

Nearly 60 ITS-Davis researchers are participating in the 91st annual meeting of the Transportation Research Board, January 22–26, 2012 in Washington, DC. Their presentations are listed below with session number, title, date, time, location, paper title, authors, and a link to details on the presentation. ITS-Davis presenters are listed by name only; other presenters are listed by institution as well.

MEETINGS

Chemical and Mechanical Stabilization Committee

January 23, 2012, 7:30–10:00 p.m., Marriott
David Jones, presiding officer

Accelerated Pavement Testing International Conferences Subcommittee, AFD40(1)

January 23, 2012, 8:00–9:45 a.m., Marriott
John Harvey, presiding officer

Emerging and Innovative Public Transport and Technologies Committee

January 23, 2012, 1:30–5:30 p.m., Hilton
Caroline Rodier, presiding officer

Mega-Regions Joint Subcommittee of ADA20

January 23, 2012, 1:30–3:15 p.m., Hilton
Gian-Claudia Sciara, presiding officer

PRESENTATIONS AND/OR PAPERS

Session 104: *Doctoral Student Research in Asphalt Materials and Mixtures*

January 22, 2012, 9:00 a.m.–12:00 p.m., Marriott

Thermal Performance of Fully Permeable Asphalt Pavement: Experimental and Simulation Investigation
[\(P12-5124\)](#)

Hui Li

Session 136: *Using Models to Meet the Demands of Transportation Planning in the 21st Century*

January 22, 2012, 9:00 a.m.–12:00 p.m., Hilton

Michael McCoy, presiding officer

Access, Equity, and Health: Using California's Statewide Activity-Based Travel Demand Model to Assess Co-benefits of Interregional Transportation Planning [\(P12-6744\)](#)

Caroline Rodier

Session 145: *Integrated Corridor Management*

January 22, 2012, 9:00 a.m.–5:00 p.m., Marriott

Technical Approaches and Issues with Signal System and Freeway Operations (Part 1) [\(P12-6507\)](#)

Montasir M. Abbas, Virginia Polytechnic Institute and State University

Zong Z. Tian, University of Nevada, Reno

Byungkyu (Brian) Park, University of Virginia

H. Michael Zhang

Zichuan Li, University of Maryland

Yi-Chang Chiu, University of Arizona

Session 149: *Doctoral Student Research in Transportation Modeling*

January 22, 2012, 1:00–5:00 p.m., Hilton

Autopia: A Serious Game about Long-range Alternative Fuel and Vehicle Transitions ([P12-6880](#))

Joel Bremson

Session 236: *Construction Management: Selected Research Topics*

January 23, 2012, 8:30–10:15 a.m., Marriott

Enhancement of Life-Cycle Cost Analysis Tool: RealCost California Customization ([12-3100](#)) B10

Changmo Kim

Eul-Bum Lee, University of California, Berkeley

John Harvey

Session 252: *Best Papers from Tenth International Conference on Low-Volume Roads, 2011*

January 23, 2012, 10:15 a.m.–12:00 p.m., Marriott

Project Selection Guidelines for Road Rehabilitation through Full-Depth Reclamation with Foamed Asphalt ([P12-5162](#))

David Jones

Session 299: *Policy and Practice in Transportation Demand Management and Parking Management*

January 23, 2012, 10:45 a.m.–12:30 p.m., Hilton

Calculation of Drive-Along Commute VMT Changes During Temporary Freeway Closure: Fix I-5 Project in Sacramento, California ([12-1543](#)) - D02

David van Herick

Patricia L. Mokhtarian

Xi He

Session 303: *Transportation History: Chicago Skyway, California Planning, and Swedish Nationalization*

January 23, 2012, 10:45a.m.–12:30 p.m., Hilton

The Region or the State? California Transportation Planning, 1967 to 1977 ([12-3738](#)) - D08

Alex Karner

Debbie Niemeier

Session 312: *Outcomes from Second Conference on Road Dust Best Management Practices*

January 23, 2012, 1:30–3:15 p.m., Marriott

National Scan Tour of Road Dust Management Practices: Key Findings ([P12-6526](#))

