THE MEMBER INSTITUTIONS OF THE UNIVERSITY TRANSPORTATION RESEARCH CENTER ARE:

- City University of New York
- Clarkson University
- Columbia University
- Cornell University
- Hofstra University
- Manhattan College
- New Jersey Institute of Technology
- New York Institute of Technology
- New York University
- Rensselaer Polytechnic Institute
- Rochester Institute of Technology
- Rowan University
- State University of New York
- Stevens Institute of Technology
- Syracuse University
- The College of New Jersey
- University of Puerto Rico - Mayagüez
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* Researcher(s) from the UTRC Consortium
**Workshop 101**

**The Nexus of Transportation and Environmental Health Governance: Intersections and Collisions Across and Within Borders**

Sunday, January 8, 2017 / 9:00 AM - 12:00 PM / Convention Center, 147A

**Event Description:**
The International Cooperation Committee is organizing a workshop on Transportation and Environmental Health Governance. Speakers will examine the intersection of transportation and environmental health governance. They will analyze how the sub-national, national and international laws, regulations, practices and programs intersect and/or collide in the area of governance. The workshop will address topics of Transportation, Environment, and Public Health. Joint presentations on case studies from around the world will be followed by interactive discussions and dialogue.

The workshop will explore the (a) dynamics of transportation governance around the world; (b) inter and intra dynamics of how decisions are made in consideration of, or in conflict with, sub national, national and international laws, regulations and protocols related to environmental health, and (c) analysis of the ideological discourses, values and norms that influence transportation-related decision making specifically those affecting environmental health.

**Presiding Officer(s):**
O. A. Elrahman, Rensselaer Polytechnic Institute (RPI),
George Giannopoulos, Hellenic Institute of Transport (HIT),
Heidi Guenin,

**Sponsored By:**
Standing Committee on International Cooperation (A0010)
Joint Subcommittee on Health and Transportation (ADD50 (1))

**Presentation(s):**
Role of Transportation Policies, Protocols, and Regulations in Mitigating Environmental Health Risks
• Rae Zimmerman*, New York University

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**Workshop 103**

**Help Wanted: Agency Leaders Speak Out on Critical Research Needs to Support a Dramatically Changing Industry | AICP Certification**

Sunday, January 8, 2017 / 9:00 AM - 12:00 PM / Convention Center, 150B

**Event Description:**
We need research for good decision making in a rapidly changing industry, but identifying what we need and how to get it quickly enough remains a challenge. Professionals within and outside of transportation will share thoughts on our rapidly changing world and potential transportation impacts as agency leaders discuss how they use research to bolster support and make decisions and where more is needed.

Join us and provide input on critical transportation research and learn how research can help prepare for the future.

**Presiding Officer(s):**
Andrea d’Amato, Kleinfelder,
Allison C. de Cerreno, Port Authority of New York and New Jersey,
Simon Smith, IBI Group

**Sponsored By:**
Standing Committee on Strategic Management (ABC10)
Standing Committee on Management and Productivity (ABC20)
Standing Committee on Performance Management (ABC30)
Standing Committee on Transportation Issues in Major Cities (ABE30)

**Presentation(s):**
Transportation: At the Intersection of Population, Climate, and Technology
• Thomas Wakeman*, Stevens Institute of Technology
### Workshop 111

**Resilience Tabletop Simulation: What You Need to Know Before and After Disaster Strikes**

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**Event Description:**
Adverse events test transportation resilience and produce varying levels of disruption across interdependent systems managed by personnel trained in different disciplines. The knowledge, information, and data needed for planning or investments can differ in type and scale across short-, medium-, and long-term time frames. This workshop addresses strategies for building the evidence base for a resilience implementation plan and other related decisions.

**Presiding Officer(s):**
Silvana Croope, Delaware Department of Transportation

**Sponsored By:**
Standing Committee on Critical Transportation Infrastructure Protection (ABR10)

Section - Transportation Systems Resilience (ABR00)

Standing Committee on the Logistics of Disaster Response and Business Continuity (ABR20)

**Presentation(s):**
- **Commentary and Insights**
  - John Contestabile, Johns Hopkins University
  - Thomas Wakeman*, Stevens Institute of Technology
  - Brian Wolshon, Louisiana State University

### Workshop 142

**Traditional and Emerging On-Demand Transportation: Can We Live Together and Make Sure Everyone Is Served?**

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**Event Description:**
Taxis and transportation network companies (TNCs) play an increasing role in public transportation service, primarily as additional, flexible capacity for public agencies. What are the advantages and challenges that face the agencies that try to take advantage of taxis and TNCs? This workshop includes representatives from transit agencies, taxi operators, and representatives from some of the major TNCs, as well as planners and regulators from federal, state, and local government.

**Presiding Officer(s):**
Annette Williams, San Francisco Municipal Transportation Agency

**Sponsored By:**
Standing Committee on Paratransit (AP060)

**Presentation(s):**
**Workshop Panel**
- Annette Williams, San Francisco Municipal Transportation Agency
- David Chia, The Collaborative, Inc.
- Elizabeth Ellis, KFH Group, Inc.
- Sean Bouffioi, King County (Washington)
- Matthew Daus*, City College of New York
- Bill George, Transdev on Demand, Inc.
- Christian Kent, Washington Metropolitan Area Transit Authority
- James Nihan, Massachusetts Bay Transportation Authority
- Kate Toran, San Francisco Municipal Transportation Agency
- Carol Tyson,
## Workshop 149C
### Walking at Night: Pedestrian’s Perspective, or “The Dangers of the Night-Walkers” (HF-C Ticket required); Workshop

**Event Description:**
These days, improving pedestrian safety remains a challenge. Most fatal pedestrian crashes in the United States (72%) occur during nighttime conditions. This is despite much higher numbers of pedestrian exposure during daytime versus nighttime conditions. Moreover, the knowledge of pedestrian behavior is fragmented, and the studies are mainly focused on street crossing in daylight conditions. The objectives of this workshop are to highlight recent studies in this area and to identify future research needs.

**Presiding Officer(s):**
- Jiguang Zhao, CH2M, presiding
- Jean-Michel Auberlet, IFSTTAR, presiding

**Presentation(s):**
- New Approaches to Lighting for Pedestrian Safety and Sense of Personal Security
  - John Bullough*, Rensselaer Polytechnic Institute (RPI)

## Workshop 142
### Urban Streets Subcommittee, AHB40(3.3)

**Event Description:**
This workshop introduces the audience to a variety of sustainable technologies and practices that currently are used by or are on the horizon for intermodal port systems around the world. Key elements of the workshop include (a) advanced fuel and energy systems, (b) emissions characterization and control, (c) invasive species control, and (d) water pollution and discharge treatment.

**Presiding Officer(s):**
- Janice Daniel*, New Jersey Institute of Technology, presiding

## Workshop 193C
### Sustainable Gateways: Ensuring Clean, Safe, and Reliable Port Gateways for the 21st Century; Workshop

**Event Description:**
This workshop introduces the audience to a variety of sustainable technologies and practices that currently are used by or are on the horizon for intermodal port systems around the world. Key elements of the workshop include (a) advanced fuel and energy systems, (b) emissions characterization and control, (c) invasive species control, and (d) water pollution and discharge treatment.

**Presiding Officer(s):**
- James Corbett, University of Delaware, presiding

**Sponsored By:**
Standing Committee on Marine Environment (AW030)

**Presentation(s):**
- Welcome and Purpose of Workshop
  - James Winebrake*, Rochester Institute of Technology (RIT)
**Workshop 101**

The Nexus of Transportation and Environmental Health Governance: Intersections and Collisions Across and Within Borders

*Event Description:*
Congestion pricing applications, including priced managed lanes, cordon pricing, and road usage charges, are a key interest in urbanized areas to address congestion and revenue needs. This session highlights papers that touch upon best practices, case studies, and research methods in pricing applications.

*Presiding Officer(s):*
Thomas Wakeman*, Stevens Institute of Technology, presiding

*Sponsored By:*
Section - Transportation Systems Resilience (ABR00)

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**Workshop 204**

Congestion Pricing and Managed Lane Case Studies; Poster | Practice Ready Paper

*Event Description:*
Congestion pricing applications, including priced managed lanes, cordon pricing, and road usage charges, are a key interest in urbanized areas to address congestion and revenue needs. This session highlights papers that touch upon best practices, case studies, and research methods in pricing applications.

*Presiding Officer(s):*
Kenneth Buckeye, Minnesota Department of Transportation, presiding

*Sponsored By:*
Standing Committee on Congestion Pricing (ABE25)
Standing Committee on Managed Lanes (AHB35)

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**Workshop 207**

Sensing Technology Innovations in Multimodal Transportation; Poster

*Presiding Officer(s):*
Guohui Zhang, University of Hawaii, Manoa, presiding

*Sponsored By:*
Standing Committee on Information Systems and Technology (ABJ50)
Standing Committee on Urban Transportation Data and Information Systems (ABJ30)
Standing Committee on Geographic Information Science and Applications (ABJ60)

*Presentation(s):*
Crowdsourcing Incident Information for Disaster Response Using Twitter
- Abdullah Kurkcu, New York University
- Fan Zuo, New York University
- Jingqin Gao, New York University
- Ender Morgul, New York University
- Kaan Ozbay*, New York University

Urban Travel Time Variability in New York City: Spatio-temporal Analysis Within Congestion Pricing Context
- Anil Yazici*, SUNY College, Stony Brook
- Ayberk Kocatepe, Florida State University
- Eren Ozguven, Florida A&M University - Florida State University

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Social Media and Travel: Explorations Using New Data and Methods; Lectern | AICP Certification

Event Description:
Social media has not only expanded the world of communication, but offers a wealth of information about travel behavior and consumer choice. This session explores the ways in which geographic and other data from social media can inform analysis of destination choice and other travel activity.

