**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
- 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.