investment landscape. Furthermore, industry advances allow for more detailed and voluminous data on how, where and when we travel, but access and use of these data is not a simple matter for agencies. Whether these questions come from the public, elected officials, a supervisor, co-worker, or even professional and personal acquaintances . . . we are often front and center for answers. As we formulate answers, we look at the data we collect, the metrics we measure, and our own processes developed for making transportation decisions. We also look to conferences like this one to help us consider the models, tools and options available to us to advance our state of practice, while seeking validation, where appropriate, for our established planning and engineering programs and pursuits.

The conference planning committee is very excited to present this program on Performance and Data in Transportation Decision Making, a program that we believe will be useful, and instructive to your time here in Atlanta and readily applicable upon returning to your home organization. The agenda includes 34 interactive conference sessions with 120 presentations addressing various decision-making topics across four technical topic areas, or “tracks”: Performance and Project Selection, Multi-modal Considerations, Data Considerations, and Public Involvement and Communications. Professionals from state departments of transportation, metropolitan planning organizations, universities, National Cooperative Highway Research Program (NCHRP) panels, federal agencies, software developers, and private-sector consultants will be here as both speakers and attendees to share their insights and experiences. The program includes opportunities for after-hours informal networking to keep the conversation going. We hope you will make the most of this unique opportunity to interact with your peers and other industry representatives on the latest research and practical methods for using data and performance measures to inform decisions on transportation services and infrastructure in urban and rural areas alike.

We are pleased to announce that TRB will be developing a post-conference “E-circular” summary of the conference presentations and discussions through a generous contribution by the Federal Highway Administration. This will enable the reach of this conference to extend to a broader array of professionals and help kick start any subsequent activity on developing research problem statements or plans for implementation and adoption that might take place within the transportation industry. Look for the E-circular to be available on the TRB website in early 2020.

Finally, this conference could not take place without the generous patronage support of thirteen organizations. Look for their logos and advertisements in this program and please be certain to visit their exhibits during the conference.

Enjoy your time in Atlanta!

Bob Hazlett, Maricopa Association of Governments
Conference Planning Co-Chair

David Wasserman, North Carolina DOT
Conference Planning Co-Chair
Bob Hazlett, Conference Co-chair, Maricopa Association of Governments
David Wasserman, Conference Co-chair, North Carolina Department of Transportation
Claudia Bilotto, WSP
Jerri Bohard, Oregon Department of Transportation
J. Matthew Carpenter, Sacramento Area Council of Governments
Matthew Hardy, American Association of State Highway and Transportation Officials
Patricia Hendren, I-95 Corridor Coalition
Jordan Holt, Washington Metropolitan Area Transit Authority
Bill Keyrouze, Association of Metropolitan Planning Organizations
Deborah Miller, Kansas University Public Management Center
Harlan Miller, Federal Highway Administration
James Mitchell, Louisiana Department of Transportation and Development
Jon Schermann, Metropolitan Washington Council of Governments
Joseph Schofer, Northwestern University
Tracy Selin, Cambridge Systematics
Hannah Twaddell, ICF
Amy Van Doren, Marin Transit
Dwayne Weeks, Federal Transit Administration
Penelope Weinberger, American Association of State Highway and Transportation Officials

TRB STAFF
Jennifer L. Weeks
Tom Palmerlee
Megan Kaufmann
Mary Kissi

TRANSPORTATION RESEARCH BOARD
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
<table>
<thead>
<tr>
<th>COMMITTEE MEETINGS</th>
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<tbody>
<tr>
<td><strong>AASHTO Committees</strong></td>
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<tr>
<td>AASHTO Committee on Data Management and Analytics, Leadership Group</td>
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<td>AASHTO Committee on Performance Based Management</td>
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<td>AASHTO Committee on Data Management and Analytics</td>
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<td>AASHTO Organizational Management Subcommittee (joint meeting with TRB Committee on Management and Productivity – ABC20)</td>
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<td><strong>TRB Committees</strong></td>
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<tr>
<td>TRB Committee on Statewide Transportation Data Information Systems (ABJ20)</td>
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<td>TRB Section on Management and Leadership (ABC00)</td>
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<td>TRB Committee on Metropolitan Planning, Policy and Processes (ADA20)</td>
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<td>TRB Committee on Regional Transportation Systems Management (AHB10)</td>
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<tr>
<td>TRB Committee on Management and Productivity (ABC20) (joint meeting with AASHTO Organizational Management Subcommittee)</td>
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### Sunday, September 15

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<thead>
<tr>
<th>Time</th>
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<tr>
<td>Noon – 5:00 p.m.</td>
<td><strong>Registration</strong></td>
<td>M4 Prefunction</td>
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<tr>
<td>9:00 a.m. – Noon</td>
<td><strong>Committee Meetings</strong></td>
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<tr>
<td></td>
<td>TRB Committee on Statewide Transportation Data Information Systems (ABJ20)</td>
<td>Hickory (M3)</td>
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<td>AASHTO Committee on Leadership Group</td>
<td>Walnut (M3)</td>
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<td></td>
<td>AASHTO Committee on Performance-Based Management</td>
<td>Grand Ballroom A  (M4)</td>
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<tr>
<td>1:00 p.m. – 4:00 p.m.</td>
<td><strong>Committee Meetings</strong></td>
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<td>TRB Committee on Performance Management (ABC30)</td>
<td>Grand Ballroom C  (M4)</td>
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<tr>
<td></td>
<td>TRB Committee on Information Systems and Technology (ABJ50)</td>
<td>Hickory (M3)</td>
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<td>AASHTO Committee on Data Management and Analytics</td>
<td>Walnut (M3)</td>
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<tr>
<td></td>
<td>TRB Committee on Statewide Multimodal Planning (ADA10)</td>
<td>Grand Ballroom A  (M4)</td>
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<tr>
<td>6:00 p.m. – 8:00 p.m.</td>
<td>TRB Section on Management and Leadership (ABC00)</td>
<td>TBD</td>
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<tr>
<td>6:00 p.m.</td>
<td><strong>Social Event: Scavenger Hunt (begins at 6:15PM)</strong></td>
<td>Registration Area</td>
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### Monday, September 16

