BRTB Safety Sub-Committee Meeting

Carole Delion, P.E.

Maryland DOT State Highway Administration

Office of Transportation Mobility & Operations
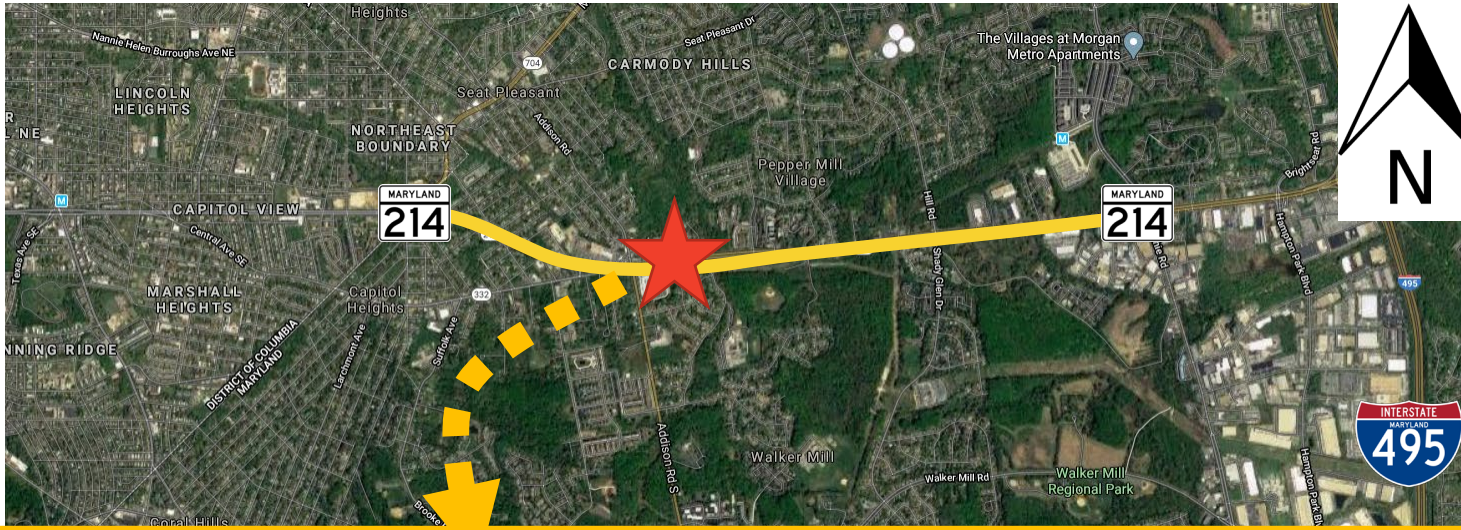
CATS Division

