

ADB40 Committee/Subcommittee Meetings at TRB 2006

ADB40 - Transportation Demand Forecasting Committee

Wednesday, January 25, 2006, 8:00am – 9:45am, Hilton, Georgetown South

Chandra R. Bhat, presiding

Sponsored by Committee on Transportation Demand Forecasting (ADB40)

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

Tuesday, January 24, 2006, 7:00am – 8:00am, Hilton, Grant

Karthik Srinivasan and Joan Walker, presiding

Sponsored by Committee on Transportation Demand Forecasting (ADB40)

ADB40(2) - Integrated Transportation and Land Use Subcommittee

Wednesday, January 25, 2006, 4:30am – 6:00pm, Hilton, Georgetown South

John Douglas Hunt and Eric J. Miller, presiding

Sponsored by Committee on Transportation Demand Forecasting (ADB40); Committee on Transportation and Land Development (ADD30)

Sessions Sponsored or Co-Sponsored by ADB40 Committee at TRB 2006

TPW06-002

Sunday, January 22, 2006, 8:30am – 12:00pm, Hilton, Jefferson East

Transferability of Household Travel Survey Data--Getting by Without a Travel Survey

Nancy McGuckin, Consultant, presiding

Sponsored by Committee on Urban Transportation Data and Information Systems; Committee on Traveler Behavior and Values; Committee on Transportation Demand Forecasting; Committee on National Transportation Data Requirements and Programs

Can the data or survey results from one or more areas be applied to other similar areas? Recently, this concept, known as transferability has received a great deal of attention and interest within the transportation community. As a result, several committees have joined together to share the latest results, research and activities in this workshop environment. Workshop participants will not only learn about the current state of the practice, but they will also be able to share in developing the future direction of this exciting field.

A Brief History of Transferability (P06-0689)

Nancy McGuckin, Consultant

Oak Ridge National Laboratory Work (P06-0690)

Patricia S. Hu, Oak Ridge National Laboratory

Synthesising a Household Travel Survey Data Base (P06-0691)

Peter R. Stopher, Institute of Transport and Logistics Studies, Australia

Stephen Greaves, University of Sydney, Australia

University of Illinois at Chicago Transferability Research (P06-0693)

Abolfazl Mohammadian, University of Illinois, Chicago

Jie Lin, University of Illinois at Chicago

Workshop 164

Sunday, January 22, 2006, 1:30pm – 5:00pm, Hilton, Jefferson East

A Coast to Coast Tutorial with Activity Models

Konstadinos G. Goulias, University of California, Santa Barbara, presiding

Sponsored by Task Force on Moving Activity-Based Approaches To Practice; Committee on Traveler Behavior and Values; Committee on Transportation Demand Forecasting

In this workshop we will showcase two activity-based applications from Portland, Oregon and New York, New York. The workshop will examine problems and solutions for model formulation, data collection, model estimation and implementation as well as policy analyses using the models.

PART A: ACTIVITY MODELING IN PORTLAND:

Soup to Nuts Introduction & Overview (P06-0200)

William A. Davidson, PB Consult Inc

A Simple Approach to a Complex Model (P06-0202)

T. Keith Lawton, Keith Lawton Consulting

Selective and Sampled Feedback Techniques (P06-0204)

John P. Gliebe, PB Consult, Inc.

Activity-Based models and network microsimulation (P06-0206)

David B. Roden, AECOM Consult Inc.

Data Resources for Activity and Micro-Simulation at the MPO network level - How Daunting? (P06-0208)

Cindy Pederson, Portland Oregon Metro Planning Council

PART B: ACTIVITY MODELING IN NEW YORK:

The NYMTC approach (P06-0209)

Kuo-Ann Chiao, New York Metro Transportation Council

KFW06-009

Sunday, January 22, 2006, 1:30pm – 5:00pm, Hilton, Thoroughbred

Doctoral Student Research in Transportation Modeling

Sponsored by Committee on Transportation Network Modeling; Committee on Traffic Flow Theory and Characteristics; Committee on Traveler Behavior and Values; Committee on Transportation Demand Forecasting

The Transportation Network Modeling Committee (ADB30), the Traffic Flow Theory Committee (AHB45), the Demand Forecasting Committee (ADB40), and the Travel Behavior Committee (ADB10) of the Transportation Research Board are co-sponsoring a half-day seminar consisting of reports of Ph.D. student research on transportation modeling and travel behavior. The seminar is to be held on Sunday at the 84th annual meeting of the Transportation Research Board in Washington, DC. Reports of recently completed (or nearly completed) Ph.D. dissertations and research-in-progress are welcome.