<table>
<thead>
<tr>
<th>Time</th>
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<th>Location</th>
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<tbody>
<tr>
<td>7:30 a.m. – 5:00 p.m.</td>
<td><strong>Registration</strong></td>
<td>M4 Prefunction</td>
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<tr>
<td>7:30 a.m. – 5:30 p.m.</td>
<td><strong>Exhibits</strong></td>
<td>M4 Prefunction</td>
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<tr>
<td>8:30 a.m. – 10:30 a.m.</td>
<td>Opening Session: Special Session #1</td>
<td>Grand Ballroom E  (M4)</td>
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<tr>
<td>10:30 a.m. – 11:00 a.m.</td>
<td><strong>Break</strong></td>
<td>M4 Prefunction</td>
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<tr>
<td>11:00 a.m. – 12:30 p.m.</td>
<td>Concurrent Breakout Sessions: 1A, 1B, 1C, 1D.</td>
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<tr>
<td></td>
<td><strong>1A:</strong> State and MPO Transportation Plans – How Agencies Are Using Data to Shape Investment Decisions</td>
<td>Grand Ballroom A  (M4)</td>
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<td><strong>1B:</strong> Benchmarking: Collaborating to Develop Common Performance Measures</td>
<td>Grand Ballroom B  (M4)</td>
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<td><strong>1C:</strong> State of the Nation/Balancing Data-Driven Decision-Making with Political Reality</td>
<td>Grand Ballroom C  (M4)</td>
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<td><strong>1D:</strong> Engaging the Public and Local Officials in Data Driven Decision Making</td>
<td>Dogwood (M1)</td>
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<tr>
<td>12:30 a.m. – 2:00 p.m.</td>
<td><strong>Lunch with Key Note Speaker</strong></td>
<td>Grand Ballroom E  (M4)</td>
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<tr>
<td>Time Block</td>
<td>Concurrent Breakout Sessions: 2A, 2B, 2C, 2D.</td>
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<tr>
<td>2:00 p.m. – 3:30 p.m.</td>
<td><strong>2A</strong>: Using Business Intelligence Tools to Improve Decision-Making <strong>2B</strong>: The Road to High-Value BI Opportunities: Bringing together the Decision Maker, Data, Analytics, and the Kitchen Sink, Part 1 <strong>2C</strong>: Data-driven Project Selection Across the States <strong>2D</strong>: Fostering Local Accountability for Regional and State-wide System Performance</td>
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<td></td>
<td><strong>Grand Ballroom A (M4)</strong> <strong>Grand Ballroom B (M4)</strong> <strong>Grand Ballroom C (M4)</strong> Dogwood (M1)</td>
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<tr>
<td>3:30 p.m. – 4:00 p.m.</td>
<td><strong>Break</strong></td>
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<tr>
<td>4:00 p.m. – 5:30 p.m.</td>
<td>Concurrent Breakout Sessions: 3A, 3B, 3C, 3D.</td>
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<td><strong>3A</strong>: Aligning Goals of State DOT Plans for Implementation Success <strong>3B</strong>: The Road to High-Value BI Opportunities: Bringing together the Decision Maker, Data, Analytics, and the Kitchen Sink, Part 2 <strong>3C</strong>: Mode-Neutral Project Evaluation <strong>3D</strong>: Fostering Employee Accountability for Agency Performance - WMATA Case Study</td>
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<td></td>
<td><strong>Grand Ballroom A (M4)</strong> <strong>Grand Ballroom B (M4)</strong> <strong>Grand Ballroom C (M4)</strong> Dogwood (M1)</td>
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<tr>
<td>5:30 p.m. – 7:00 p.m.</td>
<td><strong>Welcome Reception/ Poster Session/Exhibits</strong></td>
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<td><strong>Grand Ballroom E (M4)</strong></td>
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**Tuesday, September 17**

