

John D. Hunt
University of Calgary
Calgary, Alberta, Canada
jdhunt@ucalgary.ca

Education:

- *Bachelor of Science (B.S.)* in Civil Engineering with emphasis in Transportation Engineering, University of Alberta, Edmonton, Alberta, Canada, **1981**
 - Ranking: First in Faculty of Engineering
- *PhD* in Architecture, Cambridge University, Martin Centre for Land Use and Built Form Studies, **1983**
- *Dissertation*, "Parking Location Choice and its Influence on Mode Choice", Churchill College, **1986**

Research Interest:

- Spatial activity systems, including the modelling and the development and evaluation of practical policy options for such systems
- Land use and transport interaction modelling and related spatial economic modelling
- Greenhouse gas policy
- Driver behavior and the modelling of such behavior in traffic engineering
- Public transport planning
- Passenger route choice behavior

Work Experience:

- July 2000-present, Professor, Department of Civil Engineering, University of Calgary, Alberta, Canada
- August 2008-October 2004, Professor, Institute for Advanced Policy Research University of Calgary, Alberta, Canada
- November 2006- May 2007, Visiting Professor. Department of Civil Engineering, Indian Institute of Technology – Bombay, Powai, Mumbai, India
- July 1993- June 2000, Associate Professor, Department of Civil Engineering, University of Calgary, Alberta, Canada
- December 1991- June 1993, Assistant Professor, Department of Civil Engineering University of Calgary, Alberta, Canada
- October 1990- 1991, Project Manager, Korve Engineering, Pasadena, California, USA
- October 1989- October 1990, Project Manager, Marcial Echenique and Partners,

Cambridge, England

- July 1988- October 1989, Senior Transport Engineer, Marcial Echenique and Partners, Cambridge, England
- July 1983- June 1988, Professor, Department of Civil Engineering, University of Alberta, Edmonton, Alberta, Canada
- May 1981- September 1981, Analysis Engineer, Department of Engineering, Traffic Operations, City of Edmonton, Edmonton, Alberta, Canada
- May 1980- September 1980, Research Assistant, University of Alberta Edmonton, Alberta, Canada

Recent Publications:

- Rodier CJ, Abraham JE, Dix BN and Hunt JD, in press, Equity analysis of land use and transport plans using an integrated spatial model. *Transportation Research Record*
- Mir MS, Krishna Rao KV and Hunt JD, 2010, Space development modeling of urban regions in developing countries. *Journal of Urban Planning and Development* 136(1):75-85.
- Abraham JE, Andersen KM, Clay MJ and Hunt JD, 2010, Calibrating a synthetic built form generator. *Transportation Research Record* 2133:100-108.
- Zhong M and Hunt JD, 2010, Exploring best-fit hazard functions and lifetime regression models for urban weekend activities: A case study. *ASCE Journal of Transportation Engineering* 136(3):255-266.
- Weidner TJ, Knudson B, Picado R and Hunt JD, and Picado R, 2010, Sensitivity testing with Oregon Statewide Integrated Model. *Transportation Research Record* 2133:109-122.
- Zhong M, Hunt JD and Lu X, 2008, Studying differences of household weekend and weekday activities: A duration perspective. *Transportation Research Record* 2054:28-36.
- Abraham JE and Hunt JD, 2007, Random utility location/production/exchange choice, the additive logit model, and spatial choice microsimulations. *Transportation Research Record* 2003:1-6.
- Stefan KJ, Hunt JD, McMillan JDP and Farhan A, 2007, Development of a fleet allocator model for Calgary. *Transportation Research Record* 1994:89-93.
- Gliebe J, Cohen O, and Hunt JD, 2007, Dynamic choice model of urban commercial activity patterns of vehicles and people. *Transportation Research Record* 2003:17-26.
- Hunt JD and Stefan KJ, 2007, Tour-based microsimulation of urban commercial movements. *Transportation Research* 41B:981-1013.