Session 227

Monday, January 23, 2006, 8:00am– 9:45am, Hilton, Monroe West

Probing Travel Behavioral Decision Processes: Experiments and Findings

Sean T. Doherty, Wilfrid Laurier University, Canada, presiding

Sponsored by Committee on Traveler Behavior and Values; Committee on Transportation Demand Forecasting

A Framework for Travel Time Learning and Behavioral Adaptation in Route and Departure Time Choice

(06-2107)

Apivat Jotisankasa, Imperial College London, United Kingdom

John W. Polak, Imperial College London, United Kingdom

Simulating and Forecasting Individual Car Choice Decision Processes under Future Governmental Incentive Schemes Promoting Fuel-Efficient New Cars (06-1785)

Michel Mueller, Swiss Federal Institute of Technology

Peter de Haan, Swiss Federal Institute of Technology

Cognitive Mapping, Travel Behavior, and Access to Opportunity (06-2883)

Andrew Mondschein, University of California, Los Angeles

Evelyn Blumenberg, University of California, Los Angeles

Brian D. Taylor, University of California, Los Angeles

The Applicability of Non-Cooperative Game Theory in Transport Systems Analysis (06-0240)

Yaron Hollander, University of Leeds, United Kingdom

Collecting Social Network Data to Study Social Activity-Travel Behavior: An Egocentric Approach

(06-1488)

Juan Antonio Carrasco, University of Toronto, Canada

Bernie Hogan, University of Toronto, Canada

Barry Wellman, University of Toronto, Canada

Eric J. Miller, University of Toronto, Canada

Session 272

Monday, January 23, 2006, 10:15am – 12:00pm, Hilton, Monroe West

Behavioral and Methodological Considerations in Discrete Choice Modeling

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

Sponsored by Committee on Transportation Demand Forecasting

Identification and Estimation of Mixed Logit Models under Simulation Methods (06-2787)

Lesley Chiou, Occidental College

Joan L. Walker, Boston University

Random Covariance Heterogeneity in Discrete Choice Models (06-2297)

Stephane Hess, Imperial College London, United Kingdom

Denis Bolduc, University of Laval, Canada

John W. Polak, Imperial College London, United Kingdom

On the Nonlinearity of Response to Level of Service Variables in Travel Mode Choice Models (06-0986)

Abdul Rawoof Pinjari, University of Texas, Austin

Chandra R. Bhat, University of Texas, Austin

Dynamics And Variability In Within-Day Mode Choice Decisions: Role Of State-Dependence, Habit Persistence, And Unobserved Heterogeneity (06-2081)

Gitakrishnan Ramadurai, Indian Institute of Technology Madras

Karthik Srinivasan, Indian Institute of Technology Madras

Using Mixed RP/SP Models with Non Linear Effects in Prediction: On the Problem of Scaling Specific SP Parameters (06-0865)

Elisabetta Cherchi, University of Cagliari, Italy

Juan de Dios Ortuzar, Pontificia Universidad Católica de Chile

Poster Session 325

Monday, January 23, 2006, 2:30pm – 5:00pm, Hilton, International Center

Integrated Land Use and Transportation Models

Sponsored by Committee on Transportation Demand Forecasting; Committee on Transportation and Land Development

Location Choice vis-à-vis Transportation: The Case of Apartment Dwellers (06-1590)

Michelle Bina, University of Texas, Austin
Valdemar Warburg, Technical University of Denmark
Kara M. Kockelman, University of Texas, Austin

Using Input-output Tables And Social Accounting Matrices In The Development Of Land Use Transport Interaction Models (06-2187)

John Douglas Hunt, University of Calgary, Canada
John E. Abraham, University of Calgary, Canada
Ming Zhong, University of Calgary, Canada
Alan T. Brownlee, City of Edmonton, Canada

The Relationship Between Land Use and Trip Internalization Behaviors: Evidence and Implications (06-1486)