Topics

1. Pedestrian I2V Deployment

2. Vulnerable Roadway User Safety Exposure Dashboard

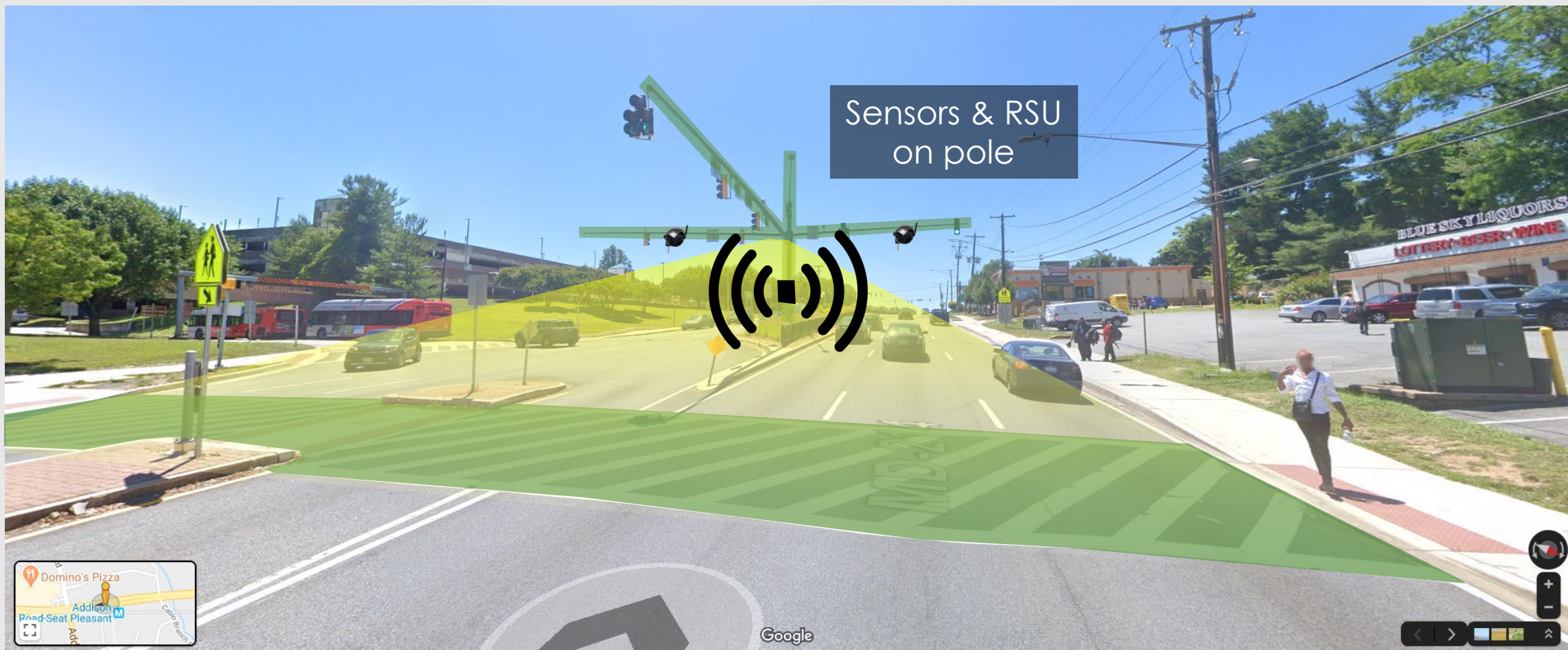# PEDESTRIAN I2V DEPLOYMENT

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.

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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!
- Winter/early Spring 2021: deployment.
- 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

MARYLAND DEPARTMENT OF TRANSPORTATION

STATE HIGHWAY ADMINISTRATION

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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.
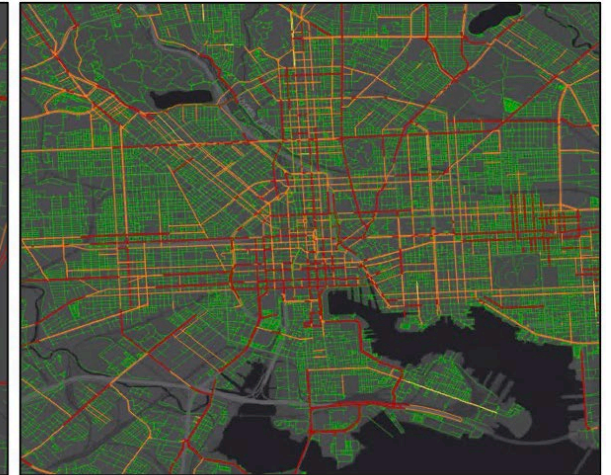
Latest Updates

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

- Measuring the Level of Traffic Stress (LTS)