David Jones

Session 325: *Greening Pavements: Reducing CO₂ Emissions through Reduced Rolling Resistance, Part 2: Measuring and Modeling* (Part 1, Session 265)

January 23, 2012, 1:30–3:15 p.m., Shoreham

Life-Cycle Assessment for Pavements with Low Rolling Resistance ([P12-6133](#))

John Harvey

Session 335: *New Frontiers in Modeling Trip Generation*

January 23, 2012, 1:30–3:15 p.m., Hilton

Evaluation of the Operation and Accuracy of Available Smart Growth Trip Generation Methodologies for Use in California ([12-3949](#))

Kevan Shafizadeh, California State University, Sacramento

Richard W. Lee, Fehr and Peers Associates

Debbie Niemeier

Terry L. Parker, California Department of Transportation

Susan L. Handy

Session 346: *Pavement Preservation Supporting Pavement Management*

January 23, 2012, 2:00–3:45 p.m., Marriott

Probabilistic Approach to Life-Cycle Cost Assessment of Preventive Maintenance Strategies on Flexible Pavements ([12-2604](#)) - D03

Charles Lee

Genetic Algorithm for Finite Horizon Pavement Resurfacing Planning Problem ([12-3806](#)) - D07

Erdem Coleri

Session 377: *Flexible Pavement Design Inputs and Procedures*

January 23, 2012, 3:45–5:30 p.m., Shoreham

Developing a Mechanistic-Empirical Design Procedure for Fully Permeable Pavement under Heavy Traffic ([12-0551](#))

Hui Li

John Harvey

David Jones

Session 380: *Pavement Behavior Assessment Utilizing Automated Tools*

January 23, 2012, 3:45–5:30 p.m., Shoreham

Approaches to Filtering Laser-Based Inertial Profiler Data to Mitigate the Influence of Cracking ([12-2925](#))

Jeremy David Lea

Lin Chai

Session 386: *Emerging Topics in Air Quality and Greenhouse Gas Emissions from Non-highway Vehicles*

January 23, 2012, 3:45–5:30 p.m., Hilton

Including Regional Transit Emissions in Local Greenhouse Gas Inventories: Comparison of Methods with Examples from Portland, Oregon, and the San Francisco Bay Area, California ([12-0466**](#))

Frank Gallivan, ICF International

Elizabeth Sall, San Francisco County Transportation Authority

Eric Hesse, TriMet

Deborah Salon

Christopher Paul Ganson, World Resources Institute, India

Session 404: *Work Zone Analysis Tools*

January 23, 2012, 4:15–6:00 p.m., Marriott

Dynamic Modeling of Work Zone Traffic and Its Spillover Effect in Large-Scale Networks: Methodology and Its Application to Fix I-5 Project ([12-2809](#)) - A07

Zhen Qian

H. Michael Zhang

Session 416: *Mega-Regional Perspectives on Transportation: Planning Forum*

January 23, 2012, 4:15–6:00 p.m., Hilton

Gian-Claudia Sciara, presiding officer

Session 422: *Impacts of Transit-Oriented Development and New Insights on Transit Policy and Research*

January 23, 2012, 4:15–6:00 p.m., Hilton

Opportunities for Value Capture to Fund Public Transport: A Comprehensive Review of the Literature with Examples from East Asia ([12-1267](#)) - B06

Deborah Salon

Sharon Anne Shewmake, Vanderbilt University

Session 428: *Performance and Durability of Open-Graded Asphalt Mixtures*

January 23, 2012, 7:30–9:30 p.m., Marriott

Effect of Aggregate Type on Noise and Durability Performance of Open-Graded Asphalt Mixes ([12-2785](#))

Qing Lu, University of South Florida

John Harvey

Session 450: *Issues in Modeling Statewide Travel Demand*

January 23, 2012, 7:30–9:30 p.m., Hilton

Short-Distance Personal Travel Model in California Statewide Transportation Demand Model ([12-4706](#))

