

## ADB40 Committee/Subcommittee Meetings at TRB 2005

### **ADB40 - Transportation Demand Forecasting Committee**

Chandra R. Bhat, presiding

**Wednesday, January 12, 2005, 7:30pm- 9:30pm, Hilton, Conservatory**

*Sponsored by: Committee on Transportation Demand Forecasting (ADB40)*

### **ADB40(1) - Emerging Methods and Developments in Urban Activity and Travel Analysis**

Karthik Srinivasan and Joan Walker, presiding

**Tuesday, January 11, 2005, 12:00 PM - 1:30 PM, Hilton**

*Sponsored by: Subcommittee on Emerging Methods and Developments in Urban Activity and Travel Analysis (ADB40(1))*

### **ADB40(2) - Integrated Transportation and Land Use**

John Douglas Hunt and Eric J. Miller, presiding

**Monday, January 10, 2005, 7:30 PM - 9:30 PM, Hilton**

*Sponsored by: Subcommittee on Integrated Transportation and Land Use (ADB40(2))*

## Sessions Sponsored or Co-Sponsored by ADB40 Committee at TRB 2005

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### **Workshop 111**

**Sunday, January 09, 2005, 8:30 AM - 12:00 PM, Hilton, Lincoln East**

#### **Innovative Travel Models: Proof of Concept**

*Sponsored by: Committee on Transportation Demand Forecasting (ADB40), Committee on Traveler Behavior and Values (ADB10), Task Force on Moving Activity-Based Approaches To Practice (ADB60T)*

8:30 – 8:35 AM Introduction (C. Bhat and J. Walker)

8:35 – 9:00 AM Innovations in Travel Demand Modeling: Discrete Choice Methods (J. Walker)

9:00 – 9:25 AM Innovations in Travel Demand Modeling: Microsimulation (R. Donnelly)

9:25 – 9:50 AM Innovations in Travel Demand Modeling: Activity-based Modeling (J. Bowman)

*Break 15 minutes*

10:05 – 10:30 AM Innovations in Travel Demand Modeling: Dynamic Traffic Assignment (T. Waller)

10:30 – 10:55 AM Innovations in Travel Demand Modeling: Land Use Modeling (E. Miller)

10:55 – 11:20 AM Adopting Innovative Methods for Planning (K. Cervenka)

11:20 – 11:40 AM A Vision for Moving Forward (K. Lawton)

11:40 – 12:00 PM A Vision for Moving Forward (F. Koppelman)

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## Workshop 158

**Sunday, January 09, 2005, 1:30 PM - 5:00 PM, Hilton, International East**

### Activity-Based Approaches: Theory, Methods, Data, and Applications

*Sponsored by: Task Force on Moving Activity-Based Approaches To Practice (ADB60T), Committee on Traveler Behavior and Values (ADB10), Committee on Transportation Demand Forecasting (ADB40)*

1:00 - 1:15 PM Introduction: Moving Activity Based Approaches to Practice (K. Goulias)

1:15 - 2:00 PM What is Activity Based Modeling? A TMIP Primer (T. Rossi)

2:00 - 2:30 PM Activity Based Models in Practice: Portland, Oregon and San Francisco, California (M. Bradley)

2:30 - 3:00 PM Activity Based Models in Practice: Columbus, Ohio (P. Vovsha)

*Break 15 minutes*

3:15 - 3:40 PM New Developments in Analytical Methods for Activity Based Modeling (C. Bhat)

3:40 - 4:05 PM New Developments in Microsimulation of Activity-Travel Patterns in Time and Space (R. Pendyala)

4:05 - 4:30 PM European Perspective: Albatross (H. Timmermans)

4:30 - 4:45 PM Summary of New Analytic Techniques and the Need for "Proof of Concept" Studies (J. Walker)

4:45 - 5:00 PM Closing Remarks: What Does the Future Hold and What Are Key Action Items (Goulias)

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## Workshop 160

**Sunday, January 09, 2005, 1:30 PM - 5:00 PM, Hilton, Thoroughbred**

### Doctoral Student Research in Transportation Modeling

David Lovell, University of Maryland, presiding

*Sponsored by: Committee on Transportation Network Modeling (ADB30), Committee on Traffic Flow Theory and Characteristics (AHB45), Committee on Transportation Demand Forecasting (ADB40), Committee on Traveler Behavior and Values (ADB10)*

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## Workshop 162

**Sunday, January 09, 2005, 1:30 PM - 5:00 PM, Hilton, Lincoln East**

### Integrated Land Use-Transport Models

Eric J. Miller, University of Toronto, Canada, presiding

*Sponsored by: Committee on Transportation Demand Forecasting (ADB40), Committee on Transportation and Land Development (ADD30)*

1:30 - 1:35 PM Workshop Introduction (E.J. Miller)

1:35 - 2:00 PM Introduction to Integrated Models (J.D. Hunt, University of Calgary)

