

2013-14 SPEAKER SERIES EVENT

***Getting to Yes?
The Sustainable Energy Modeling Program:
A Decision Support System for Infrastructure Siting***

Wednesday, November 20, 2013 (GIS DAY)

6:15 – 8:00 pm (To be preceded by dinner beginning at 5:30 pm)

Casa Loma Room, University of Redlands Main Campus

**Register for this event by November 15, 2013 by contacting Vanessa Siliezar at 909-748-8769
or vanessa_siliezar@redlands.edu**

THIS EVENT & PRECEDING DINNER ARE FREE AND OPEN TO THE PUBLIC

ABSTRACT: This talk explicates the results of the Sustainable Energy Modeling Program, a decision support system for infrastructure siting. The model fuses geographical information system data, an agent-based model of citizen attitude and behavior diffusion with spatial bargaining models of stakeholder and regulatory decision making to simulate the complexity of infrastructure siting.

We find that citizen interactions result in emergent behavior that affects stakeholder and regulator decision making in highly institutionalized Environmental Impact Assessment (EIA) processes. Monte Carlo simulations show that higher levels of project disruption result in a greater number of citizen comments sent to regulators. These messages have a greater impact on the preferences of regulators simulated in the spatial bargaining module, than they do on stakeholder preferences. In fact, citizen messages and stakeholder preferences have a similar impact on regulator preferences. Stakeholders are strongly influenced by the community based organizations that arise to oppose the project. The SEMPro model fills a much needed void for public and private managers who are trying to balance citizen concerns with achieving public policy goals in the infrastructure siting domain. Risk communication efforts by project proponents need to be carefully tailored to the attributes of the project and the impacted communities.

Speaker's bio

Hal T. Nelson (Ph.D., CFA) is Research Assistant Professor in the Division of Politics and Economics at Claremont Graduate University. His research interests focus on stakeholder participation and facilitation, simulation modeling, and economic analysis. His research simulates citizen and stakeholder opposition to new infrastructure projects in the built environment using GIS and agent based modeling. Dr. Nelson has publications appearing in *The Journal of Artificial Societies and Social Simulation*, *Land Use Policy*, *Ecology and Society*, *Energy Policy*, *The Journal of Policy Studies*, *The Journal of Environment and Development*, *The Journal of Public Affairs Education*, *The Journal of Environmental Planning and Management*, and *Climate Policy*.