



# CENTER FOR CONNECTED AND AUTOMATED TRANSPORTATION

Project Title	Mcity Infrastructure Data-Collection and Management System Development	
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Most relevant CCAT research thrusts (choose all applicable)	<input checked="" type="checkbox"/> Enabling Technology <input type="checkbox"/> Planning and Policy <input type="checkbox"/> Human Factors <input checked="" type="checkbox"/> Infrastructure Design and Management <input type="checkbox"/> Control and Operations <input checked="" type="checkbox"/> Models and Implementation	
Funding Request		
Matching Funds and Source (if any)	Mcity \$179,693	
Total Project Cost	\$179,693	
Contract Number	69A3551747105	
Project start/end dates	1/1/2017 – 6/1/2018	
Project Abstract	<p>This project developed a data collection and management system that collects and archives data on Mcity infrastructure – including traffic signals, vehicle detectors, and roadside units – for both real-time and off-line access, analysis, and visualization to support connected and autonomous vehicle testing. A connected vehicle-based control interface device (CVCID) was deployed to collect data from different equipment at each intersection. All collected data were forwarded to the Michigan Traffic Center server database in real time. A user interface was designed to allow end users and administrators to access the data. The CVCID also serves as an open platform to facilitate the development and testing of future vehicle-to-infrastructure (V2I) applications. Corresponding application programming interfaces (APIs) and other interfaces will be developed and sample applications will be built to illustrate the concept.</p> <p>The final report for this project will not be publicly available.</p>	
High-level implementation plan	See abstract above.	
Project Metrics	Infrastructure equipment and network configuration complete CVCID Development complete Simulation and Field Test complete Upgrade to SAE J2735 standard to 2016 version	

Web Links:

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