Transportation Research Board
2017 ANNUAL MEETING
TRB Committees & Panels

- **7000 volunteers**
- **200 Technical Activities Division Standing Committees**
- **16 Policy Study Committees**
Welcome to the 2017 TRB Annual Meeting

The Transportation Research Board (TRB) 96th Annual Meeting will be held January 8–12, 2017, at the Walter E. Washington Convention Center in Washington, D.C. The meeting attracts transport professionals from around the world. The meeting program will cover all transportation modes, with more than 5,000 presentations in over 800 sessions, with special emphasis on research, policy, and practice of government, industry, and academic institutions. A number of sessions will address key issues in an era of rapid change.

Register Now

Registration is required to secure a guest room within the TRB hotel block. Register online now.

Interactive Program

The full 2017 program is available online now via the Interactive Program. You can view the program—viewing them chronologically or searching just for those with interest. Choose a session and then select a track.

Mobile App

The TRB Annual Meeting Mobile App provides you with access to the schedule or Android device.

Curated Sessions

“Curated” session charts provide representative samplings of sessions for all members of the different organizations and affiliations.

- 15 approved
- 14 attended
- 7 CIPGA

- Elkins Green
- Tineen Howard
- Giri Venkiteela
- Mamun Rashid
- Carol Paszamant
- Priscilla Ukpah
- Camille Crichton-Sumners
Brief Summary of sessions attended

• Combined overview of 3 Sessions all related to Environmental Justice/Title VI compliance - highlighting repeated themes, issues, & take aways
• Benefits & Challenges of NEPA Assignment
• Addressing Environmental Outcomes in the Long Range Planning Process
Environmental Justice/Title VI Sessions attended

• Environmental Justice in Transportation Committee Meeting
• New Era of Transportation Civil Rights Challenges: Going Beyond Environmental Justice - USDOT/FHWA perspective
• Diversity & Discrimination: What’s Up in Civil Rights Enforcement in Transportation Planning, Design & Implementation
EJ/Title VI common themes

• Both established to encourage development of “equitable transportation systems”
• “Opportunity and equity” for all in transportation decision making, specifically in the allocation of federal $$$$$
• EJ established by the 1994 Executive Order, Title VI - law established thru the Civil Rights Act of 1964
• Common area is the effect of projects on minority communities
EJ Analysis in Project Delivery

• Included in NEPA process
  • - identify if minority or low income communities potentially affected by proposed action are present

• Engage community(s) in process

• Assess impacts - determine if action will have a “disproportionate” adverse impact to the protected community(s)
• (NOTE: Risks for Title VI violations exist when “disproportionate” impacts occur and are not mitigated)
Challenges of EJ Analyzes

• Data collection and defining an EJ community - what threshold is used to define a community as an EJ community (25%, 30% 75% ?)

• Conducting meaningful community engagement sustained thru all phases of project delivery, how to maintain active on going meaningful communications - not talked to, but communicated with

• Consistent methodology used to assess impacts, how to define “disproportionate” impacts
Take aways - there is Hope 😊

- February 2016 EJ Practitioners workshop in Washington DC resulted in the recent publication, “Environmental Justice Roadmap” consisting of guidance material for EJ compliance.
- FHWA Training and a “tool kit” for Title VI compliance coming in 2017.
- NJDOT’s own office of Civil Rights has an excellent slide show on EJ & Title VI compliance for NJDOT.
- NJDOT’s Environmental Division in collaboration with Civil Rights & FHWA is preparing “how to” guidance materials for EJ compliance.
- NJDOT includes EJ analysis in our NEPA/project delivery process but how is Title VI on a project level being addressed?
Benefits and Challenges of NEPA Assignment

- NEPA assignment is full delegation of NEPA and other related federal environmental processes (“4(f)” “Section 106” etc.) to the state DOT’s - NO FHWA Involvement
- Allowed under MAP 21 & FAST Act
- Purpose is to stream line project delivery
- Both Texas & Ohio discussed their experiences
Common Findings

• Benefits
  • Both reported time savings in document processing, reducing the project delivery processing time
  • Converting time savings to cost savings

• Challenges -
  • Loss of FHWA as a “mediator” in dealing with other federal agencies (US Coast Guard, ACOE, US Fish & Wildlife, USEPA)
  • Loss of Federal legal support for document “legal sufficiency” reviews and more importantly in defense of legal challenges to NEPA & other findings/decisions rendered
Take Aways