- Zhong M, Hunt JD and Abraham JE, 2007, Design and development of a land use transport model for Alberta. *Journal of Transportation Systems Engineering and Information Technology* 7(1):79-91.
- Hunt JD and Abraham JE, 2007, Influences on bicycle use. *Transportation* 34(4):453-470.
- Hunt JD, Stefan KJ and Brownlee AT, 2006, Establishment-based survey of urban commercial vehicle movements in Alberta: Survey design, implementation and results. *Transportation Research Record* 1957:75-83.
- Abraham JE, Weidner TJ, Gliebe J, Willison C and Hunt JD, 2005, Three methods for synthesizing base-year built form for use in integrated land use – transport models. *Transportation Research Record* 1902:114-123.
- Stefan KJ, McMillan JDP and Hunt JD, 2005, An urban commercial vehicle movement model for Calgary, Alberta, Canada. *Transportation Research Record* 1921:1-10.
- Hunt JD, Kriger DS and Miller EJ, 2005, Current operational urban land-use–transport modelling frameworks: A review. *Transport Reviews* 25:1-48.
- Abraham JE and Hunt JD, 2005, Dynamic sub-model integration using an offer-accept discrete event simulation. *Networks and Spatial Economics* 5:129-146.
- Hunt JD, Abraham JE and Weidner TJ, 2004, Household allocation module of Oregon 2. *Transportation Research Record* 1898:98-107.
- Abraham JE, Garry GR, Hunt JD and Brownlee AT, 2004, Incremental modeling developments in Sacramento, California: Toward advanced integrated land use – transport model. *Transportation Research Record* 1898:108-113.
- Miller EJ, Hunt JD, Abraham JE and Salvini P, 2004, Microsimulating urban systems. *Computers, Environment and Urban Systems* 28:9-44.
- Hunt JD, 2003, Modelling transportation policy impacts on mobility benefits and Kyoto-Protocol- related emissions. *Built Environment* 29(1):48-65.
- Hunt JD, 2003, Agent behaviour issues arising with urban system micro-simulation. *European Journal of Transport Infrastructure and Research* 2(3/4):233-254.
- Hunt JD, in press, Analysis of transportation responses to the Kyoto Protocol in Edmonton, Canada (in Japanese). *Academic Journal of the Japanese Society of Civil Engineers*.
- Hunt JD, Brownlee AT and Stefan KJ, 2002, Responses to the Centre Street Bridge closure: where the ‘disappearing’ traffic went. *Transportation Research Record* 1807:51-58.
- Hunt JD, 2001, Stated preference analysis of sensitivities to elements of transportation and urban form. *Transportation Research Record* 1780:76-86.
- Jonnalagadda N, Freedman J, Davidson WA and Hunt JD, 2001, Development of a microsimulation activity-based model for San Francisco: Destination and mode choice models. *Transportation Research Record* 1777:25-35.
- Hunt JD, Johnston RA, Abraham JE, Rodier C, Garry G, Putman S and delaBarra T, 2001, Comparisons from the Sacramento model testbed. *Transportation Research Record* 1780:53-63.

Conference Presentations:

