

Eco-Traffic Signal Priority



TRANSPORTATION NEEDS ADDRESSED



ENVIRONMENT



V2I

HOW COULD THIS HELP?

- ✓ Keeps freight/transit operations on schedule
- ✓ Reduces emissions by keeping large freight/transit vehicles moving

HOW DOES THIS WORK?

- ✓ An application allows transit or freight vehicles approaching a signalized intersection to request signal priority, thereby adjusting the signal timing dynamically to improve service for the vehicle.
- ✓ Priority decisions are optimized for the environment by considering vehicle type, passenger count, or adherence to schedule.

SOLUTION IMPROVEMENTS

- ✓ Unoptimized traffic signal priority efficiency
- ✓ Excessive emissions
- ✓ Excessive fuel consumption

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
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