

Contact: Donna Maurillo  
Communications Director  
831-234-4009  
donna.maurillo (at) sjsu.edu

**Free report: How public education can help reduce vehicle emissions, fuel use**  
*Mineta Transportation Institute says many people will change driving behavior; fewer will change vehicle maintenance.*

San Jose, Calif., April 19, 2012 – The Mineta Transportation Institute ([transweb.sjsu.edu](http://transweb.sjsu.edu)) has released its newest research report, [\*Ecodriving and Carbon Footprinting: Understanding How Public Education Can Result in Reduced Greenhouse Gas Emissions and Fuel Use\*](#), which provides a review and study of eco-driving. The report found that exposure to eco-driving information influenced people's driving behavior and some maintenance practices. While not everyone modifies their behavior after reviewing this information, even small behavioral shifts due to inexpensive information dissemination could be a cost effective way to reduce fuel consumption and emissions. These methods could augment more costly "dynamic eco-driving" approaches, which give continuous feedback through onboard monitoring devices. Principal investigators were Susan A. Shaheen, PhD, Elliot W. Martin, PhD, and Rachel S. Finson, MA. The free report is available for PDF download from [transweb.sjsu.edu/project/2808.html](http://transweb.sjsu.edu/project/2808.html).

Dr. Shaheen noted that, "Ecodriving is a collection of changes to driving behavior and vehicle maintenance designed to impact fuel consumption and greenhouse gas emissions in existing vehicles. These include driving at the speed limit, keeping tires properly inflated, avoiding unnecessary weight, removing bike and roof racks, and observing other principles. Because of its promise to improve fuel economy within the existing fleet, eco-driving has gained increased attention in North America. One strategy to improve eco-driving is through public education on how to practice it."

The key study areas were:

- Whether or not travelers will adopt eco-driving practices in response to eco-driving and carbon footprinting information;
- The extent of greenhouse gas emission and fuel use reductions if the new behaviors are adopted; and
- How long the modified behavior will persist.

The report offers a literature review of previous work and programs in eco-driving across the world. Researchers also interviewed experts in public relations and public message campaigns to ascertain best practices for public campaigns. The study also completed a set of focus groups evaluating consumer response to a series of websites featuring eco-driving information. Finally, researchers conducted a set of surveys, including a controlled stated-response study assessing the effectiveness of static eco-driving web-based information as well as an intercept clipboard survey in the San Francisco Bay Area.

Surveys showed that people did reduce their driving speeds after exposure to eco-driving information. Study participants also noted that tips about changing their driving behavior were more practical to implement than vehicle maintenance tips.

"In the US, the personal automobile is the primary mode of transportation for a majority of American households," said Dr. Shaheen. "Our literature review found that in 2008,

transportation accounted for 27 percent of total US greenhouse gas emissions. According to the 2005-2007 American Community Survey 3-Year Estimates, 91.2 percent of households owned at least one vehicle, and over 50 percent owned two or more vehicles. Thus, it would be helpful for US households to have carbon emissions and fuel use information specific to driving, which is often their primary transportation mode.”

The complete report includes nearly 40 figures and tables to illustrate key points. It is available for free download at [transweb.sjsu.edu/project/2808.html](http://transweb.sjsu.edu/project/2808.html).

## **ABOUT THE AUTHORS**

**Susan Shaheen, PhD**, is a lecturer in the Civil and Environmental Engineering Department and an associate research engineer with the Institute of Transportation Studies, both at the University of California, Berkeley. She is also a co-director of the Transportation Sustainability Research Center and a research associate with the Mineta Transportation Institute. She earned a PhD in ecology, focusing on technology management and the environmental aspects of transportation, from the University of California, Davis (1999) and an MS in public policy analysis from the University of Rochester (1990). She completed her post-doctoral studies on advanced public transportation systems at UC Berkeley in July 2001.

**Elliot Martin, PhD**, is an assistant research engineer at the Transportation Sustainability Research Center (TSRC) within the Institute of Transportation Studies at UC Berkeley. He also is a research associate with the Mineta Transportation Institute. He holds a PhD in civil and environmental engineering and a dual Masters in transportation engineering and city planning, all from UC Berkeley. Previously, he was an assistant economist at the Federal Reserve Bank of Richmond. He graduated from Johns Hopkins University with a Bachelor’s degree in economics and computer science.

**Rachel Satsuki Finson, MA**, is a project manager at the Transportation Sustainability Research Center (TSRC) within the Institute of Transportation Studies at UC Berkeley. She has over twenty years of experience in the transportation arena, including issues pertaining to land use, air quality, carbon emissions, transportation demand management, alternative fuels, and advanced technologies. Ms. Finson received her MA in environment, technology, and society from Clark University in Massachusetts.

## **ABOUT THE MINETA TRANSPORTATION INSTITUTE**

The Mineta Transportation Institute (MTI) conducts research, education, and information and technology transfer, focusing on multimodal surface transportation policy and management issues, especially as they relate to transit. MTI was established by Congress in 1991 as part of the Intermodal Surface Transportation Efficiency Act (ISTEA) and was reauthorized under TEA-21 and again under SAFETEA-LU. The Institute has been funded by Congress through the US Department of Transportation’s (DOT) Research and Innovative Technology Administration, by the California Legislature through the Department of Transportation (Caltrans), and by other public and private grants and donations, including grants from the US Department of Homeland Security. DOT selected MTI as a National Center of Excellence following competitions in 2002 and 2006. The internationally respected members of the MTI Board of Trustees represent all major surface transportation modes. MTI’s focus on policy and management resulted from the Board’s assessment of the transportation industry’s unmet needs. That led directly to choosing the San José State University College of Business as the Institute’s home. Visit [transweb.sjsu.edu](http://transweb.sjsu.edu) or Twitter @minetatrans

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