- Abraham JE, Hunt JD, Johnston RA, McCoy MC, Gao S and Lehmer E, 2010, Incremental Cooperative Development of Land Use Models in California. Presented at the 12th World Conference on Transport Research, Lisbon, Portugal, July 2010.
- Hossain MS, Hunt JD and Wirasinghe SC, 2010, Impact of Walking Distance on Attractiveness of Transit Use. Presented at the 12th World Conference on Transport Research, Lisbon, Portugal, July 2010.
- Hossain MS, Hunt JD and Tay R, 2010, Student Perception of Pedestrian Risk. Presented at the 45th Canadian Transportation Research Forum Annual Conference, Toronto ON, Canada, June 2010.
- Hassanvand M, Hunt JD and Tay R, 2010, Speed Effects of Roadside Memorials on Curved Roads. Presented at the 45th Canadian Transportation Research Forum Annual Conference, Toronto ON, Canada, June 2010.
- Rodier CJ, Abraham JE, Dix BN and Hunt JD, 2010, Presented at the 89th Annual Transportation Research Board Conference, Washington DC, USA, January 2010.
- Abraham JE, Andresen KM, Clay MJ and Hunt JD, 2009, Calibrating a Synthetic Built Form Generator. Presented at the 88th Annual Transportation Research Board Conference, Washington DC, USA, January 2009.
- Weidner TJ, Knudson B and Hunt JD, 2009, Sensitivity Testing with Oregon Statewide Integrated Model. Presented at the 88th Annual Transportation Research Board Conference, Washington DC, USA, January 2009.
- Hunt JD, Abraham JE, Bergerson J and Carbone J, 2009, Modelling Transportation Policy Effects on Point-Source Greenhouse Gas Emissions Using Spatial Input-Output Models. Presented at Sponsored Workshop 118: Integrated Urban Modelling of Greenhouse Gas Emissions and Policy Analysis Workshop, 88th Annual Transportation Research Board Conference, Washington DC, USA, January 2009 (by invitation).
- Hunt JD, 2008, Key Issues for India: Inauguration Address for Transportation Planning and Implementation Methodologies for Developing Countries Conference. Presented at the IIT- Bombay Golden Jubilee International Conference and 8th International Workshop on Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC 2008) Conference, Mumbai, India, December 2008 (by invitation).
- Mir MS, Hunt JD, and Krishna Rao KV, 2008, Data Issues in Space Development Modeling of Urban Regions in Developing Countries: With Special Emphasis on Economic Boom in India. Presented at the IIT-Bombay Golden Jubilee International Conference and 8th International Workshop on Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC 2008) Conference, Mumbai, India, December 2008
- Hunt JD, Mir MS and Krishna Rao KV, 2008, Stated Preference Examination of Crowding and Other Factors Influencing The Attractiveness of Train Use in Mumbai. Presented at the IIT Golden Jubilee International Conference and 8th International

Workshop on Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC 2008) Conference, Mumbai, India, December 2008.

- Hunt JD, Mir MS and Krishna Rao KV, 2008, Designing and Developing a PECAS Spatial Economic Model of Mumbai. Presented at the Conference 'Coopération pour le Développement et l'Amélioration des Transports Urbains et Périurbains' (CODATU), Ho Chi Minh City, Vietnam, November 2008 (by invitation).
- Abraham JE, Hunt JD and De Silva D, 2008, Calibrating a Random Utility Equilibrium Model of Spatial Interactions. Presented at the 2nd World Conference of the Spatial Econometrics Association, New York NY, USA, November 2008.
- Abraham JE, Hunt JD and De Silva D, 2008, PECAS as a CGE Model. Presented at the 55th Annual North American Meeting of the Regional Science Association International, Brooklyn, NY, USA, November 2008.
- Hunt JD, 2008, Influences on the Utility of Transit Use in Calgary. Presented at the 3rd University of Seoul – University of Calgary Joint Workshop, University of Calgary, Calgary AB, Canada, August 2008.
- Hunt JD, 2008, Commercial Vehicle and Infrastructure Inventory and Use Data: Description of An Establishment-Based Survey of Urban Commercial Vehicle Movements in Alberta, Survey Design, Implementation and Results. Presented at the Transportation Research Board Workshop on Data for Goods Movement Impacts on Air Quality, University of California, Irvine CA, USA, March 2008 (by invitation).
- Mir MS, Krishna Rao KV and Hunt JD, 2008, Economic Linkages of Land Use and Transport: A Modeling Perspective. Presented at The National Conference on the Impacts of Globalization on the Industrial and Financial Sectors in India, University of Pune, India, February 2008
- Mir MS, Krishna Rao KV and Hunt JD, 2008, Data solutions for developing a space development model of a developing metropolitan region. Presented at the International Conference on Transportation System Studies (ICOTSS 2008), Mumbai University, Mumbai, India, January 2008.
- Mir MS, Krishna Rao KV and Hunt JD, 2008, Development of space development module for Mumbai Metropolitan Region (MMR). Presented at the International Conference on Transportation System Studies (ICOTSS 2008), Mumbai University, Mumbai, India, January 2008.
- Hunt JD, Abraham JE, De Silva D, Zhong M, Bridges J and Mysko J, 2008, Developing and Applying a Parcel-Level Simulation of Developer Actions in Baltimore. Presented at the 87th Annual Transportation Research Board Conference, Washington DC, USA, January 2008.
- Hunt JD, 2008, Integrated Land Use Transport Models: An Introduction. Presented at the 87th Annual Transportation Research Board Conference, Sponsored Workshop 169, Washington DC, USA, January 2008 (by invitation).
- Hunt JD, Abraham JE, De Silva D, Zhong M, Bridges J and Mysko J, 2007, Microsimulating Space Development in Baltimore. Presented at the 12th International Conference of the Hong Kong Society for Transportation Studies. Hong Kong SAR, China, December 2007.
- Hunt JD, Brownlee AT, Doblanko LP and Hardin C, 2007, Commercial Vehicle