• NJDOT - NO THANKS, we’re ok as is

• NJDOT’s Programmatic Agreement with FHWA to “self certify” many project types (the vast majority of what we do) as “categorical exclusions” has stream lined our project delivery process

• Need FHWA as our partners for legal support
Addressing Environmental Outcomes in the Long Range Planning Process

- San Diego California - Environmental Mitigation Program
- Kansas City’s MPO’s - Linking Planning & Environment Program/Process
- Florida DOT’s - Setting the Stage for Better Environmental Outcomes
San Diego - Environmental Mitigation Program

- Sales tax dedicated funding source for habitat conservation
- Property purchased for “advanced mitigation” for highway & local projects
- Coordinates with environmental groups/agencies to id critical habitats that could be purchased for habitat conservation
- DOT “planning ahead” with consideration for environmental conservation
Kansas City - Linking Planning & the Environment

- MPO perspective - Mid America Regional Council (MARC) focused on transportation & the environment
- Encourages land management policies that preserve resources
- Uses habitat conservation as means for advance mitigation
- Addresses “human impact” of land development - transportation equity, complete streets, and also “clean streets” - storm water benefits
Florida - Setting the Stage for Better Environmental Outcomes

• Corridor Planning - encourage advance mitigation opportunities as appropriate

• Early Transportation Decision Making Process (ETDM) - uses GIS layers as screening tool to id environmental factors/challenges early on,

• ETDM also applies principles of context sensitive solutions, complete streets and sociocultural analysis (community impact assessment techniques)

• Goal - “Agile, Resilient, and Quality transportation infrastructure”
Take Aways

• Advance mitigation in the form of habitat conservation practiced/encouraged, an area NJDOT is lacking

• Long range planning considers environmental preservation, not so much at NJDOT, however NJDEP does

• NJ’s Concept Development Phase originally developed to link Planning & the Environment and closely resembles Florida’s ETDM
Questions?
Demographics and Attitudes

United Kingdom Study
1. Globalization
2. Deregulation
3. Societal Changes

Conclusions
1. Fulltime employment is down.
2. More college students.
3. More young adults living with parents.
Neighborhood Economics, Transit Oriented Development and Gentrification

- Identified casual local spill over effects of urban rail infrastructure
- High socioeconomic change in low income areas
- Highest effect in ½ mile buffer areas
Running the Transportation Research Program
Ahead of the Curve Training Program:
Mastering the Management of Transportation Research
Sponsored by the National Cooperative Highway Research Program Project 20-105
TRB Education and Training Committee Workshop January 12, 2017
Ahead of the Curve
Mastering the Management of Transportation
Research and Training Program

Training Program Curriculum:

- Introductory Course
- 4 Core Courses
- 12 Elective Courses—4 required

Successful completion of all courses earns a TRB certificate acknowledging your accomplishment
Ahead of the Curve
Mastering the Management of Transportation Research and Training Program

Four Core Courses: Phase I

1. Making Research Relevant
2. Running the Program (mechanics focus)
3. Delivering the Program (outcomes focus)
4. Program Quality Improvement

The National Academies of Sciences • Engineering • Medicine
Transportation Research Board
Ahead of the Curve
Mastering the Management of Transportation Research and Training Program

**Elective Courses (Phase II):**
4 required to complete training program and earn a certificate

1. Effective Problem Statements
2. Performance Measurement
3. Information and Knowledge Management
4. Advocating/Being a Champion
5. Innovation Management and Risk Management
6. Funding
7. Scientific Methods
8. Intellectual Property, Innovation and Technology Transfer
9. Strategic Planning for Research
10. Building Trusted Credible Partnerships
11. Continuous Quality Improvement
12. Program Design
VALUE TO NJDOT

- If the study was in the U.S. it could have help me help NJDOT get a better understanding of the population we service.
- Serve as impetus to Research on Transit Villages and Transit Hubs and the effects of public policy and public investment in various communities.
- Provide professional development opportunities to Research Staff to further improve the Research Bureau.
2017 TRB Annual Meeting
Giri Venkiteela
Research Bureau
Committee Meetings

• TRB Standing Committee on Conduct of Research-ABG10 (Friend)
• TRB Standing Committee on Corrosion-AHD45 (Member)
• TRB Standing Committee on Properties of Concrete-AFN20 (Friend)
• TRB Committee Polymer Concretes Adhesives and Sealers-AHD40 (Member)

