

UTC Project Information	
Project Title	Developing Operational and Policy Insights into Next Generation Vehicle Needs Based on an Integrated Understanding of the Transportation and Energy System of Systems
University	Purdue University
Principal Investigator	<p>J. Eric Dietz, Professor - Department of Computer and Information Technology, Purdue University, West Lafayette IN, 47907, jedietz@purdue.edu</p> <p>Srinivas Peeta, Professor – School of Civil Engineering, Purdue University, West Lafayette, IN, 47907 peeta@purdue.edu</p> <p>Joseph F. Pekny, Professor – School of Chemical Engineering, Purdue University, West Lafayette, IN, 47907, pekny@purdue.edu</p>
PI Contact Information	See above
Funding Source(s) and Amounts Provided (by each agency or organization)	<p>\$81,989: NEXTRANS Center / USDOT</p> <p>\$81,989: Purdue University (School of Chemical Engineering, \$48,196; Department of Computer and Information Technology, \$33,793).</p> <p>\$30,195: Additional cost share from Purdue Smart Grid Consortium Companies</p>
Total Project Cost	\$194,173
Agency ID or Contract Number	DTRT12-G-UTC05
Start and End Dates	1/1/2013 - 12/31/2016
Brief Description of Research Project	<p>Rapidly evolving transportation and energy technology is opening up a tremendous number of possibilities for simultaneously achieving environmental sustainability, economic development, and energy security, but the many possibilities for their interaction greatly complicate analysis to understand the best policy options and strategies for individuals and companies to take to maximize opportunities.</p> <p>This project proposes to explore the effects of various vehicle design options and more detailed vehicle behavior on the integrated transportation and energy system, with particular interest in studying the effect of vehicle design options on traffic</p>

	<p>system behavior and fuel and electricity use. The study proposes augmenting the use of MPO data to incorporate the detailed behavior of drivers, new vehicle capabilities, and advanced information systems. The resulting agent based model will be suitable for investigating transportation system behavior under next generation systems and its interaction with the energy system.</p>
<p>Describe Implementation of Research Outcomes (or why not implemented)</p> <p>Place Any Photos Here</p>	
<p>Impacts/Benefits of Implementation (actual, not anticipated)</p>	

Web Links <ul style="list-style-type: none">• Reports• Project website	