Presiding Officer(s):
Silvana Croope, Delaware Department of Transportation

Sponsored By:
Standing Committee on Effects of Information and Communication Technologies (ICT) on Travel Choices (ADB20)

Presentation(s):
Digital Narratives of Place: Learning About Neighborhood Sense of Place and Travel Through Online Reviews
- John Contestabile, Johns Hopkins University
- Ashok Sekar, Rochester Institute of Technology (RIT)
- Roger Chen*, Rochester Institute of Technology (RIT)
- Meiyappan Nagappan, Rochester Institute of Technology (RIT)
- Adrian Cruzat, Rochester Institute of Technology (RIT)

Exploring Travel Behavior with Social Media: An Empirical Study of Abnormal Movements Using High-Resolution Tweet Trajectory Data
- Zhenhua Zhang*, State University of New York (SUNY)
- Qing He*, University at Buffalo
- Shanjiang Zhu, George Mason University

Managed Lanes and Congestion Pricing Analysis, Design, and Operations; Poster | Practice Ready Paper

Presiding Officer(s):
Donald Samdahl, Fehr & Peers, presiding

Sponsored By:
Standing Committee on Managed Lanes (AHB35)
Standing Committee on Congestion Pricing (ABE25)

Presentation(s):
Evaluations of Managed Lane Strategies for Arterial Deployment of Cooperative Adaptive Cruise Control
- Zijia Zhong, New Jersey Institute of Technology
- Joyoung Lee*, New Jersey Institute of Technology
- Liuhui Zhao, New Jersey Institute of Technology

Traffic Flow Modeling of Connected and Automated Transportation Systems; Lectern

Presiding Officer(s):
Hani Mahmassani, Northwestern University, presiding

Sponsored By:
Standing Committee on Traffic Flow Theory and Characteristics (AHB45)

Presentation(s):
Mechanics-based Acceleration Modelling of Multilane Traffic Flow
- Liang Wang, Columbia University
- Fangliang Chen, Columbia University
- Huiming Yin*, Columbia University
### Innovative Data Applications: GTFS Real Time, Smartphone, Farebox, AVL, APC, Wi-Fi, and more; Poster Session

**Event Description:**
Researchers and practitioners are keenly focused on the generation and processing of data and on opportunities for integrating existing and emerging transit data streams with other data sets to tackle a variety of problems within the transit industry. This session includes examples of innovative uses of general transit feed specification, GTFS real-time data, smartphone data, smartcard data, farebox data, Wi-Fi signal data, automated vehicle location, APC, AFC, and more!

**Presiding Officer(s):**
Catherine Lawson*, State University of New York, Albany, presiding

**Sponsored By:**
Public Transportation Group (AP000)
Section - Data and Information Systems (ABJ00)
Standing Committee on Transit Management and Performance (AP010)
Standing Committee on Public Transportation Planning and Development

**Presentation(s):**
Evaluating Resilience and Recovery of Public Transit System Using Big Data: Case Study from New Jersey
- Sandeep Mudigonda*, University Transportation Research Center
- Kaan Ozbay*, New York University
- Bekir Bartin, Istanbul Kemerburgaz University

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### Workshop 252

**Public Transportation Planning and Development: New Perspectives; Lectern | AICP Certification | Practice Ready Paper**

**Event Description:**
This session explores a range of new perspectives related to public transportation planning in the U.S. and abroad. Participants will learn about trends in federally-funded transit project cost estimates, the equitability in network planning guidelines, identifying urban activity centers to support transit network design, planning and performance of contracted fixed-route bus transit service, and how bikesharing affects bus ridership.

**Presiding Officer(s):**
Brendon Hemily, Hemily and Associates, presiding

**Sponsored By:**
Standing Committee on Public Transportation Planning and Development (AP025)

**Presentation(s):**
Sharing Riders: How Bikesharing Affects Bus Ridership in New York City
- Kayleigh Campbell, Columbia University
- Candace Brakewood*, City College of New York

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**Monday, January 9, 2017**

**8:00 AM - 9:45 AM**

**Convention Center, Hall E**
Urban Freight Innovations; Poster | Practice Ready Paper

January 9, 2017  /  8:00 AM - 9:45 AM  /  Convention Center, Hall E

Event Description:
Authors of papers on current urban freight research provide posters showcasing their efforts and are available to discuss their research in an informal setting.

Presiding Officer(s):
Giorgio Ambrosino, MemEx, presiding

Sponsored By:
Standing Committee on Urban Freight Transportation (AT025)

Presentation(s):
Crowdsourcing Last-Mile Delivery of Online Orders by Exploiting Social Networks of Retail Store Customers
• Aashwinikumar Devari, University at Buffalo
• Alexander Nikolaev, University at Buffalo
• Qing He*, University at Buffalo

Analysis of Commercial Vehicle Parking Duration in New York City
• Joshua Schmid, Rensselaer Polytechnic Institute (RPI)
• Xiaokun Wang*, Rensselaer Polytechnic Institute (RPI)
• Alison Conway*, City College of New York

Direct Impacts of Off-Hour Deliveries on Freight Emissions
• Jose Holguin-Veras*, Rensselaer Polytechnic Institute (RPI)
• Trlice Encarnacion, Rensselaer Polytechnic Institute
• Carlos Gonzalez-Calderon, Rensselaer Polytechnic Institute (RPI)
• James Winebrake*, Rochester Institute of Technology (RIT)
• Sofia Kyle, Rensselaer Polytechnic Institute (RPI)
• Nilson Herazo Padilla, Rensselaer Polytechnic Institute (RPI)
• Lokesh Kalahasthi, Rensselaer Polytechnic Institute (RPI)
• Wilson Adarme, Universidad Nacional de Colombia
• Victor Cantillo, Universidad del Norte
• Hugo Yoshizaki, Universidade de Sao Paulo
• Rodrigo Garrido, Universidad Diego Portales

Characteristics and Traffic Impacts of Residential Delivery Activity: New York City Case Study
• Quanquan Chen, City College of New York
• Alison Conway*, City College of New York
• Jialei Cheng, Parsons Corporation
Event Description:
Foregoing the typical conference slides and canned language, this session will allow attendees to eavesdrop on dialogues between seasoned and emerging leaders in the transportation industry, as they share candid conversations on their careers. This session aims to motivate a new generation of transportation leaders armed with the capacity and insights to lead their businesses, public institutions, and social enterprises — all of which are essential to achieving success in an era of rapid change. We invite you to learn how these leaders advanced to the top. Find out what inspires them, the challenges they faced along the way, and the critical success factors that led them to where they are today.
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<td>Panagiotis Anastasopoulos*, University at Buffalo, presiding</td>
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<td>• Ke Wan, Princeton University</td>
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<td>• Alain Kornhauser*, Princeton University</td>
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<td>Modeling Multinomial Outcomes from Partner Selection and Joint Decision-Making Processes</td>
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<td>• Dapeng Zhang, Hyperloop One</td>
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<td>• Xiaokun Wang*, Rensselaer Polytechnic Institute (RPI)</td>
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| Workshop 298 | Geometric Design Research; Poster | Practice Ready Paper |
|-------------|------------------------------------|
| **Presiding Officer(s):** | Ivette Cruzado*, University of Puerto Rico, Mayaguez, presiding |
| **Sponsored By:** | Standing Committee on Geometric Design (AFB10) |

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<td>• Chathurani Chandrasiri, Clarkson University</td>
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<td>Donald Streeter, New York State Department of Transportation, presiding</td>
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<td>• Robert Thomas, Utah State University</td>
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<td>• Diego Lezama*, Clarkson University</td>
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<td>• Sulapha Peethamparan*, Clarkson University</td>
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<td>Farshad Rajabipour, Pennsylvania State University, presiding</td>
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<td>Standing Committee on Concrete Materials and Placement Techniques (AFN40)</td>
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<td>• Sulapha Peethamparan*, Clarkson University</td>
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<td>Eleni Christofa, University of Massachusetts, Amherst, presiding</td>
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<td>• Qing He*, University at Buffalo</td>
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<td>• Hernan Caceres Venegas, Universidad Catolica del Norte (Chile)</td>
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<td>• Manoj Reddy Kandukuri, University at Buffalo</td>
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<td>• Zhenhua Zhang*, State University of New York (SUNY)</td>
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<td><strong>Presiding Officer(s):</strong></td>
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<td>Joseph Smak, National Railroad Passenger Corporation (Amtrak), presiding</td>
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<td>Data-Driven Optimization of Railway Track Inspection and Maintenance Using Markov Decision Process</td>
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<td>• Siddhartha Sharma, University at Buffalo</td>
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<td>• Yu Cui, University at Buffalo</td>
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<td>• Qing He*, University at Buffalo</td>
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<td><strong>Freight Decisions: The Many Perspectives That Keep Goods Moving; Lectern</strong></td>
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<td>This session features perspectives that affect decisions on how we move goods and how professionals can learn from and engage with each of these perspectives. A panel of finance, business strategy, workforce development, and environmental science speakers will discuss the value of data, tools, and techniques that are often part of freight transportation decisions but not explicitly analyzed by transportation professionals. Attendees will gain familiarity with how data and tools come together to inform management decisions.</td>
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<td>Nicholas Kehoe, Toxcel, LLC, presiding</td>
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<td>Matthew Campo, Rutgers, The State University of New Jersey, presiding</td>
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<td>• Alison Conway*, City College of New York</td>
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**Schedule**

**Monday 01/09/17**

**Workshop 340**

**Facing Freight Gridlock in the City of the Future: Importance of Understanding Urban Freight Stakeholders’ Behavior; Lectern | AICP Certification**

- **Event Description:**
  The session concentrates on the sectors that interact and compete for space during peak hours (e.g., parcel deliveries and construction both occupy road space during peak periods). Service sectors also compete for space on the road and at the curbside. This session brings together stakeholders from industry and policy with input from the research community, with a focus on how to respond to these demands while accounting for the needs of the city and the different characteristics of these freight operations.

