



Faster between King of Prussia and Philly? PennDOT says it has a plan

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PennDOT Secretary Leslie S. Richards on Tuesday announced a long-range, comprehensive, multi-modal transportation management plan designed to enhance travel along the Interstate 76 (Schuylkill Expressway) Corridor between King of Prussia and Philadelphia. The plan includes expanded public transit, improved traffic management on I-76 and local roads, and potential trail improvements.

"The importance of this corridor to the Philadelphia region cannot be overstated and it's imperative that we take advantage of new technologies and partner with SEPTA and other key stakeholders to offer citizens more attractive options for travel between Philadelphia and the northwest suburbs," Richards said in a news release. "This corridor-wide strategy consists of several elements to improve travel whether you're driving on the expressway, riding SEPTA's regional rail, or bicycling along the Schuylkill River Trail," she added.

Richards said the transportation management plan includes several components, including the deployment of Active Traffic Management (ATM) technologies on I-76; expansion of public transit service along the Manayunk/Norristown regional rail line; the modernization of traffic signal systems along several roadways running parallel to the expressway; and potential trail improvements.

Gov. Tom Wolf followed with a statement that supports the initiative.

"The plan announced today to improve transportation by road, rail and trail in Philadelphia's Interstate 76 corridor is an important step forward towards improving infrastructure, traffic management and accessibility no matter how you commute and travel," he said. "This roadway and the entire corridor are vital to the economic viability of the region and my administration will continue to prioritize improvements that help drivers, riders and bicyclists move more efficiently."

PennDOT plans to employ a series of ATM strategies on the four-lane, 12-mile section of I-76 in Montgomery County to enhance multi-modal travel and safety, and SEPTA intends to enhance service on the Manayunk/Norristown Regional Rail line. With the purchase of new electric locomotives and bi-level rail cars expanding the SEPTA rail fleet and infrastructure improvements, SEPTA will improve service frequency on this rail line. The enhanced rail service is expected to improve customer service and generate greater ridership, the news release said.

In partnership with SEPTA, PennDOT also plans to provide real-time transit information on electronic message signs along I-76 in conjunction with SEPTA's potential deployment of a Smart Parking pilot program at a new garage and station targeted to be built in Conshohocken near the existing regional rail station. The message board displays will inform motorists of transit station parking availability and real-time train departure times to better inform citizens of transit travel options. The station will also provide bicycle storage facilities as the station is directly adjacent to Schuylkill River Trail.

PennDOT also proposes to modernize traffic signal systems on several roads running parallel to I-76 between King of Prussia, Norristown and Philadelphia to control signal operations in real-time during incidents on the expressway. New signal systems, which would be owned and managed by PennDOT, are targeted for Ridge Pike, Route 23, Swedeland Road, Route 320, U.S. 202/DeKalb Pike, South Gulph Road,

Henderson Road, Fayette Street, Ridge Avenue, Henry Avenue, Belmont Avenue, and U.S. 1/City Avenue. The new signals are expected to be installed in two-to-four years.

Initially, PennDOT will advance an early-action project to install variable speed limits and queue detectors on I-76 between the Pennsylvania Turnpike Interchange at Valley Forge and U.S. 1 (City Avenue) to smooth traffic and enhance safety. Construction is expected to start in late 2017, with the systems becoming operational by late 2018. The construction estimate is \$2.2 million.

This project consists of installing a series of electronic signs on I-76 to display official speed limits that can change based on real-time expressway, traffic and weather conditions to improve traffic flow and warn drivers to changing travel conditions. Queue detectors will provide real-time displays of electronic warning messages, coupled with flashing lights, to alert motorists of significant slowdowns ahead to reduce sudden stopping and the potential for rear-end crashes.

These new devices will operate in conjunction with the Intelligent Transportation System (ITS) components in place on I-76 in Montgomery County and Philadelphia. The existing ITS equipment includes 42 highway cameras, nine electronic message boards, 14 travel time readers, 58 incident detectors, and two expressway safety patrol tow trucks.

In addition, PennDOT will start preliminary engineering this fall to transform the outside shoulders of I-76 into part-time travel lanes between the Pennsylvania Turnpike Interchange at Valley Forge and Interstate 476, and on I-76 west between U.S. 1/Roosevelt Boulevard and Belmont Avenue interchanges.

"Part-time shoulder use is currently in place in 16 states across the country and we plan to implement it on I-76 to help reduce congestion," Richards said. "Our project team will work closely with the Pennsylvania State Police and local emergency service responders to obtain their input and guidance because driver safety is of paramount importance. We also will communicate with state transportation agencies that currently use shoulders as travel lanes to obtain more insights into their experiences."

Richards said \$125 million in funding is programmed for this initial part-time shoulder use project on I-76 and for the installation of additional ATM strategies on I-76. Construction is expected to start in approximately five years.

PennDOT also will examine part-time shoulder use on I-76 east of the I-476 Interchange when more funds are identified in the future.

To complement part-time shoulder use on I-76, PennDOT may include these additional ATM strategies:

- **Ramp Metering:** Red and green traffic signals to control the frequency with which vehicles enter the flow of traffic from entrance ramps to increase vehicle throughput during peak hours and increase expressway speeds;
- **Junction Control:** The use of overhead electronic signs over travel lanes to regulate or close lanes at merge areas to improve traffic flow at high volume interchanges, including U.S. 202/U.S. 422, I-476 and U.S. 1 north and south. It establishes lane priority at interchanges and makes shoulders available for use. This strategy can change based on the relative demand on the mainline and ramps during different hours of the day;
- **Dynamic Lane Assignments:** Overhead electronic signs provide information for each travel lane on the expressway to identify open lanes and alert drivers of upcoming lane closures due to crashes or disabled vehicles.
- **Multi-Modal Enhancements:** Utilize various modes of travel (automobile, public transit, bicycle, walking) and take advantage of viable transportation options along the I-76 corridor, including the Schuylkill River Trail and other nearby trails. PennDOT will work to convene a Schuylkill River Trail Master Plan Summit with our partners at the Delaware Valley Regional Planning Commission, Montgomery County, Philadelphia, the Bicycle Coalition, and the local

municipalities to identify the needs and priorities of the heavily used trail which is used for both recreation as well as commuting.

PennDOT's I-76 ATM plan developed from a feasibility study of I-76 in Montgomery County. The study, which began in late 2014 and was completed earlier this month, examined the viability and potential benefits associated with applying certain technologies and operational changes on the expressway.

Motorists can check conditions on more than 40,000 roadway miles by visiting www.511PA.com. 511PA, which is free and available 24 hours a day, provides traffic delay warnings, weather forecasts, traffic speed information and access to more than 770 traffic cameras.