John Douglas Hunt, University of Calgary, Canada
Kevin Stefan, HBA Specto, Inc., Canada
Alan Thomas Brownlee, HBA Specto, Inc., Canada
Shengyang Sun
Debasis Basu

Session 468: *Accelerated Pavement Testing, Part 1* (Part 2, Session 514)

January 24, 2012, 8:00–9:45 a.m., Shoreham

Rotting of Rubberized Gap-Graded and Polymer-Modified Dense-Graded Asphalt Overlays in Composite Pavements ([12-3494**](#))

Erdem Coleri
Rongzong Wu
James M. Signore, University of California, Berkeley
John Harvey

Cracking and Rotting Performance of RHMA-G/PCC Composite Pavements under Heavy-Vehicle Simulator Testing ([12-1270](#))

Rongzong Wu

Session 480: *Evaluating Parameters Affecting Tire-Pavement Noise: Onboard Sound Intensity Methodology Test Parameters and Pavement Sound Absorption*

January 24, 2012, 8:00–9:45 a.m., Hilton

Calibration of Onboard Sound Intensity Measurements of Tire-Pavement Noise ([12-3462](#))

Qing Lu, University of South Florida
Rongzong Wu
John Harvey

Session 492: *Regional Transportation Systems Management and Operations*

January 24, 2012, 8:30–10:15 a.m., Marriott

What Happens When a Major Freeway Is Closed for Repairs? Case of Fix-15 in Downtown Sacramento, California ([12-4306](#)) - B17

H. Michael Zhang
Yi-Ru Chen
Robert Lim
Zhen Qian

Session 499: *Current Environmental Issues in Transportation*

January 24, 2012, 8:30–10:15 a.m., Hilton

Cool Pavement Strategies for Heat Island Mitigation: Field Measurement and Numerical Simulation ([P12-5508](#)) - G04

Hui Li
John Harvey
David Jones

Session 504: *Emerging Issues in Managed-Lane Operations*

January 24, 2012, 10:15 a.m.–12:00 p.m., Marriott

Traffic Characteristics of High-Occupancy-Vehicle Lanes ([12-4256](#))

Kitae Jang, University of California, Berkeley
Sanghyouk Oum
Ching-Yao Chan, University of California, Berkeley

Session 514: *Accelerated Pavement Testing, Part 2* (Part 1, Session 468)

January 24, 2012, 10:15 a.m.–12:00 p.m., Shoreham

Investigation of Aggregate Movement and Air-Void Reduction on Heavy-Vehicle Simulator Test Sections by Computed Tomography Imaging ([12-4300](#))

Erdem Coleri
John Harvey
Kai Yang
John M. Boone

Session 538: *Pavement Surface Characteristics: Comfort, Safety, and the Environment*

January 24, 2012, 10:45 a.m.–12:30 p.m., Shoreham

Initial Assessment of Tire Noise on Concrete Pavements on California Highways ([12-0297](#)) – 01

Erwin Kohler, Dynatest Chile
John Harvey
Linus Motumah, California Department of Transportation

Session 539: *Bicycle Planning and the Built Environment*

January 24, 2012, 10:45 a.m.–12:30 p.m., Hilton

Factors Influencing Commute Bicycling by University Employees ([12-0700**](#)) - J14

Joshua Daniel Miller
Susan L. Handy

Incidents and Crashes: Exploring the Formation of Attitudes toward Bicycling ([12-3759](#)) - J16

Amy Lee
Susan L. Handy
Sarah Underwood

Session 541: *Current Issues in Energy, Climate Change, and Alternative Fuels in Transportation*

January 24, 2012, 10:45 a.m.–12:30 p.m., Hilton

Cost and Feasibility of Biohydrogen in Delhi, India, for Hydrogen-Compressed Natural Gas Blends ([12-4708](#)) - B02

Geoffrey M. Morrison
Ravindra Kumar, Indian Oil Corporation
Sachin Chugh, Indian Oil Corporation
S. K. Puri, Indian Oil Corporation
D. K. Tuli, Indian Oil Corporation
R. K. Malhotra, Indian Oil Corporation

