About 50 ITS-Davis researchers are participating in the 92nd annual meeting of the Transportation Research Board, January 13-17, 2013 in Washington, DC. Their presentations are listed below with session number, title, date, time, location, paper title, and authors. *(ITS-Davis presenters are listed by name only; other presenters are listed by institution as well.)*

**MEETINGS**

**Accelerated Pavement Testing International Conferences Subcommittee, AFD40(1)**
January 14, 2013, 1:30–3:15 p.m., Marriott, Madison A  
  John Harvey, presiding officer

**Emerging and Innovative Public Transport and Technologies Committee**
January 14, 2013, 3:45–5:30 p.m., Hilton, Columbia Hall 4  
  Caroline Rodier, presiding officer

**Chemical and Mechanical Stabilization Committee**
January 14, 2013, 7:30–10:00 p.m., Marriott, Coolidge  
  David Jones, presiding officer

**Mega-Regions Joint Subcommittee of ADA20**
January 15, 2013, 3:45–5:30 p.m., Hilton, Cardozo  
  Gian-Claudia Sciara, presiding officer

**International Aspects of Transportation Energy Subcommittee, ADC70(1)**
January 16, 2013, 8:00–9:45 a.m., Hilton, Northwest  
  Drew K. Kodjak, International Council on Clean Transportation, presiding officer  
  Lewis M. Fulton, presiding officer

**PRESENTATIONS AND PAPERS**

**Session 103: Doctoral Student Research in Transportation Operations and Traffic Control**
January 13, 2013, 9:00 a.m.–12:00 p.m., Marriott, Delaware A  
  *The Variational Formulation of Multi-class Traffic Flow Models: Theory and Applications* (P13-7114)  
  Jia Li

**Session 118: In-Place Pavement Recycling**
January 13, 2013, 9:00 a.m.–12:00 p.m., Shoreham, Palladian  
  *Laboratory, Accelerated Pavement Testing, and Field Studies of Full-Depth Reclamation to Refine Guidelines and Project Performance Models* (P13-5726)  
  David Jones

**Session 136: Effective Practices and Challenges for Sustainable Communities Planning Funding Grantees to Promote Health, Community Engagement, and Equity in Planning and Project Implementation**
January 13, 2013, 9:00 a.m.–12:00 p.m., Hilton, Cabinet  
  *Using Health Indicators to Advance Effective and Equitable Regional Planning* (P13-6679)  
  Alex Karner
Session 137: Transitioning to Plug-in electric Vehicles: Challenges and Best Practices
January 13, 2013, 9:00 a.m.–12:00 p.m., Hilton, Monroe

Variation in Real World Charging Behavior (P13-6169)
Kenneth S. Kurani

Session 143: Understanding the Role of Individual Behavior in Sustainability of Transportation: Lessons for Program Design
January 13, 2013, 9:00 a.m.–12:00 p.m., Hilton, Georgetown East

Changing Values: Valuing Change in Consumers, Energy, and Automobiles (P13-6245)
Kenneth S. Kurani

Session 187: On-Road and Off-Road Diesel Emissions Modeling, Monitoring, and Innovative Controls
January 13, 2013, 1:30 p.m.–4:30 p.m., Hilton, Lincoln East

Modeling In-Use Construction Equipment Emissions for Highway Projects: Framework, Methodology, and Case Analysis (13-3044)
Song Bai, Sonoma Technology Inc.
Douglas S. Eisinger, Sonoma Technology Inc.
Debbie Niemeier
Paul E. Benson, Sonoma Technology Inc.
Stephen Reid, Sonoma Technology Inc.
Beverly Chenausky, Arizona Department of Transportation

Session 195: Understanding the Impact of Deployment Best Practices to Reduce Petroleum, Clean the Air, and Mitigate Climate Change in the Transportation Sector
January 13, 2013, 1:30 p.m.–4:30 p.m., Hilton, Jefferson East

Strategies to Improve Deployment of Alternative-Fuel and Plug-in Electric Vehicles (P13-5128)
Dahlia Garas

Session 223: Advances in Travel Survey Methods
January 14, 2013, 8:00 a.m.–9:45 a.m., Hilton, Columbia Hall 8

