

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

Competitive Megaregions	
Project Title	Understanding Transportation Related Infrastructure Access in 52 major US cities
University	University of Texas at Austin
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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	9/1/2017 – 2/28/2019
Brief Description of Research Project	 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. This project addresses this gap in information and provides a standard framework for measuring transit supply and demand at the megaregional scale.
Describe Implementation of Research Outcomes (or why not implemented)	 Following items were produced as outcome of this project: 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.

	 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. Jiao, J. 2017. Commentary: Better planning can transform America's "transit deserts", Statesman. <u>https://www.statesman.com/article/20171031/NEWS/310319</u> <u>802</u> 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. <u>https://doi.org/10.1177/0739456X19862854</u> 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. <u>https://doi.org/10.1080/17549175.2018.1562488</u>
Impacts/Benefits of Implementation (actual, not anticipated)	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.
Web Links (to reports, project website, etc.)	 www.transitdeserts.org www.transitdeserts.com https://theconversation.com/stranded-in-our-own- communities-transit-deserts-make-it-hard-for-people-to-find- jobs-and-stay-healthy-77450 https://www.houstonchronicle.com/local/gray- matters/article/transit-deserts-reinforce-economic-inequality- 12750671.php https://theconversation.com/people-are-stranded-in-transit- deserts-in-dozens-of-us-cities-92722 https://doi.org/10.5198/jtlu.2017.899 https://doi.org/10.1177/0739456X19862854 https://doi.org/10.1080/17549175.2018.1562488 Project report: http://sites.utexas.edu/cm2/files/2019/12/Year- 1 Briscoe Multi-Modal-Modelling BIM-Template-for-Hub- Connectivity-and-Networks.pdf
	Connectivity-and-inetworks.pdf