NCHRP Project Panel

• 1. NCHRP 18-18: Design and Construction of Wide-Flange Precast Concrete Deck Girders
• 2. NCHRP 17-77: Project Panel on Quantitative Approaches to Systemic Safety Analysis
Enhanced Jointed Plain Concrete Pavement (JPCP) Slab Replacement Location Determination And Quantity Estimation Using 3D Data

Yichang (James) Tsai, Ph.D., P.E., Professor
Yi-Ching Wu, Research Engineer
Anindya Chatterjee, Ph.D. Student

Session 400
96th Annual TRB meeting
January 9, 2017

Research Presentations - Pavements

ACCELERATED LOAD TESTING TO COMPARE PERFORMANCE OF FULL DEPTH RECLAMATION WITH FOAMED ASPHALT UNDER THREE DIFFERENT ENVIRONMENTAL CONDITIONS

David Jones, Stefan Louw, and Rongzong Wu
University of California Pavement Research Center
Davis, California

96th TRB Annual Meeting
Washington, DC January 2017
Innovative Pothole Repair
Research Presentations - Infrastructure

Bridge Elements Using Various forms of Concrete Filled Tubes

Mahsa Farzad, Ph.D. Student
Atorod Azizinamini, Ph.D., P.E.
Civil and Environmental Engineering Department
Florida International University
2017 TRB, Washington DC

Super Durable Bridge System
Steel-Concrete Sandwich System for Short Span Bridges

Mahsa farzad
Huy Pham
Atorod Azizinamini

Vehicle to Bridge Collision Model
Ford F800 truck

Superstructure
Bridge pier
Pile cap
Deep pile foundation
Research Presentations - Research innovation

FHWA: Leadership in Innovation

- Greg Nadeau - Administrator FHWA
- Leslie Richards - Secretary Penn. DOT
- Carlos Braceras - Executive Director Utah. DOT
- Scott Bennett - Director Arkansas. DOT

Strategic Goals

- Zero Fatalities
- Preserve Infrastructure
- Optimize Mobility
Value to NJDOT

• Variety of techniques are currently used by other States for pavement management systems.
• New Infrastructure rehabilitation techniques and tools
• New materials are evolving quickly, NJDOT can benefit from collaborating for research from other States
• Research in vehicle connectivity and autonomous vehicles are hot topics.
• NJDOT Strategic plan?
Questions?
2017 TRB Annual Meeting
Mac Rashid Bureau of Research
Fiber Reinforced Polymer Composites Innovations and Applications

- Research project manager
- The objective of the project is to develop Standard Specifications (Section 916) for Fiberglass Composite Materials
- Currently, the requirements of Section 916 are based on two proprietary products.
- Other competing materials cannot qualify under these requirements.
Challenges

• Concrete and steel have standard procedures to test the material for quality control and quality assurance on the field.
• For the fiberglass composite material, there is no standard testing procedure for quality assurance.
• This research has to come up with the new testing method.
New Testing Methods

• In order to develop a complete qualification acceptance plan, a test for circular tubes needed to be developed.

• Two standard tests were developed.

• One on a ring section cut from the circular tube, and one on an arch section.
Two standard coupon tests were developed

Free-body diagram of arch with roller supports

Ring fixture in universal testing machine
These new test methods have been validated. Based on the testing and validation, a new Specification for Section 916 has been proposed where all the suppliers will have equal opportunity to bid. NJDOT customers will have better control over materials by ensuring the quality.
Innovation and Contribution by NJDOT

- The committee members at TRB praised the research effort and asked the PI to participate in their committee meeting.
- NJDOT can implement the research result with confidence and save money through competitive bid.
- The principal investigator will publish the findings to include these test methods in ASTM so everyone can use these as a standard.
Human Factors at a Roundabout
Safety Benefits of Roundabouts

• The Highway Safety Manual (HSM) indicates that:
  • By converting from a two-way stop control mechanism to a roundabout, a location can experience an 82 percent reduction in severe (injury/fatal) crashes and a 44 percent reduction in overall crashes.
  • By converting from a signalized intersection to a roundabout, a location can experience a 78 percent reduction in severe (injury/fatal) crashes and a 48 percent reduction in overall crashes.
Conceptual System Components
User Tasks on a Roadway

- Incrementally scan the road or intersection
- Identify changes in the road environment
- Control the vehicle
- Look for conflicts
- Monitor traffic control
- Prepare for downstream changes: road, TCD, traffic, pedestrians, etc.
Human Factors at a Roundabout