- **Presiding Officer(s):**
  Maria Lindholm, Lindholmen Science Park AB, presiding

- **Sponsored By:**
  Standing Committee on Urban Freight Transportation (AT025)

- **Presentation(s):**
  Role of Freight Behavior Research in Fostering Sustainability and Urban Quality of Life
  - Jose Holguin-Veras*, Rensselaer Polytechnic Institute (RPI)

**Public Transportation Group Young Members Subcommittee, AP000 (2)**

- **Monday, January 9, 2017**
  - 1:30 PM - 3:15 PM
  - Marriott Marquis, Mint (M4)

- **Presiding Officer(s):**
  Candace Brakewood*, City College of New York, presiding
  Theodore Rosenbaum*, LTK Engineering Services, Inc., presiding

- **Sponsored By:**
  Public Transportation Group (AP000)
  Subcommittee on Public Transportation Group Young Members (AP000(2))

**Workshop**

**Transformative Transit Data, AP000(3), Joint Subcommittee of AP000, ABJ00**

- **Monday, January 9, 2017**
  - 10:15 AM - 12:00 PM
  - Marriott Marquis, Congress (M4)

- **Presiding Officer(s):**
  Catherine Lawson*, State University of New York, Albany, presiding

- **Sponsored By:**
  Public Transportation Group (AP000)
  Section - Data and Information Systems (ABJ00)
  Subcommittee on Information on Transformative Trends in Transit Data (AP000(3))

**Workshop 348**

**Current Issues in Transportation Funding and Financing; Poster**

- **Monday, January 9, 2017**
  - 8:00 AM - 9:45 AM
  - Convention Center, Hall E

- **Event Description:**
  Transportation agencies are facing what are widely accepted as the most serious fiscal challenges in nearly a century. Most critically, fuel tax revenue is declining in relation to road use and transportation costs are continuing to increase with inflation. In light of this situation, many innovative funding and financing methods have been proposed or implemented. This session highlights both the current state of practice in funding and financing and innovative methods that show promise for the future.

- **Presiding Officer(s):**
  Ronald Davis, CDM Smith, presiding

- **Sponsored By:**
  Standing Committee on Revenue and Finance (ABE10)

- **Presentation(s):**
  - Carl Peters, Carl E. Peters LLC
  - Jonathan Peters*, City University of New York (CUNY)
  - Cameron Gordon, University of Canberra
**Workshop 350**

**Transportation and Economics; Poster**

Monday, January 9, 2017 / 1:30 PM - 3:15 PM / Convention Center, Hall E

**Presiding Officer(s):**
Sabyasachee Mishra, University of Memphis, presiding

**Sponsored By:**
Standing Committee on Transportation Economics (ABE20)

**Presentation(s):**
Extending the logit-mixed logit model for a combination of random and fixed parameters
- Prateek Bansal, Cornell University
- Ricardo Daziano*, Cornell University
- Martin Achtnicht, Leibniz Institute of Ecological Urban and Regional Development

Comparison of Parametric and Seminonparametric Unobserved Taste Heterogeneity in Choice Modeling
- Prateek Bansal, Cornell University
- Ricardo Daziano*, Cornell University

**Workshop 357**

**Innovations in Urban Transportation Data; Poster | Practice Ready Paper**

Monday, January 9, 2017 / 1:30 PM - 3:15 PM / Convention Center, Hall E

**Presiding Officer(s):**
Charlotte Frei, Wight & Company, presiding
Tony Qiu, University of Alberta, presiding

**Sponsored By:**
Standing Committee on Urban Transportation Data and Information Systems (ABJ30)

**Presentation(s):**
Incident Detection Through Twitter: Organization Versus Personal Accounts
- Anil Yazici*, SUNY College, Stony Brook
- Sandeep Mudigonda*, University Transportation Research Center
- Camille Kamga*, City College of New York

Lightweight and Accurate Transit Mode Detection System Based on Smartphone Platform
- Xiaoyuan Liang*, New Jersey Institute of Technology
- Guiling Wang, New Jersey Institute of Technology

**Workshop 358**

**New Research on Travel Time, Speed, and Reliability Data; Poster**

Monday, January 9, 2017 / 1:30 PM - 3:15 PM / Convention Center, Hall E

**Event Description:**
The session covers new topics related to the use, analysis, and estimation of travel time, speed, and reliability data. Topics covered in this session include probe data reliability; methods to analyze, process, and validate data; performance measures and determination of appropriate metrics; comparison of various sources of travel time data; spatiotemporal pattern matching; and inclusion of other data sources such as weather and crashes into travel time estimates.

**Presiding Officer(s):**
Sam Granato, Ohio Department of Transportation, presiding
Mei Chen, University of Kentucky, presiding

**Sponsored By:**
Standing Committee on Urban Transportation Data and Information Systems (ABJ30)
Subcommittee on Travel Time Speed and Reliability (ABJ30(3))

**Presentation(s):**
Analyzing Travel Time Reliability and Its Influential Factors on Emergency Vehicles with Generalized Extreme Value Theory
- Zhenhua Zhang*, State University of New York (SUNY)
- Qing He*, University at Buffalo
- Jizhan Gou
- Xiaoling Li, Virginia Department of Transportation
**Workshop 359**

**Innovative Big Data Solutions for Transportation Challenges; Poster | Practice Ready Paper**

Monday, January 9, 2017 / 1:30 PM - 3:15 PM / Convention Center, Hall E

**Event Description:**
Proliferation of the urban big data sets has made them a data source of choice for many travel demand forecasting, transportation, system analysis, and improvements tasks. This session highlights innovative big data solutions for improving traffic operations, safety, and travel demand forecasting.

**Presiding Officer(s):**
Vladimir Livshits, Maricopa Association of Governments, presiding
Katy Salamati, SAS Institute, presiding

**Sponsored By:**
Standing Committee on Urban Transportation Data and Information Systems (ABJ30)
Subcommittee on Urban Big Data (ABJ30(2))
Standing Committee on Information Systems and Technology (ABJ50)
Standing Committee on Artificial Intelligence and Advanced Computing Applications (ABJ70)
Standing Committee on Transportation Demand Forecasting (ADB40)

**Presentation(s):**
• Big Data Analysis-Based Decision-Making Tool for Applying Adaptive Traffic Control Systems
  • Wan Li, University of Washington
  • Xuegang Ban*, Rensselaer Polytechnic Institute (RPI)

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**Workshop 363**

**Information Technology Applications in Transportation; Poster**

Monday, January 9, 2017 / 1:30 PM - 3:15 PM / Convention Center, Hall E

**Presiding Officer(s):**
Pedro Camargo, Veitch Lister Consulting, presiding

**Sponsored By:**
Standing Committee on Geographic Information Science and Applications (ABJ60)
Standing Committee on Information Systems and Technology (ABJ50)

**Presentation(s):**
Framework for Design and Evaluation of a Distributed Data Exchange Infrastructure for Dynamic Transit Operations
• Mizanur Rahman, Clemson University
• Yucheng An, Clemson University
• Mashrur Chowdhury, Clemson University
• Kakan Dey, West Virginia University
• Yuheng Du, Clemson University
• Parth Bhavsar*, Rowan University

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**Workshop 367**

**Advances in Transportation Network Equilibrium Analysis; Lectern**

Monday, January 9, 2017 / 1:30 PM - 3:15 PM / Convention Center, 146B

**Presiding Officer(s):**
Avinash Unnikrishnan, Portland State University, presiding

**Sponsored By:**
Standing Committee on Transportation Network Modeling (ADB30)

**Presentation(s):**
Modeling Dynamics of Congestion in Urban Networks Using the Macroscopic Fundamental Diagram
• Mahyar Amirgholy, Cornell University
• Lan Liu, Cornell University
• Huaizhu Gao*, Cornell University
## Workshop 386
### Safety and Legal Issues in Vehicle-Highway Automation Systems; Poster

**Monday, January 9, 2017 / 1:30 PM - 3:15 PM / Convention Center, Hall E**

**Presiding Officer(s):**
Meng Wang, Delft University of Technology, presiding

**Presentation(s):**
Risk Analysis of Autonomous Vehicles in Mixed Traffic Streams
- Parth Bhavsar*, Rowan University
- Plaban Das, Rowan University
- Matthew Paugh, Rowan University
- Kakan Dey, West Virginia University
- Mashrur Chowdhury, Clemson University

**Sponsored By:**
Standing Committee on Vehicle-Highway Automation (AHB30)
Standing Committee on Emerging Technology Law (AL040)

## Workshop 387
### User Perspectives and Impact Assessments of Vehicle-Highway Automation Systems; Poster | Practice Ready Paper

**Monday, January 9, 2017 / 1:30 PM - 3:15 PM / Convention Center, Hall E**

**Presiding Officer(s):**
Jiaqi Ma, Leidos, Inc., presiding

**Presentation(s):**
Public Acceptance of Driver-Assist and Warning Technologies
- Andrew Bartlett, University at Buffalo
- Adel Sadek*, University at Buffalo

Public Opinion and Consumer Preferences for Selected Attributes of Automated Vehicles
- Paulina Lustgarten, State University of New York (SUNY)
- Scott Le Vine*, SUNY New Paltz/Imperial College

**Sponsored By:**
Standing Committee on Vehicle-Highway Automation (AHB30)

## Workshop 392
### Driving Improved Maintenance Decisions Through Data, Part 2
(Part 1, Session 323); Poster | Practice Ready Paper

**Monday, January 9, 2017 / 1:30 PM - 3:15 PM / Convention Center, Hall E**

**Event Description:**
Practitioners are using data and new analysis techniques more and more to assist in maintenance and preservation decisions. This session highlights a number of current and new approaches.

**Presiding Officer(s):**
Adrian Burde, Leidos, Inc., presiding

**Sponsored By:**
Standing Committee on Maintenance and Operations Management (AHD10)

**Presentation(s):**
Drainage Identification Analysis and Mapping Database
- Jay Meegoda*, New Jersey Institute of Technology
### Workshop 400

**Simulation and Measurement of Vehicle and Operator Behavior; Poster**

- **Monday, January 9, 2017**  /  1:30 PM - 3:15 PM  /  Convention Center, Hall E

**Presiding Officer(s):**

Omar Ahmad, National Advanced Driving Simulator (NADS), presiding

**Presentation(s):**

Comparative Analysis of Toll Plaza Safety Features in Puerto Rico and Massachusetts Using a Driving Simulator

- Didier Valdes*, University of Puerto Rico, Mayaguez
- Benjamin Colucci, University of Puerto Rico, Mayaguez
- Donald Fisher, Office of the Assistant Secretary for Research and Technology
- Michael Knodler, University of Massachusetts, Amherst
- Bryan Ruiz-Cruz, University of Puerto Rico, Mayaguez
- Johnathan Ruiz Gonzalez, University of Puerto Rico, Mayaguez
- Enid Colón Torres, University of Puerto Rico, Mayaguez
- Ricardo Garcia Rosario, University of Puerto Rico, Mayaguez
- Foroogh Sadat Hajiseyedjavadi, University of Massachusetts, Amherst

**Sponsored By:**

Standing Committee on Simulation and Measurement of Vehicle and Operator Performance (AND30)

### Workshop 402

**Transit Fare Payment, Policy, and Customer Response; Lectern**

- **Monday, January 9, 2017**  /  1:30 PM - 3:15 PM  /  Convention Center, Hall E

**Presiding Officer(s):**

Jeffrey Busby, TransLink, presiding

**Presentation(s):**

Concept of Operations for Deploying a Mobile Transit Fare Collection App

- Mizanur Rahman, Clemson University
- Nevine Georggi, USF Center for Urban Transportation Research
- Candace Brakewood*, City College of NewYork
- Sean Barbeau, USF Center for Urban Transportation Research
- Ann Joslin, USF Center for Urban Transportation Research

**Sponsored By:**

Standing Committee on Public Transportation Marketing and Fare Policy (AP030)

### Workshop 403

**Toward Transit Automation: Technical and Practical Advancement; Lectern**

- **Monday, January 9, 2017**  /  1:30 PM - 3:15 PM  /  Convention Center, 144A

**Event Description:**

This session tackles various issues in transit automation from perception of the public to design and comparisons of different automated transit systems around the world. Since this concept is in an advancement stage, both professionals and scholars have something to contribute.