Movement Tour Generation in Edmonton. Presented at the 12th International Conference of the Hong Kong Society for Transportation Studies. Hong Kong SAR, China, December 2007.

- Hunt JD and Abraham JE, 2007, The PECAS Framework for Spatial Economic Modeling. Presented at the Southern Demographic Association Annual Meeting, Birmingham AL, USA, October 2007 (by invitation).
- Hunt JD and Blaschuk CR, 2007, Estimating Traffic Congestion Deadweight Loss. Presented at the 2nd University of Seoul – University of Calgary Joint Workshop, University of Seoul, Seoul, South Korea, August 2007.
- Hunt JD, Abraham JE, Zhong M and De Silva D, 2007, Micro-simulation Modelling of Land Use and Transport in North America: Space Development in Micro-Simulation in Baltimore PECAS. Presented at the SOLUTIONS Annual Conference, London, UK, July 2007.
- Clay MJ, Mullins, Woerner N, Anterson KM, Abraham JE and Hunt JD, 2007, Developing an Integrated Land-Use/Transportation Model for Small to Medium Sized Cities: Case Study of Montgomery Alabama. Presented at the 10th International Conference on Computers in Urban Planning and Urban Management, Iguassu Falls PR, Brazil, July 2007.
- Abraham JE and Hunt JD, 2007, Using Random Utility Theory in Spatial Economic Modelling: Recent Advances. Presented at the 10th International Conference on Computers in Urban Planning and Urban Management, Iguassu Falls PR, Brazil, July 2007.
- Hunt JD, Stefan KJ and McMillan JDP, 2007, Development of a Microsimulation Model of Weekend Travel by Households in Calgary, Presented at the 11th World Conference on Transport Research, Berkeley CA, USA, June 2007.
- Hunt JD, Zhong M and Abraham JE, 2007, Examining Accuracy of Logit Modeling With Simulated RP and SP Data. Presented at the 11th World Conference on Transport Research, Berkeley CA, USA, June 2007.
- Abraham JE and Hunt JD, 2007, Discrete-Continuous Microsimulation of Development Decisions in a Spatial Market Model. Presented at the 11th World Conference on Transport Research, Berkeley CA, USA, June 2007.
- Weidner TJ, Abraham JE, Hunt JD, and Gregor BJ, 2007, Floorspace Supply/Demand Calibration in Two Land-Use Transport Models. Presented at the 11th World Conference on Transport Research, Berkeley CA, USA, June 2007.
- Blaschuk C, Brownlee AT and Hunt JD, 2007, Estimating Congestion Costs Using a Transportation Demand Model of Edmonton Canada. Presented at the 11th Transportation Research Board National Transportation Planning Applications Conference, Daytona Beach FL, USA, May 2007.
- Gliebe J, Cohen O and Hunt JD, 2007, Microsimulation of Intra-Urban Commercial Vehicle and Person Movements: Model Calibration and Performance. Presented at the 11th Transportation Research Board National Transportation Planning Applications Conference, Daytona Beach FL, USA, May 2007.
- Stefan KJ, McMillan JDP, Blaschuk C and Hunt JD, 2007, Estimation of a Weekend Location Choice Model for Calgary. Presented at the 11th Transportation Research

Board National Transportation Planning Applications Conference, Daytona Beach FL, USA, May 2007.

