Title
Integrated Modeling to Address Energy Impacts of Emerging Travel Modes

Abstract
The emergence of TNCs and AVs as well as last mile technologies such as shared scooters are rapidly disrupting the transportation industry. How will these emerging modes affect VMT and energy consumption? How will they affect longer-term adaptations related to residential and workplace location choices, auto ownership and other dimensions of urban life? These are some of the questions motivating the SMART Mobility project funded by the Department of Energy. This talk will describe emerging research on integrated modeling intended to support this research agenda. It will address in particular some of the computational challenges in integration of models for long-term analysis.

Speaker
Paul Waddell 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, 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.