

Freight Advanced Traveler Information Systems (FRATIS)



TRANSPORTATION NEEDS ADDRESSED



FREIGHT

HOW COULD THIS HELP?

- ✔ Optimizes freight drayage operations

HOW DOES THIS WORK?

- ✔ FRATIS provides a specialized output interface to public sector agencies that will provide open-source data collected in the FRATIS system, such as sanitized route, speed, congestion, and alternate route selection information.
- ✔ This information supports public sector freight planners and other public agencies in assessing both the needs and impacts of truck traffic in a metropolitan region (e.g., air quality reductions due to FRATIS applications, assessment of the best alternate routes)

SOLUTION IMPROVEMENTS

- ✔ Unoptimized Drayage Operations

SOLUTION PITFALLS

- ✔ Infrastructure and freight vehicle must be V2I equipped
- ✔ Requires software application development

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