Methodology to Gather Multimodal Trip Generation Data in Smart-Growth Areas (13-5108)
Robert J. Schneider, University of Wisconsin- Milwaukee
Kevan Shafizadeh, California State University, Sacramento
Benjamin R. Sperry, Texas A&M Transportation Institute
Susan L. Handy

Session 231: Network Modeling Applications and Origin-Destination Estimation
January 14, 2013, 8:00 a.m.–9:45 a.m., Hilton, Lincoln East

Primal-Dual Heuristic for Path Flow Estimation in Medium-Sized to Large Networks (13-3451)
Shikai Tang
H. Michael Zhang

Session 239: Flexible Pavements: Perpetual Pavements, MEPDG, Material Properties, and More
January 14, 2013, 8:30 a.m.–10:15 a.m., Marriott, Salon 2

Mechanistic-Empirical Pavement Design to Mitigate Rutting in Asphalt Overlays of Concrete Pavements Using MEPDG and CalME (13-3258)
Lev Khazanovich, University of Minnesota, Twin Cities
Derek Tompkins, University of Minnesota
Priyam Saxena, University of Minnesota
Rongzong Wu
John Harvey
Session 248: Current Research in Freight Transportation and Logistics Planning and Operations  
January 14, 2013, 8:30 a.m.–10:15 a.m., Shoreham, Blue Room Foyer  
**Development of Freight Demand Generation Model: Application to California with Validation** (13-1937)  
Robert Lim  
Zhen Qian, Stanford University  
H. Michael Zhang

Session 278: Mobility Analysis and Sustainable Cities in the Developing World  
January 14, 2013, 10:15 a.m.–12:00 p.m., Hilton, Columbia Hall 5  
**Low-Mass Urban Microcars for Emerging Market Megacities** (13-2844)  
Eric C. Cahill  
Bill Taylor, kVertex Associates LLC  
Daniel Sperling

Session 292: Pavement Materials and the Urban Climate: Another Step Forward  
January 14, 2013, 10:45 a.m.–12:30 p.m., Marriott, Salon 2  
**Cooling Effect of Permeable Asphalt Pavement Under Both Dry and Wet Conditions** (13-1115)  
Hui Li  
John Harvey  
David Jones  
**Measurement of Pavement Solar Reflectivity and Effect on Thermal Performance** (13-1116)  
Hui Li  
John Harvey  
Alissa Kendall

Session 330: Measuring Effectiveness of State and MPO Policies, Programs, and Projects to Reduce Greenhouse Gas Emissions from Transportation  
January 14, 2013, 1:30 p.m.–3:15 p.m., Hilton, Georgetown West  
**Technical Challenges to Good Measurement** (P13-5465)  
Caroline Rodier

Session 339: Modeling Work Zone Safety and Operations  
January 14, 2013, 2:00 p.m.–3:45 p.m., Marriott, Salon 2  
**Cost-Estimate Model for Transportation Management Plan Strategies for Highway Construction Projects** (13-3098)  
Changmo Kim  
Eul-Bum Lee, University of California, Berkeley  
Jae-Ho Pyeon, San Jose State University  
Ralph D. Ellis, University of Florida  
Akbar ShakerNia, California Department of Transportation

Session 340: Pedestrian Planning, Policy, and Demand Analysis  
January 14, 2013, 2:00 p.m.–3:45 p.m., Marriott, Salon 2  
**Skateboarding as a Mode of Transportation: Review of Regulations in California Cities and College Campuses** (13-3500)  
Kevin Fang
Session 341: Research on Highway Capacity and Quality of Service for Uninterrupted Facilities: Freeways and Two-Lane Highways
January 14, 2013, 2:00 p.m.–3:45 p.m., Marriott, Salon 2
Observations and Analysis of Multistep Approaching Lane Changing Behavior at Two Expressway Merge Bottlenecks in Shanghai (13-2400)
Li Zhao, Tongji University, China
Jian Sun, Tongji University, China
H. Michael Zhang

Session 350: Equity Analysis in Environmental Justice in Transportation
January 14, 2013, 2:00 p.m.–3:45 p.m., Hilton, International Center
Innovations in the Equity Analysis of Regional Transportation Plans (13-4203)
Alex Karner
Debbie Niemeier