Michael Greenwald, University of Wisconsin, Milwaukee

PUMA: Multi-agent Modeling of Urban Systems (06-0367)

Dick Ettema, Utrecht University, Netherlands

What, Where, and Which? A Nested Logit Model for Dutch Housing Choice (06-0380)

Berry Blijie, Delft University of Technology, Netherlands
Jacob J. De Vries, Netherlands Institute for Spatial Research

Multivariate Uncertainty Analysis of an Integrated Land Use and Transportation Model: Meplan (06-0257)

Michael J. Clay, Auburn University
Robert A. Johnston, University of California, Davis

Session 387

Monday, January 23, 2006, 7:30pm – 9:30pm, Hilton, Lincoln West

Children's Travel Behavior in the U.S., Canada, and Belgium

Patricia L. Mokhtarian, University of California, Davis, presiding
Sponsored by Committee on Transportation Demand Forecasting; Committee on Women's Issues in Transportation; Committee on Traveler Behavior and Values

Children's Travel Patterns: Evidence from the 2001 National Household Travel Survey (06-2260)

Noreen C. McDonald, University of Virginia

Age-Based Analysis of Travel by Children in Calgary, Canada (06-2832)

Kevin Stefan, City of Calgary, Canada
John Douglas Hunt, University of Calgary, Canada

Children's Travel Behavior: A World of Difference (06-1988)

Enid Zwerts, Transportation Research Institute, Belgium
Geert Wets, Transportation Research Institute, Belgium

Changes in Children's School Travel between 1969 and 2001 (06-1196)

Noreen C. McDonald, University of Virginia

Session 425

Tuesday, January 24, 2006, 8:00am – 9:45am, Hilton, Thoroughbred

Integrated Land Use and Transportation Modeling, Part 1

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

Sponsored by Committee on Transportation Demand Forecasting; Committee on Transportation and Land Development

(Session organized by the Subcommittee on Integrated Transportation and Land Use)

Endogeneity in Residential Location Choice Models (06-2606)

Christian Angelo Guevara, Massachusetts Institute of Technology

Moshe E. Ben-Akiva, Massachusetts Institute of Technology

A Comprehensive Analysis of Built Environment Characteristics on Household Residential Choice and Auto Ownership Levels (06-0990)

Chandra R. Bhat, University of Texas, Austin

Jessica Y. Guo, University of Texas, Austin

Bi-Level Negotiation Protocol for Multi-Agent Simulation of Housing Transactions and Housing Market Clearing Processes (06-1982)

Oswald Devisch, Eindhoven University of Technology, Netherlands

Theo Arentze, Eindhoven University of Technology, Netherlands

Aloys Borgers, Eindhoven University of Technology, the Netherlands

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

Non-Stationary Spatial Interpolation Method for Urban Model Development (06-1468)

Varameth Vichiensan, Kasetsart University, Thailand

Antonio Paez, McMaster University, Canada

Kenji Kawai, Tochigi Prefecture, Japan

Kazuaki Miyamoto, Musashi Institute of Technology, Japan

Tracking Land Cover Change in a Mixed Logit Model: Recognizing Temporal and Spatial Effects (06-0981)

Xiaokun Wang, University of Texas, Austin

Kara M. Kockelman, University of Texas, Austin

Session 477

Tuesday, January 24, 2006, 10:15am – 12:00pm, Hilton, Thoroughbred

Integrated Land Use and Transportation Modeling, Part 2

John Douglas Hunt, University of Calgary, Canada, presiding

Sponsored by Committee on Transportation Demand Forecasting; Committee on Transportation and Land Development

(Session organized by the Subcommittee on Integrated Transportation and Land Use)

Transport Investment, Agglomeration and Urban Productivity (06-0531)

Daniel J. Graham, Imperial College London, United Kingdom

Demographic and Regional Economic Modeling Using Stochastic Allocation in the City of Johannesburg (06-2359)

Christoffel Venter, University of Pretoria, South Africa

Theuns Lamprecht, CSIR, South Africa

Willem Badenhorst, Consultant, South Africa

Residential Choice and the Geography of Family Networks: Some Considerations (06-1777)

Elenna R. Dugundji, University of Amsterdam, Netherlands

The Effects of Land Use Characteristics on Residence Location and Travel Behavior of Urban Adult Workers (06-0929)

