



# NATIONAL CENTER FOR UNDERSTANDING FUTURE TRAVEL BEHAVIOR AND DEMAND

## Contributions to TRB 2026 by TBD National Center Key Personnel

105<sup>th</sup> Annual Meeting of the

**Transportation Research Board**

Washington, D.C., January 11-15, 2026

## ABOUT

The Center for Understanding Future Travel Behavior and Demand (TBD) is a National University Transportation Center established in 2023 by USDOT. TBD's research focuses on understanding evolving travel behaviors driven by technological advances, demographic and cultural shifts, and environmental concerns. TBD is committed to undertaking breakthrough research that will fundamentally re-examine and transform the scientific base for measuring, monitoring, modeling, and managing traveler behavior. The Center's initiatives aim to support the design, development, and operation of a people-centric, multimodal, intelligent transportation system that meets the needs of people, institutions, and businesses for generations to come. TBD is led by The University of Texas at Austin and includes Arizona State University, Georgia Tech, University of Washington, University of Michigan, Cal Poly Pomona, City College of New York, and Diné College as consortium members.



The City College  
of New York



# EVENTS

## Memorial and Tribute for Professor Hani S. Mahmassani (1956 - 2025)

### Hani's Contributions to Demand Modeling

Sunday, January 11, 7:00 PM- 8:30 PM ET | Marriott Marquis, Marquis Salon 9&10

**Patricia Mokhtarian, Georgia Institute of Technology**

Roger Chen, University of Hawai'i, Manoa

# SESSIONS

## Lectern Session 2005

### Measuring Success on Multimodal Streets

Monday, January 12, 8:00 AM- 9:45 AM ET | Convention Center, 145A

**Alison Conway, City College of New York (Presiding)**

## Poster Session 2078

### Travel Data and Networks: Collection, Modeling, and Mobility Insights

Monday, January 12, 10:30 AM- 12:15 PM ET | Convention Center, Hall A

Who Stays and Who Leaves? Examining Sample-Source Effect on Attrition in a Longitudinal Panel Survey

**Victor Alhassan, Arizona State University**

**Irfan Batur, Arizona State University**

**Hyunjun Hwang, University of Texas, Austin**

**Dale Robbennolt, University of Texas, Austin**

**Jose Roberto Dimas Valle, Arizona State University**

**Deborah Salon, Arizona State University**

**Chandra Bhat, University of Texas, Austin**

**Ram Pendyala, Arizona State University**

## Impacts of Survey Compensatory Strategies on Statistical Bias and Precision of Travel Behavior Estimates

**Amy Fong, University of Michigan, Ann Arbor**  
**Atiyya Shaw, University of Michigan, Ann Arbor**

## The Effects of Completeness Filtering on Behavioral and Population Representativeness in Location-Based Services Data

**Brynn Woolley, University of Michigan, Ann Arbor**  
**Atiyya Shaw, University of Michigan, Ann Arbor**  
**Sungho Lim, University of Michigan, Ann Arbor**

### Lectern Session 2090

## Integrating Infrastructure, Policy, and Technology for Future-Proof Mobility Management

Monday, January 12, 1:30 PM- 3:15 PM ET | Convention Center, 145B

### Modeling the Spread of Sustainable Transportation Preferences: Insights from Survey Data in the US State of Georgia

Hussein Kobeissi, Northwestern University  
Alene Holmgren, Jacobs  
**Ilsu Kim, Georgia Institute of Technology**  
**Patricia Mokhtarian, Georgia Institute of Technology**  
Ying Chen, Northwestern University

### Poster Session 2113

## Sensing, Detection, and Perception for Intelligent Transportation

Monday, January 12, 1:30 PM- 3:15 PM ET | Convention Center, Hall A

### Enhancing OC-SORT for Robust Multi-Object Tracking in Urban Traffic Scenes

**Yichi Cheng, No Organization**  
**Wen Cheng, California State Polytechnic University, Pomona**  
**Yongping Zhang, California State Polytechnic University, Pomona**  
**Yunsheng Wang, California State Polytechnic University, Pomona**  
**Wenxi Zhao, No Organization**

