



**UTC Project Information – Cooperative Mobility for Competitive Megaregions (CM<sup>2</sup>)**

<b>Project Title</b>	The Effect of Shadow Evacuation in Megaregion Disasters: A Pilot Study
<b>University</b>	Louisiana State University
<b>Principal Investigator</b>	Brian Wolshon (with Nelida Herrera)
<b>PI Contact Information</b>	brian@rsip.lsu.edu
<b>Funding Source(s) and Amounts Provided</b> (by each agency or organization)	U.S. Department of Transportation: \$125,400 Louisiana State University: \$63,750
<b>Total Project Cost</b>	\$189,150
<b>Agency ID or Contract Number</b>	UTDOT Grant number: 69A3551747135
<b>Start and End Dates</b>	6/1/2017 - 5/31/2018
<b>Brief Description of Research Project</b>	This research assesses the effect of shadow evacuation in megaregion disasters. The evacuation of areas that do not receive an official evacuation notice is referred to as shadow evacuation. Shadow evacuation could increase the overall clearance times of declared evacuation zones (Weinisch and Brueckner, 2015) which is important to be considered during the emergency planning process.
<b>Describe Implementation of Research Outcomes</b> (or why not implemented)	<p>Following items were produced as the outcome of this research:</p> <ol style="list-style-type: none"> <li>1. Murray-Tuite, P., Wolshon, B. and Matherly D., "Evacuation and Emergency Transportation - Techniques and Strategies for Systems Resilience" TR NEWS 311, Sept - Nov 2017, pp. 20 – 26</li> <li>2. Lindell, M., Murray-Tuite, P., Wolshon, B., and Baker, E. Large-Scale Evacuation: The Analysis, Modeling, and Management of Emergency Relocation from Hazardous Areas. 1st Edition, 2018, Publisher: CRP Press.</li> <li>3. Wolshon, B., Herrera, N. Effects of Shadow Evacuation on Megaregion Evacuations. Poster presentation at the Transportation Research Board Annual Meeting 2019, Washington, DC</li> </ol>

<b>Impacts/Benefits of Implementation</b> (actual, not anticipated)	This research sought to enhance the understanding of the effects of these conditions by analyzing shadow evacuations and their impact on regional traffic operations and more broadly use traffic simulation to examine traffic in megaregions.
<b>Web Links</b> (to reports, project website, etc.)	<ol style="list-style-type: none"><li>1. <a href="https://www.louisberger.com/resources/evacuation-and-emergency-transportation-techniques-and-strategies-systems-resilience">https://www.louisberger.com/resources/evacuation-and-emergency-transportation-techniques-and-strategies-systems-resilience</a></li><li>2. <a href="https://www.crcpress.com/Large-Scale-Evacuation-The-Analysis-Modeling-and-Management-of-Emergency/Murray-Tuite-Lindell-Wolshon-Baker/p/book/9781482259858">https://www.crcpress.com/Large-Scale-Evacuation-The-Analysis-Modeling-and-Management-of-Emergency/Murray-Tuite-Lindell-Wolshon-Baker/p/book/9781482259858</a></li></ol>