

## Center for Advanced Multimodal Mobility Solutions and Education

UTC Project Information – CAMMSE @ UNC Charlotte	
Project Title	Use of Innovative Intersection Designs for Improving Mobility and
	Reducing Roadway Traffic Congestion
University	Texas Southern University
Principal Investigator	Yi Qi
PI Contact Information	(713)-313-6809 / giy@tsu.edu
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	Traffic engineers, their partner agencies, and developers increasingly
Research Project	have to consider the use of innovative intersection designs, including
	single-point urban interchanges, Michigan U, Super Streets,
	continuous flow intersections, to mitigate the congestion problems at
	conventional intersections. An innovative intersection is generally
	defined as any at-grade design concept that is able to reduce the
	number of traffic signal phases at the main intersection, thereby
	increasing the efficiency and capacity of the intersection and
	improving progression at the corridors.
	It is important to understand the applicable conditions for such



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	intersection designs and how they are performing in terms of
	operations, safety, and their general public acceptance. The proposed
	research project is to systematically investigate the operational and
	design issues in the implementation of such innovative designs and to
	evaluate the operational benefits of these intersection designs. The
	outcome of the project will provide tools and guidelines for
	appropriately selecting the right locations and cost-effectively
	implementing of different types of innovative intersection designs.
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-08-Yi.pdf
• Project website	https://cammse.uncc.edu/sites/cammse.uncc.edu/files/media/CAM
	MSE-UNCC-2017-UTC-Project-Report-08-Qi-Final.pdf