## Lectern Session 2148

### Women, Safety, and Social Dimensions of Mobility

Monday, January 12, 4:00 PM- 5:45 PM ET | Convention Center, 201

Strategies and Mechanisms to Mitigate Interpersonal Violence in Public Transit

**Jose Roberto Dimas Valle, Arizona State University**

**Irfan Batur, Arizona State University**

**Steven E. Polzin, Arizona State University**

**Miguel Guillermo Rodriguez Ocana, Arizona State University**

**Victor Alhassan, Arizona State University**

**Ram Pendyala, Arizona State University**

## Poster Session 2158

### AI and Machine Learning for Safer, Smarter Transportation

Monday, January 12, 4:00 PM- 5:45 PM ET | Convention Center, Hall A

A New Flexible Skewed Bimodal Distribution with Multivariate Extensions: Theory and Application to Traffic Crash Injury Severity Analysis

**Chandra Bhat, University of Texas, Austin**

## Poster Session 2159

### Weathering the Storm: Transportation Adaptation and Resilience to Extreme Conditions

Monday, January 12, 4:00 PM- 5:45 PM ET | Convention Center, Hall A

The Role of Prior Experience in Shaping Anticipated Travel and Activity Behavior Changes in Future Extreme Heat Events

**Jinghai Huo, Arizona State University**

**Irfan Batur, Arizona State University**

**Dale Robbennolt, University of Texas, Austin**

**Fan Yu, Arizona State University**

**Miguel Guillermo Rodriguez Ocana, Arizona State University**

**Hyunjung Hwang, University of Texas, Austin**

**Eleanor Hennessy, Arizona State University**

**Cynthia Chen, University of Washington**

**Steven E. Polzin, Arizona State University**  
**Xuesong Zhou, Arizona State University**  
**Mikhail Chester, Arizona State University**  
**Chandra Bhat, University of Texas, Austin**  
**Ram Pendyala, Arizona State University**

Temporal and Spatial Adaptations Under Extreme Heat: Multi-Perspective Evidence from Seattle's August 2023 Heatwave

**Yuteng Zhang, University of Washington**  
**Lyra Chen, University of Washington**  
**Cynthia Chen, University of Washington**

#### Poster Session 2163

### Innovations in Planning Practice and Policy Implementation

Monday, January 12, 4:00 PM- 5:45 PM ET | Convention Center, Hall A

Metropolitan Planning Organizations' (MPO) Uses of and Needs for Big Data

**Ekin Ugurel, University of Washington**  
Xinhua Wu, Northeastern University  
Qi Wang, Northeastern University  
Brian Lee, Puget Sound Regional Council  
**Cynthia Chen, University of Washington**

On Predicting Demographics from Mobility Signals

**Ekin Ugurel, University of Washington**  
**Cynthia Chen, University of Washington**  
Filipe Rodrigues, Danmarks Tekniske Universitet

#### Poster Session 2170

### The Impact of Location, Infrastructure, Housing, and Social Factors on Community Travel Behavior and Access

Monday, January 12, 6:15 PM- 7:45 PM ET | Convention Center, Hall A

Transportation Priorities of Suburban Residents: Insights and Implications

**Fan Yu, Arizona State University**  
**Irfan Batur, Arizona State University**  
**Dale Robbennolt, University of Texas, Austin**  
**Miguel Guillermo Rodriguez Ocana, Arizona State University**

**Hyunjun Hwang, University of Texas, Austin**  
**Chandra Bhat, University of Texas, Austin**  
**Ram Pendyala, Arizona State University**

#### **Lectern Session 3005**

### **Chief Information Officers on AI: Wins, Fails, and Lessons Learned**

Tuesday, January 13, 8:00 AM- 9:45 AM ET | Convention Center, 151  
Academic Perspective

**Cynthia Chen, University of Washington**

#### **Poster Session 3025**

### **Pedestrian Research Roundup**

Tuesday, January 13, 8:00 AM- 9:45 AM ET | Convention Center, Hall A  
Disparities in Pedestrian Crossing and Driver Yielding Behaviors: Evidence from a Large-Scale Observational Study at Urban Intersections

**Angela Haddad, Kittelson & Associates, Inc.**  
**Emily Podnar, University of Texas, Austin**  
**Anna Beliveau, University of Texas, Austin**  
**Devina Sharma, University of Texas, Austin**  
**Chandra Bhat, University of Texas, Austin**

