Approximately 50 ITS-Davis representatives are participating in the 97th annual meeting of the Transportation Research Board to be held January 7-11, 2018 in Washington, D.C. Their presentations are listed below with session number, title, date, time, paper title, and authors.

COMMITTEE MEETINGS

Low-Volume Roads Conference Planning Subcommittee, AFB30(1)
Tuesday, January 9, 2018 10:15 AM-12:00 PM
ITS-Davis Presider: David Jones

Freight Surveys Subcommittee, ABJ40(2)
Tuesday, January 9, 2018 12:15-1:15 PM
ITS-Davis Presider: Miguel Jaller

Low-Volume Roads Committee
Tuesday, January 9, 2018 1:30-5:30 PM
*Design, Geotechnology, Pavements*
ITS-Davis Presenter: David Jones

Animal-Vehicle Collisions, ANB20 (2), Joint Subcommittee of ANB20, ADC30
Tuesday, January 9, 2018 6:00-7:00 PM
ITS-Davis Presider: Fraser Shilling

International Aspects of Transportation Energy Subcommittee, ADC70(1)
Wednesday, January 10, 2018 10:15 AM-12:00 PM
ITS-Davis Presider: Lewis Fulton

Technology and Behavior: Emerging Fleet and Travel Impacts on Air Quality Subcommittee, ADC20(2)
Wednesday, January 10, 2018 10:15 AM-12:00 PM
ITS-Davis Presider: Giovanni Circella

PRESENTATIONS AND PAPERS

SUNDAY, JANUARY 7, 2018

Workshop 114: Three Revolutions for Public Transit: From Service Agency to Mobility Platform
9:00 AM-12:00 PM
ITS-Davis Presider: Hanjiro Ambrose

Workshop 148: Disruptive Technologies: Impacts on Transportation Revenues
1:30-4:30 PM
*Policy Responses to Vehicle Sharing, Electrification, and Automation*
ITS-Davis Presenter: Giovanni Circella
MONDAY, JANUARY 8, 2018

Lectern Session 203: Mobility of the Future
8:00-9:45 AM

*Projecting Travelers into a World of Self-driving Cars: Travel Behavior Implications of a Naturalistic Experiment*

*ITS-Davis Presenter: Giovanni Circella*

Lectern Session 238: Clearing the Air Around Ports
8:00-9:45 AM

*Evaluation of the Health Impacts of Rolling Back a Port Clean Trucks Program*

*ITS-Davis Presenter: Debbie Niemeier*

Poster Session 240: Understanding Longer-Distance Journeys
8:00-9:45 AM

*Estimating the Longest Trip for Plug-In Electric Vehicle Households*

*ITS-Davis Presenters: Rosaria Berliner, Gil Tal, Alan Jenn*

Poster Session 305: From Parking Operations to the Sharing Economy: All Things Parking
10:15 AM-12:00 PM

*A Simulation Study of the Efficiency of Unmarked On-Street Parking and Vehicle Downsizing*

*ITS-Davis Presenter: Tongxin Xu*

Poster Session 308: Innovations in Urban Data and Mobility Modeling
10:15 AM-12:00 PM

*Using Matrix Decomposition Method to Understand the Structure of Metro Travel Demand*

*ITS-Davis Presenter: H. Zhang*

*Time Series Relations Between Parking Garage Occupancy and Traffic Speed in Macroscopic Downtown Areas—A Data Driven Study*

*ITS-Davis Presenters: Rui Ma, Shenyang Chen, H. Zhang*

*Identifying Temporal and Spatial Characteristics of Residents’ Trips from Cellular Signaling Data: A Case Study of Beijing*

*ITS-Davis Presenter: Yizheng Wu*

Poster Session 321: New Materials and Test Methods for Stabilization of Soils
10:15 AM-12:00 PM

*Development of an Improved Test Setup for Measuring the Resilient Modulus of Stabilized Materials*

*ITS-Davis Presenters: Stephanus Louw, Rongzong Wu, David Jones*
Lectern Session 266: Let Us Take You for a Ride: Understanding Mobility on Demand
10:15 AM-12:00 PM
On-demand Ride Services in California: Investigating the Factors Affecting the Frequency of Use of Uber/Lyft
ITS-Davis Presenters: Farzad Alemi, Susan Handy, Giovanni Circella