<table>
<thead>
<tr>
<th>Time Block</th>
<th>Event</th>
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<tbody>
<tr>
<td>7:30 a.m. – 5:00 p.m.</td>
<td><strong>Registration</strong></td>
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<tr>
<td>7:30 a.m. – 5:30 a.m.</td>
<td><strong>Exhibits</strong></td>
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<tr>
<td>8:30 a.m. – 10:30 a.m.</td>
<td>Plenary Session: Special Session #2:</td>
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<td></td>
<td><strong>Grand Ballroom E (M4)</strong></td>
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<tr>
<td>10:30 a.m. – 11:00 a.m</td>
<td><strong>Break</strong></td>
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<tr>
<td>11:00 a.m. – 12:30 p.m.</td>
<td>Concurrent Breakout Sessions: 4A, 4B, 4C, 4D.</td>
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<td><strong>4A</strong>: Tools to Aid in the Monitoring of Multimodal Performance Measures <strong>4B</strong>: Using Data to Inform Decisions <strong>4C</strong>: Getting into the Details of Highway Project Evaluation <strong>4D</strong>: Statewide Frameworks for Collaborative Performance Management</td>
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<td></td>
<td><strong>Grand Ballroom A (M4)</strong> <strong>Grand Ballroom B (M4)</strong> <strong>Grand Ballroom C (M4)</strong> Dogwood (M1)</td>
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<tr>
<td>12:30 p.m. – 2:00 p.m.</td>
<td><strong>Lunch with Special Guest Speaker</strong></td>
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<tr>
<td>2:00 p.m. – 3:30 p.m.</td>
<td>Concurrent Breakout Sessions: 5A, 5B, 5C, 5D.</td>
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<td><strong>5A</strong>: Guiding the Process For Evaluating Needs and Investments for DOTs and MPOs</td>
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<td><strong>Grand Ballroom A (M4)</strong></td>
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<td>Time</td>
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<td>3:30 p.m. - 4:00 p.m.</td>
<td><strong>Break</strong></td>
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<td>4:00 p.m. - 5:30 p.m.</td>
<td><strong>Concurrent Breakout Sessions: 6A, 6B, 6C, 6D.</strong></td>
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<td><strong>6A:</strong> It Is All About Transit</td>
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<td><strong>6B:</strong> Improving Data Governance to Support Decision Making</td>
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<td><strong>6C:</strong> Speed Data[ing] (Data &amp; Tools used in project evaluation that feeds the TIP/STIP)</td>
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<td><strong>6D:</strong> Works In Progress: Research and Capacity-Building Initiatives to Advance Data Driven Decision Making</td>
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<td><strong>Committee Meetings</strong></td>
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<td>6:00 p.m. - 8:00 p.m.</td>
<td>TRB Committee on Regional Transportation Systems Management and Operations (AHB10)</td>
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<td>TRB Committee on Metropolitan Policy, Planning and Processes (ADA20)</td>
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<td>Joint Meeting - TRB Committee on Management and Productivity (ABC20) and AASHTO Organizational Management Subcommittee</td>
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<tr>
<td>Wednesday, September 18</td>
<td><strong>Registration</strong></td>
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<tr>
<td>7:30 a.m. - 10:00 a.m.</td>
<td><strong>Exhibits</strong></td>
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<td>8:30 a.m. - 11:00 a.m.</td>
<td><strong>Concurrent Breakout Sessions: 7A, 7B, 7C, 7D.</strong></td>
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<td><strong>7A:</strong> How Transit Agencies are Revamping their Data Analysis to Make Collaboration with Cities and MPOs More Effective, Efficient, and Measurable</td>
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<td><strong>7B:</strong> Private Data</td>
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<td><strong>7C:</strong> Communicating Project Selection Results</td>
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<td><strong>7D:</strong> Achieving the National Goals Supported by Federally Required Performance Measures</td>
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<tr>
<td>10:00 a.m. - 10:30 a.m.</td>
<td><strong>Break</strong></td>
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<tr>
<td>10:30 a.m. - Noon</td>
<td><strong>Conference Closing Session: Bring it all Together</strong></td>
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<tr>
<td>Noon – 5:00 p.m.</td>
<td><strong>FHWA Workshop</strong></td>
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<td>TRB Committee on Regional Transportation Systems Management and Operations (AHB10)</td>
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Sunday, September 15

Noon - 5:00 p.m. - **M4 Prefunction**
Registration

9:00 a.m. - Noon
Committee Meetings

- TRB Committee on Statewide Transportation Data Information Systems (AB|20) - **Hickory (M3)**
- AASHTO Committee on Leadership Group - **Walnut (M3)**
- AASHTO Committee on Performance-Based Management - **Grand Ballroom A (M4)**

1:00 p.m. - 4:00 p.m.
Committee Meetings

- TRB Committee on Performance Management (ABC|30) - **Grand Ballroom C (M4)**
- TRB Committee on Information Systems and Technology (AB|50) - **Hickory (M3)**
- AASHTO Committee on Data Management and Analytics - **Walnut (M3)**
- TRB Committee on Statewide Multimodal Planning (ADA|10) - **Grand Ballroom A (M4)**
- TRB Committee on Transit Management and Performance (AP|010) - **Grand Ballroom B (M4)**

6:00 p.m: **Registration Area**
Social Event: Scavenger Hunt (begins at 6:15PM)

Monday, September 16

7:30 a.m. - 5:00 p.m. - **M4 Prefunction**
Registration

7:30 a.m. - 8:30 a.m. - **M4 Prefunction**
Continental Breakfast

7:30 a.m. - 5:30 p.m. - **M4 Prefunction**
Exhibits

8:30 a.m. - 10:30 a.m.
Welcome and Opening Session - **Grand Ballroom E (M4)**

**Opening Session**
Bob Hazlett, Maricopa Association of Governments
Chair, Conference Planning Committee

**Special Session #1: What Performance Based Decision-Making Looks like from State, Regional and Local Leaders**
*Moderator: Patricia Hendren, I-95 Corridor Coalition*