#### **Poster Session 3027**

### **Intelligent Transportation Platforms for Data-Driven Operational Insights**

Tuesday, January 13, 8:00 AM- 9:45 AM ET | Convention Center, Hall A  
Vehicle Edge Computing for Intelligent Transportation Systems (ITS)

**Rafael Trinidad, California State Polytechnic University, Pomona**  
**Michael Ly, California State Polytechnic University, Pomona**  
**Yichi Cheng, No Organization**  
**Yunsheng Wang, California State Polytechnic University, Pomona**  
**Yongping Zhang, California State Polytechnic University, Pomona**  
**Wen Cheng, California State Polytechnic University, Pomona**

## Poster Session 3029

### Urban Accessibility and Infrastructure Resilience Frameworks for Assessment

Tuesday, January 13, 8:00 AM- 9:45 AM ET | Convention Center, Hall A

Understanding Human Activity and Travel Adaptation Strategies in Response to Extreme Events

**Eleanor Hennessy, Arizona State University**

**Irfan Batur, Arizona State University**

**Miguel Guillermo Rodriguez Ocana, Arizona State University**

**Fan Yu, Arizona State University**

**Steven E. Polzin, Arizona State University**

**Cynthia Chen, University of Washington**

**Xuesong Zhou, Arizona State University**

**Mikhail Chester, Arizona State University**

**Ram Pendyala, Arizona State University**

## Poster Session 3163

### Last-Mile and Behavioral Logistics

Tuesday, January 13, 8:00 AM- 9:45 AM ET | Convention Center, Hall A

Crowd-Relay Relief Delivery System with the Courier Incentive Scheme

**Dong-Hoon Son, University of Washington**

**Cynthia Chen, University of Washington**

## Lectern Session 3056

### Exploring Transportation Access, Development, and Insecurities

Tuesday, January 13, 10:30 AM- 12:15 PM ET | Convention Center, 201

Trapped by Transport: Exploring the Everyday Impact of Mobility Challenges and Transportation Insecurities in the United States

**Dale Robbennolt, University of Texas, Austin**

**Hyunjun Hwang, University of Texas, Austin**

**Miguel Guillermo Rodriguez Ocana, Arizona State University**

**Irfan Batur, Arizona State University**

**Ram Pendyala, Arizona State University**

**Chandra Bhat, University of Texas, Austin**

## Poster Session 3126

### Planning for Electric Vehicles: Behavior, Preferences, and Infrastructure

Tuesday, January 13, 1:30 PM- 3:15 PM ET | Convention Center, Hall A

A Model of Electric Vehicle Adoption and Motivating Reasons for Adoption

**Dale Robbennolt, University of Texas, Austin**

Scott Hardman, University of California, Davis

Jeremy Firestone, University of Delaware

**Chandra Bhat, University of Texas, Austin**

## Poster Session 3153

### Understanding Activity Patterns and Travel Behavior Through Surveys and Modeling

Tuesday, January 13, 4:00 PM- 5:45 PM ET | Convention Center, Hall A

Evolving Work Arrangements and Their Implications for Travel Behavior: A Typology-Based Analysis Using the American Time Use Survey

Xinyi Wang, Massachusetts Institute of Technology

**Irfan Batur, Arizona State University**

**Patricia Mokhtarian, Georgia Institute of Technology**

**Ram Pendyala, Arizona State University**

Jinhua Zhao, Massachusetts Institute of Technology

Impact of Street Repurposing on Travel Patterns in Seattle: A Study Using Location-Based Service Data