2:00 - 2:20 PM Case Study 1: Building, Validating and Communicating Integrated Models (J. Britting, WFRC)

2:20 - 2:40 PM Case Study 2: MetroScope Operation 2001-2004: A Few Policy and Operational Lessons We've Learned to Date (S. Conder, Portland Metro)

2:40 - 2:55 PM *Break*

2:55 - 3:15 PM Case Study 3: Model Development in the Midst of a Regional Land Use Study (G. Garry, SACOG)

3:15 - 3:35 PM Case Study 4 Oregon TLUMIP Experiences (W. Upton, Oregon DOT)

3:35 - 4:00 PM Building an Integrated Model: Some Guidance (P. Waddell, University of Washington)

4:00 - 5:00 PM Open Panel Discussion & Q&A with the audience

Panel Members: J. Britting, S. Conder, G. Garry, J.D. Hunt, R.A. Johnston (UC Davis), E.J. Miller, W. Upton, P. Waddell

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## Session 231

**Monday, January 10, 2005, 8:00 AM - 9:45 AM, Hilton, Georgetown East**

### **Advances in Activity-Based Analysis of Travel Behavior**

Ondrej Pribyl, Czech Technical University, Prague, presiding

*Sponsored by: Committee on Traveler Behavior and Values (ADB10), Committee on Transportation Demand Forecasting (ADB40), Task Force on Moving Activity-Based Approaches To Practice (ADB60T)*

#### **Exploratory Analysis of Weekend Activity Patterns in San Francisco Bay Area (05-1484)**

Allison M. Lockwood, Kimley-Horn and Associates, Inc.

Sivaramakrishnan Srinivasan, University of Texas, Austin

Chandra R. Bhat, University of Texas, Austin

#### **Identifying Impacts of Explanatory Variables in Complex Rule-Based Models of Activity-Travel Behavior (05-0527)**

Theo Arentze, Eindhoven University of Technology, Netherlands

H. J. P. Timmermans, Eindhoven University of Technology, Netherlands

#### **Modeling Workers' Daily Nonwork Activity Participation and Duration (05-2451)**

You-Lian Chu, Parsons Corporation

#### **Mixed Logit Model of Activity Scheduling Time Horizon Incorporating Spatial-Temporal Flexibility Variables (05-2153)**

Abolfazl Mohammadian, University of Illinois, Chicago

Sean T. Doherty, Wilfrid Laurier University, Canada

#### **Analyzing Women's Trip-Chaining Patterns to Identify Potential Retail Amenity Mixes for Transit Oriented Development (05-0502)**

Stacey Bricka, NuStats Partners LP

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## Session 281

**Monday, January 10, 2005, 10:15 AM - 12:00 PM, Hilton, Georgetown East**

### **Understanding Behavioral Processes: Qualitative and Quantitative Approaches**

Kelly J. Clifton, University of Maryland, presiding

*Sponsored by:*

*Committee on Traveler Behavior and Values (ADB10)*

*Committee on Transportation Demand Forecasting (ADB40)*

*Task Force on Moving Activity-Based Approaches To Practice (ADB60T)*

#### **Modeling Impact of Travel Information on Activity-Travel Rescheduling Decisions Under Conditions of Travel Time Uncertainty (05-1339)**

Zhongwei Sun, Eindhoven University of Technology, Netherlands

Theo Arentze, Eindhoven University of Technology, Netherlands

H. J. P. Timmermans, Eindhoven University of Technology, Netherlands

#### **Characterizing Global Activity Schedule Adjustment Behavior Using a Sequence Alignment Method (05-2245)**

Chang-Hyeon Joh, Imperial College London, United Kingdom

John W. Polak, Imperial College London, United Kingdom

Tomás Ruiz, Technical University of Valencia, Spain

#### **How Do People Respond to Congestion Policies? Exploring Individual Consideration of Travel-Related Strategy Bundles (05-0658)**

Sangho Choo, University of California, Davis

Patricia L. Mokhtarian, University of California, Davis

#### **Queueing Process Model of Individual Activity Scheduling Behavior: Conceptual Framework (05-2597)**

Roger B. Chen, University of Maryland

Hani S. Mahmassani, University of Maryland

#### **How Far in Advance Are Activities Planned? Measurement Challenges and Analysis (05-2119)**

Sean T. Doherty, Wilfrid Laurier University, Canada

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## **Poster Session 323**

**Monday, January 10, 2005, 2:30 PM - 5:00 PM, Hilton, International Center**

### **Planning Mega Poster Session**

*Sponsored by: Planning and Environment Group (AD000), Committee on Statewide Multimodal Transportation Planning (ADA10), Committee on Metropolitan Policy, Planning, and Processes (ADA20), Committee on Transportation Planning for Small and Medium-Sized Communities (ADA30), Task Force on the Transportation Needs for National Parks and Public Lands (ADA40T), Committee on Transportation Programming, Planning, and Systems Evaluation (ADA50), Committee on Access Management (ADA70), Committee on Traveler Behavior and Values (ADB10), Committee on Telecommunications and Travel Behavior (ADB20), Committee on Transportation Demand Forecasting (ADB40), Committee on Transportation Planning Applications (ADB50), Task Force on Moving Activity-Based Approaches To Practice (ADB60T), Committee on Transportation and Land Development (ADD30), Committee on Women's Issues in Transportation (ABE70)*

