



## Center for Advanced Multimodal Mobility Solutions and Education

UTC Project Information – CAMMSE @ UNC Charlotte	
<b>Project Title</b>	Use of Vessel Automatic Information System Data to Improve Multi-modal Transportation in and around the Ports
<b>University</b>	Texas Southern University
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<b>Funding Sources and Amount Provided (by each agency or organization)</b>	The University of North Carolina at Charlotte: \$80,000
<b>Total Project Cost</b>	\$80,000
<b>Agency ID or Contract Number</b>	
<b>Start and End Dates</b>	1/15/17 – 11/30/17
<b>Brief Description of Research Project</b>	One of the major challenges in multi-modal transportation is the alignment in planning the arrival and departure of different modes, e.g. vessels and trucks, such that the containers can be transferred without delays. Although trucking companies may have access to some levels of information in order to track the vessels and cargos, they don't have accurate estimation for the arrivals of those vessels to the port. Automatic Information System provides a means for ships to electronically broadcast ship data at regular intervals including vessel identification, position, course, and speed.



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	<p>PortVision is a tool that uses the Automatic Information System. By using this tool, the positions of the vessels can be tracked in order to calculate the vessel estimated time of arrivals. It will help the trucking companies to have a better plan for delivering or picking up the containers. If the system detects a deviation from the planned schedule (e.g. a delay in arrival of a vessel), the involved trucking companies are informed pro-actively. Consequently, the related trucks can be re-scheduled at an early stage and waiting times and unsuccessful attempts to deliver or pick up a container can be reduced. The outcomes of the project will decrease unproductive waiting time of transportation vehicles and improve the multi-modal connections in ports.</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"> <li>• <i>Reports</i></li> <li>• <i>Project website</i></li> </ul>	<p><a href="http://cammse.uncc.edu/research/current-projects/CAMMSE-UNCC-2017-UTC-Project-Information-07-Azimi.pdf">http://cammse.uncc.edu/research/current-projects/CAMMSE-UNCC-2017-UTC-Project-Information-07-Azimi.pdf</a></p>