Session 360: Travel Time Algorithms and Arterial Monitoring
January 14, 2013, 2:00 p.m.–3:45 p.m., Hilton, International Center
Travel Time Distributions on Urban Streets: Estimations with Hierarchical Bayesian Mixture Model and Application to Traffic Analysis with High-Resolution Bus Probe Data (13-4377)
Yuxiong Ji, Tongji University, China
H. Michael Zhang

Session 395: Value of Green and Other Consumer Attributes to Market Penetration of Alternative Fuel Vehicles
January 14, 2013, 3:45 p.m.–5:30 p.m., Hilton, Jefferson West
Hybrid, Plug-in Hybrid, or Electric: What Do Car Buyers Want? (13-3028)
Jonn Axsen, Simon Fraser University, Canada
Kenneth S. Kurani
Jonn Axsen, Simon Fraser University, Canada
Kenneth S. Kurani
Community and Social Media Use Among Early PEV Drivers (P13-6533)
Jennifer L. Tyree-Hageman
Who Is Buying PEVs in California and How Are They Being Used? (P13-6534)
Gil Tal

Session 416: Multidisciplinary Perspectives on Metropolitan Transportation Planning: Annual Planning Forum
January 14, 2013, 4:15 p.m.–6:00 p.m., Hilton, International Center
Supporting Greenhouse Gas Reduction with Metropolitan Planning and Discretion: Institutional Perspectives on California’s SB 375 (13-5259)
Gian-Claudia Sciara

Session 418: Recent Research in Mega-Regions
January 14, 2013, 4:15 p.m.–6:00 p.m., Hilton, International Center
Gian-Claudia Sciara, presiding officer
Session 430: Emerging Technologies for Intelligent Signal Control
January 14, 2013, 7:30 p.m.–9:30 p.m., Marriott, Marriott, Salon 2

Two-Step Optimization Model for Dynamic Lane Assignment at Isolated Signalized Intersections (13-1882)
Jing Zhao, Tongji University, China
Wanjing Ma, Tongji University, China
H. Michael Zhang
Xiaoguang Yang, Tongji University, China

Increasing the Capacity of Signalized Intersections by Dynamically Using Exit-Lanes for Left-Turn Traffic (13-2989)
Jing Zhao, Tongji University, China
Wanjing Ma, Tongji University, China
H. Michael Zhang
Xiaoguang Yang, Tongji University, China

January 15, 2013, 8:30 a.m.–10:15 a.m., Marriott, Salon 2

Investigation of Early-Onset Breakdown Phenomenon at Urban Expressway Bottlenecks in Shanghai, China (13-2105)
Jian Sun, Tongji University, China
Juan Zhang, Tongji University, China
H. Michael Zhang

Session 503: Current Issues in Transportation Energy, Alternative Fuels, and Climate Change
January 15, 2013, 8:30 a.m.–10:15 a.m., Hilton, International Center

How Much on Electric? Looking at PHEV Users’ eVMT and How It Might Change—Possible influence of CD Range, Charging Infrastructure, Vehicle Design and Self-selection (13-5261)
Jamie Davies

Clean Development Mechanism and Sustainability in the Transportation Sector (13-3195)
Omid M. Rouhani

California Statewide Charging Survey: What Do Drivers Want? (13-5285)
Michael Anselm Nicholas
Gil Tal
Justin Woodjack

Do You Mind If I Plug in My Car? How Etiquette Shapes Plug-in Vehicle Drivers’ Vehicle Charging Behavior (13-2816)
Nicolette Caperello
Kenneth S. Kurani
Jennifer L. Tyree-Hageman

Commercial Building Trigeneration System for Refueling Hydrogen Vehicles, Providing Local Grid Support, and Enhancing Sustainability (13-3134)
Xuping Li
Joan M. Ogden
Christopher Yang

New Approach to Modeling Large-Scale Alternative Fuel and Vehicle Transitions (13-5210)
Joel Bremsen
Alan Meier, Lawrence Berkeley National Laboratory
C.-Y. Cynthia Lin
Joan M. Ogden

Accommodating Electric Vehicle Charging in California’s Power Sector: Regional Impacts on Greenhouse Gas Emissions (13-4120)
Julia M Sohnen
Yueyue Fan
Joan M. Ogden
Christopher Yang

