



# Welcome to Portland

## ACKNOWLEDGEMENTS

TRB: Kimberly Fisher  
 TRB ADB00 – Travel Analysis Methods Section  
 Chuck Purvis, Chair  
 Innovations in Transport Modeling Conference Subcommittee  
 Co-chairs: Joan Walker, Rick Donnelly  
 Host Agencies:  
 Oregon Department of Transportation  
 Portland Metro  
 Portland State University

## EVENING ACTIVITIES

**Sunday evening reception  
 6 – 7:30 pm**  
 Come join your friends for an evening of fine food, refreshments, and engaging conversation! A short streetcar ride and four-block walk will take you to the Artists Repertory Theatre at 1515 SW Morrison.

**Dinner**  
**Sunday: Meet at Artists Repertory Theatre at 7:30 pm.**  
**Monday: Meet at University Place lobby at 6 pm.**  
 Enjoy the fine cuisine of Portland! Reservations have been made at multiple restaurants – approximately twelve seats are available at each locale. Please sign up at the registration desk. First come – first served!

**Monday evening pub crawl**  
**Meet at University Place lobby at 6 pm**  
 Sample the finest ales in town! Join your personal guide for a tour of Portland's best.

## EXHIBITORS

**Monday: 7 am – 5 pm**  
**Tuesday: 7 am – 10:30 am**  
 Be sure to visit the conference exhibitors in the Willamette Falls Room at University Place.

## CONFERENCE AT A GLANCE

### Sunday, June 22

10:30 – 11:30 am State-of-the-practice workshop  
 11:30 am – 1 pm Lunch (on your own)  
 1 – 3 pm Activity-based modeling tutorial  
 3 – 3:30 pm Break (Willamette Falls Room)  
 3:30 – 5:30 pm Climate change and travel modeling tutorial  
 6 pm Evening reception, Artists Repertory Theatre  
 7:30 pm Dinner with colleagues

### Monday, June 23

7 – 8 am Continental breakfast  
 7 am – 5 pm Exhibitors (Willamette Falls Room)  
 8 – 9:30 am Plenary session  
 10 – 10:30 am Break (Willamette Falls Room)  
 10 am – 12 pm S1: Communicating forecasts 1  
 S2: Pricing and policy 1  
 12 – 1 pm Lunch (Willamette Falls Room)  
 1 – 3 pm S3: Activity-based models 1  
 S4: Pricing and policy 2  
 3 – 3:30 PM Break (Willamette Falls Room)  
 3:30 – 5:30 pm S5: Activity-based models 2  
 S6: Linking dynamic network & travel models 1  
 6 pm Dinner with colleagues; Pub crawl

### Tuesday, June 24

7 – 8 am Continental breakfast (Willamette Falls Room)  
 7 – 10:30 am Exhibitors (Willamette Falls Room)  
 8 – 10 am S7: Linking dynamic network & travel models 2  
 S8: Communicating forecasts 2  
 10 – 10:30 am Break (Willamette Falls Room)  
 10:30 am – 12 pm S9: Activity-based models 3  
 S10: Policy and pricing 3  
 12 pm Conference concludes

# TRB Innovations in Transport Modeling 2008



**Portland State University**  
**University Place**  
**310 Southwest Lincoln Street**  
**Portland, Oregon**  
**June 22 – 24, 2008**



## Sunday, June 22

### 10:30 – 11:30 am: State-of-the-practice workshop

Moderators: Dick Walker, Metro, Portland; Fred Ducca, FHWA

This session provides a brief look at *Special Report 288: Metropolitan Travel Forecasting – Current Practice and Future Direction*. Group discussion will focus on the next steps that should be taken with regard to the recommendations of the report.

