How Can Transit Agencies 'Do More with Less'?

Agencies that use van pooling or rideshare services tend to be more efficient

San José, Calif., November 30, 2016 — Frustrated with increasing parking problems, unstable gasoline prices, and stifling traffic congestion, a growing number of U.S. residents are turning to mass transit. Transit ridership in the U.S. has reached the highest levels in nearly six decades. Transit agencies find themselves strained to respond to this increased demand while budgets remain tight. New research from the Mineta Transportation Institute identifies best-in-class practices that the U.S. transit service sector can use to maximize transit services with minimum expenditures. Assessing the Efficiency of Mass Transit Systems in the United States, research led by MTI Research Associate Dr. Hokey Min, measures the comparative efficiencies of 515 mass transit systems across the U.S. in terms of their capability to utilize human, capital, and physical resources given budgetary constraints. A key goal of the research was to develop a strategy to help transit agencies optimize the use of limited resources while enhancing transit service quality.

In addition to using state-of-the-art data envelopment analysis (DEA) models to assess operational efficiency, Min examined potential causal relationships between key environmental factors, such as geographic or demographic compositions in the transit service area, and transit efficiency scores using multivariate Tobit regression models. According to Min, findings suggest that "economies of scale alone do not seem to dictate mass transit efficiency nor do private operations of transit systems." Regardless of size, agencies using van pooling or rideshare services performed better. Agencies determined by Min to have the highest efficiency scores included: Wave Transit System in Alabama; VPSI, Inc. in Denver; North Front Range Metropolitan Planning Organization in Colorado; Licking Country Transit Board in Ohio; and Centre Area Transportation Authority in Pennsylvania.

A number of specific recommendations come directly from these research findings. First, transit agencies should consider leveraging car or van pooling services rather than solely investing in infrastructure and service expansion. In addition, while outsourcing or privatizing service may not necessarily lead to transit efficiencies, partnering with local private enterprises to leverage expertise and financial resources could lead to overall improvements.

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ABOUT THE MINETA TRANSPORTATION INSTITUTE

The Mineta Transportation Institute (MTI) conducts research, education, and information

transfer programs regarding surface transportation policy and management issues, especially related to transit. Congress established MTI in 1991 as part of the Intermodal Surface Transportation Efficiency Act. MTI won national re-designation competitions in 2002, 2006 and 2012. The Institute is funded through the US Department of Transportation, the US Department of Homeland Security, the California Department of Transportation, and public and private grants. The internationally respected members of the MTI Board of Trustees represent all major surface transportation modes. MTI, the lead institute for the nine-university Mineta National Transit Research Consortium, is affiliated with San Jose (CA) State University's Lucas College and Graduate School of Business. Visit transweb.sjsu.edu

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