- **Russell McMurry**, Commissioner, Georgia Department of Transportation
- Kyle Schneweis, Director, Nebraska Department of Transportation
- Tina Quigley, Chief Executive Officer, Regional Transportation Commission of Southern Nevada
- Jacob Tzegaegbe, Senior Transportation Policy Advisor, City of Atlanta
- Yvonne Carney, Director of Strategic Performance, Washington Suburban Sanitary Commission

10:30 a.m. - 11:00 a.m. - **M4 Prefunction**
Break
11:00 a.m. - 12:30 p.m.
Concurrent Breakout Sessions

Session 1A - Grand Ballroom A (M4)
State and MPO Transportation Plans – How Agencies Are Using Data to Shape Investment Decisions
Moderator: John Orr, Atlanta Regional Commission

Analyzing Freight Flows and Trends to Improve Freight Investments
Michael Vanderhoof, Illinois Department of Transportation

Guide towards Zero Deaths – Analyze Data and Select Strategies to Address Safety Issues
Eric Tang, Vanasse Hangen Brustlin, Inc.

Planning for an Uncertain Future
Matt Haubrich, Iowa Department of Transportation

Where Do We Go from Here? Preparing a Platform for Success
Monique de los Rios-Urban, Maricopa Association of Governments

Session 1B - Grand Ballroom B (M4)
Benchmarking: Collaborating to Develop Common Performance Measures
Moderator: Amy Van Doren, Marin Transit

Outcome-Driven Performance Measure for Funding Allocation that Makes Paradigm Shift: MTC’s StreetSaver Tool
Sui Tan, Metropolitan Transportation Commission

Comparing Apples to Apples - Interagency Scorecard Framework
Brian Brooke, Sound Transit

Session 1C - Grand Ballroom C (M4)
State of the Nation/Balancing Data-Driven Decision-Making with Political Reality
Moderator: David Jackson, Cambridge Systematics

State of the Nation
David Jackson, Cambridge Systematics

North Carolina’s Strategic Transportation Investments Prioritization Process
David Wasserman, North Carolina Department of Transportation

Virginia’s Smart Scale Project Selection Process
Chad Tucker, Virginia Office of Intermodal Planning and Investment

Arizona’s P2P Process
Dan Gabiou, Arizona Department of Transportation

Session 1D - Dogwood (M1)
Engaging the Public and Local Officials in Data Driven Decision Making
Moderator: Claudia Billotto, WSP

Project Prioritization Made Simple
Allan Fye and Ben Owen, Northern Virginia Transportation Commission

Man Makes Rational Choices Using PBPP
Beth Alden, Hillsborough County Metropolitan Planning Organization

Connecting Northwestern Indiana’s Vision for 2050 to the Transportation Improvement Program
Trey Wadsworth, Northwestern Indiana Regional Planning Commission
12:30 p.m. - 2:00 p.m. - Grand Ballroom E (M4)
Lunch with Key Note Speaker
Moderator: Patricia Hendren, I-95 Corridor Coalition

Transforming Transit: Using Community Involvement to Turn Around a Beleaguered Agency
Keith Parker, CEO, Goodwill of North Georgia, Former CEO of MARTA

Keith T. Parker is President and CEO of Goodwill of North Georgia. Prior to that, he served as the General Manager and Chief Executive Officer of the Metropolitan Atlanta Rapid Transit Authority (MARTA), the nation’s 9th largest transit system that includes heavy rail, bus and paratransit services. With an annual budget of $1 billion, MARTA provides more than 400,000 passenger boardings a day. Keith will discuss his time at MARTA where he and his team balanced the budget, improved efficiencies, increased bus and rail service, enhanced the customer experience, and restored pride among MARTA employees and staff. MARTA is now recognized as one of the most innovative transit authorities in the nation. And, Parker was recognized by APTA and METRO Magazine for his ability to transform agency efficiencies, implement cost-effective measures, and engender a culture of innovation in diverse environments. Additionally, Keith will discuss how a continued focus on research and improving the customer experience has translated to his new role at Goodwill of North Georgia.

2:00 p.m. - 3:30 p.m.
Concurrent Breakout Sessions

Session 2A - Grand Ballroom A (M4)
Using Business Intelligence Tools to Improve Decision-Making
Moderator: Yvonne Carney, Washington Suburban Sanitary Commission

Maintaining an Analytical Framework for Database Management of Performance Data at SCDOT
Chowdhury Siddiqui, South Carolina Department of Transportation

Port Authority Enables Data Driven Decision Making Using an Integrated Analytics Platform
Theodore Bobowsky, Port Authority of New York and New Jersey

Developing Receptive Enterprise Management Systems in an Era of Performance-Based Management: A Case Study
Richard Boadi, Wood Environment & Infrastructure Solutions. Inc.

Session 2B - Grand Ballroom B (M4)
The Road to High-Value BI Opportunities: Bringing together the Decision Maker, Data, Analytics, and the Kitchen Sink, Part 1
Moderator: Vaishali Shah, AEM Corporation

Part 1 of 2 sessions presents the finding and framework from the NCHRP 03-128: Business Intelligence (BI) Techniques for Transportation Agency Decision Making, focusing on BI Analytics techniques, data management and decision making. Session 3B will engage participants in applying the BI framework.

