

Robert A. Johnston

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Education:

- *Bachelor of Arts (B.A.)* in Art History/ Architecture, Dartmouth College, **1967**
- *Master of Planning* in Planning, University of Southern California, **1969**
- *Master of Science (M.S.)* in Renewable Natural Resources, University of Nevada, Reno, **1974**

Research Interest:

- Land use and transportation modeling
- Land use and transportation planning
- Plan evaluation, indicators, impact assessment.

Work Experience:

- 2005- present, Professor Emeritus, Department of Environmental Science and Policy, University of California, Davis
- 1971-2005, Assistant Professor, Associate Professor, and Professor, Department of Environmental Science and Policy, University of California, Davis
- 1969-1970, Associate Planner, Raymond M. Smith and Associates, Reno, NV

Recent Publications:

- Gao, Shengyi, Patricia L. Mokhtarian, and Robert A. Johnston (forthcoming). Exploring the causal connections among job accessibility, employment, income, and auto ownership with structural equation modeling. *The Annals of Regional Science*.
- Walker, Thomas, Shengyi Gao, and Robert A. Johnston (forthcoming). UPlan: A discrete choice, supply-side, land use planning model. *Transportation Research Record*.
- Gao, Shengyi, Patricia L. Mokhtarian, and Robert A. Johnston. Non-normality of data in transportation behavior studies. *Transportation Research Record*, in press, 2008.
- *Metropolitan Travel Forecasting: Current Practice and Future Directions*. Transportation Research Board, Washington D.C., 2007. Special Report No. 288. I was on this committee and drafted several parts of the report, especially chapters 2 and 6.
- R. A. Johnston. Indicators for Sustainable Transportation Planning. *Transportation Research Record No. 2067*, 2008, pp. 146-154.
- Thorne, James H., Shengyi Gao, Allan D. Hollander, Jeffery A. Kennedy, Michael McCoy, Robert A. Johnston, and James F. Quinn. 2006. Modeling Potential Species Richness and

Recent Publications (cont'd):

- Urban Buildout to Identify Mitigation Sites Along A California Highway. Transp. Res.: D, pp, 277-291.
- Clay, Michael J. and Robert A. Johnston. 2006. "Large Developments, Spatial Uncertainty, land Integrated Land Use and Transportation Modeling." Transp. Planning and Technology 29:6, pp. 427-444.
 - Clay, Michael J. and Robert A. Johnston. 2006. "Multivariate Uncertainty Analysis of a Fully Integrated Land Use and Transportation Model: MEPLAN." Transp. Res.: D, pp. 191-203.
 - Clay, Michael J. and Robert A. Johnston. 2005. "Univariate Uncertainty Analysis of a Fully Integrated Land Use and Transportation Model: MEPLAN." Transp. Planning and Technology, 28:3, pp. 149-165.
 - Johnston, Robert A., Shengyi Gao, and Michael J. Clay. 2005. "Modeling Long-Range Transportation and Land Use Scenarios for the Sacramento Region, Using Citizen-Generated Policies." Transp. Res. Rec., 1902, pg. 99-106.
 - Merenlender, A. M., Brooks, C., Shabazian, D., Gao, S., and R. A. Johnston. 2005. "Forecasting exurban development to evaluate the influence of land-use policies on wildland and farmland conservation." J. of Conservation Planning, 1(1): pp. 64-88.
 - R.A. Johnston. "The Urban Transportation Planning Process." 2004. Book ch. for The Geography of Urban Transportation. Ed. by Susan Hanson and Genevieve Guiliano.
 - R.A. Johnston, et al. 2003. "UPlan: A Versatile Urban Growth Model for Transportation Planning." Transp. Res. Rec. 1831, pp. 202-209.
 - R. A. Johnston and Gordon Garry. 2003. "Sustainable Development Planning Tools: A Suite of Models Useful in Large Metropolitan Regions." Transp. Res. Rec., 1848, pp. 132-136.
 - Rodier, C. J., Johnston, R. A., and Abraham, J. E. 2002. "Heuristic policy analysis of regional land use, transit, and travel pricing scenarios using two urban models." Transp. Res.: D, pp. 243-254.
 - Johnston, Robert A., Caroline J. Rodier, John E. Abraham, and John Douglas Hunt. 2001. Applying An Integrated Model to the Evaluation of Travel Demand Management Policies in the Sacramento Region: Year Two. Mineta Transportation Institute, San Jose State University, CA. MTI Rept. 01-08.
 - Rodier, C. J. and R. A. Johnston, 2002. "Uncertain socioeconomic projections used in travel and emissions models: could plausible errors result in air quality nonconformity?" Transp. Res.: A, pp. 613-631.
 - J.D. Hunt, R.A. Johnston, J.E. Abraham, C.J. Rodier, G. Garry, S.H. Putman, and T. de la Barra. 2001. "Comparison from the Sacramento Model Testbed." Transp. Res. Rec., 1780. pp. 53-63.
 - Johnston, Robert A. and Tomas de la Barra. 2000. "Comprehensive Regional Modeling for Long-Range Planning: Integrated Urban Models and Geographic Information Systems." Transp. Res.: A, pp. 125-136.

Current Research:

- Blueprint planning support for about 25 counties, using our GIS-based urban growth

Current Research (cont'd):

- model, UPlan. Assessment of Integrated Transportation/Land Use Models. California Dept. of Transportation. FY 2005. Review and evaluate urban models for use by large Calif. MPOs. Held workshops at MPOs. Resulted in all four large Calif. MPOs adopting the PECAS model for development in their regions.
- Development of a Statewide Integrated Urban Model for California. California Dept. of Transportation. FYs 2006-10. UC Davis and Univ. of Calgary teams. Set-up model done July, 2008. Demo model due July, 2009, with all zones and sectors. Production model due July, 2010. Improving State Travel Model.

Recent Other Activities and Accomplishments:

- Member of state and regional advisory committees for transportation and air quality planning agencies and a local transportation commission
- Reviews articles and grant proposals for several organizations and has published over 95 refereed articles and book chapters.
- He has given invited talks at many conferences and universities and has been a faculty member-in-residence at the University of Iowa.
- Served as a member of the:
 - TRB Transportation and Land Development Committee,
 - the NAS Committee on the Determination of the State of Practice of Metropolitan Travel Modeling
- Is a Town Planning Commissioner in Truckee, CA.
- Member of the Board of Directors of the Sierra Nevada Conservancy, a State agency that funds sustainable development in this region