#### **Gender Differences in Bicycling Behavior and Facility Preferences (05-2711)**

Kevin J. Krizek, University of Minnesota  
Pamela Jo Johnson, University of Minnesota  
Nebiyon Yonas Tilahun, University of Minnesota

#### **Assessing Intermodal Transportation Planning at State Departments of Transportation (05-1502)**

Andrew R. Goetz, University of Denver  
Joseph S. Szyliowicz, University of Denver  
Timothy M. Vowles, Victoria University, New Zealand

#### **Achieving Interagency Cooperation Through Technical Assistance: Option for Coordinating Transportation and Land Use Planning (05-0363)**

John Sanders Miller, Virginia Transportation Research Council  
Arkopal K. Goswami, Virginia Transportation Research Council

#### **Integrating Access Management into Metropolitan Planning Organization Transportation Planning Process (05-1154)**

Jeffrey Kramer, University of South Florida  
Kristine M. Williams, University of South Florida  
Karen E. Seggerman, University of South Florida

#### **Demographic Forecasting for Northern New Jersey: Desktop Scenario Model for Planning and Travel Estimation (05-2596)**

Albert Racciatti, Louis Berger Group, Inc.  
David Heller, North Jersey Transportation Planning Authority  
Ryan Prince, Louis Berger Group, Inc.  
Keith Miller, North Jersey Transportation Planning Authority  
David Aimen, Louis Berger Group, Inc.

#### **Decision Tool to Prioritize Multinational Transportation Infrastructure Investments (05-1221)**

Dimitrios A. Tsamboulas, National Technical University of Athens, Greece

#### **A Lagrangian Relaxation Heuristic for Selecting Interdependent Transportation Projects Under Cost Uncertainty (05-0565)**

Xianding Tao, InDyne Inc.  
Paul M. Schonfeld, University of Maryland, College Park

#### **Incorporating Access Management into Texas Transportation Institute's Urban Mobility Report (05-0716)**

William L. Eisele, Texas Transportation Institute  
David L. Schrank, Texas Transportation Institute  
Timothy J. Lomax, Texas Transportation Institute

#### **A Multiagent Learning-Based Approach to Transit Assignment Problem: A Prototype (05-0994)**

Mohammed Medhat Amin Wahba, University of Toronto, Canada  
Amer Shalaby, University of Toronto, Canada

#### **Assessment of User Benefits with Discrete Choice Models: Implications of Specification Errors Under Random Taste Heterogeneity (05-1732)**

Elisabetta Cherchi, Imperial College London, United Kingdom  
John W. Polak, Imperial College London, United Kingdom

#### **Parametric Action Decision Trees: Incorporating Continuous Attribute Variables into Rule-Based Models of Activity-Travel Behavior (05-0530)**

Theo Arentze, Eindhoven University of Technology, Netherlands  
H. J. P. Timmermans, Eindhoven University of Technology, Netherlands

**Simulation of Daily Activity Patterns Incorporating Interactions Within Households: Algorithm Overview and Performance (05-0634)**

Ondrej Pribyl, Czech Technical University, Prague  
Konstadinos G. Goulias, University of California, Santa Barbara

**Modeling Impact of Key Events on Long-Term Transport Mode Choice Decisions: Decision Network Approach Using Event History Data (05-0812)**

Marloes Verhoeven, Eindhoven University of Technology, Netherlands  
Theo Arentze, Eindhoven University of Technology, Netherlands  
H. J .P. Timmermans, Eindhoven University of Technology, Netherlands  
Peter van der Waerden, Eindhoven University of Technology, Netherlands

**Use of Travel Information and Effects on Mode Choice for Recreational Trips (05-1123)**

Rebecca van der Horst, Utrecht University, Netherlands  
Dick Ettema, Utrecht University, Netherlands

**Variation of Subjective Value of Travel Time on Freeways and Ramp Meters (05-0868)**

Lei Zhang, University of Minnesota  
Feng Xie, University of Minnesota  
David Levinson, University of Minnesota

**Investigating Effect of User Behavior Factors and Transportation Control Measures on Day-to-Day Network Evolution and Trip-Time Reliability (05-2491)**

Karthik Srinivasan, Vanderbilt University

**Capturing taste heterogeneity and correlation structure with Mixed GEV models (05-0590)**

Stephane Hess, Imperial College London, United Kingdom  
Michel Bierlaire, Ecole Polytechnique Federale de Lausanne, Switzerland  
John W. Polak, Imperial College London, United Kingdom