**Sponsored By:**

Standing Committee on Automated Transit Systems (AP040)

**Presentation(s):**

Simulation Experiment to Compare Light Rail Streetcar Against Shared Autonomous Vehicle Fleet for Brooklyn-Queens Connector

- Lucas Mendes, Aeronautics Institute of Technology
- Manel Rivera-Bennassar, New York University
- Joseph Chow*, New York University

**Presiding Officer(s):**

Nadereh Moini, New Jersey Sports & Exposition Authority, presiding
Workshop 404

**Right Sizing Rail Transit Service; Lectern | AICP Certification | Practice Ready Paper**

Monday, January 9, 2017 / 1:30 PM - 3:15 PM / Convention Center, 143C

**Presiding Officer(s):**
*Wendy Jia*, Washington Metropolitan Area Transit Authority, presiding

**Presentation(s):**
Redesigning Subway Map to Mitigate Bottleneck Congestion: An Experiment in Washington DC Using Mechanical Turk
- *Zhan Guo*, New York University
- *Jinhua Zhao*, Massachusetts Institute of Technology
- *Chris Whong*, New York University
- *Prachee Mishra*, New York University
- *Lance Wyman*, Lance Wyman Ltd

**Sponsored By:**
Standing Committee on Rail Transit Systems (AP065)

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Visibility Committee

Monday, January 9, 2017 / 1:30 PM - 5:30 PM / Marriott Marquis, Marquis Ballroom Salon 9 (M2)

**Presiding Officer(s):**
*John Bullough*, Rensselaer Polytechnic Institute (RPI), presiding

**Sponsored By:**
Standing Committee on Visibility (AND40)

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Marine Safety and Human Factors Committee (AW040)

Monday, January 9, 2017 / 3:45 PM - 5:30 PM / Marriott Marquis, Judiciary Square (M3)

**Presiding Officer(s):**
*Alexander Landsburg*, The Society of Naval Architects and Marine Engineers (SNAME), presiding

**Sponsored By:**
Standing Committee on Marine Safety and Human Factors (AW040)

**Presentation(s):**
Optimizing Throughput of Restricted Tidal Waters: Composite Ship and Time Domain Model and Its Applications
- *Rongfang Liu*, New Jersey Institute of Technology
**Workshop 419**

**Statewide Data and Information Systems; Poster | Practice Ready Paper**

**Monday, January 9, 2017**  
**3:45 PM - 5:30 PM**  
**Convention Center, Hall E**

**Presiding Officer(s):**  
Coco Briseno, California Department of Transportation (CALTRANS), presiding

**Sponsored By:**  
Standing Committee on Statewide Transportation Data and Information Systems (ABJ20)

**Presentation(s):**  
Ranking Statistically Similar Highway Travel Corridors Using State Speed Data Sets

- Thomas Brennan*, The College of New Jersey
- Christopher Day, Purdue University
- Matthew Volovski*, Manhattan College

Modeling Salt Usage During Snow Storms: Application of Hierarchical Linear Models with Varying Dispersion

- Kun Xie*, New York University
- Kaan Ozbay*, New York University
- Yuan Zhu, New York University
- Sami Demiroglu, Rutgers, The State University of NJ
- Hong Yang, Old Dominion University
- Hani Nassif, Rutgers, The State University of NJ

**Workshop 426**

**Urban Transit and Service Network Design; Lectern**

**Monday, January 9, 2017**  
**3:45 PM - 5:30 PM**  
**Convention Center, 146B**

**Presiding Officer(s):**  
Rahul Nair, IBM Corporation, presiding

**Sponsored By:**  
Standing Committee on Transportation Network Modeling (ADB30)

**Presentation(s):**  
Designing a Sustainable Transit System in Grid Urban Networks Using the Macroscopic Fundamental Diagram

- Mahyar Amirgholy, Cornell University
- Mehrdad Shahabi, University of Florida
- Huaizhu Gao*, Cornell University

**Workshop 458**

**Driver Behavior and Inattention; Poster**

**Monday, January 9, 2017**  
**3:45 PM - 5:30 PM**  
**Convention Center, Hall E**

**Presiding Officer(s):**  
Birsen Donmez, University of Toronto, presiding

**Sponsored By:**  
Standing Committee on Vehicle User Characteristics (AND10)

**Presentation(s):**  
Comparison of Motivational and Informational Contexts for Improving Eco-Driving Performance

- Roger Chen*, Rochester Institute of Technology (RIT)
- Katie McConkey, Rochester Institute of Technology (RIT)
- Glenn Gavi, Rochester Institute of Technology (RIT)

Exploratory Empirical Analysis of Measured and Perceived Aggressive Driving Behavior in a Driving Simulation Environment

- Nima Golshani, University of Illinois, Chicago
- Md Tawfiq Sarwar, NRC Research Associateship
- Panagiotis Anastasopoulos*, University at Buffalo
- Kevin Hulme
**Workshop 462**

**Tickets Please! Research in Public Transit Fares; Poster**

**Event Description:**
This session tackles various issues in transit automation from perception of the public to design and comparisons of different automated transit systems around the world. Since this concept is in an advancement stage, both professionals and scholars have something to contribute.

**Presiding Officer(s):**
Susan Bregman, Oak Square Resources, LLC, presiding

**Sponsored By:**
Standing Committee on Public Transportation Marketing and Fare Policy (AP030)

**Presentation(s):**

- **Ridership Changes and Price Elasticity Based on Fare Hike in 2013 in New York City**
  - Sabihehal sadat Faghih*, City University of New York (CUNY)
  - Camille Kamga*, City College of New York
  - Anil Yazici*, SUNY College, Stony Brook
  - Dan Wan*, City College of New York
  - Sandeep Mudigonda*, University Transportation Research Center

- **A Comparison of Transit Mobile Ticketing Applications in the United States and Europe**
  - Nahla Ali, City College of New York
  - Marion Tourret, Ecole Nationale des Travaux Publics de l’Etat
  - Candace Brakewood*, City College of New York
  - Robert Paaswell*, University Transportation Research Center

- **Do Employee Commuter Benefits Increase Transit Ridership? Evidence from New York-New Jersey Region**
  - Paola Bueno, Universidad Politecnica de Madrid
  - Juan Gomez, Universidad Politecnica de Madrid
  - Jonathan Peters*, City University of New York (CUNY)
  - Jose Vassallo, Universidad Politecnica de Madrid

**Workshop 463**

**Bus Transit Research and Practices; Poster | Practice Ready Paper**

**Presiding Officer(s):**
Thomas Schwetz, Lane Transit District, presiding

**Sponsored By:**
Standing Committee on Bus Transit Systems (AP050)

**Presentation(s):**

- **Do Employee Commuter Benefits Increase Transit Ridership? Evidence from New York-New Jersey Region**
  - Paola Bueno, Universidad Politecnica de Madrid
  - Juan Gomez, Universidad Politecnica de Madrid
  - Jonathan Peters*, City University of New York (CUNY)
  - Jose Vassallo, Universidad Politecnica de Madrid

- **Modeling an Integrated Bus Service for Minimum Cost Operation Considering Environmental Impact**
  - Xiaobo Liu, Southwest Jiaotong University
  - Hezhou Qu
  - I Jy Chien*, New Jersey Institute of Technology
Workshop 465
Emerging Topics in Taxis, Transportation Network Companies, and Paratransit; Poster | Practice Ready Paper

Monday, January 9, 2017 / 3:45 PM - 5:30 PM / Convention Center, Hall E

Presiding Officer(s):
Liza Joffrion, Tennessee Department of Transportation, presiding

Presentation(s):
Ranking Statistically Similar Highway Travel Corridors Using State Speed Data Sets
• Thomas Brennan*, The College of New Jersey
• Christopher Day, Purdue University
• Matthew Volovski*, Manhattan College

Exploring Taxi and Uber Demand in New York City: Empirical Analysis and Spatial Modeling
• Diego Correa, New York University
• Kun Xie, New York University
• Kaan Ozbay*, New York University

Sponsored By:
Standing Committee on Paratransit (AP060)

Workshop 471
Advances in Railroad Operating Technologies; Poster | Practice Ready Paper

Monday, January 9, 2017 / 3:45 PM - 5:30 PM / Convention Center, Hall E

Presiding Officer(s):
Adrian Hellman, Office of the Assistant Secretary for Research and Technology, presiding

Presentation(s):
Reducing Rail Energy Consumption Through Coasting and Regenerative Braking
• Leon Allen, Long Island Railroad Company
• I Jy Chien*, New Jersey Institute of Technology

Sponsored By:
Standing Committee on Railroad Operating Technologies (AR030)

Freight Modeling Subcommittee, AT015(1)

Monday, January 9, 2017 / 6:00 PM - 7:30 PM / Marriott Marquis, Treasury (M4)

Event Description:
This meeting invites all researchers and practitioners with interest and experiences in freight modeling from the private sector to the public sector to share ideas and progress. The U.S. freight policy and new initiatives will be updated.