• Signing
• Striping
• Approach Speed
• Recognizing gaps
• Pedestrian and Bicycle interactions
• Central Island for deflection
Signs for Roundabouts
Markings for Roundabouts

Source: adapted from Robinson et al. (2)
Higher Speed Approaches

Roundabout needs speed reduction curves in advance and a visible central island.
Takeaways for NJDOT

• Learned more about roundabouts and the human factors related to that
• Based on the safety benefits discussed, we should implement the human factors in the design phase
• NCHRP 600 is the complete Human Factors Guideline for the designers
• NJDOT should consider using this guide for all aspects of design to increase safety
Conduct of Research Committee

- Attended the committee meeting to learn how this committee runs the research projects
- The committee members presented brief presentations for each of sessions/workshop they were presenting at TRB 2017
- Discussed FAST Act research mandates:
  - Promoting safety, improving mobility, improving infrastructure and preserving the environment
- Lots of useful information for conducting research was discussed in the meeting
Questions?
Presentations, Meetings, and Workshops Attended

Presented by Carol Paszamant - NJDOT Research Library
Why are librarians at TRB?

- Improving access to research
- Presenting and coordinating
- Learning
What did I attend?

Meetings!

- LIST Committee
- TRB Information Services Committee
- TRT Thesaurus Subcommittee
Sessions – Library-related or coordinated:

• Public Access Speed Dating
  • DMPs

• Brass Tacks of Knowledge Management

• Poster sessions
Other sessions –

- Safety: Neighborhood Greenways
- Policy: Big Brother in the Sunshine
More sessions

- Environment:
  - Pollinators on the Verge
  - We Know There’s a Climate Problem
  - Maintaining Connectivity
Benefits of attending:

- Learning and sharing
- Making contacts
- Visiting the Exhibits
Benefits (continued)

- The Journey itself
  - Observation
  - Inspiration

Thank you for the opportunity to attend!
More Information

Available from:

- TRB / TRID
  the TRIS and ITRD database
- NJDOT Research Library
  “Your Knowledge-sharing partner”
What is a Public Private Partnership (P3)?
A contract or agreement between a government entity and a private company that balances the needs of the public sector and the private sector to finance our nation’s transportation network, road maintenance, infrastructure, etc.

P3s:
• Ease budgetary burdens
• Increase data for proactive decision making
• Promote asset longevity
P3s Are Promoting Multimodality

• Public private partnerships (P3s) encourage multimodality with a variety of shared mobility provider options
  • Supersharers = people using 3+ shared modes (bike sharing, car sharing and ridesourcing)
  • Supersharers own half as many cars as those who use transit alone, in addition to decreasing their transportation spending and becoming more physically active
Shared Mobility P3s are Thriving in North America

Shared mobility types include:

- Bike sharing
- Car sharing
- Ridesharing/carpooling
- Microtransit and shuttles
- Taxis
- Mobility hubs
- Public transit
Why do we need shared mobility options?
To address transportation network gaps by providing:
• First and last mile connections, by filling transit gaps
• Carpool and ridesharing matching
• On demand and paratransit service
• Discount incentives
• Flexible transportation options for high demand urban mobility as well as underserved rural communities
Why do we need P3s to provide shared mobility?

• To reduce reliance on private autos
• To reduce overcrowding on transit
• To reduce congestion and pollution
• To save government funding with car sharing
• To provide transportation options during off-peak hours
• To provide a financially feasible alternative to private car ownership
• To assist government in promoting sustainability
• To make ends meet while adding value and public benefit
NJDOT Relevancy / Implementation Opportunities, Previous Work & Takeaways

• **Relevancy:** I was the RPM for “Feasibility and Efficacy of Public Transportation Partnerships”, 2-Volume Final Report, by Dr. Janice Daniel, NJIT, July 2014, FHWA-NJ-2014-013 – *Implementation Phase?*

• **Previous work:** Managing the TMA program where ridesharing services were provided/promoted.

