

PROJECT OVERVIEW REPORT

1. UTC Identifying Number
69A3551847102
2. Center Identifying Number
CAIT-UTC-REG23
3. Project Title
The Development of a Smart Intersection Mobility Testbed (SIMT)
4. Principal Investigator & Contact Information
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5. Rutgers/CAIT Project Manager
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7. Project Description
The primary goal of this proposal is to establish the pilot Smart Intersection Mobility (SIMO) testbed in downtown New Brunswick. The testbed will be equipped with AV-grade LiDAR and computer vision sensors to collect real-time vehicle, pedestrian, and infrastructure change data. Data sharing and testing platforms will be built for testing and evaluating different mobility, safety, environmental, and energy applications.
8. Implementation of Research Outcomes (or why not implemented)
The intended outcome of the project is a small-scale two-intersection smart mobility testbed. The developed hardware-software-and-cloud systems has the potential to be scaled to develop a full-size smart mobility testing ground in the City of New Brunswick. The full-size smart mobility testing ground will provide "one-of-its-kind" living laboratory for smart mobility, connected and automated vehicles, electric vehicles, and other smart city solutions with real-world live and historical data services.
9. Impacts/Benefits of Implementation (actual, not anticipated)
To Be Determined

10. Dates and Budget

Start date: 9/1/2019
End date: 9/30/2020
UTC (CAIT) Dollars: \$179,700
Cost Sharing: \$93,245
Total Dollars: \$179,700

11. Keywords

Infrastructure Readiness; Connected and Autonomous Vehicles, Electric Vehicles

12. Web Links (Reports and Project Website)

<https://cait.rutgers.edu/research/the-development-of-a-smart-intersection-mobility-testbed-simt/>