Spatially Explicit Biofuel Supply Projection for Meeting the Renewable Fuel Standard ([12-4423](#)) - B03

Nathan Parker

Increasing and Decreasing Fuel Economy Using Feedback: Behavioral Theory-Inspired Ecodriving Experiment ([12-4502](#)) - G01

Tai Stillwater
Kenneth S. Kurani
Patricia L. Mokhtarian

Are Electrical Vehicles Greener Than Conventional Vehicles in China? ([12-2740](#)) - G02

Zhenying Shao
Yueyue Fan
Yunshi Wang

In-vehicle Ecodriving Interface: Theory, Design, and Driver Response ([12-4510](#)) - G03

Tai Stillwater
Kenneth S. Kurani

LCFS-Compliant Transportation Fuel Pathways Under Uncertainties of Cellulosic Ethanol Technology Evolution and FFV Market Penetration ([12-2748](#)) - G04

Yuche Chen

Yueyue Fan

Can Markets for Electric Vehicles and Green Electricity Accelerate Each Other? Initial Conversations with Consumers ([12-4019](#)) - G05

Kenneth S. Kurani

Nicolette Caperello

Abdulkadir Bedir

Jon Axsen, Simon Fraser University, Canada

Characterizing Residential Recharge Potential for Plug-in Electric Vehicles ([12-2694](#)) - G07

Jon Axsen, Simon Fraser University, Canada

Kenneth S. Kurani

DC Fast as the Only Public Charging Option? Scenario Testing from GPS-Tracked Vehicles ([12-2997](#)) - G09

Michael A. Nicholas

Gil Tal

Jamie Davies

Justin Woodjack

Consumers' Perceptions and Use of Electric Vehicle Range Changes over Time through a Lifestyle Learning Process ([12-4041](#)) - G10

Justin Woodjack

Dahlia Garas

Andy Lentz

Tom Turrentine

Gil Tal

Michael A. Nicholas

Session 590: *Around the World: Does Gender Influence Travel?*

January 24, 2012, 2:00–3:45 p.m., Hilton

Gender Differences in Response to Price- and Time-Oriented Policies Targeting the Commute to an Automobile-Restricted CBD: Stated-Preference Mode Choice Study of Drivers in Tehran, Iran ([12-0463](#)) - J14

Reyhaneh Sadat Shahangian, Sharif University of Technology, Iran

Mohammad Kermanshah, Sharif University of Technology, Iran

Patricia L. Mokhtarian

Session 595: *Innovations in Mobility*

January 24, 2012, 2:00–3:45 p.m., Hilton

Caroline Rodier, presiding officer

Session 598: *Opportunities and Barriers for Shared-Vehicle Systems*

January 24, 2012, 2:00–3:45 p.m., Hilton

Caroline Rodier, presiding officer

Session 628: *New Technologies in Collecting and Archiving Non-motorized Travel Data*

January 24, 2012, 3:45–5:30 p.m., Hilton

Online Versus Phone Surveys: Comparison of Results for Bicycling Survey ([12-2357](#))

Yan Xing

Susan L. Handy

Session 636: *Innovations in Asphalt Materials, Applications, Design, and Testing*

January 24, 2012, 4:15–6:00 p.m., Marriott

Simplified Thermal Modeling Approach Used in CalME ([12-2938](#)) - A03

Jeremy David Lea

John Harvey

Session 639: *Flexible Pavement Performance*

January 24, 2012, 4:15–6:00 p.m., Shoreham

Material Characterization for Mechanistic Design of Fully Permeable Pavements: Low-Compaction Subgrade and Open-Graded Base Materials ([12-0550](#)) – 01

Hui Li
David Jones
John Harvey

Session 645: *Advances in Macroscopic Modeling*

January 24, 2012, 7:30–9:30 p.m., Marriott

Space-Time Inhomogeneity of Lighthill-Whitham and Richards Model: Modeling, Numerical Treatment, and Implications ([12-4060](#))

