Track B: Challenges & Opportunities for Emerging Tech

Monday, June 10, 2019 (Room: TBA)

Track Chair: Zhanmin Zhang, University of Texas at Austin

1:30 to 3:00 PM

Smart Cities - Insights from the U.S. DOT Smart City Challenge Finalists

Moderators: Zhanmin Zhang, University of Texas at Austin & Jen Duthie, City of Austin

- Jen Duthie, Division Manager, City of Austin
- Alexander Pazuchanics, Assistant Director of Planning, Policy, and Permitting, City of Pittsburgh
- Kevin Martin, Smart City PDX / Tech Services Manager, City of Portland, Oregon
- Speaker TBD, City and County of Denver

3:30 to 5:00 PM

Data Sensing & Analytics

Moderators: Jen Duthie, City of Austin & Guohui Zhang, University of Hawaii at Manoa

- Concrete Structure Health Detection System, Scott Spagnola, T-Mobile; Nadeem Uraizee, Nokia
- Big Data and Project Prioritization: Using Trip Origins to Assess the Benefits of Congestion Reduction Investments, Harun Rashid, Northern Virginia Transportation Authority; Cat Manzo, Street Light Data
- Using Big Data to Investigate Travelers Route Choice Due to Major Operation Change: Case Study Interstate 66 Inside the Beltway, Amir Shahpar, VDOT; Cat Manzo, Street Light Data
- Powell Bill Funding Program Visualization, Majed Al-Ghandour, NCDOT

Preliminary Program Draft – Subject to Change
1:30 to 3:00 PM

**Mobility as a Service (MaaS)**

Moderator: Janille Smith-Colin, Southern Methodist University; Eric Shimizu, DKS Associates

- **Modeling the Adoption, Frequency, and Characteristics of Ride-Hailing Trips in Dallas, Texas**, Patricia Lavieri, University of Melbourne; Chandra Bhat, The University of Texas at Austin
- **Integrated Payments and Technology**, Jack Opiola, 50-50 Solution
- **Increasing Transit Accessibility Using Shared Autonomous Vehicles**, Ting Zuo and Heng Wei, University of Cincinnati
- **MaaS and Advanced Analytics**, Edward Chavis and Andy Taylor, Cubic

3:30 to 5:00 PM

**Electric Vehicles**

Moderator: Eva Lerner-Lam, Palisades Consulting Group

- **Denver RTD’s EV Fleet Management Strategies**, Carly Macias, Denver RTD
- **An Analysis of Attributes of Electric Vehicle Owners’ Travel and Purchasing Behavior: The Case of Maryland**, Amirreza Nickkar, Hyeon-Shic Shin, and Andrew Farkas, Morgan State University
- **Promoting the Usage of Electric Vehicles through the Efficient Design of Charging Station Network**, Mohammad Miralinaghi, Sania Seilabi, and Samuel Labi, Purdue University

Preliminary Program Draft – Subject to Change
9:15 to 10:45 AM

**Artificial Intelligence (AI)**

**Moderator:** Lili Du, *University of Florida* & Christian Braneon, *Hummingbird Firm*

- **AI applications for Transportation Engineering – How to Define Research Projects**, Peter Huang, *FHWA*
- **Promises of Big Data in Transportation Planning Applications**, Cynthia Chen, *University of Washington*
- **AI in Transportation Cyber Physical Systems**, Daniel B. Work, *Vanderbilt University*
- **Microsoft Video Analytics for Traffic Safety**, Lon Tierney, *Microsoft*

11:00 to 12:30 PM

**Unmanned Arial System (UAS)**

**Moderator:** Halil Ceylan, *Iowa State University*; David Hurwitz, *Oregon State University*

- **Unmanned Aerial Systems in Civil/Transportation Engineering: A Compressive Review**, Halil Ceylan, *Iowa State University*
- **Use of Drones by Oregon DOT and Other State Highway Agencies**, Chris Glantz, *Oregon DOT*
- **Driver Behavior due to Unmanned Aerial Vehicle Height: A Driver Simulator Study**, Alyssa Ryan, Cole Fitzpatrick, and Michael Knodler, *University of Massachusetts Amherst*
- **Exploring the Application of LiDAR for Flooded Roadway Management**, Seri Park, *Villanova University*