



Center for Advanced Multimodal Mobility Solutions and Education

UTC Project Information – CAMMSE @ UNC Charlotte	
Project Title	Multimodal Connected Vehicle Pilot for Winter Travel
University	Washington State University
Principal Investigator	Xianming Shi
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Funding Sources and Amount Provided (by each agency or organization)	The University of North Carolina at Charlotte: \$53,066 Washington State University: \$26,533
Total Project Cost	\$79,599
Agency ID or Contract Number	
Start and End Dates	10/01/2019 – 09/30/2021
Brief Description of Research Project	<p>The goal of this CAMMSE project is to implement connected vehicle (CV) technologies within Pullman, Spokane, or a similarly sized city as a case study to gather data between smart-technology-enabled transit and bicycle/pedestrian travel modes. The case study data will include inclement weather conditions as these greatly impact transit operations and multimodal commuting efficiency. To meet this goal, the following objectives will be addressed: (1) identify appropriate transit routes for case-study implementation of transit and bicycle/ pedestrian V2X (Vehicle-2-Everything) implementation; (2) collect baseline mobility and weather data along the routes; and (3) use mobile tablet and smartphone devices with a customized program for transit vehicles</p>



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	<p>and bicycle/pedestrian commuters and collect data related to travel speed, bus-stop-waiting duration, and distance between transit/bike/pedestrian interactions. This case study data will provide critical information for determining program expansion, and may be used to calibrate simulation models of broader connected vehicle applications within Pullman or Spokane. This research is directly related to topic areas “Accessibility” and “Connected Vehicle Technologies”.</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>Web Links</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-2020-UTC-Project-Information-16-Shi.pdf</p> <p>https://cammse.uncc.edu/sites/cammse.uncc.edu/files/media/CAMMSE-UNCC-2020-UTC-Project-Report-16-Shi-Final.pdf</p>