



Center for Advanced Multimodal Mobility Solutions and Education

UTC Project Information – CAMMSE @ UNC Charlotte	
Project Title	Are Transportation Network Companies Synergistic with Other Shared Ride Mode Offerings? An Exploratory Analysis of Demand Data from NYC Utilizing High Resolution Spatiotemporal Models
University	The University of Connecticut
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Funding Sources and Amount Provided (by each agency or organization)	The University of North Carolina at Charlotte: \$59,999 The University of Connecticut: \$30,269
Total Project Cost	\$90,268
Agency ID or Contract Number	
Start and End Dates	10/01/2018 – 09/30/2020
Brief Description of Research Project	Spurred by technological advances, transportation networks and the mobility offerings for moving people and goods are undergoing transformative and significant changes. A significant operator in the area of moving people is transportation network companies (TNC). The growth of TNC is irrefutable and the direct impact of TNCs on mode choice behaviors of consumers is very evident. The current body of research on TNC is growing, and the literature is beginning to shine light on how they impact the demand for existing shared modes (e.g. bikeshare, transit). However, a comprehensive investigation of all shared ride modes in a particular region,



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	<p>including the temporal and spatial patterns of overall shared demand and its relationship to other shared modes, is lacking. The proposed research attempts to fill this important knowledge gap by analyzing data about shared mode offerings in New York City. The research will develop multivariate analysis methods from time series literature including state-space models, and dynamic compositional methods to explore the spatial and temporal patterns of different shared modes and also attempt to capture the tradeoffs across modes. This exploration will help better plan the shared mode offerings so the positive impacts can be promoted and negative impacts can be alleviated.</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>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-2019-UTC-Project-Information-10-Konduri.pdf</p>