Nearly 80 ITS-Davis representatives are participating in the 99th annual meeting of the Transportation research Board to be held January 12-16th in Washington, D.C. Their presentation are listed below with session number, title, date, time, paper title, and authors.

**SUNDAY, JANUARY 12, 2020**

**PRESENTATION AND PAPERS**

1:30 PM-4:30 PM

   *Facilitated Discussion of Experts with Audience Participation*
   **ITS-Davis Presenter:** Fraser Shilling

Workshop 1059: Developing Performance Prediction Models
   *Data Issues and Pre-Processing*
   **ITS-Davis Presenter:** Jeremy Lea

Workshop 1085: Improving Last-Mile and 50-Feet Logistics with Smart Initiatives to Improve Freight Mobility
   *Understanding Faster and Faster Deliveries: Traditional Facility Location Problems and New Delivery Technologies and Services*
   **ITS-Davis Presenter:** Miguel Jaller

**MONDAY, JANUARY 13, 2020**

**COMMITTEE MEETINGS**

1:30 PM-3:15 PM

Sustainability Measurement Subcommittee, ADD40(1)
   **ITS-Davis Participant:** Giovanni Circella

1:30 PM-5:30 PM

Low-Volume Roads Committee
   *Design, Geotechnology, Pavements*
   **ITS-Davis Presider:** David Jones

**PRESENTATION AND PAPERS**

8:00 AM-9:45 AM

Lectern Session 1101: Autonomous Vehicles and Travel Behavior
   *Do People Expect Autonomous Vehicles to Change Their Residential Location and Vehicle Ownership? Early Glimpses from the State of Georgia*
   **ITS-Davis Presenter:** Giovanni Circella
Lectern Session 1103: Electric Vehicle Market Development: Moving to Mainstream Adoption
  Plug-in Electric Vehicle Diffusion in California: Role of Exposure to New Technology at Home and Work
  ITS-Davis Presenters: Debapriya Chakraborty, David Bunch, Bingzheng Xu, Gil Tal

Lectern Session 1105: Selected Presentations from the 12th TRB International Conference on Low-Volume Roads
  Applying Pavement Preservation Principles in Unpaved Road Management with Specific Reference to Fines Preservation and Dust Control
  ITS-Davis Presenter: David Jones

Lectern Session 1128: Shared Mobility and Traveler Choices
  Factors Influencing Bicycling Propensity: Evidence from the California Millennials Dataset 2015
  ITS-Davis Presenters: Tatsuya Fukushige, Susan Handy

Poster Session 1140: Research Topics in Construction Management
  A Methodology to Identify Cross-Functional Synergies of CIM Knowledge within a Transportation Agency
  ITS-Davis Presenters: Alireza Shams, Sean Donohoe, Bahram Ravani

Poster Session 1144: Bicycle Research Poster Session
  Commuting Mode Choices and Bicycle Level of Traffic Stress: Findings from the Franklin County, Ohio
  ITS-Davis Presenter: Kailai Wang

Poster Session 1156: Current Research in Freight Planning and Logistics
  Evaluating the Costs and Distribution Structure in Last Mile Deliveries Under Short Time-Windows
  ITS-Davis Presenters: Anmol Pahwa, Miguel Jaller

10:15 AM-12:00 PM
Lectern Session 1167: Shared Mobility, Automated Vehicles, and the Future of Mobility
  Controlling for Selection and Simultaneity Biases in the Relationships between Ridehailing Use and Vehicle Ownership in the 2017 NHTS
  ITS-Davis Presenter: Farzad Alemi

  Adoption of Ridehailing in Four Megacities in Developing Countries
  ITS-Davis Presenters: Jai Malik, Giovanni Circella, Farzad Alemi, Lewis Fulton

Lectern Session 1173: Concrete Overlays: Modeling, Fibers, and Materials
  Evaluation of the Moisture-Dependence of Concrete CTE and its Impacts on the Thermal Deformations and Stresses of Concrete Pavements
  ITS-Davis Presenters: John Harvey, Rongzong Wu, Julio Paniagua, Fabian Paniagua
Poster Session 1224: Optimizing Highway Maintenance

Regression Models of Road User Cost Prediction for Highway Maintenance and Rehabilitation for Life Cycle Planning in California

ITS-Davis Presenters: Sampat Kedarisetty, Changmo Kim, John Harvey

Poster Session 1226: Ridesourcing, Ridesharing, and Carsharing

Insights from the California Mobility Panel Study: Evolution in the Use, Impacts and Limitations on the Use of (Shared) Ridehailing