Lectern Session 268: Competing Visions of Transportation’s Future
10:15 AM-12:00 PM
Shared-Mobility Perspective
ITS-Davis Presenter: Lewis Fulton

Lectern Session 270: Family Life and Sustainable Transportation Choices
10:15 AM-12:00 PM
Limitations to the Adoption of Uber and Lyft in California and Impacts on the Use of Other Travel Modes
ITS-Davis Presenters: Daniel Sperling, Farzad Alemi, Giovanni Circella

Lectern Session 275: Pavement Structural Modeling and Evaluation
10:15 AM-12:00 PM
Energy Dissipation in Concrete Pavements Under Moving Loads Due to Structural Damping
ITS-Davis Presenter: John Harvey

Development of Artificial Neural Networks for Predicting the Response of Bonded Concrete Overlays of Asphalt for Use in a Faulting Prediction Model
ITS-Davis Presenter: John Harvey

Lectern Session 341: Toward Zero Emissions by 2050: The Role of Transportation Technology
1:30-3:15 PM
Policies to Ensure a Zero-Emission Future in a Connected and Automated Light-Duty Sector
ITS-Davis Presenter: Lewis Fulton

Lectern Session 408: Improving Road Travel Fuel Efficiency and Emissions, Part 1: Effective Technologies and Their Implications (Part 2, Session 742)
3:45-5:30 PM
The Future of Electric Vehicle Emissions in the United States
ITS-Davis Presenter: Alan Jenn

Modeling the Potential of BEVs and PHEVs in GHG Reduction Based on Household level GPS Data
ITS-Davis Presenters: Wei Ji, Gil Tal
Lectern Session 412: Converting Distressed Paved Roads to Engineered Unpaved Roads
3:45-5:30 PM

*Converting Paved Roads to Unpaved: California Experience*

**ITS-Davis Presenter:** David Jones

Poster Session 447: Fiber-Reinforced and Asphalt Rubber Mixtures: Properties and Performance
3:45-5:30 PM

*Laboratory Testing to Identify any Implications of Using Reclaimed Asphalt Rubber Pavement in Conventional Asphalt Concrete Mixes*

**ITS-Davis Presenters:** David Jones, Shawn Hung, Mohamad Zia Alavi

**TUESDAY, JANUARY 9, 2018**

Lectern Session 499: Intermodal Passenger Facilities and Access to Jobs
8:00-9:45 AM

*Private Shuttles and Public Transportation: Effects of Shared Transit Stops on Travel Time and Reliability in Seattle*

**ITS-Davis Presenter:** Regina Clewlow

Poster Session 508: Climate Change and Decarbonization
8:00-9:45 AM

*LOS vs. VMT in California’s Environmental Review: A Los Angeles Case Study*

**ITS-Davis Presenters:** Jamey Volker, Amy Lee, Dillon Fitch, Joe Kaylor

Poster Session 514: Current Issues in Ecology and Transportation
8:00-9:45 AM

*Automating Wildlife-Vehicle Conflict Tracking and Analysis*

**ITS-Davis Presenter:** Fraser Shilling

*Traffic Noise and Light as Potential Explanations for Suppressed use of Wildlife Crossing Structures*

**ITS-Davis Presenter:** Fraser Shilling

Poster Session 517: Emerging Research in Transportation and Land Development
8:00-9:45 AM

*Urban Travel and Residential Choices Across Generations: Results from a North American Survey*

**ITS-Davis Presenters:** Gouri Shankar Mishra, Alan Jenn

Lectern Session 536: Life Stage and Demographics
8:00-9:45 AM

*Are Millennials More Multimodal? A latent class analysis with attitudes and preferences*

**ITS-Davis Presenter:** Giovanni Circella
Poster Session 566: Current Issues in Transportation Energy
10:15 AM-12:00 PM
  Cost Implications for Automakers’ Compliance with Emission Standards from Zero Emissions Vehicle Mandate
  ITS-Davis Presenter: Scott Hardman, Alan Jenn