Session 554: Strength and Deformation Characteristics of Pavement Sections
January 15, 2013, 10:45 a.m.–12:30 p.m., Shoreham, Blue Room Foyer

Benefit of Ground-Penetrating Radar Thickness for Backcalculation Using Falling Weight Deflectometer Data (13-5178)
Rongzong Wu
Jeremy David Lea
John Harvey
Arash Reazei
T. Joseph Holland, California Department of Transportation

Session 557: Current Issues in Transportation and the Environment
January 15, 2013, 10:45 a.m.–12:30 p.m., Hilton, International Center

Cool Pavement Strategies for Mitigating Heat Island: Do They Help Reduce Energy Use? (P13-5971)
Hui Li
John Harvey
David Jones

Session 558: Electric Bicycles and Emerging Vehicles
January 15, 2013, 10:45 a.m.–12:30 p.m., Hilton, International Center

Experience of Electric Bicycle Users in the Area of Davis-Sacramento, California (13-1709)
Elizabeth Gordon
Zhenying Shao
Yan Xing
Yunshi Wang
Susan L. Handy

Session 574: Advanced Understanding of Pavements Using Accelerated Pavement Testing
January 15, 2013, 1:30 p.m.–3:15 p.m., Shoreham, Ambassador

Effects of Asphalt Concrete Anisotropy on Predicted Pavement Response at High Temperatures (13-2166)
Erdem Coleri
John Harvey

Session 579: Prevention of Reflective Cracking in Hot-Mix Asphalt Overlays
January 15, 2013, 1:30 p.m.–3:15 p.m., Shoreham, Empire

Investigation and Modification of Available Mechanistic-Empirical Procedures for Reflective Cracking in Asphalt Overlays of Concrete Pavements (13-3264)
Lev Khazanovich, University of Minnesota, Twin Cities
Derek Tompkins, University of Minnesota
Rongzong Wu
John Harvey

Session 585: Emissions and Air Quality Analysis, Management, and Regulation of Transit Facilities
January 15, 2013, 1:30 p.m.–3:15 p.m., Hilton, Jefferson West
Colin Murphy, presiding officer
Session 590: Sustainable Energy and Transportation: Strategies, Research, and Data
January 15, 2013, 1:30 p.m.–3:15 p.m., Hilton, Jefferson West
Daniel Sperling, presiding officer
Outcomes (P13-6854)
Daniel Sperling

Session 612: Bus Operations
January 15, 2013, 2:00 p.m.–3:45 p.m., Hilton, International Center
Dynamic Holding Strategy to Prevent Buses from Bunching (13-3964)
Yuxiong Ji, Tongji University, China
H. Michael Zhang
Using Cooperative Vehicle Infrastructure System to Improve Bus Schedule Adherence:
Predictive Control Strategy and Its Hardware-in-the-Loop Field Tests (13-0648)
Wei Yin, Tongji University, China
Jing TENG, Key Laboratory of Road and Traffic Engineering of the Ministry of Education,
Shanghai, Tongji University
Xiaoguang Yang, Tongji University, China
H. Michael Zhang

Session 619: Best Papers from 4th International Conference on Accelerated Pavement Testing
January 15, 2013, 3:45 p.m.–5:30 p.m., Marriott, Maryland A
Calibration of Incremental-Recursive Rutting Prediction Models in CalME Using Heavy-Vehicle Simulator Experiments (P13-6424)
Erdem Coleri
Rongzong Wu
John Harvey
James M. Signore, University of California, Berkeley
Use of Mechanistic-Empirical Performance to Adjust and Compare Results from Accelerated Pavement Testing (P13-6405)
John Harvey
David Jones
Jeremy David Lea
Rongzong Wu
Per Ullidtz, Dynatest International, Denmark
Bor-Wen Tsai, University of California, Berkeley

Session 642: Environmental Justice in Transportation Equity Analysis Methods for Metropolitan Planning Organizations
January 15, 2013, 3:45 p.m.–5:30 p.m., Hilton, Columbia Hall 7
Review of Civil Rights Guidance and Equity Analysis Methods for Regional Transportation Plans (13-3420)
Alex Karner
Debbie Niemeier