Presiding Officer(s):
Birsen Donmez, University of Toronto, presiding
J. Susie Lahsene, Port of Portland, Oregon, presiding
Xiubin Wang, Texas A&M University, presiding
Joseph Chow*, New York University, presiding

Sponsored By:
Standing Committee on Freight Transportation Planning and Logistics (AT015)
Subcommittee on Freight Modeling (AT015(1))
**Workshop 483**

**Parking 201: How Much Is Enough?; Lectern | AICP Certification | Practice Ready Paper**

**Event Description:**
This session examines different issues related to parking in urban environments. As we plan for parking in mixed-use, urban, and transit-served neighborhoods, what factors should be considered? Also, as we consider and plan for new technologies, such as shared autonomous vehicles, how much parking is enough?

**Presiding Officer(s):**
Lisa Jacobson, Barr Foundation, presiding

**Sponsored By:**
Standing Committee on Transportation Demand Management (ABE50)

**Presentation(s):**
Freight and Service Parking Needs and the Role of Demand Management
- Jose Holguin-Veras*, Rensselaer Polytechnic Institute (RPI)
- Shama Campbell, Rensselaer Polytechnic Institute (RPI)
- Diana Ramirez-Rios, Rensselaer Polytechnic Institute (RPI)
- Carlos Gonzalez-Calderon, Rensselaer Polytechnic Institute (RPI)
- Lokesh Kalahasthi, Rensselaer Polytechnic Institute (RPI)
- Catherine Lawson*, State University of New York, Albany
- Jeffrey Wojtowicz*, Rensselaer Polytechnic Institute (RPI)

**Workshop 491**

**New Strategies and Applications for Transit Data: Analyzing, Inferring, Fusing, and Clustering; Lectern | Practice Ready Paper**

**Event Description:**
After making great strides in the creation of new forms of transit data, researchers and practitioners are now using innovative techniques to analyze, infer, fuse, and cluster these data for a variety of new insights and applications. This session highlights archived general transit feed specification real-time data, farebox data, smartcard data, and origin and destination matrices.

**Presiding Officer(s):**
Catherine Lawson*, State University of New York, Albany, presiding

**Sponsored By:**
Public Transportation Group (AP000)
Section - Data and Information Systems (ABJ00)
Standing Committee on Transit Management and Performance (AP010)
Standing Committee on Public Transportation Planning and Development (AP025)
Standing Committee on Public Transportation Marketing and Fare Policy (AP030)
### Workshop 499
**Infrastructure Security and Resilience; Poster | Practice Ready Paper**

**Tuesday, January 10, 2017**  
**8:00 AM - 9:45 AM**  
**Convention Center, Hall E**

**Presiding Officer(s):**  
Yi Qi, Texas Southern University

**Sponsored By:**  
Standing Committee on Critical Transportation Infrastructure Protection (ABR10)

**Presentation(s):**  
Data-driven spatial modeling for quantifying network-wide resilience in the aftermath of hurricanes irene and sandy  
- Yuan Zhu, New York University  
- Kun Xie, New York University  
- Kaan Ozbay*, New York University  
- Fan Zuo, New York University  
- Hong Yang, Old Dominion University

### Workshop 501
**Emergency Evacuation Poster Presentations; Poster | Practice Ready Paper**

**Tuesday, January 10, 2017**  
**8:00 AM - 9:45 AM**  
**Convention Center, Hall E**

**Presiding Officer(s):**  
Brian Wolshon, Louisiana State University

**Sponsored By:**  
Standing Committee on Emergency Evacuations (ABR30)

**Presentation(s):**  
Modeling multimodal transportation network emergency evacuation considering evacuees’ cooperative behavior  
- Xia Yang, Rensselaer Polytechnic Institute (RPI)  
- Xuegang Ban*, Rensselaer Polytechnic Institute (RPI)  
- John Mitchell

Evaluating the Impacts of Connected Vehicle Technology on Evacuation Delay  
- Karzan Bahaaldin, JMT  
- Ryan Fries, Southern Illinois University, Edwardsville  
- Parth Bhavsar*, Rowan University  
- Plaban Das, Rowan University

### Workshop 504
**Travel Behavior Analysis; Poster**

**Tuesday, January 10, 2017**  
**8:00 AM - 9:45 AM**  
**Convention Center, Hall E**

**Presiding Officer(s):**  
Abolfazl Mohammadian, University of Illinois, Chicago

**Sponsored By:**  
Standing Committee on Traveler Behavior and Values (ADB10)

**Presentation(s):**  
Measuring Disparity Between Spatial-Temporal Activity Patterns of Physically Impaired Travelers and Nondisabled Travelers  
- Erwan LE PRIOL, Ecole Nationale des Travaux Publics de l’Etat  
- Mahdieh Allahviranloo*, City College of New York
**Workshop 505**

**Activity Patterns; Poster**

Tuesday, January 10, 2017  /  8:00 AM - 9:45 AM  /  Convention Center, Hall E

**Presiding Officer(s):**

Karthik Konduri

**Sponsored By:**

Standing Committee on Traveler Behavior and Values (ADB10)

**Presentation(s):**

Modeling Dynamics of Crowdshipping and Activity Participation Behavior
- Mahdieh Allahviranloo, City College of New York
- Shirin Najafabadi, City College of New York

Estimation of Utility Distribution Parameters for Joint and Solo Activities
- Mahdieh Allahviranloo, City College of New York
- Kay Axhausen, ETHZ - Swiss Federal Institute of Technology

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**Workshop 506**

**Route Choice Behavior; Poster**

Tuesday, January 10, 2017  /  8:00 AM - 9:45 AM  /  Convention Center, Hall E

**Presiding Officer(s):**

Song Gao, University of Massachusetts, Amherst

**Sponsored By:**

Standing Committee on Traveler Behavior and Values (ADB10)

**Presentation(s):**

Impact of Target on Traveler’s Multiple-Criteria Route Choice Decision
- Xiangfeng Ji, Southeast University
- Xuegang Ban*, Rensselaer Polytechnic Institute (RPI)
- Xu Qu, Southeast University
- Jiang Zhang, Southeast University
- Bin Ran, University of Wisconsin, Madison

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**Workshop 508**

**Car Ownership and Shared Mobility; Poster**

Tuesday, January 10, 2017  /  8:00 AM - 9:45 AM  /  Convention Center, Hall E

**Presiding Officer(s):**

Ipek Sener, Texas A&M Transportation Institute

**Sponsored By:**

Standing Committee on Traveler Behavior and Values (ADB10)

**Presentation(s):**

Nationwide Study of Factors Associated with Household Car Ownership in China
- Scott Le Vine*, SUNY New Paltz / Imperial College
- Chenyang Wu, Imperial College London
- John Polak, Imperial College London

Spatial Demand Model for Free-Floating Carsharing Incorporating Accessibility
- Justus Loehler, Imperial College London
- John Polak, Imperial College London
- Scott Le Vine*, SUNY New Paltz / Imperial College
**Workshop 511**

**Infrastructure Security and Resilience; Poster | Practice Ready Paper**

**Presenting Officer(s):**
Soumia Ichoua, Embry-Riddle Aeronautical University

**Sponsored By:**
Standing Committee on Transportation Network Modeling (ADB30)

**Presiding Officer(s):**
Paul Leiby, Oak Ridge National Laboratory

**Sponsored By:**
Standing Committee on Transportation Energy (ADC70)

**Presentation(s):**
- Increasing the Influence of CO2 Emissions Information on Car Purchase
  - Ricardo Daziano*, Cornell University
  - E. Owen Waygood, Universite Laval
  - Zachary Patterson, Concordia University
  - Marketa Braun Kohlová, Charles University

**Event Description:**
This session focuses on vehicle fuel economy regulation, including the costs and benefits of fuel economy regulation and the attributes of alternative regulatory strategies. Join us and provide input on critical transportation research and learn how research can help prepare for the future.

**Workshop 513**


**Presenting Officer(s):**
Soumia Ichoua, Embry-Riddle Aeronautical University

**Sponsored By:**
Standing Committee on Transportation Network Modeling (ADB30)

**Presiding Officer(s):**
Xuan Di
- Henry Liu, University of Michigan, Ann Arbor
- Xuegang Ban*, Rensselaer Polytechnic Institute (RPI)
- Hai Yang, Hong Kong University of Science and Technology

**Presentation(s):**
- Ridesharing User Equilibrium and Its Implications for High-Occupancy-Toll Lane Pricing

**Event Description:**
This session focuses on vehicle fuel economy regulation, including the costs and benefits of fuel economy regulation and the attributes of alternative regulatory strategies. Join us and provide input on critical transportation research and learn how research can help prepare for the future.
**Workshop 528**

**Adaptive Control of Traffic Signal Systems; Poster | Practice Ready Paper**

Tuesday, January 10, 2017 / 8:00 AM - 9:45 AM / Convention Center, Hall E

**Presiding Officer(s):**
Anuj Sharma, Iowa State University

**Sponsored By:**
Standing Committee on Traffic Signal Systems (AHB25)

**Presentation(s):**
Band Finder: Vehicular Trajectory-Driven Method for Signalized Corridor Control Under Connected and Automated Vehicles (C/AV) Environment
- Slobodan Gutesa, New Jersey Institute of Technology
- Joyoung Lee*, New Jersey Institute of Technology
- Dejan Besenski, New Jersey Institute of Technology

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**Workshop 537**

**Crash-Based Research: Wrong-Way Driving, Work Zones, Debris, Taxis, and Other Crash Situations**

Tuesday, January 10, 2017 / 8:00 AM - 9:45 AM / Convention Center, Hall E

**Presiding Officer(s):**
Alfonso Montella, University of Naples Federico II, presiding

**Sponsored By:**
Standing Committee on Safety Data, Analysis and Evaluation (ANB20)

**Presentation(s):**
Analysis of Stationary and Dynamic Factors Affecting Highway Accident Occurrence
- Grigorios Fountas*, University at Buffalo
- Md Tawfiq Sarwar, NRC Research Associateship
- Panagiotis Anastasopoulos*, University at Buffalo
- Alan Blatt, CUBRC
- Kevin Majka, CUBRC

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**Workshop**

**Artificial Intelligence and Advanced Computing Applications Committee**

Tuesday, January 10, 2017 / 8:00 AM - 9:45 AM / Marriott Marquis, Liberty O (M4)

**Presiding Officer(s):**
Sherif Ishak, Louisiana State University, Adel Sadek*, University at Buffalo

**Sponsored By:**
Standing Committee on Artificial Intelligence and Advanced Computing Applications (ABJ70)
**Workshop 563**