### 11:30 am – 1 pm: Lunch (on your own)

### 1 – 3 pm: Activity-based modeling tutorial

Moderator: Maren Outwater, Puget Sound Regional Council

#### Why should agencies make the change? What are the benefits of activity models?

Erik Sabina, Denver Region Council of Governments; Chuck Purvis, Metropolitan Transportation Commission

#### How do MPOs/DOTs make the transition from 4-step models to activity models?

Dick Walker, Metro, Portland, Oregon; Guy Rousseau, Atlanta Regional Council

#### What do the comparisons of 4-step models and activity models tell us?

Billy Charlton, San Francisco County Transportation Authority  
Gordon Garry, Sacramento Area Council of Governments

#### Taking models out of the box: Prospects for expanding the scope of travel demand microsimulation.

Mark Bradley, Mark Bradley Research and Consulting

### 3 – 3:30 pm: Break (Willamette Falls Room)

### 3:30 – 5:30 pm: Climate change and travel modeling tutorial

Moderator: Joan Walker, Boston University

#### An introduction to climate modeling, or tell me again, how do urban travel models fit in?

Deb Niemeier, University of California - Davis

#### An introduction to EPA's MOVES model

Jeff Houk, U.S. EPA

#### Application of MOVES to travel demand models

Belaji Yelchuru, AECOM Consult, Inc.

#### Adapting travel models and urban models to project greenhouse gases in California

Bob Johnston, Mike McCoy, Shengyi Gao, University of California - Davis

#### Integrated land use, travel, and emissions model improvements for climate change

Maren Outwater, Puget Sound Regional Council

### 6 pm: Evening reception

Artists Repertory Theatre (1515 SW Morrison)

### 7:30 pm: Dinner with colleagues

## Monday, June 23

### 7 – 8 am: Continental breakfast

### 7 am – 5 pm: Exhibitors (Willamette Falls Room)

### 8 – 9:30 am: Plenary session

Opening: Joan Walker, Boston University

Welcome: Bill Feyerherm, Vice Provost for Research and Graduate Studies, Portland State University

Keynote address: Keith Lawton, Lawton Consulting; Jose Luis Moscovich, San Francisco County Transportation Authority

### 10 – 10:30 am: Break (Willamette Falls Room)

### 10 am – 12 pm: Session 1 – Communicating forecasts 1

Moderator: Susan Handy, University of California - Davis

#### Communicating simulation results during the White House Area Transportation Study

David Roden, AECOM Consult, Inc.

#### Travel model information: Gauging presentations and exhibits to audiences

Christopher Primus, Jacobs Carter Burgess

#### Communicating a complex model and forecasts to the public: Summarizing the California statewide model for high-speed rail

Elizabeth A. Sall, San Francisco County Transportation Authority

#### Communicating forecasts in the transit new starts process

Ken Cervenka, Federal Transit Administration

### 10 am – 12 pm: Session 2 – Pricing and policy 1

Moderator: Rick Donnelly, PB

#### Travel demand modeling needs for road pricing: Challenges and opportunities

Tom Rossi, Jeff Buxbaum, Cambridge Systematics

#### Modeling Manhattan area congestion pricing within the framework of an activity-based model

Robert Donnelly, PB

#### Modeling response to congestion pricing in Tel Aviv: A tour-based approach

Yoram Shiftan, Technion, Israel Institute of Technology (visiting University of Michigan)

### 12 – 1 pm: Lunch (Willamette Falls Room)

### 1 – 3 pm: Session 3 – Activity-based models 1

Moderator: Chandra Bhat, University of Texas - Austin

#### The mobiTopp model: From longitudinal data to microsimulation

Tobias Kuhnimhof, IfV, Universität Karlsruhe

#### MATSIM-T

Kay Axhausen, Michael Balmer, IVT, ETH Zurich; Roman Oberli, CEO, Mappuls, AG.

