

Center for Advanced Multimodal Mobility Solutions and Education

UTC Project Information – CAMMSE @ UNC Charlotte	
Project Title	Use of Vessel Automatic Information System Data to Improve Multi-
	modal Transportation in and around the Ports
University	Texas Southern University
Principal Investigator	Mehdi Azimi & Yi Qi
PI Contact Information	(713)-313-1293 / <u>azimim@tsu.edu</u>
	(713)-313-6809 / <u>qiy@tsu.edu</u>
Funding Sources and	The University of North Carolina at Charlotte: \$80,000
Amount Provided (by	
each agency or	
organization)	
Total Project Cost	\$80,000
Agency ID or Contract	
Number	
Start and End Dates	01/15/2017 – 09/30/2018
Brief Description of	One of the major challenges in multi-modal transportation is the
Research Project	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.
	PortVision is a tool that uses the Automatic Information System. By



Center for Advanced Multimodal Mobility Solutions and Education

	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.
Describe Implementation	
of Research Outcomes	
(or why not	
implemented)	
Place Any Photos Here	
Impacts/Benefits of	
Implementation (actual,	
not anticipated)	
Web Links	https://cammse.uncc.edu/sites/cammse.uncc.edu/files/media/CAM
Reports	MSE-UNCC-2017-UTC-Project-Information-07-Azimi.pdf
• Project website	https://cammse.uncc.edu/sites/cammse.uncc.edu/files/media/CAM
	MSE-UNCC-2017-UTC-Project-Report-07-Azimi-Final.pdf