**Current Issues in Transportation Energy; Poster | Practice Ready Paper**

Tuesday, January 10, 2017  /  10:15 AM - 12:00 PM  /  Convention Center, Hall E

**Presiding Officer(s):**
Rebecca Dodder, U.S. Environmental Protection Agency

**Sponsored By:**
Standing Committee on Transportation Energy (ADC70)

**Presentation(s):**
Pattern Analysis of Daily Electric Vehicle Charging Profiles: Operational Efficiency and Environmental Impacts
- Roger Chen*, Rochester Institute of Technology (RIT)
- Ranji Desai, Rochester Institute of Technology (RIT)
- William Armington, Rochester Institute of Technology (RIT)

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**Workshop 564**

**Current Issues in Alternative Transportation Fuels and Technologies; Poster | Practice Ready Paper**

Tuesday, January 10, 2017  /  10:15 AM - 12:00 PM  /  Convention Center, Hall E

**Presiding Officer(s):**
Timothy Lipman, University of California, Berkeley

**Sponsored By:**
Standing Committee on Alternative Transportation Fuels and Technologies (ADC80)

**Presentation(s):**
Incorporating Demand Dynamics in Multi-Period Capacitated Recharging Location Planning for Electric Vehicles
- Anpeng Zhang, University at Buffalo
- Jee Eun Kang*, University at Buffalo
- Changhyun Kwon, University of South Florida

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**Workshop 579**

**Evaluating the Performance of Traffic Signal Systems; Poster | Practice Ready Paper**

Tuesday, January 10, 2017  /  10:15 AM - 12:00 PM  /  Convention Center, Hall E

**Presiding Officer(s):**
Christopher Day, Purdue University

**Sponsored By:**
Standing Committee on Traffic Signal Systems (AHB25)

**Presentation(s):**
Development of CID-Free Hardware-in-the-Loop Simulation Framework
- Zijia Zhong, New Jersey Institute of Technology
- Joyoung Lee*, New Jersey Institute of Technology

Traffic State Estimation Based on Vehicle Trajectory Segmentation
- Choudhury Siddique, University of Washington
- Xuegang Ban*, Rensselaer Polytechnic Institute (RPI)
## Workshop 590
**Vulnerable Road Users: Analysis of Pedestrian and Bicycle Crashes; Poster | Practice Ready Paper**

<table>
<thead>
<tr>
<th>Presiding Officer(s):</th>
<th>Presentation(s):</th>
</tr>
</thead>
<tbody>
<tr>
<td>David Noyce, University of Wisconsin, Madison</td>
<td>Preliminary Investigation of the Effectiveness of High Visibility Crosswalks on Pedestrian Safety Using Crash Surrogates</td>
</tr>
<tr>
<td><strong>Sponsored By:</strong></td>
<td><strong>Md Tawfiq Sarwar</strong>, NRC Research Associateship</td>
</tr>
<tr>
<td>Standing Committee on Safety Data, Analysis and Evaluation (AN820)</td>
<td><strong>Grigorios Fountas</strong>, University at Buffalo</td>
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<td></td>
<td><strong>Courtney Bentley</strong>, University at Buffalo</td>
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<td><strong>Panagiotis Anastasopoulos</strong>, University at Buffalo</td>
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<td><strong>Alan Blatt</strong>, CUBRC</td>
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<td><strong>John Pierowicz</strong>, CUBRC</td>
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<td><strong>Kevin Majka</strong>, CUBRC</td>
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<td><strong>Robert Limoges</strong>, New York State Department of Transportation</td>
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| Tuesday, January 10, 2017       / 10:15 AM - 12:00 PM       / Convention Center, Hall E |

## Workshop 599
**Current Research in Intercity Passenger Rail Transportation; Lectern**

<table>
<thead>
<tr>
<th>Event Description:</th>
<th>Presiding Officer(s):</th>
<th>Sponsored By:</th>
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</thead>
<tbody>
<tr>
<td>This session presents this year’s most relevant research papers in intercity passenger rail transportation.</td>
<td>David Simpson, David P. Simpson Consultants, LLC</td>
<td>Standing Committee on Intercity Passenger Rail (AR010)</td>
</tr>
<tr>
<td><strong>Presentation(s):</strong></td>
<td><strong>Integrated Pricing and Planning Strategy to Optimize Passenger Rail Service</strong></td>
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<tr>
<td><strong>Xiaoqiang Zhang</strong>, Southwest Jiaotong University</td>
<td><strong>Jingfan Li</strong>, Southwest Jiaotong University</td>
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<tr>
<td><strong>Scott Le Vine</strong>, SUNY New Paltz / Imperial College</td>
<td><strong>Xiaobo Liu</strong>, Southwest Jiaotong University</td>
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</tbody>
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| Tuesday, January 10, 2017       / 10:15 AM - 12:00 PM       / Convention Center, 143A |

## Workshop 606
**Thinking Outside the Bulb: Innovations in Airfield Lighting Strategies; Lectern**

<table>
<thead>
<tr>
<th>Event Description:</th>
<th>Presiding Officer(s):</th>
<th>Sponsored By:</th>
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<tbody>
<tr>
<td>Innovations in lighting, signage and wayfinding will be explored during this session. There is an emphasis on systems, sustainability and durability.</td>
<td>Brian McKeehan, Gresham Smith and Partners</td>
<td>Standing Committee on Aircraft/Airport Compatibility (AV070)</td>
</tr>
<tr>
<td><strong>Presentation(s):</strong></td>
<td><strong>Human Factors Impacts of Light-Emitting-Diode Airfield Lighting</strong></td>
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<tr>
<td><strong>John Bullough</strong>, Rensselaer Polytechnic Institute (RPI)</td>
<td><strong>Scott Le Vine</strong>, SUNY New Paltz / Imperial College</td>
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</tbody>
</table>

| Tuesday, January 10, 2017       / 10:15 AM - 12:00 PM       / Convention Center, 147B |
### Workshop 617

**Artificial Intelligence Methods and Modeling Tools for Classification, Estimation, Recognition, and Detection in Transportation Applications; Poster**

**Event Description:**
This session presents applications of advanced computing and machine learning tools for traffic monitoring, management, and prediction using traditional and emerging data sources including smartphones and connected and automated vehicles. This session includes several other applications such as pavement rehabilitation, decision making, transportation mode and route choice, simulation calibration, and big data analytics. Example tools include Random Forest, Hidden Markov, Relevance Vector Machine, and Deep Learning.

**Presiding Officer(s):**
Osama Osman, Louisiana State University

**Sponsored By:**
Standing Committee on Artificial Intelligence and Advanced Computing Applications (ABJ70)

**Presentation(s):**
Interval Prediction of Short-Term Traffic Volume Based on Extreme Learning Machine and Particle Swarm Optimization
- Lei Lin, PARC Research
- John Handley, Xerox Corporation
- Adel Sadek*, University at Buffalo

Data-Driven Approach to Estimate Double Parking Events Using Machine Learning Techniques
- Jingqin Gao, New York University
- Kaan Ozbay*, New York University

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### Workshop 619

**Transportation Workforce Needs for Critical Infrastructure Resilience for Physical Security and Related Cyber-Security Challenges; Lectern**

**Event Description:**
Critical infrastructure protection, physical security, and resilience are continuing to experience dramatic technological changes with workforce implications. Physical security, related cyber issues, and workforce training and other human dimensions are addressed to meet new needs including increasing intersector infrastructure dependencies, system fragility and complexity, and uncertainties posed by catastrophic human-originated cyber and physical threats.

**Presiding Officer(s):**
Gouranga Banik, Oklahoma State University

**Sponsored By:**
Standing Committee on Critical Transportation Infrastructure Protection (ABR10)
Standing Committee on Management and Productivity (ABC20)

**Presentation(s):**
Integrating Physical and Cyber-Security Workforce
- Rae Zimmerman*, New York University
| Workshop 634 | **Asphalt Binder Aging, Recycling, and Rejuvenation; Poster | Practice Ready Paper** |
|--------------|----------------------------------------------------------|
| **Presiding Officer(s):** | Hao Wang, Rutgers, The State University of New Jersey |
| **Presentation(s):** | Accelerated Aging Kinematics of Asphalt by Ultraviolet Photooxidation Considering Moisture and Condensation Effects |
| **Sponsored By:** | Standing Committee on Asphalt Binders (AFK20) |
| **Sponsored By:** | Standing Committee on Non-Binder Components of Asphalt Mixtures (AFK30) |
| **Presentation(s):** | Xin He*, Columbia University |
| **Presentation(s):** | Daniel Hochastein*, Manhattan College |
| **Presentation(s):** | Qi Ge, Columbia University |
| **Presentation(s):** | Ayman Ali*, Rowan University |
| **Presentation(s):** | Fangliang Chen, Columbia University |
| **Presentation(s):** | Huiming Yin*, Columbia University |

<table>
<thead>
<tr>
<th>Workshop 636</th>
<th><strong>Reclaimed Asphalt Pavement and Recycled Asphalt Shingles in Asphalt Mixtures; Poster</strong></th>
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<tbody>
<tr>
<td><strong>Presiding Officer(s):</strong></td>
<td>Ashley Buss, Iowa State University</td>
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<tr>
<td><strong>Presentation(s):</strong></td>
<td>Methodology to Determine Optimum Rejuvenator Dosage for 50 Percent High-RAP Mixture</td>
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<tr>
<td><strong>Sponsored By:</strong></td>
<td>Standing Committee on Non-Binder Components of Asphalt Mixtures (AFK30)</td>
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<tr>
<td><strong>Presentation(s):</strong></td>
<td>Hashim Rizvi, Rowan University</td>
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<tr>
<td><strong>Presentation(s):</strong></td>
<td>Caitlin Purdy, Rowan University</td>
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<td><strong>Presentation(s):</strong></td>
<td>Yusuf Mehta, *Rowan University</td>
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<td><strong>Presentation(s):</strong></td>
<td>Aaron Nolan, Rowan University</td>
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<tr>
<th>Workshop 640</th>
<th><strong>Different Concrete for Materials Applications; Lectern</strong></th>
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<tr>
<td><strong>Presiding Officer(s):</strong></td>
<td>Shrenath Rao, Applied Research Associates, Inc. (ARA)</td>
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<tr>
<td><strong>Presentation(s):</strong></td>
<td>Effect of Specimen Size and Curing Condition on Compressive Strength of Alkali-activated Concrete</td>
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<tr>
<td><strong>Sponsored By:</strong></td>
<td>Standing Committee on Concrete Materials and Placement Techniques (AFN40)</td>
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<tr>
<td><strong>Presentation(s):</strong></td>
<td>Robert Thomas, Utah State University</td>
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<tr>
<td><strong>Presentation(s):</strong></td>
<td>Sulapha Peethamparan*, Clarkson University</td>
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</table>
## Workshop 653
### Surface Transportation Weather and Winter Maintenance; Lectern | Practice Ready Paper

