

# “Designing, Simulating, and Visualizing Sustainable Communities”

A Geography Colloquium presentation by

**Dr. Paul Waddell**

Thursday, February 17, 2011: 1940 Buchanan, 3:30–4:45 pm

## **Abstract:**

This talk will address an evolving research agenda on the development of planning support for metropolitan and city planning efforts to link land use, transportation and environmental visioning and planning. SB 375 mandates land use changes to reduce VMT and greenhouse gas emissions, but the processes to implement changes in land use and transportation plans to achieve these goals has not yet caught up to the challenge at hand. The seminar will present work in progress to address several dimensions of this agenda through coordinated land use and transportation modeling, and through the development of information technology to support public engagement and visualization of alternative scenarios and plans. A new project with the Metropolitan Transportation Commission to support the Sustainable Communities Strategies outreach process will provide a specific case to ground the discussion.

## **Bio:**

Paul Waddell is Professor and Vice Chair of the Department of City and Regional Planning at UC Berkeley. He teaches and conducts research on modeling and planning in the domains of land use, housing, economic geography, transportation, and the environment. He has led the development of the [UrbanSim](#) model of urban development and the Open Platform for Urban Simulation, now used by Metropolitan Planning Organizations and other local and regional agencies for operational planning purposes in a variety of U.S. metropolitan areas such as Detroit, Houston, Phoenix, Salt Lake City, San Francisco, and Seattle, as well as internationally in a growing list of cities in Europe, Asia, and Africa. His current research focuses on the assessment of the impacts of land use regulations and transportation investments on outcomes such as spatial patterns of real estate development and prices, travel behavior, emissions, and resource consumption. He is also working on ways to engage public participation in making complex policy choices in new projects funded by the National Science Foundation, the European Research Council, and more locally, by the Metropolitan Transportation Commission in the Bay Area.

Professor Waddell has served on the editorial boards of the *Journal of the American Planning Association*, *Transportation Research Part A: Policy and Practice*, *Journal of Transport and Land Use*, *Transportation Letters*, *Applied Spatial Analysis and Planning*, and *International Journal of Microsimulation*. His research is published broadly in journals in planning, geography, transportation, and urban economics.