Center for Advanced Multimodal Mobility Solutions and Education

UTC Project Information – CAMMSE @ UNC Charlotte	
Project Title	Characterization of Bicycle Rider Behavior among Various Street Environments
University	The University of Texas at Austin
Principal Investigator	Randy Machemehl
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Funding Sources and Amount Provided (by each agency or organization)	The University of North Carolina at Charlotte: $74,999 City of Austin: $37,500
Total Project Cost	$112,499
Agency ID or Contract Number	
Start and End Dates	10/01/2017 – 09/30/2018
Brief Description of Research Project	When bicycle riders use public streets, they have the same rights and obligations as automobile drivers. However, bicycle speeds are typically less than automobiles, making bicycle rider safety is a major concern. In order to improve bicycle safety and encourage more cycling, a variety of bicycle traffic control devices are often installed. These include shared lane markings and signs, delineated bike lanes, colored bike lane markings, barriers between bike and auto lanes, and bicycle signals. Austin, Texas has all of these devices along with others installed along various streets. In some locations, virtually all possible bicycle devices are provided but in other places almost no devices are provided. While examining

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	surveillance data of bicycle rider responses to bicycle signals, significantly different rider behavior was observed at locations with many bicycle control devices versus those with few or none. Based on those findings, a paper was written to describe some of the differences, however since that study was done for evaluation of bicycle signals, very little in-depth analyses were possible. The proposed study will supplement the 200 hours of surveillance video already developed to provide detailed analyses of how rider behavior differs in environments rich in control and safety devices compared to environments have few or none.
Describe Implementation of Research Outcomes (or why not implemented) *Place Any Photos Here*	
Impacts/Benefits of Implementation (actual, not anticipated)	
Web Links • *Reports* • *Project website*	https://cammse.uncc.edu/sites/cammse.uncc.edu/files/media/CAMMSE-UNCC-2018-UTC-Project-Information-06-Machemehl.pdf https://cammse.uncc.edu/sites/cammse.uncc.edu/files/media/CAMMSE-UNCC-2018-UTC-Project-Report-06-Machemehl-Final.pdf