**Analysis of Variations in Vehicle Ownership Expenditures (05-2513)**

Piyushmita (Vonu) Thakuria, University of Illinois, Chicago  
Yihua Liao, University of Illinois, Chicago

**Modeling Travel Time Distributions on a Road Network (05-1331)**

Santiago Arroyo, Princeton University

**Traveler Preference for Park-and-Ride Facilities: Empirical Evidence of Generalizability (05-0760)**

Ilona Bos, University of Nijmegen, Netherlands  
Rob van der Heijden, University of Nijmegen, Netherlands  
Eric Molin, Delft University of Technology, Netherlands  
H. J .P. Timmermans, Eindhoven University of Technology, Netherlands

**Integrating Prospect Theory and Stackelberg Games to Model Strategic Dyad Behavior of Information Providers and Travelers: Theory and Numerical Simulations (05-0905)**

Qi Han, Eindhoven University of Technology, Netherlands  
Benedict Dellaert, Maastricht University, Netherlands  
Fred van Raaij, Tilburg University, Netherlands  
H. J .P. Timmermans, Eindhoven University of Technology, Netherlands

**Restoration of Cheonggye Stream in Downtown Seoul: Impacts of Serious Loss of Road Capacity on Traffic Conditions and Travel Behavior (05-0963)**

Kee Yeon Hwang, Seoul Development Institute, Korea  
Seungjae Lee, University of Seoul, Korea

**Developing New Activity-Trip Scheduling Model Based on Utility of Timing Incorporating Timing Constraints, Censored Timing, and Sequential Correlation (05-2048)**

Junyi Zhang, Hiroshima University, Japan  
Akimasa Fujiwara, Hiroshima University, Japan  
Noriyuki Ishikawa, Bureau of Water Work, Japan

**Vehicle Miles Traveled in Multivehicle Households (05-0494)**

Ali Haghani, University of Maryland  
Somchai Pathomsiri, University of Maryland

**Eliciting Causal Reasoning Mechanisms Underlying Activity-Travel Choice: Interview Protocol Based on Bayesian Belief Networks (05-0794)**

Anouk den Hartog, Eindhoven University of Technology, Netherlands  
Theo Arentze, Eindhoven University of Technology, Netherlands  
Benedict Dellaert, Maastricht University, Netherlands  
H. J .P. Timmermans, Eindhoven University of Technology, Netherlands

**Analysis of Factors Affecting Frequency and Type of Activity Schedule Modification (05-2428)**

Chang-Hyeon Joh, Imperial College London, United Kingdom

Sean T. Doherty, Wilfrid Laurier University, Canada

John W. Polak, Imperial College London, United Kingdom

**Empirical Analysis of Factors Affecting Resolution of Activity Scheduling Conflicts (05-2118)**

Tomás Ruiz, Technical University of Valencia, Spain

John W. Polak, Imperial College London, United Kingdom

Chang-Hyeon Joh, Imperial College London, United Kingdom

**Short-Term Shifts in Population Distribution: Unraveling the Diurnal Mobility of Daytime**

**Population in the Netherlands (05-0145)**

Robbert Zandvliet, Utrecht University, Netherlands

Martin Dijst, Utrecht University, Netherlands

**Model of Daily Time Use Allocation Using Fractional Logit Methodology (05-0703)**

Xin Ye, University of South Florida

Ram M. Pendyala, University of South Florida

**Understanding Travel Time Expenditures Around the World: Exploring Existence of Positive Utility of Travel (05-1571)**

Xin Ye, University of South Florida

Amlan Banerjee, University of South Florida

Ram M. Pendyala, University of South Florida

Abdul Rawoof Pinjari, University of South Florida

**Classification Taxonomy and Empirical Analysis of Work Arrangements (05-1522)**

Aswani Yeraguntla, University of Texas, Austin

Chandra R. Bhat, University of Texas, Austin

**Working from Home in U.S. Metropolitan Areas: Role of New Technologies (05-0481)**

Steve Wernick, University of North Carolina, Chapel Hill

Asad Jan Khattak, University of North Carolina, Chapel Hill

**Spatial Attributes and Patterns of Use in Household-Related Information and Communications**

**Technology Activity (05-1933)**

Kevin J. Krizek, University of Minnesota

Yi Li, University of Minnesota

Susan Handy, University of California, Davis

**Social Influence and Decision to Telecommute: Simulation Example (05-2182)**

Antonio Paez, McMaster University, Canada

Darren M. Scott, McMaster University, Canada

**The Impact of E-shopping on Individual Temporal Constraints and Out-of-home Activities (05-1647)**

Fang Ren, Ohio State University

Mei-Po Kwan, Ohio State University

**Correlations Between Communications and Transportation Inputs to U.S. Industry, 1947-1997 (05-2755)**

Taihyeong Lee, University of California, Davis

Patricia L. Mokhtarian, University of California, Davis

**Flexible Substitution Patterns in Models of Mode and Time-of-Day Choice: New Evidence from the United Kingdom and the Netherlands (05-2122)**