- Abraham JE and Hunt JD, 2007, A Random Utility Dynamic Simulation Model of Developer Behaviour. Presented at the Framing Land Use Dynamics II Conference, Utrecht University, Utrecht, The Netherlands, April 2007.
- Hunt JD, 2007, Opportunities and Challenges in the Development and Use of PECAS Spatial Economic Models. Presented at the International Seminar on Land Use Transportation, University of Seoul, Seoul, South Korea, March 2007 (by invitation).
- Hunt JD, 2007, Putting Transportation in an Economic Context. Presented at the International Conference on Civil Engineering in the New Millennium 'Opportunities and Challenges', Shibpur WB, India, January 2007 (by invitation).
- Gliebe J, Cohen O, and Hunt JD, 2007, Dynamic Choice Model of Urban Commercial Vehicle and Person Activity Patterns. Presented at the 86th Annual Transportation Research Board Conference, Washington DC, USA, January 2007.
- Abraham JE and Hunt JD, 2007, Random Utility Location, Production and Exchange Choice: Additive Logit Model and Spatial Choice Microsimulation. Presented at the 86th Annual Transportation Research Board Conference, Washington DC, USA, January 2007.
- Weidner TJ, Abraham JE, Hunt JD, Freedman J and Donnelly R, 2007, Current Status of TLUMIP: Oregon Statewide Economic Land Use Transport Model. Presented at the 86th Annual Transportation Research Board Conference, Washington DC, USA, January 2007.
- Stefan KJ, Hunt JD, McMillan JDP and Farhan A, 2007, Development of a Fleet Allocator Model for Calgary. Presented at the 86th Annual Transportation Research Board Conference, Washington DC, USA, January 2007.
- Hunt JD, Stefan KJ and McMillan JDP, 2007, Estimation of Weekend Mode Choice Model for Calgary. Presented at the 86th Annual Transportation Research Board Conference, Washington DC, USA, January 2007.
- De Silva D and Hunt JD, 2007, Fuzzy Clustering Examination of Activity Patterns in Time and Space. Presented at the Seminar at Doctoral Student Research in Transport Modeling at the 86th Annual Transportation Research Board

Software:

- SYNTHESIZER Program for Generating Synthetic Populations of Discrete Objects with Pre-Specified Aggregate Distributions of Characteristics: Designed, specified and written 2005 jointly with JE Abraham
- PECAS Program for Modelling Spatial Economic Systems: Designed, specified and written 2002- 2003 jointly with JE Abraham; ongoing enhancements made 2004-2010
- INVIEW Program for Developing Stated Preference Survey Instruments: Designed

- and specified 1993-1996 jointly with JE Abraham
- ACES Program for Calculating and Applying Transportation Accessibilities: Designed, specified and written 1992
 - MEPLAN Package for Land Use and Transport Interaction Modelling: Assisted in later stages of design and specification 1988-1990
 - RCOORD Program for Coordination of Traffic Signals Along a Single Route: Re-developed program logic and re-wrote code 1981

Professional Affiliations:

- Member of Institute of Transportation Engineers, February 1984 – December 1998
- Member of International Association for Travel Behaviour Research, June 1985- December 2004
- Member of Association of Professional Engineers, Geologist, and Geophysicists of Alberta (Professional Engineer), December 1985- present
- Member of United States National Research Council (by invitation), April 1987- March 2008
- Member of World Conference on Transport Research Special Interest Group on Land Use and Transport, July 1993- Present