## Monday, June 23

### 1 – 3 pm: Session 4 – Pricing and policy 2

Moderator: Bruce Spear, Cambridge Systematics

#### Using toll revenue forecasts for highway investment decisions

In this session, a panel of public and private investment decision makers will discuss how forecasts of future travel demand and toll revenues are used to determine the financial risk for proposed highway facilities. The panelists are: Cherian George, Senior Director, Fitch Ratings; Mark Muriello, Assistant Director of Tunnels, Bridges, & Terminals, PANYNJ; Winnie Shi, Director, Global Infrastructure and Projects Group, KPMG Corporate Finance LLC

### 3 – 3:30 pm: Break (Willamette Falls Room)

### 3:30 – 5:30 pm: Session 5 – Activity-based models 2

Moderator – Joel Freedman, PB

#### ALBATROSS

Theo Arentze and Harry Timmermans, Eindhoven University of Technology

#### CEMDEP/VISTA

Chandra Bhat, University of Texas - Austin; Arash Mirzaei, North Central Texas Council of Governments; Travis Waller, University of Texas – Austin

### 3:30 – 5:30 pm: Session 6 – Linking dynamic network & travel models 1

Moderator: Jen Duthie, University of Texas - Austin

#### Dynamic traffic assignment techniques: An overview

Hani Mahmassani, Northwestern University

#### Linking demand from a regional travel demand forecasting model to a new DTA model: The Montreal experience

Shane Velan, INRO; Pascal Volet, City of Montreal

#### Modeling and simulation of a morning reaction to an evening toll

Marcel Rieser, TU Berlin

#### DynaSmart/DynusT applications in the Twin Cities, Minnesota area

Steve Wilson, SRF Consulting; Yi-Chang Chiu, University of Arizona

### 6 pm: Dinner with colleagues; Pub crawl

## Tuesday, June 24

### 7 – 8 am: Continental breakfast (Willamette Falls Room)

### 7 – 10:30 am: Exhibitors (Willamette Falls Room)

### 8 – 10 am: Session 7 – Linking dynamic network & travel models 2

Moderator: Elizabeth Sall, San Francisco County Transportation Authority

#### Dynamic choices in coordinated household activity-travel systems

John Gliebe, Portland State University

#### Linking activity-based travel demand models and traffic assignment: A Flemish case study

Katrien Ramaekers, Tom Bellemans, Hasselt University

## Tuesday, June 24

### Integrating an activity model with a microsimulator:

#### The TRANSIMS application to Portland

Hayssam Sbayti, AECOM Consult, Inc.

#### The future of dynamic traffic assignment: Requirements, challenges, and opportunities

Travis Waller, University of Texas-Austin

### 8 – 10 am: Session 8 – Communicating forecasts 2

Moderator: Keith Killough

#### Gone in sixty seconds: Thought piece on communicating travel demand modeling to survey respondents

Stacey Bricka, NuStats

#### Guiding scenario exploration in the PECAS model output interface: Summary of research in progress

Catherine Emond, University of California - Davis

#### Disseminating forecasts using Wiki software

Christopher Puchalsky, Delaware Valley Regional Planning Commission

#### Open microphone

### 10 – 10:30 am: Break (Willamette Falls Room)

### 10:30 am – 12 pm: Session 9 – Activity-based models 3

Moderator: Karen Faussett, Michigan Department of Transportation

#### TASHA: An activity-based travel model with an application in emissions estimation

Eric Miller, Matthew Roorda, University of Toronto

#### The PCATS-DEBNetS model for microsimulating activity travel patterns

Ryuichi Kitamura, Akira Kikuchi, Kyoto University; Ram Pendyala, Arizona State University

#### The day activity schedule approach of Bowman, Ben-Akiva and Bradley: 1994-2008

John Bowman, Bowman Research and Consulting

#### TRESIS: An integrated land use – transport-environment model from Australia

Peter Stopher, University of Sydney

### 10:30 am – 12 pm: Session 10 – Policy and pricing 3

Moderator: John Gliebe, Portland State University

#### Towards a post-processor-based HOT lane mode shift model

Laura McWethy and Jay Evans, Cambridge Systematics

#### Traffic Choices Study: Measuring response to a network of time-of-day tolls in the Central Puget Sound Region

Matthew Kitchen, Larry Blain, and Maren Outwater, Puget Sound Regional Council

#### Enhancement and application of an activity-based travel model for congestion pricing

Greg Erhardt, Joel Freedman, PB; Joe Castiglione; Billy Charlton, San Francisco County Transportation Authority; Mark Bradley, Mark Bradley Research and Consulting