Vaishali Shah and Benjamin Pecheux, AEM Corporation; Pat Noyes, Pat Noyes & Associates; and Emanuel Robinson, WESTAT

Session 2C - Grand Ballroom C (M4)
Data-driven Project Selection Across the States
Moderator: David Wasserman

Kentucky’s SHIFT Program
Scott Thomson, Kentucky Transportation Cabinet

MassDOT’S Project Selection Process
Bryan Pounds, Massachusetts Department of Transportation
One Nevada Transportation Plan
Sondra Rosenberg, Nevada Department of Transportation

Texas DOT's Project Selection Process
Peter Smith, Texas Department of Transportation

Minnesota DOT'S New Project Selection Process
Philip Schaffner, Minnesota Department of Transportation

Session 2D - Dogwood (M1)
Fostering Local Accountability for Regional and Statewide System Performance
Moderator: Michael Grant, ICF

Performance-based maintenance at Michigan DOT
Gareth McKay, WSP

Development of a Performance Based Approach to Revenue Distribution in the San Francisco Bay Area: A Case Study in Stakeholder Engagement
Theresa Romell, Metropolitan Transportation Commission

3:30 p.m. - 4:00 p.m. - M4 Prefunction Break

4:00 p.m. - 5:30 p.m.
Concurrent Breakout Sessions

Session 3A - Grand Ballroom A (M4)
Aligning Goals of State DOT Plans for Implementation Success
Moderator: Jessie Jones, Arkansas Department of Transportation

Performance Based Planning and Programming - Connecting the Dots
Larry Shifflet, Pennsylvania Department of Transportation

Toward a Common Vision: Aligning MnDOT's Family of Plans
Philip Schaffner, Minnesota Department of Transportation

How Do We Plan To Create a Statewide Preformance Based Integrated Multiagency Multimodal Transportation Strategy for Washington State in Three Easy Steps
Jeremy Jewkes, Washington State Department of Transportation

Session 3B- Grand Ballroom B (M4)
The Road to High-Value BI Opportunities: Bringing together the Decision Maker, Data, Analytics, and the Kitchen Sink, Part 2
Moderator: Vaishali Shah, AEM Corp.

Part 2 builds on the information presented in session 2B through interactive breakout groups focused on applying the BI framework to asset, operations, and human capital management decisions based on guidance from NCHRP 03-128: Business Intelligence (BI) Techniques for Transportation Agency Decision Making.

Vaishali Shah and Benjamin Pecheux, AEM Corporation; Pat Noyes, Pat Noyes & Associates; and Emanuel Robinson, WESTAT

Session 3C - Grand Ballroom C (M4)
Mode-Neutral Project Evaluation
Moderator: J. Matthew Carpenter, Sacramento Area Council of Governments

Recapping the Spokane Peer Exchange
Tracy Selin, Cambridge Systematics
Mode-Neutral Project Prioritization, an MPO Success Story
Tracy Selin, Cambridge Systematics

Comparing Projects Across Modes in Virginia
Chad Tucker, Virginia Office of Intermodal Planning and Investment

Revamping Vermont’s’ Project Selection and Prioritization Processes
Chad Allen, Vermont Agency of Transportation

Session 3D - Dogwood (M1)
Fostering Employee Accountability for Agency Performance - WMATA Case Study
Moderator: Jordan Holt, Washington Metropolitan Area Transit Authority

I Need Track Rights! Using Data to Support and Sustain Development of Standardized Processes
Elissa McDade, Washington Metropolitan Area Transit Authority

Washington Metro’s 3% Challenge: Mobilizing an agency-wide efficiency transformation program
Elissa McDade, Washington Metropolitan Area Transit Authority

WMATA’s Non-Revenue Fleet Dashboard
Laura Moeini, Washington Metropolitan Area Transit Authority

5:30 p.m. - 7:00 p.m. - Grand Ballroom E (M4)
Welcome Reception/Poster Session/Exhibits

Methodology to Capture the Effects of Construction Projects on Travel Time Reliability Measures in South Carolina
Siddiqui Chowdhury, South Carolina Department of Transportation

Introduction to the Census Transportation Planning Products Program Data Set and its Many Applications
Penelope Weinberger, AASHTO

Methodology to Validate Accuracy of Automated Systems Using Cell Phones
Sylvan Hoover, Oregon State University

Framework for Identifying Systematic Service Deterioration from the Passengers’ Perspective in Urban Rail Systems (Hong Kong) Using Excess Journey Time as a Measure of the Gap Between Service Expectations and Passenger Experience
Kenji Chigusa, East Japan Railway Company

Performance Measures to Evaluate the Quality of Safety Data
Nancy Lefler, UNC Highway Safety Research Center

Evolution of HPMS Pavement Condition Data
Amy Simpson, Wood Environment & Infrastructure Solutions, Inc.

Pavement Performance Measures and Condition in 2018 versus 2015
Sareh Kouchaki, Wood Environment & Infrastructure Solutions, Inc.

Evaluating the National Transit Asset Management Program
Mshadoni Smith, Federal Transit Administration

Life-Cycle Cost Assessment of Maintenance and Repair Strategies for Bridges
Dena Khatami, Wood Environment & Infrastructure Solutions, Inc.