• **Takeaways:** Government must do more with less funding available due to infrastructure maintenance needs. P3s are a creative solution to this challenge.
Benefits of PPP

- Bridges large funding gaps in infra development
- Enhances efficiency of project implementation
- Leads to cost savings of 17-25% over a period
- Helps local firms gain scale, and take up projects abroad
- Forces govt to evolve institutional, legal frameworks
- Pressures govt to develop and reform financial markets
- Creates execution urgency otherwise goes unnoticed
- Ensures effective and efficient delivery by private party
- Helps different capabilities in market to come together
- Enables govt to take up larger, more challenging projects
- Finds competitive bidders for maximum number of projects

Questions?
International Success With Creating Livable Urban Communities That Integrate: Freight, Transit, Vehicles, Pedestrian Bicycle Transportation
Workshop Participation Was Through Questions to be Considered

• In order to apply the European lessons learned to the United States and specifically to New Jersey.
What are the Multimodal NEEDS in Urban Areas?

- Freight Delivery – maps, standards, parking, last mile
- Transit – intersection design, funding, exclusive ROW, simultaneous movements
- Bicycle/Pedestrian – safety, education, ADA design, parking, accessibility for vulnerable populations
- Vehicular – trip generation by land use type, parking, SOV, e-Commerce, shared trips
What are the Multimodal CHALLENGES in Urban Areas?

- **Balance** – Right-of-Way space and funding
- **Educate** – transportation leadership and road users to the needs of all modes
- **Research** – attitudes of transportation users towards multimodal freight solutions to improve education and public awareness campaigns
- **Standardize** – data platforms across all modes for better synergy
What could be Multimodal SOLUTIONS in Urban Areas?

- Develop a tool that articulates each mode’s challenges to urban mobility
- Utilize unassisted deliveries (drones, automated freight vehicles)
- Emphasize the value of freight components within all master plans, land use plans, and transportation plans including urban regions
NJDOT Relevancy / Implementation Opportunities, Previous Work & Takeaways

• **Relevancy:** This could be a potential research topic ~ to examine the applicability to New Jersey of the successful European urban multimodal livable communities, which incorporate freight.

• **Previous work:** Managing the TMAs who promote multimodal solutions and ridesharing services.

• **Takeaways:** Car-less living is trending high among Millennials (born 1982-2004) due to affordability and successful multimodal transportation networks.
QUESTIONS?
2017 TRB Annual Meeting
Camille Crichton-Sumners
Information and Systems Technology Committee Meeting  
CIO Roundtable

- Research needs and challenges:
  - USDOT Cyber security issues autonomous vehicles
    - Hacking connected vehicles
  - Security resilience testing
  - Bridge gap between OIT and Traffic Ops
  - MD blocking ability to forward data, usb transfers
  - Leadership Guide for Strategic Information Management NCHRP 829
    - 9 step process and checklist
**T2 Committee**

- Assigning technology readiness levels
  - Avoid increasing costs
  - Avoid delays
  - Improved communication
  - Improved outcomes

- Calling all states:
  - Have a market ready technology?
  - 10 Case studies needed for NCHRP 768

**Technology Readiness Levels**

<table>
<thead>
<tr>
<th>Phase</th>
<th>TRL</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Research</td>
<td>1</td>
<td>Basic principles and research</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Application formulated</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Proof of concept</td>
</tr>
<tr>
<td>Applied Research</td>
<td>4</td>
<td>Components validated in laboratory environment</td>
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<tr>
<td></td>
<td>5</td>
<td>Integrated components demonstrated in a laboratory environment</td>
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<tr>
<td>Development</td>
<td>6</td>
<td>Prototype demonstrated in relevant environment</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Prototype demonstrated in operational environment</td>
</tr>
<tr>
<td>Implementation</td>
<td>9</td>
<td>Technology refined and adopted</td>
</tr>
</tbody>
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Encouraging a Culture of Innovation

*Catastrophic Failure* = $$$
10 Keys: Deploying Innovation  TXDOT

1. User is right
2. Over communicate the why
3. Change is disruptive expect resistance
4. Foster champions
5. Strive for simplicity
6. Network
7. Reinforce the how remember the principle
8. tell a story measure success
9. manage change
10. learn from mistakes

Examples:
WMA,
HFS treatments
Federal Lands Innovation Goals

1. Look to enhance the agency mission
2. Strive to increase the ROI on R&D investment
   - Utah DOT implemented Mexico's continuous flow contraflow lanes
   - Michigan’s thru-uturn
3. Support Economic growth and development
   - Utah’s focus HOT lanes, congestion pricing
4. Enhance competitiveness
Innovation at Utah DOT

UDOT Vision, Mission, Strategic Goals and Accountability

Mission

Innovating transportation solutions that strengthen Utah’s economy and enhance quality of life.