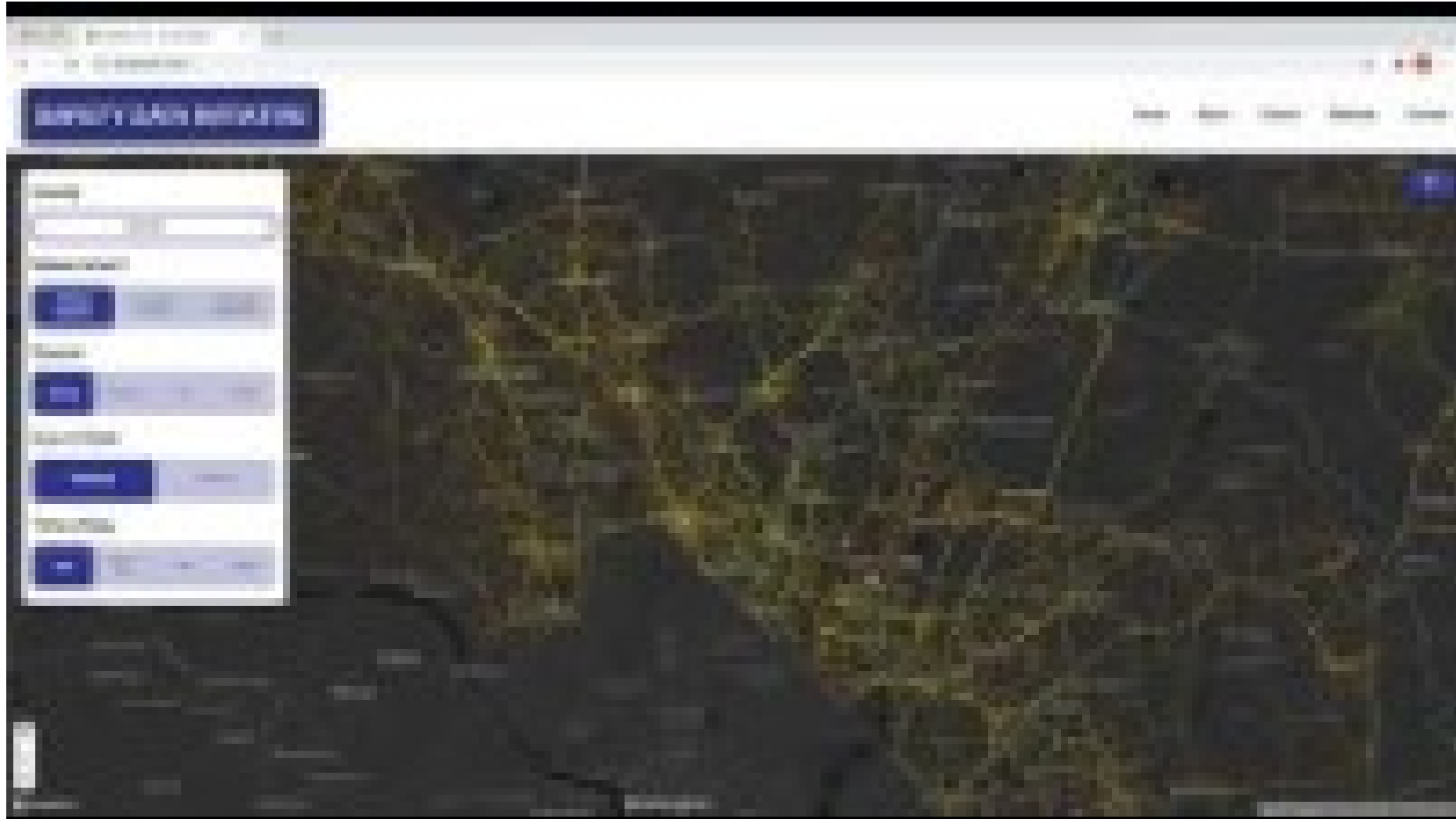- Measuring the pedestrian/bicycle safety risks using a statistical model
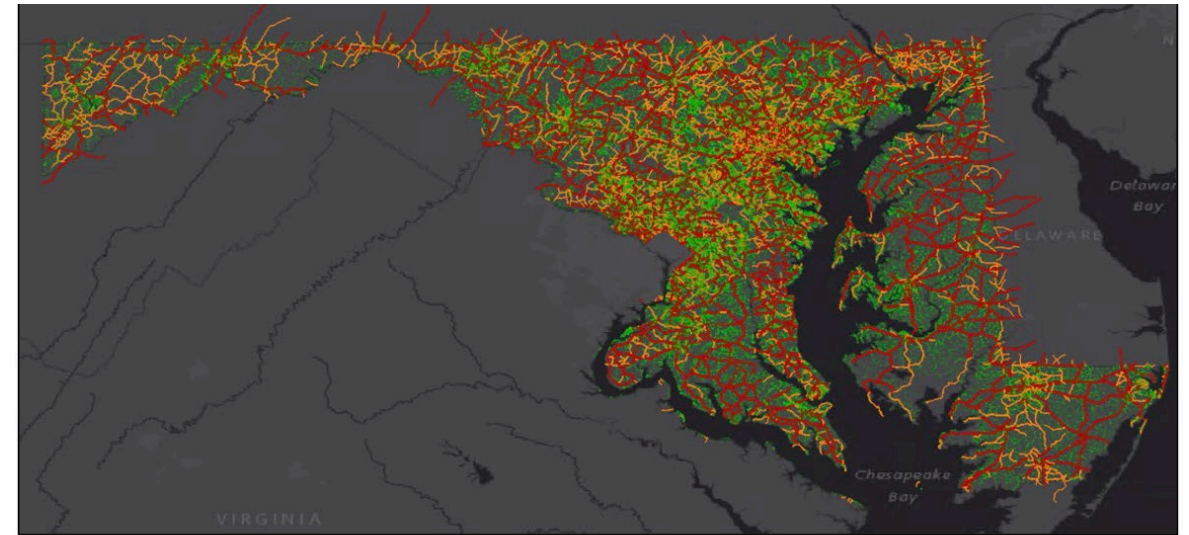
Interactive Visualization Dashboard

Project Timeline

- Refining hiccups/data processing - Winter 2020-2021

- Internal US DOT & stakeholder reviews - Spring 2021

- Final product - Summer 2021 (required)