Stephane Hess, Imperial College London, United Kingdom

John W. Polak, Imperial College London, United Kingdom

Andrew Daly, Rand Europe, United Kingdom

Geoffrey Hyman, Department for Transport

**Discrete Choice with Social and Spatial Network Interdependencies: Empirical Example Using Mixed Cross-Nested Logit Models with Panel Effects (05-2675)**

Elenna R. Dugundji, University of Amsterdam, Netherlands

Joan L. Walker, Boston University

**Comparative Analysis of Discrete Choice Models with Flexible Substitution Patterns (05-2327)**

Dinesh Gopinath, ChoiceStream

Mark L. Schofield, AECOM Consult Inc.

Joan L. Walker, Boston University

Moshe Ben-Akiva, Massachusetts Institute of Technology

**New Discrete Choice Model with Endogenous Generation of Choice Set Based on the Principle of Relative Utility Maximization (05-2054)**

Junyi Zhang, Hiroshima University, Japan  
Akimasa Fujiwara, Hiroshima University, Japan  
Tetsuo Kusakabe, Hiroshima University, Japan

**Monitoring Traffic Under Congestion (05-0773)**

Theo H.J. Muller, Delft University of Technology, Netherlands

**Congestion on Risky Routes with Risk-Averse Drivers (05-1795)**

Nathalie Picard, THEMA-UCP, France  
André de Palma, University of Cergy-Pontoise, France

**Impact of Stop-Making and Travel Time Reliability on Commute Mode Choice: Application to Predict Commuter Rail Transit Mode for Austin, Texas (05-1545)**

Chandra R. Bhat, University of Texas, Austin  
Rupali Sardesai, University of Texas, Austin

**Development of Car Tourists' Scheduling Model for One-Day Tour (05-2059)**

Akimasa Fujiwara, Hiroshima University, Japan  
Junyi Zhang, Hiroshima University, Japan

**Application of Macro- and Microscopic Simulations for Traffic Planning of Urban Highway Reconstruction (05-1552)**

Eul-Bum Lee, University of California, Berkeley  
Changmo Kim, University of California, Davis  
John T. Harvey, University of California, Davis

**Representation of Within-Household Interactions in Activity Patterns (05-1607)**

Ondrej Pribyl, Czech Technical University, Prague

**Escorting Children to School: Statistical Analysis and Applied Modeling Approach (05-2071)**

Peter Vovsha, PB Consult  
Eric Petersen, PB Consult

**Comparative Analysis of Married Couples' Task and Time Allocation Behavior on Weekdays Versus Weekends (05-2024)**

Junyi Zhang, Hiroshima University, Japan  
Harry J.P. Timmermans, Eindhoven University of Technology, Netherlands  
Aloys W.J. Borgers, Eindhoven University of Technology, Netherlands

**An Analysis of Activity Type Classification and Issues Related to the with Whom and for Whom Questions of an Activity Diary (05-0372)**

Konstadinos G. Goulias, University of California, Santa Barbara  
Tae-Gyu Kim, City of El Paso

**Automobile Ownership and Use in Neotraditional and Conventional Neighborhoods (05-0978)**

Elizabeth Shay, University of North Carolina, Chapel Hill  
Asad Jan Khattak, University of North Carolina, Chapel Hill

**Influence of Accessibility on Residential Location Choice (05-0793)**

Barry Zondag, Delft University of Technology, Netherlands  
Marits Pieters, Rand Europe, Netherlands

**Firm Location and Accessibility of Locations: Empirical Results from the Netherlands (05-1231)**

Michiel De Bok, Delft University of Technology, Netherlands

**Employer Valuations of Employee Commuting Time: Case Study of Office Tenants in North Dallas (05-2799)**

David Luskin, University of Texas, Austin

**Intercity Variations in the Relationship Between Urban Form and Automobile Dependence: Disaggregate Analyses of Boston, Portland, And Houston (05-2458)**

Ming Zhang, University of Texas, Austin

**Analysis of the Effects of Local Street Connectivity on Arterial Traffic (05-0240)**

Edward Beimborn, University of Wisconsin, Milwaukee  
Carlos Alba, University of Wisconsin, Milwaukee

**North Point in Cambridge, Massachusetts: Remaking the O'Brien Highway and Gilmore Bridge Urban Arterials (05-1486)**

Christopher Conklin, Vanasse Hangen Brustlin Inc.  
Laura Marie Castelli, Vanasse Hangen Brustlin Inc.

Lisa Serafin, Spauling & Slye Colliers  
Susan Sloan-Rossiter, Vanasse Hangen Brustlin Inc.

