MTI Researchers Assess Transit Performance Measures in California

New reference guide illuminates diverse metrics used by MPOs and transit agencies.

San José, Calif., May 2, 2016 – A new study by MTI attempts to systematize the diverse transit measures used within California, in order to help Caltrans develop a comprehensive measurement framework for transit development. The study, Transit Performance Measures in California led by Caroline Rodier, PhD, was conducted in three phases.

In the first phase, researchers reviewed transit performance measurement-guidance publications. This allowed them to hone in on the following performance yardsticks: service availability, service delivery (reliability, passenger comfort), safety/security, community impact, financial efficiency, and agency administration. Data were examined from in-house collection mechanisms at transit agencies, the National Transit Database, non-transit agencies at the local, state, and federal level, and from automated systems.

Investigators then examined the use of performance measures in publications by the four major California metropolitan planning organizations (MPOs): Southern California Association of Governments (SCAG); San Diego Association of Governments (SANDAG); Sacramento Area of Governments (SACOG); and the San Francisco Bay Area Metropolitan Transportation Commission (MTC).

Finally, the researchers evaluated the most recent transit agency planning documents in California, based on an internet search. Documents from 26 transit agencies yielded 231 performance measures. The most frequently measured category was financial (with the most prominent subcategories being farebox recovery, passenger trips per vehicle revenue/service hour, and cost per vehicle revenue/service hour). The next most frequent category was delivery, including on-time performance, responsiveness to calls, number of complaints, and missed trips. Safety was also evaluated by some agencies, and that encompassed accidents, crime, and injuries.

Dr. Rodier points out that “when agencies have data, they use that data to measure transit performance. The data mandated for National Transit Database, especially financial data, are commonly used to evaluate transit performance by both MPOs and transit agencies. Performance measures also seem to align with agency goals. Transit agency measures tend to focus more on issues related to customer service, whereas MPO measures focus more on overall scope, location, quality, and equitability of transit service.”

For a free, no-registration download, go to http://transweb.sjsu.edu/project/1208.html.

Tweet This: How do CA transit agencies measure effectiveness? MTI examined 26 local transit agencies & found 231 perf. measures http://tinyurl.com/hzsh6hm
ABOUT THE PRINCIPAL INVESTIGATOR

Caroline Rodier, Ph.D. is a Research Associate at the Mineta Transportation Institute and the Associate Director of the Urban Land Use and Transportation Center – and a Research Scientist – at the Institute of Transportation Studies, University of California, Davis. Dr. Rodier’s major areas of research include transport, land use, and environmental planning and policy analysis. She has expertise in the design and implementation of research projects that routinely make use of expert and stakeholder interviews, focus groups, and travel behavior surveys. Her research includes parking information and pricing technology pilot projects; shared-use modes to facilitate first- and last-mile access to transit; travel needs and mobility solutions for diverse populations in California; traffic safety impacts of Variable Message Signs; and the scoping plan for California’s landmark climate change legislation, Assembly Bill 32. Dr. Rodier currently serves as the Chair of the Transportation Research Board’s Emerging and Innovative Public Transport and Technologies Committee; she holds a B.A. in U.S. History from Barnard College at Columbia University, and an M.S. in Community Development and a Ph.D. in Ecology from the University of California, Davis.

ABOUT THE MINETA TRANSPORTATION INSTITUTE

The Mineta Transportation Institute (MTI) conducts research, education, and information and technology transfer, focusing on multimodal surface transportation policy and management issues, especially as they relate to transit. The Institute has been funded by Congress through the U.S. 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 U.S. Department of Homeland Security. The Institute operates from the College of Business at San José State University. Visit MTI at transweb.sjsu.edu.

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