Session 653: Characterization and Modeling of Asphalt Mixtures: Part 2 (Part 1, Session 599)
January 15, 2013, 4:15 p.m.–6:00 p.m., Marriott, Salon 2
Modeling and Experimental Measurements of Asphalt Mixture Fracture Properties Using Semicircular Bending Test (13-2635)
Enad Mahmoud, Bradley University
Shadi Saadeh, California State University, Long Beach
Hamed Hakimelahi, California State University, Long Beach
John Harvey
Session 726: Traffic Flow Theory and Characteristics, Part 2 (Part 1, Session 497)
January 16, 2013, 8:30 a.m.–10:15 a.m., Marriott, Salon 2

Jia Li
H. Michael Zhang

Application of Pavement Marker to Avoid Queue-jumping and Traffic Spillback at Off- ramp of Expressways (13- 3298)
Xiaoning Zhang, Tongji University, China
Xuan Di, University of Minnesota, Twin Cities
H. Michael Zhang
Henry X. Liu, University of Minnesota, Twin Cities

Session 737: Beneficial Results Based on Accelerated Pavement Testing
January 16, 2013, 10:15 a.m.–12:00 p.m., Marriott, Maryland A

Case Study for Evaluating Benefits of Pavement Research: Final Results (13- 2604)
Louw du Plessis, Council for Scientific and Industrial Research
William Nokes, California Department of Transportation
Nicholas Burmas, California Department of Transportation
T. Joseph Holland, California Department of Transportation
John Harvey

Session 739: Daring to UnPave
January 16, 2013, 10:15 a.m.–12:00 p.m., Marriott, Thurgood Marshall East

Role of Chemical Additives in Reverting to Unpaved Roads (P13- 5800)
David Jones

Session 740: Developments in In-Place Chemical and Asphalt Stabilization of Pavement Layers
January 16, 2013, 10:15 a.m.–12:00 p.m., Marriott, Virginia B

New Developments in Selecting Chemical Treatments for Gravel Roads (13- 2957)
David Jones

Session 757: Attitudes and Policies Toward Bicycling
January 16, 2013, 10:15 a.m.–12:00 p.m., Hilton, Columbia Hall 6

Exploring the Impact of Parent-Child Relationships on Children’s Bicycling in Davis, California (13- 3924)
Brigitte Driller
Susan L. Handy

Session 764: Past and Present Planning Regulations and Future Implications of MAP-21
January 16, 2013, 10:15 a.m.–12:00 p.m., Hilton, Lincoln West

Regulations and Evolving Roles of Metropolitan Planning Organizations (P13- 6440)
Gian- Cluadia Sciara

Session 791: Information and Communication Technologies, New Data, and New Behavioral Patterns
January 16, 2013, 2:30 p.m.–4:00 p.m., Hilton, Lincoln West

Giovanni Circella, presiding officer

Activity Fragmentation, ICT, and Travel: Unraveling Interrelationships with Structural Equation Models (13- 2057)
Bayarma Alexander
Eran Ben- Elia, University of the West of England, United Kingdom
Dick Ettema, Utrecht University, Netherlands
Session 800: Advances in Networking Modeling
January 16, 2013, 2:45 p.m.–4:30 p.m., Hilton, International Center

   *Primal-Dual Heuristic for Path Flow Estimation in Medium-Sized to Large Networks (13-3451)*
   
   Shikai Tang
   H. Michael Zhang

Session 815: E-shopping, Teleworking, and Internet Use During Travel: Some New Results
January 16, 2013, 4:30 p.m.–6:00 p.m., Hilton, Lincoln West

   *Estimation of Changes in Rail Ridership Through Onboard Survey: Did Free Wi-Fi Make a Difference to Amtrak’s Capitol Corridor Service? (13- 3946)*
   
   Zhi Dong, Tongji University
   Patricia L. Mokhtarian
   Giovanni Circella

Session 833: Vehicle Ownership, Usage, and Fuel Use
January 17, 2013, 8:00 a.m.–9:45 a.m., Hilton, Jefferson East

   *Design Matters: Early Results from Field Experiment of Fuel Economy Feedback (13- 4112)*
   
   Tai Stillwater
   Kenneth S. Kurani