**Tuesday, January 10, 2017  /  1:30 PM - 3:15 PM  /  Convention Center, 207A**

**Presiding Officer(s):**
Tina Greenfield, Iowa Department of Transportation  

**Sponsored By:**
Standing Committee on Winter Maintenance (AHD65)  
Standing Committee on Surface Transportation Weather (AH010)

**Presentation(s):**
WeatherEVANT: Real-Time Weather-Related Event Visualization and Analytics Tool  
- Sami Demirolok, Rutgers, The State University of New Jersey  
- Kaan Ozbay*, New York University  
- Bekir Bartin, Istanbul Kemerburgaz University  
- Matthew D. Maggio, Rutgers, The State University of New Jersey  
- Hani Nassif, Rutgers, The State University of New Jersey  
- Daniel L. Hesslein, New Jersey Turnpike Authority

## Workshop 659
### Pedestrian Planning and Design; Poster | Practice Ready Paper

**Tuesday, January 10, 2017  /  1:30 PM - 3:15 PM  /  Convention Center, Hall E**

**Presiding Officer(s):**
Michael Cynecki, Lee Engineering, LLC  

**Sponsored By:**
Standing Committee on Pedestrians (ANF10)

**Presentation(s):**
Real-World Demonstrations of Novel Pedestrian Crosswalk Lighting  
- John Bullough*, Rensselaer Polytechnic Institute (RPI)  
- Nicholas Skinner, Rensselaer Polytechnic Institute (RPI)

## Workshop 665
### New Mobility Services: New Research Evidence; Poster

**Tuesday, January 10, 2017  /  1:30 PM - 3:15 PM  /  Convention Center, Hall E**

**Presiding Officer(s):**
Farzad Alemi, University of California, Davis  

**Sponsored By:**
Standing Committee on Emerging and Innovative Public Transport and Technologies (AP020)

**Presentation(s):**
Evaluation of Mobile Ticketing Technologies for Public Transit  
- Bekir Bartin, Istanbul Kemerburgaz University  
- Kaan Ozbay*, New York University  
- Hong Yang, Old Dominion University  

Interactive Travel Modes: Uber, Transit, and Mobility in New York City  
- Adam Davidson*, City University of New York (CUNY)  
- Jonathan Peters*, City University of New York (CUNY)  
- Candace Brakewood*, City College of New York
### Workshop 670
**Transit Fare Collection and Policy: International Experience;**

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<th>Date</th>
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<tr>
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<td>Convention Center, 147B</td>
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</table>

**Presiding Officer(s):**

Candace Brakewood, City College of New York

**Sponsored By:**

Standing Committee on Public Transportation Marketing and Fare Policy (AP030)

### Workshop 671
**Urban Shared Mobility in an Era of Automation; Poster**

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<td>Convention Center, Hall E</td>
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</table>

**Presiding Officer(s):**

Nadereh Moini, New Jersey Sports & Exposition Authority

**Sponsored By:**

Standing Committee on Automated Transit Systems (AP040)

**Presentation(s):**

Interplay Between Fleet Size, Level of Service, and Empty Vehicle Repositioning Strategies in Large-Scale, Shared-Ride Autonomous Taxi Mobility-on-Demand Scenarios

- Shirley Zhu, Princeton University
- Alain Kornhauser*, Princeton University

### Workshop 673
**Improving Paratransit Service through Technology and Monitoring; Lectern | Practice Ready Paper**

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<td>Convention Center, 144A</td>
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</table>

**Presiding Officer(s):**

George Sparks, Pomona Valley Transportation Authority

**Sponsored By:**

Standing Committee on Paratransit (AP060)

**Presentation(s):**

Smart Arrival Notification System for ADA Passenger Paratransit Service Using Consumer Mobile Device

- Slobodan Gutesa*, New Jersey Institute of Technology
- Branislav Dimitrijevic*, New Jersey Institute of Technology
- Joyoung Lee*, New Jersey Institute of Technology
- Yuchuan Zhang*, New Jersey Institute of Technology
- Cecilia Feeley, Rutgers, The State University of New Jersey
- Lazar Spasovic*, New Jersey Institute of Technology
Workshop 693
Enhancing Statewide Multimodal Planning with Modeling and Scenario Analysis; Poster | Practice Ready Paper

Event Description:
What will drive changing transportation needs in the long term? How does the transportation system need to respond to those drivers in order to achieve a state's goals and performance targets? Transportation planners recognize that answering these questions requires analysis of multiple objectives and trade-offs among different scenarios. This session presents modeling and other planning applications to enhance scenario-building and analysis for long-range planning.

Presiding Officer(s):
Elise Barrella, James Madison University

Sponsored By:
Standing Committee on Statewide Multimodal Transportation Planning (ADA10)

Presentation(s):
Spatial Analysis of VMT and Fuel Sales Attributed to Vehicles Registered Out of State
- Matthew Volovski*, Manhattan College
- Samuel Labi, Purdue University
- Thomas Brennan*, The College of New Jersey
- Kumares Sinha, Purdue University

Workshop 703
Travel and Land Development: Research and Practice Insights; Poster | Practice Ready Paper

Presiding Officer(s):
Ilona Kastenhofer,

Sponsored By:
Standing Committee on Transportation and Land Development (ADD30)

Presentation(s):
Spatial Econometric Model for Travel Flow Analysis and Real-World Applications with Massive Mobile Phone Data
- Linglin Ni, Zhejiang University of Finance and Economics
- Xiaokun Wang*, Rensselaer Polytechnic Institute (RPI)
- Xiqun (Michael) Chen, Zhejiang University

Workshop 728
Optimizing Subgrade and Base Stabilization; Lectern

Presiding Officer(s):
George Machan, Landslide Technology

Sponsored By:
Standing Committee on Stabilization of Geomaterials and Recycled Materials (AFS80)

Presentation(s):
Evaluating the Impact of Different Types of Stabilized Bases on Overall Performance of Flexible Pavements
- Andrae Francois, Rowan University
- Ayman Ali*, Rowan University
- Yusuf Mehta*, Rowan University
### Workshop 733

**Work Zone Safety Evaluations and Operations Management Strategies; Poster**

Tuesday, January 10, 2017  /  3:45 PM - 5:30 PM  /  Convention Center, Hall E

**Presiding Officer(s):**
Name, Institution

**Sponsored By:**
Standing Committee on Work Zone Traffic Control (AHB55)

**Presentation(s):**

Work Zone Coordination Tool
- Bekir Bartin, Istanbul Kemerburgaz University
- Kaan Ozbay, New York University
- Matthew D. Maggio, Rutgers, The State University of New Jersey
- Hao Wang, Rutgers, The State University of New Jersey

### Workshop 736

**Pavement Preservation and Maintenance; Poster | Practice Ready Paper**

Tuesday, January 10, 2017  /  3:45 PM - 5:30 PM  /  Convention Center, Hall E

**Presiding Officer(s):**

**Sponsored By:**
Standing Committee on Pavement Maintenance (AHD20)
Standing Committee on Pavement Preservation (AHD18)

**Presentation(s):**

Innovative Maintenance, Repair, and Reconstruction Techniques for Asphalt Roadways: Survey of State Departments of Transportation
- Baris Salman, Syracuse University
- O. Salem*, Syracuse University
- Danielle T. Garguilo, Syracuse University
- Song He, Syracuse University

### Workshop 746

**Addressing Concerns About LED Street Lighting; Lectern**

Tuesday, January 10, 2017  /  3:45 PM - 5:30 PM  /  Convention Center, Salon B

**Event Description:**
As LED road lighting expands, concerns about collateral impacts are being expressed. The American Medical Association encourages using LEDs with correlated color temperatures of 3,000 K or less (warm white color), citing potential impacts on circadian health, glare, preference, and possible effects on other species. These proposals have sparked lively discussion about proper guides for road lighting. The speakers will offer varied perspectives on specifying road lighting that meets safety concerns while minimizing negative consequences.

**Presiding Officer(s):**
John Bullough*, Rensselaer Polytechnic Institute (RPI)

**Sponsored By:**
Standing Committee on Visibility (AND40)
Standing Committee on Ecology and Transportation (ADC30)

**Presentation(s):**

Beyond Illuminance and CCT: How Do We Measure the Health Impacts of Roadway Lighting?
- Mark Rea*, Rensselaer Polytechnic Institute (RPI)
### Workshop 749

**Innovative Applications and Evaluations of Ridesharing and Ridesourcing Services; Lectern**

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<td>3:45 PM - 5:30 PM</td>
<td>Convention Center, 147B</td>
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</table>

**Presiding Officer(s):**

Caroline Rodier, University of California, Davis

**Sponsored By:**

Standing Committee on Emerging and Innovative Public Transport and Technologies (AP020)

**Presentation(s):**

Qualitative Analysis of Ridehailing Regulations in Major American Cities

- Rachel Beer, City College of New York
- Candace Brakewood*, City College of New York
- Subrina Rahman,
- Jennifer Viscardi, VHB

### Workshop 754

**Current Research in Freight Planning and Logistics; Poster | Practice Ready Paper**

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**Presiding Officer(s):**

Matthew Roorda, University of Toronto

**Sponsored By:**

Standing Committee on Freight Transportation Planning and Logistics (AT015)

**Presentation(s):**

Generalized Noortman And Van Es’ Empty Trips Model

- Carlos Gonzalez-Calderon, Rensselaer Polytechnic Institute (RPI)
- Jose Holguin-Veras*, Rensselaer Polytechnic Institute (RPI)
- Johanna Amaya Leal, Iowa State University
- Ivan Sanchez-Diaz, Chalmers University of Technology
- Ivan Sarmiento, National University of Colombia

### Workshop 762

**Waterway Throughput, Safety, and Resilience; Lectern | Practice Ready Paper**

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<td>Convention Center, 143B</td>
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**Presiding Officer(s):**

Rajiv Khandpur, U.S. Coast Guard

**Sponsored By:**

Standing Committee on Marine Safety and Human Factors (AW040)

**Presentation(s):**

Capacity Analysis for Bifurcated Estuaries Based on Ship Domain Theory and Its Applications

- Rongfang Liu*, New Jersey Institute of Technology
### Workshop 774

**Technology Use in Travel Surveys; Lectern | Practice Ready Paper**

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<th>Scheduled Date</th>
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<tr>
<td>Wednesday, January 11, 2017</td>
<td>8:00 AM - 9:45 AM</td>
<td>Convention Center, 151A</td>
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</table>

**Event Description:**
This session presents research in the use of new technology for travel surveys, including hand-held devices and smartcards.