What is a Swing Weight and Why Does it Matter
Bobby Cottam, Burns & McDonnell
The Use of Performance Measures in Transit Funding Allocation: Experiences Across States
Jerry Zhiron Zhao, University of Minnesota

How Roadway Speed Performance Metrics are Being Used in Project Prioritization of Safety Projects
David Ederer, Georgia Tech

Let the Big Picture Data Speak- Focus on the Message and Change will Come
Satvinder Sandhu, Federal Highway Administration

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**Tuesday, September, 17**

7:30 a.m. - 5:00 p.m. - **M4 Prefunction**
Registration

7:30 a.m. - 8:30 a.m. - **M4 Prefunction**
Continental Breakfast

7:30 a.m. - 5:30 p.m. - **M4 Prefunction**
Exhibits

8:30 a.m. - 10:30 a.m.
Plenary Session: Special Session #2 - **Grand Ballroom E (M4)**
Special Session #2: How Data is Changing the Structure and Role of Public Agencies
Moderator: Matt Hardy, American Association of State Highway and Transportation Officials

- **Data Changing Agency from the Inside**
  Greg Slater, Maryland State Highway Administration

- **Structuring Your Agency to Disseminate Information to Decision Makers**
  Tim Henkel, Minnesota Department of Transportation

- **New Agency Approaches to Fulfilling Performance Analytic Needs**
  Ryan Huff, Nebraska Department of Transportation

- **How Can Agencies Better Prepare for Data Today and the Unknown of Tomorrow?**
  Michael Pack, University of Maryland CATT Lab

10:30 a.m. - 11:00 a.m. - **M4 Prefunction**
Break

11:00 a.m. - 12:30 p.m.
Concurrent Breakout Sessions

**Session 4A - Grand Ballroom A (M4)**
Tools to Aid in the Monitoring of Multimodal Performance Measures
Moderator: John Kaliski, Cambridge Systematic

- **US Department of Energy: Mobility -Energy Productivity Measure: Standard for Smart City Mobility Assessment**
  Stanley Young, National Renewable Energy Lab

- **El Paso MPO’s Multimodal Web Tool**
  Marketa Vavrova, University of Texas El Paso; and Sonia Perez, El Paso Metropolitan Planning Organization

- **Evolution of the FDOT Multimodal Mobility Measures Program**
  Monica Zhong, Florida Department of Transportation; and Praveen Pasumarthy, Cambridge Systematics

13
A New Multimodal Tool to Better Understand Supply Chain Performances
Chandra Bondzie, Federal Highway Administration; and Patricia Hendren, I-95 Corridor Coalition

Session 4B - Grand Ballroom B (M4)
Using Data to Inform Decisions
Moderator: Jordan Holt, Washington Metropolitan Area Transit Authority

GIS Enhances Asset Management and Operations
Nate Reck, GeoDecisions, a Division of Gannett Fleming

Managing Data, Traffic, and Expectations: Football Gameday Operations Performance Measures
Madison Metsker-Galarza, Texas A&M Transportation Institute

Using Cost-Benefit Analysis
Mark Seaman, New York City Department of Transportation

NDOT Lessons learned from Leveraging Data Science to Support Operational Decision Making
Mark Egge, High Street Consulting

Session 4C - Grand Ballroom C (M4)
Getting into the Details of Highway & Freight Project Evaluation
Moderator: Joseph Schofer, Northwestern University

Prioritizing Project Selections for Operations
Jason Firman, Michigan Department of Transportation

How Travel Time Data is Used in NCTCOG’s Project Selection Process
Brian Dell, North Central Texas Council of Governments

How ARC Evaluates Highway Projects
John Orr, Atlanta Regional Commission

Balancing Urban and Rural Project Scoring in a Rapidly Urbanizing State
Jason Schronce, North Carolina Department of Transportation

Session 4D - Dogwood (M1)
Statewide Frameworks for Collaborative Performance Management
Moderator: Peter Plumeau, Economic Development Research Group

Florida DOT/MPO Collaboration for Transportation Planning and Performance Management
Carl Mikyska, Florida Metropolitan Planning Organization Advisory Council; John Kaliski, Cambridge Systematics

West Virginia DOT Planning and Communicating for Performance: Aligning Data, Communication, and Management Tools to Institutionalize Performance Based Decision Making
Gehan Elsayed, West Virginia Department of Transportation; and David Jackson, Cambridge Systematics

12:30 p.m.- 2:00 p.m. - Grand Ballroom E (M4)
Lunch with Special Guest Speaker
Moderator: Patricia Hendren, I-95 Corridor Coalition

The Link Between Transportation Performance and Economic Vitality
Mohammed Chaara, Director of Machine Learning and Data Sciences

Mohammed (Mo) Chaara is Director of Machine Learning and Data Sciences at UPS. In this role, he leads the UPS Global Advanced Analytics practice and is responsible for developing, managing and governing advanced analytics projects globally. Mo will discuss how UPS collects, analyzes and uses data to run its business; how a poor performing transportation system affects UPS and UPS views on the future of goods movement. UPS is known data based insights to drive business transformation. As an analytics and strategy executive Mo will highlight how data does drive UPS decisions and how making sound investments in our transportation system supports our country’s economic vitality.
2:00 p.m. - 3:30 p.m.
Concurrent Breakout Sessions

Session 5A - Grand Ballroom A (M4)
Guiding the Process For Evaluating Needs and Investments for DOTs and MPOs
Moderator: Paul Hershkowitz, ICF

