MEDIA ADVISORY

Mineta Transportation Institute Study Finds that
People Use Transit Less Often where Crime Rates Are High

The report could prove valuable in showing how crime reduction could be more cost-effective than increasing transit services to various neighborhoods.

San Jose, CA, March 10, 2009 – Researchers at the Mineta Transportation Institute (MTI) completed a scientific study of seven San Francisco Bay Area cities and found that neighborhood crime rates can influence whether a person uses non-automotive transportation for home-based trips. The report, Neighborhood Crime and Travel Behavior: An Investigation of the Influence of Neighborhood Crime Rates on Mode Choice, is one of only a few studies on how neighborhood crimes affect travel choices. It is available for free at www.transweb.sjsu.edu

This research can help determine whether crime data could augment data used for mode-choice models in travel demand forecasting. It also could help determine if policies and programs created to reduce neighborhood crimes and increase a sense of personal safety may be equally or more cost-effective than increasing transit services to particular neighborhoods. The report also could influence long-term efforts to increase urban density and pedestrian-friendly infrastructure.

“We found that high vice and vagrancy crime rates reduced the possibility that someone would use transit in suburban cities,” said Christopher E. Ferrell, Ph.D., principal investigator for the report. “High property crime rates were associated with a reduced chance that someone would walk to work in urban cities and inner-ring suburban cities. High violent crime rates reduced the probability that someone would walk to work in the suburban cities we studied. However, high property crime rates in San Francisco were associated with greater probability of walking for non-work trips.”

This study collected one-year individual crime data from seven San Francisco Bay Area police departments and calculated neighborhood crime rates. The results were merged with travel survey data from the Bay Area Travel Survey for that year, collected by the Metropolitan Transportation Commission. Other variables were calculated to identify how neighborhood crime rates affect the way people travel.
While relationship indicators generally showed that high crime rates reduce the probability of choosing non-automotive travel, researchers did not find statistically significant relationships for all cities/trips. They concluded, therefore, that these relationships differ depending on cities and trip types.

For example, the researchers believe that San Francisco attracts people who are aware of crime challenges and, to some extent, have accepted them. Dr. Ferrell said, “They live in neighborhoods where they can enjoy the benefits of walkable, transit-rich, dense urban environments and have learned to live with or disregard the high crime rates in these areas.”

Other researchers included Shishir Mathur, Ph.D. and Emilia Mendoza.

Download the report from www.transweb.sjsu.edu  Click on “Research” and then “Publications.” There is no fee.

**ABOUT THE PRINCIPAL RESEARCHER**

**Christopher E. Ferrell, Ph.D.** began his career in 1995 at the Metropolitan Transportation Commission working on intelligent transportation system applications for traffic management. Since 2000, he has been a transportation consultant for Dowling Associates, Inc. Dr. Ferrell earned his doctorate in city and regional planning at the University of California, Berkeley in 2005. His studies focus on the relationships between transportation and land use. His research includes evaluating transit facilities, transportation policy analysis, transportation and land use interactions, travel behavior, and analyzing institutional structures. He developed traffic impact studies for mixed-use, infill and transit-oriented projects, analyzed the impacts of specific and general plans and planned and implemented intelligent transportation systems, and developed bicycle and pedestrian plans. He is now researching revisions to the City of San Francisco’s environmental impact analysis significance thresholds. He has taught quantitative methods in San José State University’s Urban Planning Department.

**ABOUT THE MINETA TRANSPORTATION INSTITUTE:**

The [Mineta Transportation Institute](https://www.mineta.org) (MTI) was established by Congress in 1991 as part of the Intermodal Surface Transportation Efficiency Act (ISTEA) and was reauthorized in 1998. The institute is funded by Congress through the US DOT’s Research and Innovative Technology Administration, by the California Legislature through the Department of Transportation (Caltrans), and by other public and private grants and donations. The US DOT selected MTI as a national “Center of Excellence” following a 2002 competition.
The Institute has a Board of Trustees whose internationally-respected members represent all major surface transportation modes. MTI’s focus on policy and management resulted from a board assessment of the industry’s unmet needs and 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 transportation policy and management topics and issues. Visit [www.transweb.sjsu.edu](http://www.transweb.sjsu.edu)

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