Enhanced Maintenance Decision Support System (MDSS)

HOW COULD THIS HELP?

- Optimizes roadway treatment plans

HOW DOES THIS WORK?

- An application could acquire road-weather data from connected and other general public vehicles to recommend treatment plans and weather response plans to snow plow operators, and drivers of maintenance vehicles.

INVESTMENT

+ V2X ROADSIDE UNIT COST PER MILE-FREEWAYS
$52,000
+ V2X ROADSIDE UNIT COST PER INTERSECTION-SIGNALIZED CORRIDORS
$26,000
+ V2X SIGNAL CONTROLLER COST PER INTERSECTION-SIGNALIZED CORRIDORS
$10,000
+ FIBER OPTICS COST PER MILE
$158,000

TRANSPORTATION NEEDS ADDRESSED

ROAD WEATHER

V2I

SAFETY

SOLUTION IMPROVEMENTS

- Unoptimized road-weather data distribution
- Multi-car pile-up
- Roadway departure crashes

SOLUTION PITFALLS

- Dependent on volume of probe vehicles for data

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.

MDOT MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION