

Eco-Cooperative Adaptive Cruise Control



TRANSPORTATION NEEDS ADDRESSED



ENVIRONMENT



V2V

HOW COULD THIS HELP?

- ✓ Saves fuel
- ✓ Reduces emissions

HOW DOES THIS WORK?

- ✓ A V2V application uses connected vehicle technologies to collect speed, acceleration, and location information of other vehicles and integrates these data into a vehicle's adaptive cruise control system.
- ✓ This application allows for automated longitudinal control capabilities and vehicle platooning that seek to reduce fuel consumption and emissions.

SOLUTION IMPROVEMENTS

- ✓ Excessive fuel consumption
- ✓ Distracted driving
- ✓ Excessive emissions

SOLUTION PITFALLS

- ✓ Vehicles must be V2V equipped

Disclaimer: all content is for planning purposes only and published as of Summer 2020. Contact the author at shacav@mdot.maryland.gov with any questions or comments.

INVESTMENT

- + V2X ROADSIDE UNIT COST PER MILE-FREEWAYS
\$52,000
- + V2X ROADSIDE UNIT COST PER INTERSECTION-SIGNALIZED CORRIDORS
N/A
- + V2X SIGNAL CONTROLLER COST PER INTERSECTION-SIGNALIZED CORRIDORS
N/A
- + FIBER OPTICS COST PER MILE
\$158,000