ATMS Integrated Queue Detection System
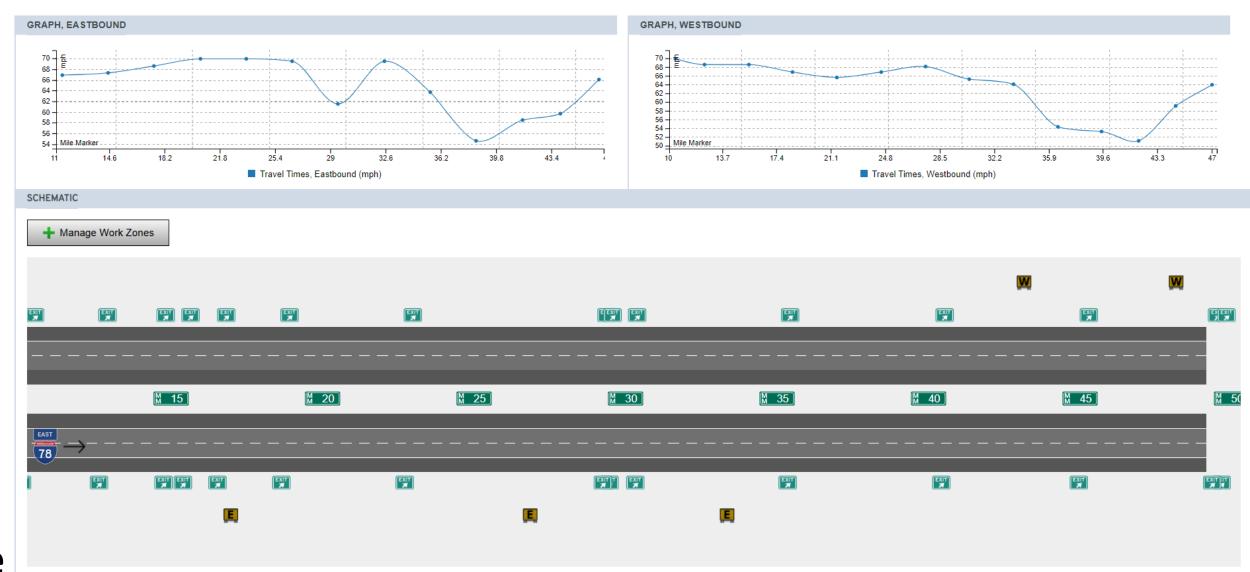
PennDOT District 5 Pilot

Problem/Challenge Addressed

The Advanced Traffic Management System (ATMS) Integrated Queue Detection was developed to detect slow/stopped traffic on a designated area of interest also known as corridor utilizing live traffic data.

Method/Process/Product to Resolve Challenge

A built-in algorithm within the ATMS platform evaluates live traffic conditions and displays predetermined messages on our dynamic message signs based on real-time roadway conditions or, in this case, the area of interest/corridor.

District 5, through a pilot with PennDOT's Highway Safety and Traffic Operations Division, is currently utilizing the system for the work zones on I-78 in Berks county and is looking to implement the same system on US-22 in Lehigh and Northampton counties in the near future.

GRAPH, EASTBOUND — Travel Times, Eastbound (mph)

GRAPH, WESTBOUND — Travel Times, Westbound (mph)

SCHEMATIC — Manage Work Zones

Results/Key Takeaways

- Real-time situational awareness for the motoring public and our traffic management center staff.
- Increased response time for incidents.
- Automatically assess and respond to travel conditions across a designated area of interest.

Contact Information

Name: Jose Lopez-Rocha
Phone Number: 610-871-4484
Email Address: jlopezroch@pa.gov