ITS-Davis Presenters: Farzad Alemi, Giovanni Circella, Grant Matson, Daniel Sperling

The Evolution, Usage and Trip Patterns of Taxis & Ridesourcing Services

ITS-Davis Presenter: Xiatian Wu

Assessing the VMT Effect of Ridesourcing Services in the US -- Evidence from 2017 National Household Travel Survey

ITS-Davis Presenter: Xiatian Wu

1:30 PM-3:15 PM

Lectern Session 1242: Evaluation of Pavement Structures Using Full-Scale Accelerated Pavement Testing

Full-Scale Evaluation of Concrete-Asphalt Interphase in Thin Bonded Concrete Overlay on Asphalt Pavements

ITS-Davis Presenters: Fabian Paniagua, Julio Paniagua, Rongzong Wu, John Harvey

3:45 PM-5:30 PM

Lectern Session 1297: Light Duty Vehicle Energy Efficiency Gains Through New Operational Approaches and Technologies

From Shifting Gears to Changing Modes: The Motivations and Efficiency Impacts of Driver-induced Mode Changes

ITS-Davis Presenters: Chaitanya Vaishnavi Karanam, Claire Sugihara, Katrina Sutton, Seshadri Srinivasa Raghavan, Gil Tal

Lectern Session 1305: Developments in Concrete Materials Research

Use of Bagasse Ash as a Partial Replacement of Cement in Concrete in Pavement Applications

ITS-Davis Presenters: Michelle Barbato, Nitin Kumar

Poster Session 1332: Information and Communications Technologies, Smartphones, Activity Patterns, and Travel Choices

ITS-Davis Presider: Farzad Alemi

Synergistic Effects of Telecommuting and the Built Environment on Sustainable Travel: A Machine Learning Approach

ITS-Davis Presenter: Kailai Wang
Who Wants to Share? Exploring the Factors that Affect the Frequency of Use of Ridehailing and the Adoption of Shared Ridehailing in California  
**ITS-Davis Presenters:** Jai Malik, Farzad Alemi, Giovanni Circella

The Adoption of Ridehailing in the United States: Evidence from the 2017 NHTS  
**ITS-Davis Presenter:** Giovanni Circella

**6:00 PM-7:30 PM**

Poster Session 1351: New Ideas for Emergency Evacuations  
*Wildfire Awareness, Departure Time, Mode Choice, and Emergency Communication: Decisionmaking in the 2018 Camp Fire Evacuation*  
**ITS-Davis Presenters:** Sarah Grajdura, Xiaodong Qian, Deb Niemeier

Poster Session 1484: Through the Looking Glass of Gender Issues: Mobility Challenges Across the World  
*Exploring Gender Effects on Electric Vehicle Charging Behavior: Preference or Inequity?*  
**ITS-Davis Presenters:** Noam Baharav, Debapriya Chakraborty, Gil Tal

**TUESDAY, JANUARY 14, 2020**

**COMMITTEE MEETINGS**

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

**Effects of Information and Communication Technologies on Travel Choices Committee (ADB20)**  
*Data and Information Technology, Planning and Forecasting*  
**ITS-Davis Presider:** Giovanni Circella

**10:15 AM-12:00 PM**

**Animal–Vehicle Collisions, ANB20(2), Joint Subcommittee of ANB20, ADC30**  
*Safety and Human Factors*  
**ITS-Davis Presider:** Fraser Shilling

**12:15 PM-1:15 PM**

**Freight Surveys Subcommittee, ABJ40(2)**  
*Data and Information Technology, Freight Transportation*  
**ITS-Davis Presider:** Miguel Jaller

**1:30 PM-3:15 PM**

**International Aspects of Transportation Energy Subcommittee, ADC70(1)**  
*Energy, Environment*  
**ITS-Davis Presider:** Lewis Fulton

**Low-Volume Roads Conference Planning Subcommittee, AFB30(1)**  
*Geotechnology*  
**ITS-Davis Presider:** David Jones
PRESENTATION AND PAPERS

8:00 AM-9:45 AM

Lectern Session 1371: Electrification of Heavy Duty Trucks for Short and Long Haul Applications
  Analysis of Advanced Battery-Electric Long Haul Trucks: Batteries, Performance, and Economics
  ITS-Davis Presenter: Lewis Fulton

Poster Session 1411: Current Issues in Environmental Analysis in Transportation
  Operationalizing Induced Travel Research
  ITS-Davis Presenters: Jamey Volker, Amy Lee, Susan Handy

Poster Session 1412: Current Issues in Transportation and Air Quality
  Environmental Impacts of Extreme Fast Charging
  ITS-Davis Presenter: Alan Jenn