- NCHRP 19-14: Sharing intelligence About System Performance to “Right Size” Transportation Investments
  Kyle Schroekenthaler, Economic Development Research Group

- MetroPlan Orlando - Aligning Objectives and Investments Using Data and Performance-Based Processes
  Alex Trauger, MetroPlan Orlando

- When Data and Politics Collide
  Chris Upchurch, Wichita Area Metropolitan Planning Organization

Session 5B - Grand Ballroom B (M4)
Lessons Learned on Data Governance
Moderator: Harlan Miller, Federal Highway Administration

- Improving Data Assessment and Governance to Support Informed Decisions: Lessons Learned
  Richard Boadi, Wood Environment & Infrastructure Solutions

- How TxDOT Tackled Growth in Performance Measures Volume
  Tarun Malhotra, Michigan Department of Transportation

Session 5C - Grand Ballroom C (M4)
Getting into the Details of Multimodal (Transit / Bike & Ped) Project Evaluation
Moderator: Jason Schronce, North Carolina Department of Transportation

- The Atlanta-Region Transit Link Authority Project Selection Project
  Lori Sand, Atlanta-Region Transit Link Authority

- LA Metro’s Project Selection Process
  Mark Yamarone, LA Metro; and Michael Snavely, Cambridge Systematics

- Application of ActiveTrans Prioritization by City of Harrisonburg Virginia
  Elise Barrella, Wake Forest University

- Evaluating Accessibility as Part of Hawaii DOT’s Project Selection process
  Eric Sundquist, State Smart Transportation Initiative

- Integrating Equity and Resilience Into the Metropolitan Transportation Commission Project Evaluation Process
  Dave Vautin, Metropolitan Transportation Commission

Session 5D - Dogwood (M1)
Dashboard Demo
Moderator: Penelope Weinberger, American Association of State Highway and Transportation Officials

- VDOT’s New Dashboard
  Jay Styles, Virginia Department of Transportation

- The Non-Revenue Fleet Dashboard
  Laura Moeini, Washington Metropolitan Area Transit Authority
ARC DASHes Through the Data
Shichen Fan and Kyung-Hwa Kim, Atlanta Regional Commission

ARC Activity-Based Model Visualization Platform (ABMVIZ)
Abigail Marinelli, Guy Rousseau, and Kyeil Kim, Atlanta Regional Commission

MDOT Performance Dashboard
Deanna Belden, Minnesota Department of Transportation

Flash Report - Using Data for Informed Decision Making Every Day
Hyeeun Tortora, Chicago Transit Authority

3:30 p.m. - 4:00 p.m. **M4 Prefunction Break**

4:00 p.m. - 5:30 p.m. Concurrent Breakout Sessions

**Session 6A - Grand Ballroom A (M4)**
**It Is All About Transit**
**Moderator:** Kenneth Cervenka, Federal Transit Administration

- **Performance Management: From Program Initiation to Planning and Operations for Maryland Transit Administration**
  David Miller, Foursquare ITP

- **Evaluating Alternative Mobility Performance Measures for the Traveler’s Experience**
  Alice Grossman, Eno Center for Transportation

- **Using Bus-Stop Level Data to Measure the Ridership Elasticity to Frequency in Four Cities**
  Simon Berrebi, Georgia Institute of Technology

**Session 6B - Grand Ballroom B (M4)**
**Improving Data Governance to Support Decision Making**
**Moderator:** Anita Vandervalk, Iteris, Inc

- **Data Governance to Support Performance Management and Decision Making within State DOT's**
  - Cassie Jordan, Texas Department of Transportation
  - Chad Baker, California Department of Transportation
  - Leni Oman, Washington State Department of Transportation
  - Tarun Malhotra, Michigan Department of Transportation
  - Barb Cohn, Colorado Department of Transportation

**Session 6C - Dogwood (M1)**
**Speed Data[ing] (Data & Tools used in project evaluation that feeds the TIP/STIP)**
**Moderator:** Penelope Weinberger, American Association of State Highway and Transportation Officials

- **Kentucky’s SHIFT Tool**
  Mark Egge, High Street Consulting

- **North Carolina DOT’s "SPOT Online"**
  Jason Schronce, North Carolina Department of Transportation

- **New York City Strategic Plan Scoring System**
  Chris Hamby, New York City Department of Transportation

- **Georgia’s Mark1 and Numetric Platform**
  Sam Harris, Georgia Department of Transportation
Performance-based Prioritization of NCDOT Statewide Signal System Retiming Program
Thomas Chase, Institute for Transportation Research and Education

Texas Corridor Prioritization Tool
Peter Smith, Texas Department of Transportation

Session 6D - Grand Ballroom C (M4)
Works In Progress: Research and Capacity-Building Initiatives to Advance Data-Driven Decision Making
Moderator: Bob Hazlett, Maricopa Association of Governments

Federal Highway Administration Transportation Program Management Implementation Survey of Departments of Transportation and Metropolitan Planning Organizations
Michael Nesbitt, Federal Highway Administration

FTA Research and Capacity Building Initiatives
David Schneider, Federal Transit Administration Office of Research and Innovation

Transportation Research Board Cooperative Research Programs Research Initiatives
• Michael Grant, ICF
• Ann Hartell, Transportation Research Board
• Hannah Twaddell, ICF

AASHTO Communities of Practice and Related Initiatives
Matt Hardy, American Association of State Highway and Transportation Officials

