



# Transportation Seminar Series

*Friday, May 1, 2009*

*4 - 5 p.m. in 240 Bechtel Engineering Center*

## **Elliot Martin**

PhD Candidate

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### **New Vehicle Choice and Government Incentives: Cost-Effectiveness of New Vehicle Incentives for Reducing Greenhouse Gas Emissions**

**Abstract:** Individual consumer decisions of automotive choice play a critical role in determining the aggregate composition of the nation's vehicle fleet. Although consumer choice is a private matter, the collective vehicle choices of individuals carry broad implications with respect to the nation's fossil fuel consumption and by extension, the external costs of transportation. Incentives and taxes on the consumer purchase of vehicles and fuels are instruments that provide governments with a fair amount of flexibility in automotive policy. This study explores the utilization of both aggregate and disaggregate data to generate a model that can forecast the impact and cost-effectiveness of incentives and taxes in promoting vehicles with advanced technology or high fuel efficiency. The methodology merges monthly aggregate data of new vehicle sales with disaggregate consumer data of automotive holdings. This approach can be useful for policy making institutions because it simplifies the demands of disaggregate data acquisition while providing readily updateable information on market behavior. Policy analysis exploring the effectiveness of purchase incentives is presented within the context of the estimated choice model.

**Bio:** Elliot Martin is a PhD Candidate within the Transportation Group of the Department of Civil and Environmental Engineering at UC Berkeley; where in 2006 he earned a dual Masters degree in Transportation Engineering and City and Regional Planning. Prior to coming to California, Elliot worked at the Federal Reserve Bank of Richmond. He attended Johns Hopkins University for his undergraduate degree.

Please join us for a TRANSOC-sponsored cookie hour in the ITS library at 3:30 p.m.