

UTC Project Information	
Project Title	Public Bikesharing in North America During a Period of Rapid Expansion: Understanding Business Models, Industry Trends, and User Impacts (Former title: Public Bikesharing in the U.S., Canada, and Mexico: Industry Developments & User Understanding)
University	San José State University Mineta National Transit Research Consortium
Principal Investigator	Susan Shaheen, Ph.D.
PI Contact Information	Mineta Transportation Institute San José State University 210 N. Fourth St., 4 th Floor San Jose, CA 95112 sashaheen@berkeley.edu 510-665-3483
Funding Source(s) and Amounts Provided (by each agency or organization)	Research and Innovative Technology Administration University Transportation Centers Program (\$32,500) California Department of Transportation Office of Research—MS42 (\$32,500)
Total Project Cost	\$65,000
Agency ID or Contract Number	DTRT12-G-UTC21
Start and End Dates	May 2012 – October 2014
Brief Description of Research Project	<p>Public bikesharing—the shared use of a bicycle fleet—is an innovative transportation strategy that has recently emerged in major cities around the world, including North America. Information technology (IT)-based bikesharing systems typically position bicycles throughout an urban environment, among a network of docking stations, for immediate access. Trips can be one-way, round-trip, or both, depending on the operator. Bikesharing can serve as a first-and-last mile connector to other modes, as well as for both short and long distance destinations. In 2012, 22 IT-based public bikesharing systems were operating in the United States, with a total of 884,442 users and 7,549 bicycles. Four IT-based programs in Canada had a total of 197,419 users and 6,115 bicycles. Two IT-based programs in Mexico had a total of 71,611 users and 3,680 bicycles. (Membership numbers reflect the total number of short- and long-term users.)</p> <p>This study evaluates public bikesharing in North America, reviewing the change in travel behavior exhibited by members of different programs in the context of their business models and</p>

	<p>operational environment. This Phase II research builds on data collected during our Phase I research conducted in 2012. During the 2012 research (Phase I), researchers conducted 14 expert interviews with industry experts and public officials in the United States and Canada, as well as 19 interviews with the manager and/or key staff of IT-based bikesharing organizations. For more information on the Phase I research, please see the Shaheen et al., 2012 report <i>Public Bikesharing in North America: Early Operator and User Understanding</i>.</p> <p>For this Phase II study, an additional 23 interviews were conducted with IT-based bikesharing organizations in the United States, Canada, and Mexico in Spring 2013. Notable developments during this period include the ongoing expansion of public bikesharing in North America, including the recent launches of multiple large bikesharing programs in the United States (i.e., Citi Bike in New York City, Divvy in Chicago, and Bay Area Bike Share in the San Francisco Bay Area).</p> <p>In addition to expert interviews, the authors conducted two kinds of surveys with bikesharing users. One was the online member survey. This survey was sent to all people for whom the operator had an email address. The population of this survey was mainly annual members of the bikesharing system, and the members took the survey via a URL link sent to them from the operator. The second survey was an on-street survey. This survey was designed for anyone, including casual users (i.e., those who are not members of the system and use it on a short-term basis), to take “on-street” via a smartphone.</p> <p>The member survey was deployed in five cities: Montreal, Toronto, Salt Lake City, Minneapolis-Saint Paul, and Mexico City. The on-street survey was implemented in three cities: Boston, Salt Lake City, and San Antonio.</p>
Describe Implementation of Research Outcomes (or why not implemented)	<p>Cohen, Adam, Martin, Elliot, and Shaheen, Susan. "Public Bikesharing in North America: Early Operator Understanding and Emerging Trends." <i>Journal of the Transportation Research Board</i>, (2013): 13-4472.</p> <p>Shaheen, Susan and Cohen, Adam. "Understanding the Diffusion of Public Bikesharing Systems: Evidence from Europe and North America." <i>Journal of Transport Geography</i>, no. 31 (2013): 94-103.</p> <p>Shaheen, Susan. "Bicycle Sharing Programs." Presentation at CalACT Autumn Conference, Monterey, CA, September 30, 2012.</p> <p>Martin, Elliot. "Public Bikesharing in North America: Early Operator and User Understanding." Presentation at the Bicycle Urbanism Symposium, Seattle, WA, June 20, 2013.</p>

Martin, Elliot. "Evaluating Public Transit Modal Shift Dynamics In Response to Public Bikesharing: Evidence from Two U.S. Cities." Presentation at the Shared-Use Mobility Summit, San Francisco, CA, October 10, 2013.

Shaheen, Susan. "Public Bikesharing Around the World and North America." Presentation at the Metropolitan Transportation Commission: Regional Bikesharing for the Bay Area and Beyond, San Francisco, CA, May 28, 2013.

Shaheen, Susan. "Bike Sharing and Active Transportation for Communities Large and Small." Presentation at the 12th Annual New Partners for Smart Growth Conference, Kansas City, MO, February 9, 2013.

Shaheen, Susan. "Trends and Trajectory of Shared Mobility." Presentation at the Transportation Research Board's International Workshop on Road Vehicle Automation, Palo Alto, CA, July 19, 2013.

Shaheen, Susan. "Carsharing Snapshot & Impacts: The Americas." Presentation at the Shared-Use Mobility Summit, San Francisco, CA, October 10, 2013.


Shaheen, Susan. "Planning Services to Complement Transit: Ridesharing, Bikesharing & Carsharing." Presentation at the Smart Technologies, Smart Policies: The UCLA Lake Arrowhead Symposium on the Transportation – Land Use – Environment Connection, Lake Arrowhead, CA, October 21, 2013.

Shaheen, Susan. "Bikesharing as a Form of Public Transit: Business Models & Impacts in North America." Presentation at the Association of Pedestrian and Bicycle Professionals National Webinar Series on Bikesharing Transit, Webinar, December 4, 2013.

Cohen, Adam. "Overview of Trends and Shared-use Mobility Research." Presentation at the Applications for the Environment: Real-Time Information Synthesis Program, Washington, DC, October 22, 2014.

Shaheen, Susan. "Public Bikesharing in the U.S., Canada & Mexico: Industry Developments & User Understanding." Webinar presented for the National High Institute: Bikesharing Research and Programs, April 2, 2014.

Shaheen, Susan. "Shared Mobility 101." Presentation at the Shared-Use Mobility Center, Chicago, IL, October 27, 2014.

	<p>Shaheen, Susan. "Shared Mobility Services As An Evolutionary Path to Leverage Vehicle Automation." Presentation at the Podcar City 9: Innovative Mobility in the Era of Automation, Mountain View, CA, November 5, 2015</p> <p>Shaheen, Susan. "Shared Economy: Impacts on Public Transit." Presentation at a CUTR Webcast, October, 4, 2015</p> <p>Shaheen, S., & Martin, E. (2015). Unraveling the Modal Impacts of Bikesharing. Access Magazine. http://www.accessmagazine.org/wp-content/uploads/sites/7/2015/12/access47.shaheen.pdf</p>
Place Any Photos Here	 <p>The Social Bicycles app showing a geo-fence around the operations area.</p>
Impacts/Benefits of Implementation (actual, not anticipated)	
<p>Web Links</p> <ul style="list-style-type: none"> • Reports • Project Website 	<p>Final report (MNTRC Website): http://transweb.sjsu.edu/project/1131.html</p>

