Interactive Modeling
Appropriation and Experimentation for Urban Simulation

Transportation projects and land use policies have significant economic, social and environmental consequences. We provide urban modelers and planners an open source platform to model, simulate, and inspect the ramifications of policy alternatives.

• Suite of tools designed against modeling practice
• Interoperability with heavily used external applications
• Lightweight model creation from templates and integration into simulation
• Declarative language for indicator and model variables

UrbanSim

• Simulates interaction between land use and transportation over period of 20-30 years
• Decade-long project at UW CSE and Evans School of Public Affairs
• Used by Metropolitan Planning Organizations
• Applied operationally in Houston, Salt Lake City, and Detroit (soon, Puget Sound)
• Many experimental applications including San Francisco, Paris, Brussels, Tel Aviv

Field deployment & lab study

• Risk-aversion is barrier to appropriation
• Experimentation important for validity, appropriation into local political context, communication, and accountability

Ongoing Work

• Visualizing uncertainty
• Interfaces for public deliberation
• Activity-based travel modeling