



Center for Advanced Multimodal Mobility Solutions and Education

UTC Project Information – CAMMSE @ UNC Charlotte	
Project Title	Investigating the Impact of COVID-19 Pandemic Outbreak on Bike Share Usage and Ridership: A Case Study in Houston
University	Texas Southern University
Principal Investigator	Mehdi Azimi and Yi Qi
PI Contact Information	(713)-313-1293 / azimim@tsu.edu
Funding Sources and Amount Provided (by each agency or organization)	The University of North Carolina at Charlotte: \$59,989 Texas Southern University: \$31,319
Total Project Cost	\$91,308
Agency ID or Contract Number	
Start and End Dates	10/01/2021 – 09/30/2024
Brief Description of Research Project	<p>Public bicycle share systems have increased from operating in a few European cities to expanding in the United States at an increasing pace. During the COVID-19 pandemic outbreak, people may opt to bike instead of riding transit to avoid exposure to the coronavirus.</p> <p>The goal of this project is to investigate the impact of COVID-19 pandemic outbreak on bicycling mode share. The research is developed based on the CAMMSE theme of addressing the FAST Act research priority area of “Improving Mobility of People and Goods.”</p> <p>The research is relevant to three CAMMSE research thrusts, “Innovations to improve multi-modal connections, system integration</p>



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	<p>and security” and “Develop data modeling and analytical tools to optimize passenger and freight movements.” Specific project objectives include:</p> <ol style="list-style-type: none"> a) Identify potential attributes related to bike sharing demand, b) Examine the trip distribution of bike share users throughout the four seasons of the year, and the different hour blocks of a day, c) Model bike share station activity, d) Examine and locate the dock stations in relation to potential demand, and e) Investigate system users and impacts on the bike share.
<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>Project has not begun yet, so no impacts have been realized.</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-2022-UTC-Project-Information-12-Azimi.pdf</p>