



## Sponsored Seminar

### Ken Gillingham

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Presenting on:

### “Sorting on Anticipated Driving and the Consumer Response to Gasoline Price Changes”

February 18, 2013

12 noon

(Lunch served at 11:50 am)

129 Baker Conference Room

Department of Engineering and Public Policy

**Seminar Abstract:** Consumer vehicle choice reflects both the anticipated price of gasoline and anticipated driving. I develop a model of vehicle choice and utilization to explore the importance of selection based on anticipated driving for estimating the driving responsiveness to changing gasoline prices. Using a unique dataset of new personal vehicle registrations and odometer readings in California, I find a medium-run gasoline price elasticity of driving of -0.15 and of fuel economy of 0.09. Abstracting from sorting leads to an over-estimate of the gasoline price responsiveness. A counterfactual policy simulation of a gasoline tax and feebate suggests a relatively small short-run rebound effect of increased driving and surprisingly small net changes in consumer surplus.

**Speaker Bio:** Professor Gillingham’s research and teaching interests focus on energy and transportation. He specializes in using the tools of economics and statistics, along with expertise in energy and systems engineering, to rigorously analyze policies to address the great energy challenges facing the world. His work covers the intersection of energy efficiency, new energy technologies, and sustainable transportation. Recent publications have focused on the adoption of solar photovoltaic technology, market failures in household energy efficiency, and alternative fuels for transportation. On-going research delves deeply into the effects of different policies to reduce greenhouse gas emissions from the transportation sector. Other research covers the modeling of energy innovation and technological change, both at the micro-level and in the large-scale energy-climate models used to examine the effects of climate change mitigation policies. Prior to joining the Yale faculty, he worked at the California Air Resources Board, White House Council of Economic Advisers, Stanford Energy Modeling Forum, Resources for the Future, and Joint Global Change Research Institute of Pacific Northwest National Laboratory. He also received a Fulbright Fellowship to study in New Zealand, which he used to research the economics and policy of solar energy technologies in New Zealand. His Ph.D. is from Stanford University, where he studied management science & engineering and economics.