Poster Session 567: Current Issues in Alternative Transportation Fuels and Technologies
10:15 AM-12:00 PM
  Exploring Mechanisms of Decision Making For Plug-In Electric Vehicle Adoption or Rejection: A Qualitative Study in a Second- and a Third-Tier City in China
  ITS-Davis Presenters: Yan Xing, Gil Tal, Yunshi Wang

  Battery Electric Vehicle Recharging: A Qualitative Investigation into High-End Early Adopter Attitudes
  ITS-Davis Presenter: Scott Hardman

  Motivations and Barriers Associated With the Adoption of Battery Electric Vehicles in Beijing: A Multinomial Logit Model Approach
  ITS-Davis Presenters: Yan Xing, Gil Tal, Yunshi Wang

Lectern Session 541: Proven Performance of Concrete Overlays: Part 2 (Part 1, Session 479)
10:15 AM-12:00 PM
  Evaluation of Mix Designs for Rapid Construction of Bonded Concrete Overlays
  ITS-Davis Presenters: Fabian Paniagua Fernandez, Julio Paniagua, John Harvey

Lectern Session 557: Trends in Transit Information
10:15 AM-12:00 PM
  Real-Time Riders? Millennials, Smartphone Use and Public Transportation Ridership
  ITS-Davis Presenter: Kate Tiedeman, Giovanni Circella

Poster Session 638: Sustainable and Resilient Pavements
1:30-3:15 PM
  Initial Evaluation Approach for the Life Cycle Impact of Permeability of Pervious Pavements
  ITS-Davis Presenter: John Harvey

Poster Session 640: Asphalt Binder Additives and Modifiers
1:30-3:15 PM
  Development of Performance Grading Testing Procedures for Asphalt Rubber Binders Containing Large Rubber Particles
  ITS-Davis Presenters: Yanlong Liang, David Jones, Mohamad Zia Alavi, John Harvey
Poster Session 643: Asphalt Mixture Performance Using Modified Binders and Rejuvenators
1:30-3:15 PM

Performance-Related Properties of Asphalt Mixture Modified with a Polymerized Pellet Mix Additive
ITS-Davis Presenter: Mohamad Zia Alavi

Lectern Session 596: Location Choice and Integrated Models
1:30-3:15 PM

ITS-Davis Presiding: Giovanni Circella

Lectern Session 598: Technological Advances in Road Ecology Science
1:30-3:15 PM

Collecting & Using Big Data for Wildlife-Vehicle Conflict Reduction
ITS-Davis Presenter: Fraser Shilling

Poster Session 633: Statewide Data and Information Systems, Part 2 (Part 1, Session 632)
1:30-3:15 PM

Statewide Comparison of Origin-Destination Matrices between California Travel Model and Twitter
ITS-Davis Presenter: Jae Hyun Lee

Poster Session 636: The Future Is Here: Major Advances in Pavement Management Systems
1:30-3:15 PM

Development of a Cracking Performance Prediction Model for Replaced Concrete Slabs in California
ITS-Davis Presenters: Ashkan Saboori, Jeremy Lea, Venkata Kannekanti, Arash Saboori, John Harvey

Lectern Session 640: Freight Rail Propulsion: Where Does the Energy Come From?
1:30-3:15 PM

ITS-Davis Moderator: Raphael Isaac

Poster Session 650: Transit Service Disruptions: Impacts and Mitigation Measures
1:30-3:15 PM

Optimizing Tailored Bus Bridging Paths
ITS-Davis Presenter: H. Zhang

Poster Session 713: Health, Transportation, and Moving Forward
3:45-5:30 PM

Modeling Health Equity in Active Transportation Planning
ITS-Davis Presenter: Yizheng Wu
Poster Session 714: Innovative and Specification Testing of Asphalt Binders
3:45-5:30 PM

*Infrared Spectroscopy on Asphalt Binders: Improving Repeatability and Sensitivity*

**ITS-Davis Presenters:** Mohamad Zia Alavi, David Jones, John Harvey

Lectern Session 669: Advancing the Science of Transportation Demand Modeling
3:45-5:30 PM

*Advancing TDM: Strengthening Linkages with Policy and Planning*

**ITS-Davis Presenter:** Giovanni Circella

*Advancing TDM: Advancing Knowledge in a Generalizable and Testable Manner*

**ITS-Davis Presenter:** Giovanni Circella

Poster Session 718: Fatigue Cracking of Bituminous Mixtures
3:45-5:30 PM

*Sine Versus Haversine Displacement Waveform Comparison for Hot Mix Asphalt Four-Point Bending Fatigue Testing*