**Redevelopment and Revitalization Along Urban Arterials: Case Study of San Pablo Avenue from Developer's Perspective (05-2006)**

Luis Eric Mejias, University of California, Berkeley

**Location Behavior of Two-Earner Households: Further Evidence (05-0023)**

Jeppe Husted Rich, Technical University of Denmark

**Evaluating the Feasibility of New Urbanism in an Existing Neighborhood (05-0334)**

Jon D. Fricker, Purdue University

Ee Huei Koh, National University of Singapore

**Land Use and Transportation: Operationalizing the Relationship With a Transportation-Efficient Land Use Mapping Index (05-2320)**

Anne Vernez Moudon, University of Washington

Sarah E. Kavage, Washington State Department of Transportation

Jean E. Mabry, Washington State Department of Transportation

D. W. Sohn, University of Washington

**Spatial Mismatch Hypothesis: Critique of Research and Proposed Methods (05-0699)**

Shengyi Gao, University of California, Davis

Robert A. Johnston, University of California, Davis

**Estimating the Impact of Compact Development on Travel Mode and Public Health (05-1104)**

Dick Nelson, Integrated Transport Research

**An Analysis of the Day-to-Day Variability in the Individual's Action Space: An Exploration of the Six-Week Mobidrive Travel Diary Data (05-2051)**

Yusak Octavius Susilo, Kyoto University

Ryuichi Kitamura, Kyoto University

**Activity-Travel Behavior in Time and Space: Analysis of Commuters' Weekday Trips Involving Convenient Goods Purchase in Seoul, Korea (05-1687)**

Chang-Hyeon Joh, Imperial College London, United Kingdom

Woo-kung Huh, Seoul National University, Korea

**Influences of Urban Form and Residential Self-Selection on Pedestrian Behavior (05-0981)**

Xinyu Cao, University of California, Davis

Susan Handy, University of California, Davis

Patricia L. Mokhtarian, University of California, Davis

**Case Study on Investment Analysis Using Constraint Multiobjective Programming Method (05-2416)**

Mashrur A Chowdhury, Clemson University

Paulin Tan, University of Dayton

**The Ontario Executive Support System – Integrating Pavement and Bridge Management Systems (05-1161)**

Joseph A. Guerre, Cambridge Systematics, Inc.

William E. Robert, Cambridge Systematics, Inc.

Alison Bradbury, Ontario Ministry of Transportation, Canada

Michael Goodale, Ontario Ministry of Transportation, Canada

**The Micro-based Modeling System OVID (05-2296)**

Christoph Gringmuth, University of Karlsruhe, Germany

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## Session 434

**Tuesday, January 11, 2005, 8:00 AM - 9:45 AM, Hilton, Georgetown West**

### Land Use Modeling: Methods and Data

Kevin J. Krizek, University of Minnesota, presiding

*Sponsored by: Committee on Transportation and Land Development (ADD30), Committee on Transportation Demand Forecasting (ADB40)*

#### **Metrics of the Built Environment and Modifiable Areal Unit Problem (05-2562)**

Ming Zhang, University of Texas, Austin

Nishant Kukadia, Texas A&M University System

#### **Spatial Econometric Models for Panel Data: Incorporating Spatial and Temporal Data (05-2207)**

Christopher Frazier, University of Texas, Austin

Kara M. Kockelman, University of Texas, Austin

#### **Spatiotemporal Data Model and Query Language for Tracking Land Use Change (05-1760)**

Bo Huang, University of Calgary, Canada

Christophe Claramunt, French Naval Academy Research Institute

#### **Sacramento PECAS Model (05-1220)**

John E. Abraham, University of Calgary, Canada

Gordon R. Garry, Sacramento Area Council of Governments

John Douglas Hunt, University of Calgary, Canada

#### **Three Methods for Synthesizing Base-Year Built Form for Use in Integrated Land Use-Transport Models (05-2325)**

John E. Abraham, University of Calgary, Canada

Tara J. Weidner, PB Consult, Inc.

John P. Gliebe, PB Consult, Inc.

Christi Willison, PB Consult, Inc.

John Douglas Hunt, University of Calgary, Canada

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## Session 472

**Tuesday, January 11, 2005, 10:15 AM - 12:00 PM, Hilton, Georgetown West**

### Land Use Modeling Applications

Eric J. Miller, University of Toronto, Canada, presiding

*Sponsored by: Committee on Transportation and Land Development (ADD30), Committee on Transportation Demand Forecasting (ADB40)*

#### **Oregon Bridge Investment Alternatives: Using Integrated Modeling and Analysis in Policy Decisions (05-0957)**

Tara J. Weidner, PB Consult, Inc.

