

Vehicle Data Translator (VDT)



TRANSPORTATION NEEDS ADDRESSED



ROAD WEATHER



V2I



SAFETY

HOW COULD THIS HELP?

- ✔ Transmits road and atmospheric conditions data to other portions of road management network

HOW DOES THIS WORK?

- ✔ A complementary application that, when installed on road service vehicles such as snowplows, collects road and atmospheric conditions data and transmits them to other portions of the road weather management network.

SOLUTION IMPROVEMENTS

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

SOLUTION PITFALLS

- ✔ Infrastructure and vehicle must be V2I 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
\$26,000
- + V2X SIGNAL CONTROLLER COST PER INTERSECTION-SIGNALIZED CORRIDORS
\$10,000
- + FIBER OPTICS COST PER MILE
\$158,000