**ITS-Davis Presenters:** Rongzong Wu, John Harvey

Lectern 671: Pollinators: State DOT Support Programs and Current Issues
3:45-5:30 PM

*Review of Potential Negative Impacts to Pollinators from Roadside Vegetation Improvements*

**ITS-Davis Presenter:** Fraser Shilling

Lectern 676: Impact of Pavements on Rolling Resistance
3:45-5:30 PM

*Preliminary Results of the California Study—Relative Contribution of the Various Components of Rolling Resistance*

**ITS-Davis Presenter:** John Harvey

Poster Session 709: Latest Research in Metropolitan Policy, Planning, and Processes
3:45-5:30 PM

*Local Governments and the Land Use-Transportation Connection: Statewide Survey Results from California*

**ITS-Davis Presenters:** Gian-Claudia Sciara, Sarah Strand

*Simulation of Ridesourcing Using Agent-Based Demand and Supply Models Regional: Potential Market Demand for First Mile Transit Travel and Reduction in Vehicle Mile’s Travelled in the San Francisco Bay Area*

**ITS-Davis Presenters:** Farzad Alemi, Caroline Rodier

**WEDNESDAY, JANUARY 10, 2018**

Poster Session 781: Cycling Safety and Comfort
8:00-9:45 AM

*What Is It About Bicycling? Evidence from Davis, California*

**ITS-Davis Presenters:** Susan Handy, Amy Lee
Poster Session 773: Travel Behavior of Special Population Groups
8:00-9:45 AM
Commute Quality: Exploring the role of mode and other factors using the UC Davis Campus Travel Survey
ITS-Davis Presenter: Susan Handy

Understanding the Mobility Patterns of Millennials and Older Adults in Bogota, Colombia
ITS-Davis Presenter: Giovanni Circella

Poster Session 774: Travel Behavior
8:00-9:45 AM
Investigating the Satisfaction with Travel Amounts: A Comparison of Commuters and Non-Commuters in California
ITS-Davis Presenter: Giovanni Circella

Exploring the Self-Reported Long-Distance Travel Frequency of Adult Californians
ITS-Davis Presenters: Giovanni Circella, Rosaria Berliner

Lectern Session 806: Operational Applications of Environmental Justice
10:15 AM-12:00 PM
Opportunities for Shared Use Mobility Services in Rural Disadvantaged Communities in California’s San Joaquin Valley
ITS-Davis Presenters: Caroline Rodier, Laura Podolsky

Lectern Session 819: Drivers’ Behavior as a Function of Their Characteristics and the Driving Environment
10:15 AM-12:00 PM
Effect of Traffic Density on Lane Change and Overtaking Maneuvers: A Driving Simulator-Based Study
ITS-Davis Presenter: H. Zhang

Poster Session 828: Information and Communications Technology and Travel Behavior: A Spectrum of Findings
10:15 AM-12:00 PM
Outcomes of Travel-based Multitasking: Reported Benefits and Disadvantages of Conducting Activities While Commuting
ITS-Davis Presenter: Giovanni Circella

Lectern Session 844: Built Environment and Demographic Issues
2:30-4:00 PM
Millennials in Cities
ITS-Davis Presenter: Giovanni Circella
Lectern Session 849: Cycling Experience, Comfort, and Stress
2:30-4:00 PM

The Effects of Building a Stock of Bicycling Experience in Youth
ITS-Davis Presenter: Susan Handy

The Relationship Between Real and Imagined Bicycling Comfort and Safety
ITS-Davis Presenters: Dillon Fitch, Susan Handy

Poster Session 857: Productivity and Management
2:30-4:00 PM

What Drives Your Drivers: An In-depth look at Lyft and Uber Drivers
ITS-Davis Presenters: Rosaria Berliner, Gil Tal

Poster Session 859: Sensing and Information Technology Innovation to Enhance Traffic Operation Efficiency
2:30-4:00 PM

Sensor Measurement Error Estimation on Transportation Network
ITS-Davis Presenters: Yudi Yang, Han Yang, Yueyue Fan