Brian J. Gregor, Oregon Department of Transportation

Michal Wert, MW Consulting

John Douglas Hunt, University of Calgary, Canada

#### **Comparing Forecasting Methods: Expert Land Use Panel Versus Simple Land Use Allocation Model (05-2758)**

Reid Ewing, University of Maryland

Rich Kuzmyak, Consultant

#### **Multiobjective Analysis of Regional Transportation and Land Development Policies (05-2347)**

Caroline Rodier, University of California, Berkeley

#### **Modeling Long-Range Transportation and Land Use Scenarios for Sacramento Region Using Citizen-Generated Policies (05-1586)**

Robert A. Johnston, University of California, Davis

Shengyi Gao, University of California, Davis

Michael J. Clay, University of California, Davis

#### **Development of Dynamic Integrated Land Use Transportation Model (05-2391)**

André de Palma, University of Cergy-Pontoise, France

Kiarash Motamedi, University of Cergy-Pontoise, France

José Moyano, AdpC, Belgium

Dany Nguyen-Luong, Institute for Urban Planning and Development of Paris-Ile-de-France Region, France

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## Session 507

**Tuesday, January 11, 2005, 1:30 PM - 3:15 PM, Hilton, Georgetown West**

### **Emerging and Innovative Travel Demand Analysis Techniques**

Chandra R. Bhat, University of Texas, Austin, presiding

*Sponsored by: Committee on Transportation Demand Forecasting (ADB40), Committee on Traveler Behavior and Values (ADB10)*

#### **Mobility Tools: Modeling Interactions Between Car and Season Ticket Ownership (05-1640)**

Darren M. Scott, McMaster University, Canada

Kay W. Axhausen, Swiss Federal Institute of Technology Zurich

#### **Market-Based Parking Cost Forecasting Framework for Traditional and Microsimulation Modeling Applications (05-1539)**

Gregory D. Erhardt, Denver Regional Council of Governments

David L. Kurth, Parsons

Erik E. Sabina, Denver Regional Council of Governments

Smith Myung, Manuel Padron & Associates

#### **Impact of Policy Measures on Park-and-Ride Choice: Simulations Based on Park-and-Ride Choice Model (05-0769)**

Ilona Bos, University of Nijmegen, Netherlands

Rob van der Heijden, University of Nijmegen, Netherlands

Eric Molin, Delft University of Technology, Netherlands

H. J. P. Timmermans, Eindhoven University of Technology, Netherlands

#### **Estimation of Value of Time Using Mixed Logit Models (05-2534)**

Stephane Hess, Imperial College London, United Kingdom

Michel Bierlaire, Ecole Polytechnique Federale de Lausanne, Switzerland

John W. Polak, Imperial College London, United Kingdom

#### **Urban Commercial Vehicle Movement Model for Calgary (05-1534)**

Kevin Stefan, City of Calgary, Canada

Paul McMillan, City of Calgary, Canada

John Douglas Hunt, University of Calgary, Canada

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## Session 560

**Tuesday, January 11, 2005, 3:45 PM - 5:30 PM, Hilton, Georgetown West**

### **Long-Range Forecasting, Quick-Response Methods, and Scenario Analysis**

Thomas F. Rossi, Cambridge Systematics, Inc., presiding

*Sponsored by: Committee on Transportation Demand Forecasting (ADB40)*

#### **Travel Demand Modeling for Regional Visioning and Scenario Analysis (05-0364)**

Norman Marshall, Smart Mobility Inc.

Brian Grady, Smart Mobility Inc.

#### **Tests of Family of Trip Table Refinements for Long-Range, Quick-Response Travel Forecasting (05-0100)**

Alan J. Horowitz, University of Wisconsin, Milwaukee

#### **Comparative Evaluations of Elasticity of Travel Demand (05-0313)**

Robert Schiffer, Cambridge Systematics, Inc.

#### **Incorporating Trip Chaining Behavior in Network Equilibrium Analysis (05-1085)**

Takuya Maruyama, University of Tokyo, Japan

Noboru Harata, University of Tokyo, Japan

#### **Forecasting 65+ Travel: Integration of Cohort Analysis and Travel Demand Modeling (05-1790)**

Sarah Bush, Massachusetts Institute of Technology

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## Session 625

Wednesday, January 12, 2005, 8:00 AM - 9:45 AM, Hilton, Military

### Evolving Practice and Theory in Travel Demand Modeling: Challenges for Data Systems

Jonette Kreideweis, Minnesota Department of Transportation, presiding

*Sponsored by: Committee on Statewide Transportation Data and Information Systems (ABJ20), Committee on Travel Survey Methods (ABJ40), Committee on Transportation Demand Forecasting (ADB40), Committee on Statewide Multimodal Transportation Planning (ADA10), Innovations in Freight Transportation Modeling (AT016T)*

#### **Travel Demand Modeling Data Challenges: Pima County Example (P05-0514)**

Maren L. Outwater, Cambridge Systematics, Inc.