Poster Session 1419: In-Place Asphalt Pavement Recycling and Interface Bond
  Development and Assessment of Rapid Tests for Construction of Asphalt-Treated Cold Recycled Pavements
  ITS-Davis Presenter: David Jones

10:15 AM-12:00 PM

Lectern Session 1441: Adoption of Emerging Mobility Services and Other Disruptive Technologies: An International Perspective
  ITS-Davis Presider: Giovanni Circella

Lectern Session 1465: Where the Rubber Meets the Road: Critical Evaluation of Bikeway Rating Methods and Cyclist Typologies
  The Role of Attitudes in Perceptions of Bicycle Facilities: A Latent-Class Regression Approach
  ITS-Davis Presenter: Giovanni Circella

Poster Session 1480: Transportation Management and Governance in the Age of Disruption
  Impact of Vehicle Automation and Electric Propulsion on Production Costs for Mobility Services Worldwide
  ITS-Davis Presenters: Lewis Fulton, Jai Malik

Poster Session 1487: Current Issues in Transportation Energy
  What Have We Learned About a Zero-Emissions Vehicle (ZEV) Mandate? A Literature Review and Critical Research Agenda
  ITS-Davis Presenters: Scott Hardman, Alan Jenn
Oregon’s Clean Fuels Program – A Review and Status Update  
ITS-Davis Presenters: Julie Witcover, Colin Murphy  

Poster Session 1488: Current Issues in Alternative Transportation Fuels and Technologies  
Emissions Benefits of Electric Vehicles in Uber and Lyft Services  
ITS-Davis Presenter: Alan Jenn  

Electrification of Vehicle Miles Traveled within the Household Context  
ITS-Davis Presenter: Gil Tal  

An Integrated Optimization Platform for Spatial-Temporal Modeling of Electric Vehicles Charging Infrastructure  
ITS-Davis Presenter: Xinwei Li, Alan Jenn  

Decrease Emissions or Increase Electric Miles? The Case of Plug-In Electric Vehicles and Household Travel  
ITS-Davis Presenters: Seshadri Srinivasa Raghavan, Gil Tal  

Are Consumers Considering Buying an Electric Vehicle? A Case Study of Sacramento  
ITS-Davis Presenters: Scott Hardman, Kenneth Kurani  

Plug-in Hybrid or Hybrid? Exploring Reasons Why Some Consumers Do Not Charge Their Plug-In Hybrids  
ITS-Davis Presenters: Debapriya Chakraborty, Scott Hardman, Gil Tal  

Plug-In Hybrid Electric Vehicle Utility Factors: Why Observed Electrification Performance Differs from SAE J2841 Expectations?  
ITS-Davis Presenters: Seshadri Srinivasa Raghavan, Dahlia Garas, Gil Tal  

Large-Scale Automated Electric Ridehailing Substantially Improves the Grid-Integration Opportunity of Electric Vehicles  
ITS-Davis Presenter: Alan Jenn  

A Methodology for Calculating eVMT in PHEVs Based on Second by Second Logged Data  
ITS-Davis Presenters: Christopher Nitta, Chaitanya Vaishnavi Karanam, Matthew Favetti, Gil Tal  

Poster Session 1498: Practical Advancements in Winter Maintenance  
Standards-Based Testing and Performance Evaluation of Highway Salt and Sand Spreader Systems  
ITS-Davis Presenters: Wilderich White, Ty Lasky
1:30 PM-3:15 PM

Lectern Session 1512: Advances in the Use of Smartphones for the Collection of Travel Surveys
   EM-EVAL: an evaluation procedure for smartphone-based travel diaries
   ITS-Davis Presenter: Hari Venugopalan

Lectern Session 1520: More Mobility with Less Vehicle Miles Traveled: An Expert Panel on Ridematching in the Ridehailing Sector
   Pooling is the Answer?!
   ITS-Davis Presenter: Daniel Sperling

Poster Session 1555: Asphalt Binders: Modified Binders, Specifications, and Investigations
   Revised Short-Term Aging Procedures for Asphalt Rubber Binders
   ITS-Davis Presenters: David Jones, Hashim Rizvi, Yanlong Liang

Poster Session 1557: Using Rubber in Asphalt Mixtures
   Fatigue Fracture Properties of Asphalt Mixes Containing Low Content of Crumb Rubber Modifier
   ITS-Davis Presenters: Yanlong Liang, John Harvey, Rongzong Wu, Liya Jiao, David Jones

