Free Research Report: Does Rail Transit Proximity Attract New Businesses?

Mineta National Transit Research Consortium studies Portland and Dallas, finds different results

San Jose, CA – June 3, 2014 – Are new firms more likely to form near rail transit stations? That question is addressed in a new peer-reviewed research report just published by the Mineta National Transit Research Consortium. Two cities were compared – Portland OR and Dallas TX – because each one had relatively new light-rail systems. The report, *Transit Access and the Agglomeration of New Firms: A Case Study of Portland and Dallas*, found that new firms did cluster around transit stations in Portland but less so in Dallas, likely because of different planning and zoning criteria. Authors are Robert Noland, PhD; Daniel Chatman, PhD; and Nicholas Klein, PhD. The report is available for free, no-registration download at http://transweb.sjsu.edu/project/1145.html

"As many cities develop or expand their transit systems, a major impetus is to spur regional economic development," said Dr. Noland. "Rail transit is particularly promoted as a source of that growth and development. One recently-evaluated mechanism is how and whether transit causes or intensifies agglomerations of employment and population in cities. A related question is whether policies to encourage transit-oriented development may also lead to agglomeration economies by intensifying the density of firms and employment within station areas."

Agglomeration – in this case, several companies locating near each other – can generate certain economic benefits, such as cost reductions, greater pools of employees, and other advantages.

The research findings indicate that newly formed firms do tend to cluster around rail stations in the Portland region, but new firm births in the Dallas region are not nearly as correlated with rail station access. The difference between the two regions holds for different firm sizes and different industry sectors. While both the Dallas-Ft. Worth and Portland regions have relatively new light-rail and commuter-rail systems, there are substantial differences in how these systems are associated with the birth of new firms.

"Portland has adopted more stringent policies than Dallas-Ft. Worth in focusing development near rail stations and within the central business district (CBD)," said Dr. Noland. "These include restrictions on off-street parking for new development and an urban growth boundary that restricts development on the metropolitan fringe. These policies have led to more infill development, some of which naturally occurs near rail stations, both in the CBD and elsewhere."

By contrast, he noted, Dallas has no comprehensive planning around transit, and there is ample parking in the CBD. Portland's transit system also provides relatively better access than does the Dallas system, with a much higher mode share for all transit ridership and a much higher mode share of rail. Both factors likely increase the attractiveness of rail station areas to startup firms.

Data regarding startups came from the National Establishment Time-Series (NETS) dataset, which is derived from Dun & Bradstreet records of firms. It includes data on firm size, industrial category, dates of firm birth and death, and location at the block level. The NETS data were used to develop a geographically specific dataset, including firm location relative to the rail transit networks in the two regions.

Because the NETS data are a time series over 18 years, it was possible to evaluate from 1991-2008 how firm births within the regions have changed over time and how births may be influenced by proximity to the rail network, with attention to firms of various sizes and in specific

industry sectors. A random effects, negative binomial regression model was used to examine associations between proximity to rail stations and to control for a large set of other spatially correlated variables, such as distance to downtown, access to freeways, and socioeconomic characteristics of census tracts.

The full report includes a total of 28 tables and figures, such as (for each city) Number of Firms by Year; Negative Binomial Model Coefficients; Density of Firm Births per Square Mile; Predicted Effects of Station Distance Variables; and more. The free PDF download is available at http://transweb.sjsu.edu/project/1145.html

ABOUT THE PRINCIPAL INVESTIGATOR

Robert B. Noland is a professor at the Edward J. Bloustein School of Planning and Public Policy at Rutgers University and director of the Alan M. Voorhees Transportation Center. He received his PhD at the University of Pennsylvania in energy management and environmental policy. Prior to joining Rutgers University, he was reader in transport and environmental policy at Imperial College London, and a policy analyst at the US Environmental Protection Agency. He conducted postdoctoral research in the Economics Department at the University of California, Irvine.

ABOUT THE MINETA NATIONAL TRANSIT RESEARCH CONSORTIUM

The Mineta National Transit Research Consortium is composed of nine university transportation centers led by the Mineta Transportation Institute at San Jose State University. The Consortium was organized in January 2012 after winning a competition sponsored by the US Department of Transportation to create consortia tasked with "Delivering Solutions that Improve Public Transportation." Member universities include Bowling Green State University, Grand Valley State University, Howard University, Penn State University, Rutgers University, San Jose State University, University of Detroit Mercy, University of Nevada Las Vegas, and University of Toledo. Visit transweb.sjsu.edu/mntrc

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 2011. The Institute is funded by Congress through the US DOT Research and Innovative Technology Administration, by the California Legislature through Caltrans, and public and private grants. In 2006 the US Department of Homeland Security selected MTI as a National Transportation Security Center of Excellence. The internationally respected members of the MTI Board of Trustees represent all major surface transportation modes. MTI is the lead institute for the Mineta National Transit Research Consortium, an affiliation of nine university transportation research centers. MTI is affiliated with San Jose (CA) State University's College of Business. Visit transweb.sjsu.edu

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