#### **Travel Demand Modeling Data Challenges: Metropolitan Washington Council of Governments (P05-0513)**

Ronald F. Kirby, Metropolitan Washington Council of Governments

#### **Integrating Freight Considerations into Travel Demand Modeling Process (P05-0515)**

J. Susie Lahsene, Port of Portland

#### **Overview of Peer Exchange on Statewide Traffic Forecasting Models (P05-0512)**

Gregory Giaimo, Ohio Department of Transportation

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## Session 811

Thursday, January 13, 2005, 8:00 AM - 9:45 AM, Hilton, Military

### Time Use and Travel Time Expenditures: New Insights

Cynthia Chen, City College of New York, presiding

*Sponsored by: Committee on Traveler Behavior and Values (ADB10), Committee on Transportation Demand Forecasting (ADB40), Task Force on Moving Activity-Based Approaches To Practice (ADB60T)*

#### **Rational Locator Reexamined: Are Travel Times Still Stable? (05-1112)**

David Levinson, University of Minnesota

Yao Wu, Fehr & Peers Associates

#### **Latent Activities: Modeling Relationship Between Travel Times and Activity Participation (05-1015)**

Dick Ettema, Utrecht University, Netherlands

#### **Understanding Travel Time Expenditures Around the World: Exploring Notion of Travel Time Budgets (05-1579)**

Amlan Banerjee, University of South Florida

Xin Ye, University of South Florida

Ram M. Pendyala, University of South Florida

Abdul Rawoof Pinjari, University of South Florida

#### **Multiple Discrete-Continuous Extreme Value Model: Formulation and Application to Discretionary Time Use Decisions (05-1530)**

Chandra R. Bhat, University of Texas, Austin

#### **Dynamic Analysis of Time Use and Frequency of Activity and Travel Using Latent Class Clustering and Structural Equation Modeling (05-1082)**

Tae-Gyu Kim, City of El Paso

Konstadinos G. Goulias, University of California, Santa Barbara

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## Session 812

Thursday, January 13, 2005, 8:00 AM - 9:45 AM, Hilton, Hemisphere

### Intrahousehold Interaction and Group Decision Making

Peter Vovsha, PB Consult, presiding

*Sponsored by: Committee on Transportation Demand Forecasting (ADB40), Committee on Traveler Behavior and Values (ADB10), Task Force on Moving Activity-Based Approaches To Practice (ADB60T)*

#### **Modeling Household Activity-Travel Interactions as Parallel Constrained Choices (05-2530)**

John P. Gliebe, PB Consult, Inc.

Frank S. Koppelman, Northwestern University

#### **Model for Joint Choice of Daily Activity Pattern Types of Household Members (05-0954)**

Mark Bradley, Bradley Research & Consulting

Peter Vovsha, PB Consult

#### **Modeling Household Interactions in Daily In-Home and Out-of-Home Maintenance Activity Participation (05-1488)**

Sivaramakrishnan Srinivasan, University of Texas, Austin

Chandra R. Bhat, University of Texas, Austin

#### **Genetic Algorithm-Based Household Scheduler (05-1637)**

Kay W. Axhausen, Swiss Federal Institute of Technology Zurich

Konrad Meister, Swiss Federal Institute of Technology Zurich

Martin Frick, Swiss Federal Institute of Technology Zurich

#### **Analysis of Within-Household Effects and Between-Household Differences in Maintenance Activity Allocation (05-2132)**

Karthik Srinivasan, Vanderbilt University

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## Session 823

Thursday, January 13, 2005, 10:15 AM - 12:00 PM, Hilton, Hemisphere

### State-of-the-Art Econometric Developments in Discrete Choice Modeling

Karthik K. Srinivasan, Vanderbilt University, presiding

*Sponsored by: Committee on Transportation Demand Forecasting (ADB40)*

#### **Evaluation of Advanced Optimization Methods for Estimating Mixed Logit Models (05-2340)**

Fabian Bastin, University of Namur, Belgium

Cinzia Cirillo, University of Namur, Belgium

Stephane Hess, Imperial College London, United Kingdom

#### **Simulation Estimation of Mixed Discrete Choice Models Using Randomized Quasi-Monte Carlo Sequences: A Comparison of Alternative Sequences, Scrambling Methods, and Uniform-to-Normal Variate Transformation Techniques (05-1503)**

Aruna Sivakumar, University of Texas at Austin

Chandra R. Bhat, University of Texas, Austin

Giray Ökten, Ball State University

#### **Testing Mixed Logit and Probit Models by Simulation (05-1708)**

Marcela Munizaga, Universidad de Chile

#### **Efficient Estimation of Nested Logit Models Using Choice-Based Samples (05-1796)**

Frank S. Koppelman, Northwestern University

Laurie Garrow, Georgia Institute of Technology

#### **Bayesian Multinomial Logit Models: Exploratory Assessment of Transportation Applications (05-1710)**

Simon P. Washington, University of Arizona

Peter Congdon, Queen Mary, University of London, United Kingdom

Matthew G. Karlaftis, National Technical University of Athens, Greece

Fred Mannering, Purdue University

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