Topics

1. Pedestrian I2V Deployment
2. Vulnerable Roadway User Safety Exposure Dashboard
PEDESTRIAN I2V DEPLOYMENT

Carole Delion, P.E.
Project Location

- Prince George’s County
- MD 214 at Addison Road – Seat Pleasant Station
- One intersection only
What will it look like?

Sensors & RSU on pole
Project Goals

Federal
• Project is a 2019 State Transportation Innovation Council (STIC) grant award.

Internally
• Deploy a dual mode DSRC/C-V2X radio for crosswalk safety.
• Report lessons learned from the deployment.
• Identify barriers to the project delivery as it relates to connected vehicle technologies.

Externally
• Incentivize private industry to pursue connected vehicle technologies.
• Demonstrate MDOT is a player in the connected vehicle arena.
Points of Clarification

This Project Does **NOT**…

‘Track’ or record people in the crosswalk.

Act in place of the existing signal pedestrian crossing operations.
• Pedestrians crossing will continue to cross or request to cross normally.
• The signal will **NOT** change based on this connected vehicle application.

Force cars to stop.
• It is still the responsibility of a driver receiving these notifications to act.
• Maryland law still applies, and this project does not change those laws!
Additional Information

**Timeline**
- Waiting on FCC DSRC license approval – CV2X license already approved!
- Spring/Summer: testing.

**Technology**
- Siemens dual RSU: DSRC and C-V2X.
- Bosch cameras for detection.
- ISS security credentialing.
A Data-Driven Safety Dashboard Assessing Maryland Statewide Density Exposure of Pedestrians, Bicycles, and E-Scooters

In Partnership With

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

MARYLAND DEPARTMENT OF TRANSPORTATION
MOTOR VEHICLE ADMINISTRATION

MARYLAND TRANSPORTATION INSTITUTE

R Adams Cowley Shock Trauma Center
UNIVERSITY OF MARYLAND
Project Deliverable

• An integrated pedestrian/bicycle/e-scooter safety and exposure data for Maryland

• The safety data dashboard to select, view, and rank the exposure, number of crashes, and risks for user-selected time period, at intersection, and roadway segment level.
Latest Updates

• Continuing fine-tuning multiple steps of vehicle/pedestrian/bicycle trajectory reconstruction methodology

• Measuring the Level of Traffic Stress (LTS)

• Measuring the pedestrian/bicycle safety risks using a statistical model
Interactive Visualization Dashboard
Project Timeline

- Refining hiccups/data processing - Winter 2020-2021
- Internal US DOT & stakeholder reviews - Spring 2021
- Final product - Summer 2021 (required)