João de Abreu e Silva, Instituto Superior Técnico, Portugal

Thomas F. Golob, University of California, Irvine

Konstadinos G. Goulias, University of California, Santa Barbara

Land Use and Transport Interaction: Calibration of a Micro Simulation Model for Firms in the Netherlands (06-0317)

Michiel De Bok, Delft University of Technology, Netherlands

Michiel Cornelis Johannes Bliemer, Delft University of Technology, Netherlands

Session 564

Tuesday, January 24, 2006, 3:45pm – 5:30pm, Hilton, Monroe West

Theories and Insights in Activity-Based Models

Konstadinos G. Goulias, University of California, Santa Barbara, presiding

Sponsored by Task Force on Moving Activity-Based Approaches To Practice; Committee on Traveler Behavior and Values; Committee on Transportation Demand Forecasting

Social Commitments and Activity-Travel Scheduling Decisions (06-0307)

Astrid Kemperman, Eindhoven University of Technology, Netherlands

Theo Arentze, Eindhoven University of Technology, Netherlands

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

Spatial Variety in Weekly, Weekday-to-Weekend, and Day-to-Day Patterns of Activity-Travel Behaviour:

Initial Results from the Toronto Travel-Activity Panel Survey (06-0765)

Ron Buliung, University of Toronto, Canada

Matthew J. Roorda, University of Toronto, Canada

Application of Activity Chaining Model for Network Demand Analysis (06-2796)

Hyunmyung Kim, University of California, Irvine

Jun-Seok Oh, Western Michigan University

R. Jayakrishnan, University of California, Irvine

A New Theory of Dynamic Activity Generation (06-0284)

Theo Arentze, Eindhoven University of Technology, Netherlands

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

Choice Heuristics, Rational Choice And Situation-related Travel Demand (06-2166)

Pat Burnett, Massachusetts Institute of Technology

Session 670

Wednesday, January 25, 2006, 10:15am – 12:00pm, Hilton, Monroe East

Advances in Activity and Time Use Pattern Analysis

Cynthia Chen, City College of New York, presiding

Sponsored by Committee on Traveler Behavior and Values; Committee on Transportation Demand Forecasting

Modeling Individuals' Frequency and Time Allocation Behavior for Shopping Activities Considering Household Level Random Effects (06-0754)

Khandker Mohammed Nurul Habib, University of Toronto, Canada

Eric J. Miller, University of Toronto, Canada

A Joint Model for the Perfect and Imperfect Substitute Goods Case: Application to Activity Time-Use Decisions (06-0977)

Chandra R. Bhat, University of Texas, Austin

Sivaramakrishnan Srinivasan, University of Florida

Sudeshna Sen, University of Texas, Austin

Weekly Rhythms in Task and Time Allocation of Households (06-0365)

Dick Ettema, Utrecht University, Netherlands

Modeling Travel and Activity Routines using Hybrid Dynamic Mixed Networks (06-0631)

James E. Marca, University of California, Irvine

Craig Rindt, University of California, Irvine

From Average Travel Time Budgets to Daily Travel Time Distributions: An Appraisal of Two Conjectures by Kölbl and Helbling and Some Consequences (06-1112)

Jean-Paul Hubert, Transportation Research Group, Belgium

Philippe L. Toint, University of Namur, Belgium

Session 736

Wednesday, January 25, 2006, 4:30pm – 6:00pm, Hilton, Lincoln West

Geospatial Technologies and Activity-Based Approaches

Konstadinos G. Goulias, University of California, Santa Barbara, presiding

Sponsored by Task Force on Moving Activity-Based Approaches To Practice; Committee on Traveler Behavior and Values; Committee on Spatial Data and Information Science; Committee on Transportation Demand Forecasting

Finding Shortest Paths under Time/Bandwidth Constraints using Elliptical Minimal Search Area (06-2144)

Lee David Han, University of Tennessee, Knoxville

Constrained Destination Choice Set Generation: A Comparison of GIS-based Approaches (06-0942)

Darren M. Scott, McMaster University, Canada

Evaluation of trip-activity pattern variability using probe person data (06-2849)

Eiji Hato, Ehime University, Japan

Activity Diary Surveys Using GPS Mobile Phone and PDA (06-3039)