AMPO Technical Working Groups and Related Initiatives
Bill Keyrouze, Association of Metropolitan Planning Organizations

Committee Meetings
6:00 p.m. - 8:00 p.m.
• TRB Committee on Regional Transportation Systems Management and Operations (AHB10) - Oak (LL)
• TRB Committee on Metropolitan Policy, Planning and Processes (ADA20) - Grand Ballroom C (M4)
• Joint Meeting - TRB Committee on Management and Productivity (ABC20) and AASHTO Organizational Management Subcommittee - Grand Ballroom A (M4)
Wednesday, September, 18

7:30 a.m. - 10:00 a.m. - M4 Prefunction
Registration

7:30 a.m. - 8:30 a.m. - M4 Prefunction
Continental Breakfast

7:30 a.m. - Noon - M4 Prefunction
Exhibits

8:30 a.m. - 10:00 a.m.
Concurrent Breakout Sessions

Session 7A - Grand Ballroom A (M4)
How Transit Agencies are Revamping their Data Analysis to Make Collaboration with Cities and MPOs More Effective, Efficient, and Measurable
Moderator: Madeline Zhu, Swiftly

Transit Signal Priority: How to Help Keep Transit Travel Times Predictable on the City’s Most Congested Streets
Krae Stieffenhofer, Kimley-Horn

Better Data, Better Arguments, and Better Decisions
Adam Burger and Tamiko Percell, Santa Clara Valley Transportation Authority

Session 7B - Grand Ballroom B (M4)
Private Data
Moderator: Mara Campbell, Jacobs

Opportunities and Challenges of Using Private Sector Data
Xu Zhang, Kentucky Transportation Center

Capabilities, Benefits and Limitations of Using Cellular Network Data for Transportation Planning and Management
Bob Pauley, Cellint

Big Data - Processing, Licensing, and Use
Jason Lemp and Nick Caccamo, Cambridge Systematics

Estimation of Mobility Performance of Freeways Based on Time Exposed Time to Collision Using Trajectory Data in a Connected Environment
Leila Azizi, Florida International University

Data and Technology Trends – How Do They Impact Decision Making Processes?
Anita Vandervalk, Iteris, Inc.

Session 7C - Grand Ballroom C (M4)
Communicating Project Selection Results
Moderator: Hannah Twaddell, ICF

Panel Discussion
• David Wasserman, North Carolina Department of Transportation
• Chad Tucker, Virginia Office of Intermodal Planning and Investment
• Dan Gabiou, Arizona Department of Transportation
Session 7D - Dogwood (M1)

Achieving the National Goals Supported by Federally Required Performance Measures

Moderator: Harlan Miller, Federal Highway Administration

Briefing on national state of the practice followed by interactive discussion with panel and participants.

**Overview of Transportation Performance Management and Performance Based Planning**

Harlan Miller, FHWA Office of Planning; Michael Nesbitt, FHWA Office of Transportation Performance Management; and Ken Cervenka, FTA Office of Planning

**FHWA TPM Implementation Survey of DOTs and MPOs**

Michael Nesbitt, Federal Highway Administration

10:00 a.m. - 10:30 a.m. - M4 Prefunction Break

10:30 a.m. - Noon

Conference Closing Session: Bring it all Together - Grand Ballroom E (M4)

Moderator: Bob Hazlett, Maricopa Association of Governments

**Panel Discussion**

- John Kaliski, Cambridge Systematics
- Jordan Holt, Washington Metropolitan Area Transit Authority
- David Wasserman, North Carolina Department of Transportation
- Hannah Tweddell, ICF

Noon - 5:00 p.m.

FHWA Workshop - Redwood (M1)

- Tool for Investment Decision Making - limited to 35 participants
- TRB Committee on Information Systems and Technology (ABJ50)

Noon - 5:00 p.m.

- TRB Committee on Regional Transportation Systems Management and Operations (AHB10) - Oak (LL)
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- Compute, visualize, & download MAP-21 PM3 metrics for target-setting, strategy evaluation & reporting

**Trajectory/O-D Analytics**
- Analyze people and freight movement data
- Dynamic and filterable O-D matrix analysis / roadway segment route analysis
- Validates Travel Demand Models, supplements major corridor planning studies, determine benefits (or consequences) of major improvement projects

**Arterial Signal System Performance Measures**
- Developed in conjunction with Purdue University
- Rank and compare the change in performance of corridors between two time periods
- Provides before-and-after comparison for corridor performance improvement projects & providing detailed analysis of both congestion and reliability
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The Wednesday post-conference workshop and E-circular conference summary document are made possible with their generous financial support.

U.S. Department of Transportation
Federal Highway Administration

SAVE THE DATE

The 13th National Conference on Transportation Asset Management (TAM) provides an opportunity for all practitioners involved in their agency’s asset management initiative to build core competencies and generate new ideas.

- Looking for both practical and innovative presentations.
- Selected abstracts will be featured in either poster or technical podium sessions.
- Presenters will be required to register and attend the conference to be included in the final program.

Presentation tracks and crosscutting issues:

- Track 1: Implementation
- Track 2: Data Governance/Tools
- Track 3: Managing Risk
- Track 4: Partners and Peers
- Track 5: Sustaining Asset Management in your Organization
- Crosscutting Issue 1: Transit
- Crosscutting Issue 2: Resilience

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