**Presiding Officer(s):**
Ken Cervenka, Federal Transit Administration, presiding

**Sponsored By:**
Standing Committee on Travel Survey Methods (ABJ40)

**Presentation(s):**
Inferring Activity-Mobility Behavior of College Students Based on Smartcard Transaction Data
- Negin Ebadi*, University at Buffalo
- Jee Eun Kang*, University at Buffalo
- Samiul Hasan, University of Central Florida

### Workshop 776

**Technology Use in Travel Surveys; Lectern | Practice Ready Paper**

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<td>Wednesday, January 11, 2017</td>
<td>8:00 AM - 9:45 AM</td>
<td>Convention Center, 145A</td>
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**Event Description:**
In July 2017, TRB convened the Chan Wui and Yunyin Rising Star Workshop for transportation academics to explore the nexus of mobility and communications. Both fellows (early career professionals) and senior fellows (experienced academics) participated, both by discussing critical research questions and by sharing best practices for career development. In this session, the participants present research findings resulting from the workshop and its technical discussions.

**Presiding Officer(s):**
Katherine Kortum, Transportation Research Board, presiding

**Sponsored By:**
Planning and Environment Group (AD000)

**Presentation(s):**
Emerging Big Data Sources from GPS-Enabled Smartphone Applications: A Case Study of Transit App
- Candace Brakewood*, City College of New York

### Workshop 779

**ICT and Travel Behavior: A Potpourri of Findings; Poster | Practice Ready Paper**

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<td>Convention Center, Hall E</td>
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**Presiding Officer(s):**
Sivaramakrishnan Srinivasan, University of Florida, presiding

**Sponsored By:**
Standing Committee on Effects of Information and Communication Technologies (ICT) on Travel Choices (ADB20)

**Presentation(s):**
Relationship Between Online Shopping and Shopping Trips: Comparison Across Major U.S. Metropolitan Areas
- Joshua Schmid*, Rensselaer Polytechnic Institute (RPI)
- Xiaokun Wang*, Rensselaer Polytechnic Institute (RPI)
Workshop 782

Innovations in Emission and Air Quality Modeling and Measurement;
Lectern | AICP Certification

**Event Description:**
The central theme of this session is to present new approaches in transportation air quality modeling and monitoring. Those approaches may not be as well tested as the conventional ones, but have the potential to greatly enhance our capabilities in transportation air quality management. The approaches include new tools (e.g., Unmanned Aerial Vehicle), emerging technologies (e.g., Connected and Autonomous Vehicles), or new applications (e.g., using AVL and APC Data for bus route planning and using noise barriers to mitigate project-level air pollution).

**Presiding Officer(s):**
Ke Zhang, Cornell University, presiding

**Sponsored By:**
Standing Committee on Transportation and Air Quality (ADC20)

**Presentation(s):**
Multiregime Approach to Parameterize Effects of Noise Barriers on Near-Road Air Quality
- Jonathan Steffens, U.S. Environmental Protection Agency
- Chunli Yuan
- Ke Zhang*, Cornell University

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Workshop 806

Pedestrian Safety and Behavior; Poster

**Presiding Officer(s):**
Karim El-Basyouny, University of Alberta, presiding

**Sponsored By:**
Standing Committee on Pedestrians (ANF10)

**Presentation(s):**
Pedestrian Walking Speeds at Unsignalized Midblock Crosswalks on Urban Street Segments
- Albert Forde
- Janice Daniel*, New Jersey Institute of Technology

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Workshop 808

Bicycle Safety, Design, and Operations; Poster | Practice Ready Paper

**Presiding Officer(s):**
Matthew Ridgway, Fehr & Peers, presiding
Jeffrey LaMondia, Auburn University, presiding
Jennifer Duthie, University of Texas, Austin, presiding

**Sponsored By:**
Standing Committee on Bicycle Transportation (ANF20)

**Presentation(s):**
Modeling the Intersection Travel Delay of Cyclists, Personal Vehicles, and Urban Freight Induced by Bike Boxes
- Jeffrey LaMondia, Auburn University
- Alison Conway*, City College of New York
- Candace Brakewood*, City College of New York
- Benjamin Bacon, Auburn University
- Michael Moore, Thompson Engineering
- Travis Gajkoswki, Auburn University
### Workshop 810

**Advanced Automated Transit Trends: Implications for Policy Makers; Lectern**

**Event Description:**
This session covers the latest trends and developments in advanced automated transit systems. It will also address the reactions of key decision and policy makers to these trends and the implications for future decisions by these officials. Technologies and new systems that will be discussed include automated transit networks, mobility on demand, automated taxis, and integrated intermodal mobility services.

**Presiding Officer(s):**
Matthew Lesh, Noblis, Inc., presiding

**Sponsored By:**
Standing Committee on Automated Transit Systems (AP040)

**Presentation(s):**
- **Advanced Transit Automation: An Opportunity to Lower Costs and Improve Accessibility**
  - Alain Kornhauser*, Princeton University

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### Innovations in Freight Data Workshop

**Event Description:**

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**Presiding Officer(s):**
Alison Conway*, City College of New York, presiding

**Sponsored By:**
Innovations in Freight Data Workshop (ABJ65T)

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### Physical Security Subcommittee, ABR10(3)

**Presiding Officer(s):**
Rae Zimmerman*, New York University, presiding

**Sponsored By:**
Standing Committee on Critical Transportation Infrastructure Protection (ABR10)
Subcommittee on Physical Security (ABR10(3))
Transportation Network Modeling; Poster | Practice Ready Paper
Wednesday, January 11, 2017 / 10:15 AM - 12:00 PM / Convention Center, Hall E

Presiding Officer(s):
Elise Miller-Hooks, George Mason University, presiding

Sponsored By:
Standing Committee on Transportation Network Modeling (ADB30)

Presentation(s):
Designing a Sustainable Transit System in Grid Urban Networks Using the Macroscopic Fundamental Diagram
- Mahyar Amirgholy, Cornell University
- Mehrdad Shahabi, University of Florida
- Huaizhu Gao*, Cornell University

Modeling Dynamics of Congestion in Large Urban Networks Using the Macroscopic Fundamental Diagram: User Equilibrium, System Optimum, and Pricing Strategies
- Mahyar Amirgholy, Cornell University
- Huaizhu Gao*, Cornell University

Ridesharing User Equilibrium and Its Implications for High-Occupancy-Toll Lane Pricing
- Xuan Di
- Henry Liu, University of Michigan, Ann Arbor
- Xuegang Ban*, Rensselaer Polytechnic Institute (RPI)
- Hai Yang, Hong Kong University of Science and Technology

Transportation Demand Forecasting Poster Mega-session, Part 2 (Part 1, Session 829); Poster | Practice Ready Paper
Wednesday, January 11, 2017 / 10:15 AM - 12:00 PM / Convention Center, Hall E

Presiding Officer(s):
Jeremy Raw, Federal Highway Administration (FHWA), presiding

Sponsored By:
Standing Committee on Transportation Demand Forecasting (ADB40)

Presentation(s):
A Random Utility Based Estimation Framework for the Household Activity Pattern Problem
- Zhiheng Xu*, University at Buffalo
- Jee Eun Kang*, University at Buffalo
- Roger Chen*, Rochester Institute of Technology (RIT)

Traffic Management and Control Issues in Cooperative Vehicle-Highway Automation; Poster
Wednesday, January 11, 2017 / 10:15 AM - 12:00 PM / Convention Center, Hall E

Presiding Officer(s):
Jeremy Raw, Federal Highway Administration (FHWA), presiding

Sponsored By:
Standing Committee on Vehicle-Highway Automation (AHB30)

Presentation(s):
Development and Evaluation of Speed Harmonization Using Optimal Control Theory: Simulation-Based Case Study at a Speed Reduction Zone
- Seongah Hong, University of Virginia
- Andreas Malikopoulos, Oak Ridge National Laboratory
- Joyyoung Lee*, New Jersey Institute of Technology
- Byungkyu Park, University of Virginia
Workshop 847

Sensing and Vehicle Control Challenges in Vehicle-Highway Automation; Poster

Wednesday, January 11, 2017 / 10:15 AM - 12:00 PM / Convention Center, Hall E

Presentation(s):
Learning to Recognize Distance to Stop Signs Using the Virtual World of Grand Theft Auto 5
• Artur Filipowicz, Princeton University
• Jeremiah Liu, Princeton University
• Alain Kornhauser*, Princeton University

Sponsored By:
Standing Committee on Freight Transportation Data (ABJ90)

Workshop

Freight Data for the FAST Act: Freight Data User Forum

Wednesday, January 11, 2017 / 6:15 PM - 7:15 PM / Convention Center, Salon A

Presiding Officer(s):
Alison Conway*, City College of New York, presiding

Sponsored By:
Standing Committee on Freight Transportation Data (ABJ90)
Event Description:
This workshop continues a series on the practical uses of sensing technologies for transportation planning, infrastructure condition assessment, management, and operations. Technologies addressed include remote and in situ sensors, satellites, unmanned sensors, and vehicle-based platforms. The workshop brings researchers and practitioners together to share results with the broader community to understand how these developing technologies can be implemented to meet their needs.

Presiding Officer(s):
Ken Cervenka, Federal Transit Administration, presiding

Sponsored By:
Standing Committee on Travel Survey Methods (ABJ40)

Presentation(s):
Optimal Access Restoration in Post-Disaster Environments
• Jose Holguin-Veras, Rensselaer Polytechnic Institute (RPI)
• Paul Salasznyk, Rensselaer Polytechnic Institute (RPI)
• Jeffrey Wojtowicz, Rensselaer Polytechnic Institute (RPI)
• Trilce Encarnacion, Rensselaer Polytechnic Institute (RPI)