

Lane Reservation System

Minimizing Congestion During Needed Road Work

As part of its Transportation Systems Management and Operations (TSMO) vision for a less congested, more reliable roadway network, PennDOT is developing the Lane Reservation System – a tool to ensure crews are performing road work at the most appropriate times to minimize impacts to the traveling public. By learning from lane reservation system applications successfully deployed in other states, PennDOT was able to gain the support necessary to pursue this innovation in Pennsylvania.



What are the benefits?

- **Reduces work zone conflicts and vehicle congestion**
- **Improves safety** for road users and work crews, and improves traveler information
- **Allows field verification using a mobile device**, freeing up Traffic Management Center (TMC) staff to focus on situational awareness rather than data entry
- **Utilizes an existing PennDOT software platform** for data entry, and seamlessly interfaces with other PennDOT systems to evaluate the request
- **Opens availability of work zone information to external partners** through use of an internet-based application and use of standardized data

How does it work?

The Lane Reservation System is often compared to online reservation tools like OpenTable, which can be used for reserving a table at your favorite restaurant. If the system determines that a work zone request will cause unacceptable levels of traffic congestion at the time requested, the system will instead direct the user to schedule the work for more appropriate times. However, if the system determines the work zone would not have a significant impact on traffic or conflict with other work zones, the request will be approved.

The tool is being built into PennDOT's Advanced Traffic Management System (ATMS) platform, used for command and control of all PennDOT intelligent transportation systems equipment. Ultimately, reservations will be able to be made by PennDOT and its contractors, municipalities, utility companies, and other entities performing work on the Pennsylvania's roadways. The data can then be shared with 511PA, third-party applications like Google Maps and Waze, and with connected and automated vehicles and research entities.

How do I learn more?

To learn more about this innovation, visit www.penndot.pa.gov/stic or email penndotstic@pa.gov.