The growing demand on Utah’s transportation system is substantial and finding ways to meet those demands, while keeping our current system running, requires resourcefulness and innovative thinking. But by focusing on our strategic goals we are able to meet these challenges, improve quality of life and strengthen Utah’s economy. We’re confident that improving Utah’s transportation system will improve Utah in more ways than one.
INFRAVATION PROGRAM

- Pilot international pooled fund program
- Involving: FHWA, 10 road authorities in Europe, Israel, EU funding
- Aim?: to look at technologies in infrastructures and pavement, and at improving structures and pavements’ life cycles
- Demos this fall....

https://www.fhwa.dot.gov/research/resources/infravation.cfm
Why attend TRB Annual?

• Networking
  • Put Right people, right place, right time
  • Inform National Decisions

• Information Transfer
  • International collaboration
  • Share successful practices
  • Help manage Information
  • Avoid duplication

• Improved technical competency
TRB Annual Meeting

• 13,300 attendees
  • 18% outside USA
• 5000 presentations
• 800 sessions & workshops
• 500 committee meetings
• 97 live webinars
• 10 pre recorded
  • 33K viewers
National Academies: TRB Committees

- ADD20 Social and Economic Factors of Transportation [https://sites.google.com/site/trbadd20/](https://sites.google.com/site/trbadd20/)
- ADB50 Transportation Planning Applications [http://www.trb-appcon.org](http://www.trb-appcon.org)
- ADA10 Statewide Multimodal Transportation Planning [https://sites.google.com/site/statewideplanning/](https://sites.google.com/site/statewideplanning/)
- ADD30 Transportation and Land Development [https://transportationandlanddevelopment.wordpress.com/](https://transportationandlanddevelopment.wordpress.com/)
- AB000 Policy and Organization Group [http://sites.google.com/site/trbcommitteeab000](http://sites.google.com/site/trbcommitteeab000)
- ABE10 Revenue and Finance [http://sites.google.com/site/trbcommitteeabe10/](http://sites.google.com/site/trbcommitteeabe10/)
- ABC20 Management and Productivity [http://sites.google.com/site/trbcommitteeabc20/](http://sites.google.com/site/trbcommitteeabc20/)
- ADD10 Transportation and Economic Development [https://sites.google.com/site/tedcommittee/home](https://sites.google.com/site/tedcommittee/home)
- ABC10 Strategic Management [https://sites.google.com/site/trbstrategicmanagementcmtee](https://sites.google.com/site/trbstrategicmanagementcmtee)
- AT015 Freight Transportation Planning and Logistics [https://sites.google.com/site/trbfreightplanningcommittee/home](https://sites.google.com/site/trbfreightplanningcommittee/home)
- AT055 Truck Size and Weight [http://www.trucksizeandweight.com](http://www.trucksizeandweight.com)
- AT045 Intermodal Freight Transport [https://sites.google.com/site/trbat045](https://sites.google.com/site/trbat045)
- AT010 Freight Transportation Economics and Regulation [https://sites.google.com/site/at010trb/](https://sites.google.com/site/at010trb/)
- AW010 Ports and Channels [http://www.its.uci.edu/trbaw010](http://www.its.uci.edu/trbaw010)
- ABJ90 Freight Transportation Data [http://trbabj90.wordpress.com](http://trbabj90.wordpress.com)
Annual Meeting Strategy

- Attendees selected strategically
- Coordination meeting
- Expectations provided
  - Take notes
  - Implementable idea
  - Presentation
  - Track implementation progress
2017 TRB Annual Meeting: Slides and Posters Now Available Online

Visit the TRB Annual Meeting Online (AMOnline) portal to view papers, presentation slides, and posters of more than 5,000 program items from the 2017, in Washington, D.C. In addition to the 2017 content, the portal also includes the papers, slides, and posters from the 2011-2013 meetings.

All employees of year-round TRB Sponsors have complimentary access to all content in the portal. Employees of past Annual Meeting attendees from 2011-2017, may access all or much of the content in the TRB AMOnline portal at no charge depending on their years of Annual Meeting attendance.

To access AMOnline, employees of TRB Sponsors and Annual Meeting Patrons must sign up for an account using their work e-mail address. Past registrants may login using the email address that was used during registration as their username and their 6-digit Annual Meeting badge or registration confirmation) as their password.

Others who do not fall into these categories may purchase access to AMOnline content. Full details on access rules are available online.