



## Center for Advanced Multimodal Mobility Solutions and Education

UTC Project Information – CAMMSE @ UNC Charlotte	
<b>Project Title</b>	Investigating the Impact of COVID-19 Pandemic Outbreak on Bike Share Usage and Ridership: A Case Study in Houston
<b>University</b>	Texas Southern University
<b>Principal Investigator</b>	Mehdi Azimi and Yi Qi
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<b>Funding Sources and Amount Provided (by each agency or organization)</b>	The University of North Carolina at Charlotte: \$59,989 Texas Southern University: \$31,319
<b>Total Project Cost</b>	\$91,308
<b>Agency ID or Contract Number</b>	
<b>Start and End Dates</b>	10/01/2021 – 09/30/2024
<b>Brief Description of Research Project</b>	<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"> <li>Identify potential attributes related to bike sharing demand,</li> <li>Examine the trip distribution of bike share users throughout the four seasons of the year, and the different hour blocks of a day,</li> <li>Model bike share station activity,</li> <li>Examine and locate the dock stations in relation to potential demand, and</li> <li>Investigate system users and impacts on the bike share.</li> </ol>
<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"> <li><i>Reports</i></li> <li><i>Project website</i></li> </ul>	<p><a href="https://cammse.uncc.edu/sites/cammse.uncc.edu/files/media/CAMMSE-UNCC-2022-UTC-Project-Information-12-Azimi.pdf">https://cammse.uncc.edu/sites/cammse.uncc.edu/files/media/CAMMSE-UNCC-2022-UTC-Project-Information-12-Azimi.pdf</a></p> <p><a href="https://cammse.charlotte.edu/wp-content/uploads/sites/191/2024/09/CAMMSE-UNCC-2022-UTC-Project-Report-12-Azimi-Qi-Final.pdf">https://cammse.charlotte.edu/wp-content/uploads/sites/191/2024/09/CAMMSE-UNCC-2022-UTC-Project-Report-12-Azimi-Qi-Final.pdf</a></p>