**Lyra Chen, University of Washington, Seattle**

**Cynthia Chen, University of Washington**

Steve Mooney, University of Washington

## Poster Session 4030

### Bridging Network Analysis and Travel Choices

Wednesday, January 14, 8:00 AM- 9:45 AM ET | Convention Center, Hall A

**BHATLIB: An Open-Source Library for Statistical and Econometric Matrix-Based Inference Methods in GAUSS**

**Chandra Bhat, University of Texas, Austin**

Eric Clower, No Organization

**Angela Haddad, Kittelson & Associates, Inc.**

Jason Jones, No Organization

**Data Collection, Weighting, and Modeling Techniques to Estimate Unbiased Population Parameters**

**Dale Robbennolt, University of Texas, Austin**

**Ram Pendyala, Arizona State University**

**Chandra Bhat, University of Texas, Austin**

**A Flexible and Interpretable Reference-Dependent Choice Model with Endogenous Estimation of Reference Points**

**Jinghai Huo, Arizona State University**

Eui-Jin Kim, Ajou University

**Irfan Batur, Arizona State University**

**Ram Pendyala, Arizona State University**

Prateek Bansal, National University of Singapore

## Poster Session 4031

### Research in Transit User Experience: Mobility

Wednesday, January 14, 8:00 AM- 9:45 AM ET | Convention Center, Hall A

**Understanding Robotaxi Adoption Among Workers in Three US Metropolitan Regions: A Sample Selection Approach**

**Seung Eun Choi, Georgia Institute of Technology**

**Patricia Mokhtarian, Georgia Institute of Technology**

## Poster Session 4058

### Micromobility and Shared Mobility: Evolving Patterns and Management Strategies

Wednesday, January 14, 10:30 AM- 12:15 PM ET | Convention Center, Hall A

Interest in Increasing the Use of Alternative and Emerging Modes of Transportation in a Suburban Context

**Miguel Guillermo Rodriguez Ocana, Arizona State University**

**Fan Yu, Arizona State University**

**Dale Robbennolt, University of Texas, Austin**

**Hyunjun Hwang, University of Texas, Austin**

**Irfan Batur, Arizona State University**

**Chandra Bhat, University of Texas, Austin**

**Ram Pendyala, Arizona State University**

## Poster Session 4059

### Managing Urban Mobility: Congestion, Pricing, and Parking Strategies

Wednesday, January 14, 10:30 AM- 12:15 PM ET | Convention Center, Hall A

Understanding Public Perceptions of Congestion Pricing – A U.S. Perspective

**Hyunjun Hwang, University of Texas, Austin**

**Irfan Batur, Arizona State University**

**Fan Yu, Arizona State University**

**Dale Robbennolt, University of Texas, Austin**

**Ram Pendyala, Arizona State University**

**Chandra Bhat, University of Texas, Austin**

A Tale of Two Perspectives: The Mileage-based User Fee Conundrum

**Hyunjun Hwang, University of Texas, Austin**

**Irfan Batur, Arizona State University**

**Dale Robbennolt, University of Texas, Austin**

**Angela Haddad, Kittelson & Associates, Inc.**

**Jose Roberto Dimas Valle, Arizona State University**

**Ram Pendyala, Arizona State University**

**Chandra Bhat, University of Texas, Austin**

## Who is Willing to Pay for Travel Time Savings and How Much? An Iterative Bidding Contingent Valuation Study in Mumbai

**Dale Robbennolt, University of Texas, Austin**

**Hyunjun Hwang, University of Texas, Austin**

Aishwarya Jaiswal, Indian Institute of Management, Ahmedabad

Sagar Verma, Indian Institute of Management, Ahmedabad

Sandip Chakrabarti, Indian Institute of Management

**Chandra Bhat, University of Texas, Austin**

### Poster Session 4074

#### Modeling the New Normal: Remote Work, E-Commerce, and Post-Pandemic Travel Patterns

Wednesday, January 14, 4:00 PM- 5:45 PM ET | Convention Center, Hall A

The Reverse Side of Online Shopping: Examining Sociodemographic and Built-Environment Determinants of Delivery Returns

**Angela Haddad, Kittelson & Associates, Inc.**

**Chandra Bhat, University of Texas, Austin**

Understanding Delivery Driver Order Acceptance: A Dynamic Discrete Choice Approach with Markov Decision Processes

**Dale Robbennolt, University of Texas, Austin**

**Jake Robbennolt, University of Texas, Austin**

**Zhaomiao Guo, University of Texas, Austin**

**Stephen Boyles, University of Texas, Austin**

**Chandra Bhat, University of Texas, Austin**

### Poster Session 4076

#### Modeling Approaches in Travel Behavior Research

Wednesday, January 14, 4:00 PM- 5:45 PM ET | Convention Center, Hall A

An Investigation of the Joint Relationships Between Personal Travel Choices, Home Delivery Frequencies, and Attitudes Toward Sustainability in the United States

**Fateme Rezapour Fardin, City College of New York**

**Alison Conway, City College of New York**