



UTC Project Information – Cooperative Mobility for Competitive Megaregions (CM²)

Project Title	Understanding Transportation Related Infrastructure Access in 52 major US cities
University	University of Texas at Austin
Principal Investigator	Junfeng Jiao
PI Contact Information	jjiao@austin.utexas.edu
Funding Source(s) and Amounts Provided (by each agency or organization)	U.S. Department of Transportation: \$50,331.82 University of Texas at Austin: \$25,165.91
Total Project Cost	\$75,497.73
Agency ID or Contract Number	UTDOT Grant number: 69A3551747135
Start and End Dates	9/30/2018 – 2/28/2019
Brief Description of Research Project	<p>U.S. Metropolitan planning organizations (MPOs) and other planning and transit authorities are limited, politically and financially, to their local areas. This leads to information gaps and a lack of collective data that is needed to guide regional planning decisions.</p> <p>This project addresses this gap in information and provides a standard framework for measuring transit supply and demand at the megaregional scale.</p>
Describe Implementation of Research Outcomes (or why not implemented)	<p>Following items were produced as outcome of this project:</p> <ol style="list-style-type: none"> 1. McGrath, N. and Jiao, J. 2017. Stranded in our own communities: Transit deserts make it hard for people to find jobs and stay healthy (Op-ed). The Conversation. 2. Jiao, J. and Bischak, C. 2018. Where Buses are Leaving People Behind (Op-ed). Houston Chronicle. 3. Jiao, J. and Bischak, C. 2018. People are stranded in “transit deserts” in dozens of US cities (Op-ed), The Conversation. 4. Chris, B., & Jiao, J. (2019). Understanding the Spatial Distribution of Transit Captive Populations in 52 Major US Cities. Paper presented at the 98th Transportation Research Board (TRB) Annual Meeting, January 13-17, 2019, Washington, DC. 5. Jiao, J. 2017. Identify Transit Desert in Major Texas Cities Where Demands Missed Supplies. Journal of Transport and Land Use. 10 (1), pp 529-540.

	<ol style="list-style-type: none"> 6. Jiao, J. and McGrath, N. 2018. Evaluating Walkability through GIS Spatial Analysis in South Florida. Paper presented at the 97th Transportation Research Board (TRB) Annual Meeting, January 7-11, 2018, Washington, D.C. 7. Jiao, J. 2017. Commentary: Better planning can transform America's "transit deserts", Statesman. https://www.statesman.com/article/20171031/NEWS/310319802 8. Alcorn, L. G., & Jiao, J. (2019). Bike-Sharing Station Usage and the Surrounding Built Environments in Major Texas Cities. Journal of Planning Education and Research. https://doi.org/10.1177/0739456X19862854 9. Zoning Changes and Social Diversity in New York City, 1990 – 2015. Journal of Urbanism: International Research on Placemaking and Urban Sustainability, 12:2, 230-243. https://doi.org/10.1080/17549175.2018.1562488
Impacts/Benefits of Implementation (actual, not anticipated)	<p>This study specifically contributes to megaregional transportation research by providing a theoretical and methodological framework that can be used to assess transportation infrastructure demands. The methods developed in this study represent a significant step forward for transit desert research. These methods can be easily extended to megaregional areas and serve as a valuable tool for megaregional transportation planning.</p>
Web Links (to reports, project website, etc.)	<p> www.transitdeserts.org www.transitdeserts.com www.transitdeserts.net </p> <ol style="list-style-type: none"> 1. https://theconversation.com/stranded-in-our-own-communities-transit-deserts-make-it-hard-for-people-to-find-jobs-and-stay-healthy-77450 2. https://www.houstonchronicle.com/local/gray-matters/article/transit-deserts-reinforce-economic-inequality-12750671.php 3. https://theconversation.com/people-are-stranded-in-transit-deserts-in-dozens-of-us-cities-92722 5. https://doi.org/10.5198/jtlu.2017.899 7. https://www.statesman.com/article/20171031/NEWS/310319802 8. https://doi.org/10.1177/0739456X19862854 9. https://doi.org/10.1080/17549175.2018.1562488 <p>Project report: http://sites.utexas.edu/cm2/files/2019/12/Year-1_Briscoe_Multi-Modal-Modelling_BIM-Template-for-Hub-Connectivity-and-Networks.pdf</p>