UTC Project Information – Project 4.3	
Project Title	Towards Quantitative Cybersecurity Risk Assessment in Transportation Infrastructure
University	University of Connecticut
Principal Investigator	Dr. Song Han
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Co-PI(s)	N/A
Co-PI Contact Information	N/A
Funding Source(s) and Amounts Provided (by each agency or organization)	U.S. DOT UTC-TIDC Total amount: \$252,300
Total Project Cost	\$252,300
Agency ID or Contract Number	N/A
Start and End Dates	Oct. 1st 2018 - June 30th, 2022
Brief Description of Research Project	This research project aims to systematically and quantitatively explore the connectivity and security issues in representative transportation infrastructures, including low-power wireless network infrastructure mainly for long-term structural monitoring, and vehicle-to-everything (V2X) communication infrastructure for vehicle-to-vehicle and vehicle-to-infrastructure message passing.
	The research outcomes are implemented on a real-time wireless network simulator as well as a multi-hop real-time wireless network testbed for functional validation and performance evaluation. The developed wireless devices are also integrated into a wireless bridge joint monitoring system for long-term bridge structure monitoring.
Describe Implementation of Research Outcomes (or why not implemented) Place Any Photos Here	Map Satellite Gateway: UCONN_GW Network Statistics (Average Value) Best 2011 127 130 (2= 10:29 30.00) Lus Bast Del 2011 127 130 (2= 10:29 30.00) Lus Bast End 2011 127 130 (2= 10:29 30.00) Lus Bast Del 2011 127 130 (2= 10:29 30.00) Lus Bast Set Soon to Latesor' Mac Per (N) APP PER (N) Set Soon to Latesor' Mac Per (N) APP PER (N) 4 114 7 74/3 0.066 5 4.364 15:295 0.004 6 3.073 0.198 0.012 7 2.985 0.996 0.012 7 2.985 0.996 0.012 8 1771 1753 C 9 3.774 0.025 C 10 1.19 2.456 C 9 3.774 0.025 C 11 3.908 6.294 0.012 7 2.126 1 1102 0.056 13 11.231 (2.138 0.006) 13 11.231 (2.138 0.006) Gorgle MAX (IO) MIN (IO) M
Impacts/Benefits of Implementation (actual, not anticipated)	The implementation of the proposed methodologies enables the research team to validate the functions and evaluate their performance on real hardware and in real scenarios. This pave the way for the proposed methods to be deployed in real systems in transportation industries.
Web Links • Reports • Project website	Reports link: Please refer to the TIDC website Project website: https://cps.cse.uconn.edu/dot-tidc-project/