

PROJECT OVERVIEW REPORT

1. UTC Identifying Number
69A3551847102
2. Center Identifying Number
CAIT-UTC-REG53
3. Project Title
A Real-Time Proactive Intersection Safety Monitoring System Based on Video Data
4. Principal Investigator & Contact Information
Mohammad Jalayer, Ph.D.
Assistant Professor
Rowan University
201 Mullica Hill Road, 234 Rowan Hall
Glassboro, NJ 08028
5. Rutgers/CAIT Project Manager
Patrick Szary, Ph.D.
6. Customer Principal
Joseph Weiss, Transportation Safety Analyst
NJ Division of Highway Traffic Safety
140 East Front Street
Trenton, NJ 08625
7. Project Description
The primary goal of this proposal is to develop and assess an innovative real-time proactive safety monitoring system based on the trajectory of road users (e.g., cars, pedestrians, and cyclists) collected by video cameras. The results of this project will provide a great opportunity for transportation agencies to rank and score intersections based on the analyzed data.
8. Implementation of Research Outcomes (or why not implemented)
The intended outcome of the project is to provide appropriate safety solutions to reduce intersection-related crashes and incidents and consequently reduce traffic congestion. As part of the implementation and training plan, the team will also conduct up to two briefings to agency officials to emphasize the findings and the recommendations of the research. The developed real-time monitoring tool will be readily available to be deployed to existing transportation infrastructure operated by transportation agencies.

9. Impacts/Benefits of Implementation (actual, not anticipated)
To Be Determined

10. Dates and Budget

Start date: 3/1/2021

End date: 2/28/2022

UTC (CAIT) Dollars: \$60,000

Cost Sharing (amount by each agency or organization): \$60,805

Total Dollars: \$120,805

11. Keywords

Proactive monitoring system, intersection safety, mobility, conflicts, SSM

12. Web Links (Reports and Project Website)

<https://cait.rutgers.edu/research/a-real-time-proactive-intersection-safety-monitoring-system-based-on-video-data/>