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## Mineta Transportation Institute Study: What Constrains People from Choosing Sustainable Vehicles?

Environmental concerns rarely influence vehicle choice. Safety, reliability, comfort rate higher. Accurate information on environmental impacts of vehicle choices often lacking.

San Jose, Calif., March 28, 2011 – The Mineta Transportation Institute (MTI) has just released its Research Report 10-08, An Investigation into Constraints to Sustainable Vehicle Ownership: A Focus Group Study. The research addresses three questions: To what extent do people perceive that their vehicle ownership reflects their environmental attitudes? What barriers and constraints do people perceive to aligning their environmental attitudes with their vehicle ownership choices? And what changes in personal circumstances and travel options would permit them to bring their vehicle ownership more closely in line with their environmental attitudes? The report, available for free download at www.transweb.sjsu.edu/project/2903.html, is a collaboration between Bradley Flamm, PhD and Asha Weinstein Agrawal, PhD.

"Though most Americans hold pro-environmental attitudes, their behavior toward vehicle ownership doesn't always reflect that," said Dr. Flamm. "Significant constraints appear to prevent them from buying smaller, more fuel-efficient, less-polluting vehicles. But researchers have only a simplistic understanding of what those constraints are and how individuals describe and react to them."

This study explored these barriers (what psychologists describe as an "attitudes-behavior gap") in depth through a series of focus group discussions with 36 residents of the Sacramento, Calif., metropolitan region who held pro-environmental attitudes.

Analysis of those discussions revealed that the features of vehicles currently on the market, family and work responsibilities, residential choices, and routines and preferences all constrained participants' vehicle purchase choices to ones which, more often than not, poorly reflect their environmental attitudes. The discussions also revealed serious misunderstandings about the environmental impacts of owning and using vehicles that make it difficult for many to accurately assess sustainability of the different vehicles they are choosing among.

The key conclusions of the study are that pro-environmental concerns were only rarely important when people bought a new or used vehicle, many people perceive significant constraints to buying fuel efficient, low emissions vehicles, and there was mixed evidence on the potential for environmental attitudes to significantly influence vehicle purchase and use patterns. For some participants, the relationship between vehicles and the natural environment was unlikely to be a high priority under any circumstances because other factors had taken precedence, such as safety, comfort, and reliability.

Nevertheless, the study results suggest that providing more accurate information to buyers about the environmental impacts of vehicles during the purchasing process could have influenced some participants' choices and, in the future, would be a useful strategy for linking environmental attitudes and vehicle ownership decisions more closely. Manufacturers' efforts to design and market vehicles

that retain the features and functionality consumers want while using energy more efficiently and polluting less are important to making sustainable vehicle purchases easier. Planners and policy-makers can facilitate this by making it cheaper and more convenient for vehicle buyers to own vehicles with smaller environmental impacts.

Further research is needed to test whether the results from this qualitative research project hold true for larger populations. The complete report is available for free download from the Mineta Transportation Institute at www.transweb.sjsu.edu/project/2903.html

## **ABOUT THE AUTHORS**

Bradley Flamm, PhD, is assistant professor in the Department of Community and Regional Planning at Temple University. He teaches transportation planning, planning methods, and sustainable development courses. His research interests are focused on the environmental and energy impacts of transportation systems and on greenhouse gas (GHG) emissions and climate change action planning at the municipal level. He chairs the Transportation Sub-Committee of Temple University's Sustainability Task Force and is co-chair of the Ambler Campus Sustainability Council. He has a BA from the University of California Berkeley in Political Science, a Master of Regional Planning from Cornell University, and a PhD in City and Regional Planning from the University of California Berkeley.

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## ABOUT THE MINETA TRANSPORTATION INSTITUTE

The Mineta Transportation Institute (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 is 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. MTI conducts research, education, and information and technology transfer, focusing on multimodal surface transportation policy and management issues. Visit www.transweb.sjsu.edu

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