Eco-Traffic Signal Timing



TRANSPORTATION NEEDS ADDRESSED



ENVIRONMENT

HOW COULD THIS HELP?

- Optimizes the performance of traffic signals
- Reduces fuel consumption

HOW DOES THIS WORK?

An application uses data collected wirelessly from vehicles (and other sources) to optimize the performance of traffic signals, thus reducing fuel consumption and emissions.

SOLUTION **IMPROVEMENTS**

- Unoptimized traffic signal timing efficiency
- Excessive emissions
- Excessive fuel consumption

+ V2X ROADSIDE UNIT COST PER MILE-FREEWAYS

N/A

- + 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

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.

MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION

INVESTMENT