



## Center for Advanced Multimodal Mobility Solutions and Education

UTC Project Information – CAMMSE @ UNC Charlotte	
<b>Project Title</b>	Development of Continuous Time, Temporally Constrained and Behaviorally Consistent Tour Pattern Generation System for Modeling the Impacts of Autonomous Vehicle Future
<b>University</b>	The University of Connecticut
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<b>Funding Sources and Amount Provided (by each agency or organization)</b>	The University of North Carolina at Charlotte: \$59,999 The University of Connecticut: \$30,269
<b>Total Project Cost</b>	\$90,268
<b>Agency ID or Contract Number</b>	
<b>Start and End Dates</b>	10/01/2017 – 09/30/2019
<b>Brief Description of Research Project</b>	Autonomous vehicle (AV) technologies and solutions have been receiving increasing attention in both academia and industry. While the potential for transformation is undisputed, the specific impacts on travel behavior of individuals and households is less understood. In the proposed research, a new framework will be developed to simultaneously model the tour and stop making decisions while addressing three main limitations of existing tour-based activity-based modeling (TABM) frameworks, namely, representing time as a continuous entity, accommodating the temporal constraints within which an individual operates when generating tours and



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	<p>stops, and acknowledging the interrelationships across different tour- and stop-level decisions. This framework will be implemented into an existing TABM implementation to enhance the activity pattern generation. Further, the enhanced TABM will be applied and compared with existing TABM to demonstrate feasibility and applicability. Additionally, the TABM model system will be applied to model the direct and indirect travel behavior impacts, resulting from different configurations of AV futures, of San Francisco County residents.</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"> <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-2018-UTC-Project-Information-11-Konduri.pdf">https://cammse.uncc.edu/sites/cammse.uncc.edu/files/media/CAMMSE-UNCC-2018-UTC-Project-Information-11-Konduri.pdf</a></p> <p><a href="https://cammse.uncc.edu/sites/cammse.uncc.edu/files/media/CAMMSE-UNCC-2018-UTC-Project-Report-11-Konduri-Final.pdf">https://cammse.uncc.edu/sites/cammse.uncc.edu/files/media/CAMMSE-UNCC-2018-UTC-Project-Report-11-Konduri-Final.pdf</a></p>