Jia Li
H. Michael Zhang

Session 649: *Intercity Passenger Rail*

January 24, 2012, 7:30–9:30 p.m., Marriott

Performance Journalism of Transportation Issues in Newspapers: Case Study of California High-Speed Rail ([12-3165](#)) - A14

Shunsuke Kimura, Tokyo University of Science, Japan
Alissa Kendall
Shintaro Terabe, Tokyo University of Science, Japan

Session 652: *Pedestrian Safety and Operations*

January 24, 2012, 7:30–9:30 p.m., Marriott

Measuring Non-motorized Accessibility and Connectivity in a Robust Pedestrian Network ([12-1494](#)) - D03

Gil Tal
Susan L. Handy

Use of Video for Automated Pedestrian Detection and Signal-Timing Extension: Results from a Pilot Installation in San Francisco, California ([12-4638](#)) - D05

Kristin Lovejoy
Frank Markowitz, San Francisco Municipal Transportation Agency
Jeannette Montufar, University of Manitoba, Canada

Session 653: *Planning for Pedestrians*

January 24, 2012, 7:30–9:30 p.m., Marriott

Examining Trip Generation and Pedestrian Behavior in Washington, D.C. ([12-0745](#)) - E11

Jacquelyn Renée Schneider

Session 692: *Attitudes and Determinants of Cycling*

January 25, 2012, 8:00–9:45 a.m., Hilton

Safe and Normal: Social Influences on Formation of Attitudes toward Bicycling ([12-3824](#))

Elizabeth Gordon
Susan L. Handy

Session 710: *Automobile Ownership Decision Making and Modeling*

January 25, 2012, 8:30–10:15 a.m., Hilton

Lifestyle Practices and Pro-environmental Technology ([12-1503](#)) - F03

Jonn Axsen, Simon Fraser University, Canada
Jennifer Tyree Hageman
Andy Lentz

Session 711: *Innovations in Activity and Travel Behavior*

January 25, 2012, 8:30–10:15 a.m., Hilton

Developing Sustainability-Oriented Values and Practices: Narrative Accounts of Drivers in Plug-in Hybrids ([12-1501](#)) - F05

Jon Axsen, Simon Fraser University, Canada

Kenneth S. Kurani

Understanding the Commute to Work on U.S. Military Bases ([12-4684](#)) - J05

Geoffrey M. Morrison

C.-Y. Cynthia Lin

How Do Local Actions Affect VMT? Critical Review of Empirical Evidence ([12-0842](#)) - J17

Deborah Salon

Marlon G. Boarnet, University of California, Irvine

Susan L. Handy

Steven Spears, University of California, Irvine

Gil Tal

Session 718: *Car Following and Driver Behavior*

January 25, 2012, 10:15 a.m.–12:00 p.m., Marriott

Car-Following Model Considering Driver Anticipation ([12-4336](#))

Hui Deng

H. Michael Zhang

Session 739: *How Do Information and Communications Technologies Continue to Re-form How We Travel, Teleshopping, and Even Industrial Uses?*

January 25, 2012, 10:15 a.m.–12:00 p.m., Hilton

Are Complementary Relationships Between Transportation and Communications for Industrial Uses Dominant? Case Study for Asian Countries ([12-2985](#))

Sangho Choo, Hongik University, South Korea

Yukyong Chang, Hongik University, South Korea

Patricia L. Mokhtarian

Keeyeon Hwang, Hongik University, South Korea

Session 773: *Texturing Concrete Pavements for Friction and Noise*

January 25, 2012, 2:30–6:00 p.m., Marriott

Summary of Noise Testing Program on Concrete Pavements in California ([P12-5060](#))

John Harvey

Session 795: *Impacts of Neighborhood and Urban Form on Travel Behavior*

January 25, 2012, 4:30–6:00 p.m., Hilton

Measuring Impacts of Local Land Use Policies on Vehicle Miles of Travel: Case of First Big Box Store in Davis, California ([12-2974](#))

Kristin Lovejoy

Gian-Claudia Sciara

Deborah Salon

Susan L. Handy

Patricia L. Mokhtarian