

## Using Data to Improve Traffic Safety and Flow

Automated Traffic Signal Performance Measures (ATSPMs), a Federal Highway Administration (FHWA) Every Day Counts Round 4 (EDC-4) innovation, is defined as a suite of performance measures, data collection and data analysis tools to support objectives and performance-based approaches to traffic signal operations, maintenance, management and design to improve the safety, mobility and efficiency of signalized intersections for all users. Simply stated, ATSPMs use "big data" to analyze and optimize the performance of traffic signals.

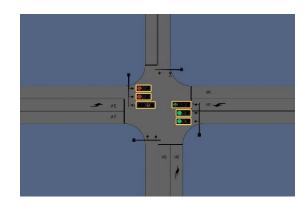


## What are the benefits?

- •Reduced delays, emissions, and fuel consumption
- Targeted maintenance
- •Better regional and multi-jurisdictional collaboration
- Reduced crashed and fatalities
- Improved data collection
- Reduced motorist frustration

## How does it work?

ATSPMs consist of high-resolution data-logging capability added to existing traffic signal infrastructure and data analysis techniques. This provides engineers with the information needed to proactively identify and correct deficiencies. Better management of traffic signal maintenance and operations help support PennDOT's safety, mobility and environmental goals.



## How do I learn more?

Visit FHWA's Every Day Counts website at <a href="https://www.fhwa.dot.gov/everydaycounts">www.fhwa.dot.gov/everydaycounts</a>.

The Pennsylvania State Transportation Innovation Council (STIC) supports and promotes the deployment of several EDC innovations. To learn about this innovation visit <a href="https://www.penndot.gov/stic">www.penndot.gov/stic</a> or email <a href="mailto:penndotstic@pa.gov">penndotstic@pa.gov</a>.