   Laboratory Evaluation of Rubberized Binder and Mix Containing a Low Content of Devulcanized Rubber Modifier
   ITS-Davis Presenters: Yanlong Liang, David Jones, John Harvey, Jeffery Buscheck

3:45 PM-5:30 PM

Lectern Session 1584: Information and Communications Technologies and the Evolution of Travel Choices
   ITS-Davis Presenters: Tho Le, Giovanni Circella, Grant Matson

Lectern Session 1590: Innovations in Pavement Design and Rehabilitation
   Optimal Structure Combination for Inverted Asphalt Pavement Incorporating Cracks in Cement-Treated Subbase
   ITS-Davis Presenter: Liya Jiao

Progress in Statewide and Long-Range Multimodal Planning
   Investigating Tools for Evaluating Service and Improvement Opportunities on Bicycle Routes in Ohio
   ITS-Davis Presenter: Kailai Wang
Poster Session 1632: Frontiers in Concrete Pavement Construction
Evaluation of Shrinkage Reducing Admixture Used as a Curing Spray on Concrete Pavements
ITS-Davis Presenters: Julio Paniagua, Fabian Paniagua, John Harvey, Rongzong Wu

Poster Session 1635: Surface Requirements of Asphalt Mixtures
Laboratory Characterization of Rutting and Moisture-Induced Damage Potential of Foamed Warm Mix Asphalt (WMA) Containing RAP
ITS-Davis Presenter: Mohammad Rahman

Effect of Additives and Aging on Moisture-induced Damage Potential of Asphalt Mixes Using Surface Free Energy and Laboratory-Based Performance Tests
ITS-Davis Presenter: Mohammad Rahman

Poster Session 1637: Design, Characterization, and Evaluation of Asphalt Mixtures
ITS-Davis Presenters: Liya Jiao, Mohamed Elkashef, David Jones, John Harvey

WEDNESDAY, JANUARY 15, 2020

Poster Session 1686: Parking Space: Recent Research in Parking Topics
Automated Vehicles And Central Business District Parking: The Effects Of Drop-Off-Travel On Traffic Flow And Vehicle Emissions
ITS-Davis Presenters: Huajun Chai, Caroline Rodier, H. Michael Zhang, Miguel Jaller, Jeffery Song, Gursewak Singh

Poster Session 1688: Travel Behavior Mega Poster Session
An Exploration of Statewide Fragmentation of Activity and Travel and a Taxonomy of Daily Time Use Patterns Using Sequence Analysis in California
ITS-Davis Presenter: Adam Davis

Consumer Response to Transformative Innovations in Transportation: Advancing the Reflexive Participant Approach to Survey Research
ITS-Davis Presenter: Kenneth Kurani

Exploring the Role of Attitude in the Acceptance of Self-driving Shuttles
ITS-Davis Presenters: Yan Xing, Susan Handy, Giovanni Circella, Yunshi Wang, Farzad Alemi

Moral Utility in Daily Time Allocation to Activities and Travel
ITS-Davis Presenter: Adam Davis
Poster Session 1690: Health, Transportation, and Emerging Research

Health Impact Assessment of Automated Vehicles in San Francisco, Bay Area Using the Integrated Transport and Health Impacts Model (ITHIM)
ITS-Davis Presenters: Elham Pourrahmani, Miguel Jaller, Neil Maizlish, Caroline Rodier

10:15 AM-12:00 PM

Poster Session 1728: Transportation Modeling Network Mega and Joint Poster Session with Traveler Behavior and Values
Stochastic Transit OD Demand Estimation Using Multi-day APC Observations
ITS-Davis Presenters: Ran Sun, Yueyue Fan, Yudi Yang

Poster Session 1736: Micromobility Poster Session: Planning, Policy, and User Behavior for Shared Bikes and Scooters
Does Bike Share Change Travel For Users as well as Non-Users? Evidence from the Sacramento Region
ITS-Davis Presenters: Dillon Fitch, Hossain Mohiuddin, Susan Handy

THURSDAY, JANUARY 16, 2020

PRESENTATION AND PAPERS
8:00 AM-12:00 PM

Workshop 1773: Toward Sustainable Management of Retired Electric Vehicle Batteries
ITS-Davis Presider: Hanjiro Ambrose

ADDITIONAL EVENTS

ITS-Davis Reception
Tuesday, January 14 at 8 PM
Courtyard by Marriott (Shaw Ballroom)

NCST Capitol Hill Briefing
Tuesday, January 14, from 12-1 PM
Rayburn House Office Building, Room 2043
Emerging Research in Freight Efficiency and Sustainability

ITS-Davis Presentations at TRB 2020