Automated Traffic Signal Performance Measures (ATSPM)

UPDATED 5/31/2018

http://www.fhwa.dot.gov/innovation/everydaycounts/edc_4/atspm.cfm

Innovation Implementation Stage Definitions	Prompt Questions for Describing the Implementation Stage The following questions are intended to help you determine your current implementation stage. While it is not mandatory to respond to each question, providing some narrative describing your current status will be helpful to the EDC teams.
Not Implementing: The State is not currently using ATSPM anywhere in the State and is not interested in the innovation.	Describe the rationale behind not electing to pursue implementation: • State has evaluated ATSPM and determined that it is not appropriate for the jurisdictional or technical restrictions of traffic signal infrastructure within the State. • State does not have the resources (human, financial, or technological) to implement the innovation. • State chooses not to implement now but may pursue innovation later.
Development Stage: The State or local agency(s) is pursuing capacity-building activities (training, workshops, webinars, peer exchanges) to increase awareness or implementation readiness for ATSPM at the State or local level.	Has the State or one or more local agency pursued, or interested in participating in information gathering, or outreach activities: • Participate in monthly, quarterly or on-demand ATSPM webinar(s). • Host an ATSPMs workshop or training at state or local level. • Participate in a peer exchange, site visit or scan tour • Collect/review guidance and best practices • Identifying candidate corridors or subareas where ATSPMs may be piloted in the future.
Demonstration Stage: The State or local agency(s) **is planning, or has implemented**, a pilot ATSPM project(s) to demonstrate the technology. During this stage an ATSPM project is planned or underway at one or more signalized intersection; this includes AID Grants or other projects.	• Has a project been scoped to demonstrate ATSPM at one or more intersections? • Have locations (State/local) been selected for demonstration of ATSPM? • Have specific performance measures been identified for assessment? (e.g., Purdue Coordination Diagram, Arrivals on Red, etc.) • Have objectives and a schedule been developed to guide the demonstration project and to define success? • Has a plan been developed to share the results and lessons learned from the demonstration?
Assessment Stage: ATSMP **is implemented** at one or more State DOT or local agency signalized intersections. Evaluation criteria are being developed or are in place to evaluate the effectiveness of the technology to actively monitor performance.	• Has an assessment plan been developed to identify the objectives of the assessment? • Is the development of design guidance complete or underway to establish intersection control detection and/or communication needs to support ATSPM? • Has the State or Local Agency(s) considered the development of a Traffic Signal Management Plan? • Is documentation of lessons learned planned or complete?
Institutionalized: A State or local agency **is planning or has adopted the use of ATSPM as a standard practice** to support objectives and performance based management of signalized intersections.	• Is the use of ATSPM planned or routinely used to guide maintenance, operations, or management activities? • Are ATSPMs routinely used to report progress towards the attainment of operations or maintenance objectives? • Have steps been taken to document the use of ATSPM to support day to day traffic signal management, operations, and maintenance activities?

Final Report Questions:

1) Reporting Period:	**Final Report: December 2018**
2) Division Contact for additional information:	Frank Lozano / Andrew Gallegos
3) What is the State's current stage of innovation implementation? Review the Innovation Profile Template and select the appropriate implementation stage for this innovation.	(Choice) ☐ Not Implementing ☐ Development Stage ☐ Demonstration Stage ☒ Assessment Stage ☐ Institutionalized
4) Describe the State's accomplishments for this reporting period (both State DOT and local agency accomplishments). Please provide EDC-4 highlights with good "so what" nuggets. -- What would another state be interested in and/or how could leadership use the information I am providing? -- If the State has advanced to the next implementation stage, consider the prompt questions in the chart and explain the advancements made to support your selection. -- Please include benefits as part of your explanation (i.e. time/cost savings, delay/crash reductions, etc.)	**City of Albuquerque: Coors Boulevard** CABQ/Lee Engineering have continued to use ATSPMs to optimize the corridor and address 311 concerns. A 1-year assessment report has been developed and is currently in internal review. Included are lessons learned and future implementation recommendations. Also, an algorithm was developed to eliminate the errors associated with Cobalt data files. The final report will be presented at the ITE Western District Mtg in June. In addition to the Peak hour plans, Holiday Shopping Plans, and weekend specific timing plans, Lee Engineering has increased maintenance response times and trained City of Albuquerque staff how to use the ATSPM platform. Lee Engineering plans on updating the ATSPM platform from V4.0 to V4.2 and perform a corridor coordination update. Although this initiative has proven to be effective in the location is was installed, NMDOT is pursuing institutionalizing this initiative due to the installation costs, communication issues and lack of special technical specification to cover this item. NMDOT leadership needs to become more educated in the benefits of the initiative so that it can be adopted statewide and included as part of either maintenance or construction projects.
5) Describe any additional assistance needed by your state.	*Continued work with Signal Controller Vendors to ensure updates and procedures follow the initial intent, and work with developers to ensure update to V4.2.* Further training and education of this initiative needs to presented to NMDOT administration. A typical special technical specification that can be used by NMDOT needs to be provided.
6) Describe any implementation obstacles or lessons learned. Also, indicate if and how your state can provide assistance to others in their implementation of this innovation.	*Upgrade from Cobalt (ASC3 Firmware) to Cobalt (EOS) Firmware crashed several intersections and requires a step back in procedure efficiency. ATSPM V4.0 will be updated to V4.2* Lack of communication between site/project controllers back to the general office continues to be a challenge. Adequate staffing is also needed to address the amount of data that is being collected by the technology.
7) The responses have been coordinated with the necessary transportation agencies and Division Office technical resource.	*(Choice)* ☒ Yes ☐ No