



Center for Advanced Multimodal Mobility Solutions and Education

UTC Project Information – CAMMSE @ UNC Charlotte	
Project Title	Innovative Countermeasures for Reducing the Truck Waiting Time at Marine Terminals
University	Texas Southern University
Principal Investigator	Yi Qj, Mehdi Azimi and Qun Zhao
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Funding Sources and Amount Provided (by each agency or organization)	The University of North Carolina at Charlotte: \$55,640 Texas Southern University: \$30,770
Total Project Cost	\$86,410
Agency ID or Contract Number	
Start and End Dates	10/01/2017 – 09/30/2019
Brief Description of Research Project	As international trade and freight volumes increase, there is a growing port congestion problem, leading to long truck waiting lines at US marine terminals. The proposed project is to investigate innovative countermeasures for reducing truck waiting times at marine terminals. For this purpose, this research will first identify the potential countermeasures that can be used for reducing truck waiting times at marine terminals. Then, a method for quantitatively estimating terminal gate truck waiting times and their cost will be developed, and the effectiveness and benefits of the identified countermeasures will be assessed. After that, interviews of marine terminal officers will be conducted to further investigate the



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	<p>feasibility and implementation barriers of different types of countermeasures. Based on the results of this study, the most feasible and cost-effective countermeasures for reducing truck waiting times at marine terminals will be recommended and the method for estimating their impacts/benefits under different scenarios will be provided.</p>
<p><i>Describe Implementation of Research Outcomes (or why not implemented)</i></p> <p><i>Place Any Photos Here</i></p>	
<p><i>Impacts/Benefits of Implementation (actual, not anticipated)</i></p>	
<p><i>Web Links</i></p> <ul style="list-style-type: none"> • <i>Reports</i> • <i>Project website</i> 	<p>https://cammse.uncc.edu/sites/cammse.uncc.edu/files/media/CAMMSE-UNCC-2018-UTC-Project-Information-14-Qi.pdf</p> <p>https://cammse.uncc.edu/sites/cammse.uncc.edu/files/media/CAMMSE-UNCC-2018-UTC-Project-Report-14-Qi-Final.pdf</p>