Nobuaki Ohmori, University of Tokyo, Japan

Morimichi Nakazato, University of Tokyo, Japan

Noboru Harata, University of Tokyo, Japan

Kuniaki Sasaki, University of Yamanashi, Japan

Kazuo Nishii, University of Yamanashi, Japan

Neighborhood Representation in Residential Location Choice Analysis (06-1329)

Jessica Y. Guo, University of Texas, Austin

Chandra R. Bhat, University of Texas, Austin

Session 807

Thursday, January 26, 2006, 8:00am – 9:45am, Hilton, Georgetown West

Mode, Departure Time, and Hurricane Evacuation Models

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

Sponsored by Committee on Transportation Demand Forecasting; Committee on Traveler Behavior and Values

Modeling Travel Mode Choice Behavior by a Bayesian Network (06-3083)

Chi Xie, Cornell University

Haiyuan Wang, Cornell University

Linda K. Nozick, Cornell University

Development of Transport Mode Choice Model by Using Adaptive Neuro-Fuzzy Inference System (06-2007)

Katia Andrade, Hokkaido University, Japan

Fitting distributions to random parameters (06-1701)

Yaron Hollander, University of Leeds, United Kingdom

Alternative Structures for Estimating Nested Logit Models with Mixed Revealed Preference and Stated Preference Data (06-2004)

Chieh-Hua Wen, Feng Chia University, Taiwan

A Sequential Logit Dynamic Travel Demand Model and its Transferability (06-0903)

Haoqiang Fu, Louisiana State University and Louisiana Transportation Research Center

Chester G. Wilmot, Louisiana State University

Earl Jay Baker, Florida State University

Session 814

Thursday, January 26, 2006, 10:15am – 12:00pm, Hilton, Georgetown East

Travel Behavior Trends: What Does the Future Hold?

Steven E. Polzin, University of South Florida, presiding

Sponsored by Committee on Traveler Behavior and Values; Committee on Transportation Demand Forecasting

Changing Transportation Trends And Their Implications For Transport Planning (06-1466)

Todd Alexander Litman, Victoria Transport Policy Institute, Canada

A Differentiated Look at Travel Behavior Dynamics: Spatial and Gender Variations in Modal Split and Travel Time Changes in the Netherlands, 1991-2001 (06-0891)

Christy Collins, Utrecht University, Netherlands

Arianne de Blaeij, Utrecht University, Netherlands

Martin Dijst, Utrecht University, Netherlands

Tim Schwanen, Utrecht University, Netherlands

Transportation Expenditures and Ability to Pay: Evidence from the Consumer Expenditure Survey (06-2786)

Piyushimita (Vonu) Thakuriah, University of Illinois, Chicago

Yihua Liao, University of Illinois, Chicago

Working Retirement: Travel Trends of the Aging Workforce (06-0630)

Nanda N. Srinivasan, Cambridge Systematics, Inc.

Travel Behavior of Immigrants: An Analysis of the 2001 National Household Transportation Survey (06-0649)

Gil Tal, University of California, Davis

Susan L. Handy, University of California, Davis

Session 815

Thursday, January 26, 2006, 10:15am – 12:00pm, Hilton, Georgetown West

User Benefits Evaluation and Equity Analysis

Joan L. Walker, Boston University, presiding

Sponsored by Committee on Transportation Demand Forecasting; Committee on Traveler Behavior and Values

Key Challenges in Estimating the Impacts of Road Pricing with State-of-the-Practice Transportation Models (06-1518)

Jeffrey Douglas Ensor, Massachusetts Institute of Technology

The Value Of Travel Information For Generating Choice Alternatives: Conceptualizations And Numerical Examples (06-0097)

Caspar Chorus, Delft University of Technology, Netherlands

Theo Arentze, Eindhoven University of Technology, Netherlands

Eric Molin, Delft University of Technology, Netherlands

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

Bert van Wee, Delft University of Technology, Netherlands

User Benefits and Time in Road Investment and Maintenance The Role of Speed Choice and Driving Comfort (06-0158)

Karin Brundell-Freij, Lund University, Sweden

Application of a Travel Demand Microsimulation Model for Equity Analysis (06-2855)

Joseph Castiglione, PB Consult Inc.
