

Contact: Donna Maurillo
831-234-4009
donna.maurillo@sjsu.edu

**Mineta Transportation Institute Study:
Are Mileage Fees and Land-Use Planning Mutually Supportive?**

For planners: mileage fees matters to land-use planning, and vice versa.

San Jose, Calif., March 7, 2011 – The [Mineta Transportation Institute](#) (MTI) has just released its Research Report 10-04, [The Intersection of Urban Form and Mileage Fees: Findings from the Oregon Road User Fee Pilot Program](#). This report analyzes data from the 2006-2007 Oregon Road User Fee Pilot Program to explore two questions related to so-called “mileage fees,” a system where drivers pay a fee linked to how many miles they drive. First, the study examined whether urban form factors such as housing density, the mix of land uses, or proximity to transit could affect the way mileage fees impact drivers’ behavior. Second, could mileage fees influence how urban form affects drivers’ behavior? The study’s principal investigator was Zhan Guo, PhD, an MTI research associate and assistant professor in the Wagner School of Public Service at New York University.

In Oregon’s Road User Fee Pilot Program, participating drivers paid a per-mile fee that replaced the state gas tax. Half of the participants in the pilot program paid a higher mileage fee during rush hour in congested areas, while the other half were in the flat-rate plan and paid a uniform fee regardless of the time and location traveled. The program responded to nationwide concerns that, over time, fuel taxes will no longer be a stable transportation revenue source because a large number of US vehicles will transition to running on little or no petroleum-based fuel.

“In analyzing data from the pilot program we uncovered some interesting findings,” said Dr. Guo. “Mileage fees that are higher during rush hour can motivate households to reduce their driving in those times and places where congestion is most a problem. In addition, we also found that the mileage reduction was greater in traditional neighborhoods—denser communities with transit service and a mix of housing, shopping, and jobs—than in suburban communities that have low-density housing and no transit service, shopping, or jobs. This finding suggests that some land use patterns are more supportive of mileage fees than others.”

The report also finds that the influence of urban form tends to be higher under congestion-based mileage fees, as oppose to under the uniform mileage fees.

“In other words,” said Dr. Guo, “mileage fees and land-use planning could be mutually supportive. For urban planners, this finding suggests that switching from fuel taxes to mileage fees with rates that vary by congestion levels would strengthen the power of land use planning as a policy tool to shift some travel from solo driving trips to more sustainable modes like transit, biking, or walking. As for mileage fee program designers, the study findings imply that they should carefully consider both current and future urban form patterns when estimating the outcome of such programs, such as the likely revenues collected from mileage fees or the potential for congestion relief.”

The research also suggests that program design could significantly affect a household’s response to a mileage fee program. For example, drivers would likely modify their behavior more under a program that collects the fees each time they buy gas rather than under one where drivers receive a monthly bill for the charges.

The complete report is available for free download from the Mineta Transportation Institute at www.transweb.sjsu.edu/project/2909.html .

ABOUT THE PRINCIPAL INVESTIGATOR

Zhan Guo, PhD, is assistant professor of urban planning and transportation policy at New York University. His research has focused on two interesting and interconnected questions: First, how does the governmental regulation over the built environment (e.g., land use planning and infrastructure investment) limit travel options and encourage one particular travel means—car driving? Second, how do travelers perceive different travel options? Could we reinforce, change, or even deceive that perception in order to promote the “right” behavior. Within this framework, He has conducted empirical studies on pedestrian behavior, public transit, and transportation and land use in Boston, Chicago, London, and New York City. He has a M.C.P. (2003) and a Ph.D. in Urban Studies and Planning (2008), both from the Massachusetts Institute of Technology.

ABOUT THE RESEARCH TEAM

Asha Weinstein Agrawal, PhD, is director of the MTI National Transportation Finance Center and also associate professor in the Department of Urban and Regional Planning at San José State University.

Jennifer Dill, PhD, is associate professor in the Nohad A. Toulon School of Urban Studies and Planning at Portland State University and director of the Oregon Transportation Research and Education Consortium (OTREC), a national university transportation center.

Megan Quirk is a graduate student at New York University’s Wagner School of Public Service.

Melissa Reese is a candidate for a Masters of Urban Planning degree, with an international specialization, at New York University’s Wagner School of Public Service.

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

####