

TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT): **Indiana Department of Transportation**

INSTRUCTIONS:

Project Managers and/or research project investigators should complete a quarterly progress report for each calendar quarter during which the projects are active. Please provide a project schedule status of the research activities tied to each task that is defined in the proposal; a percentage completion of each task; a concise discussion (2 or 3 sentences) of the current status, including accomplishments and problems encountered, if any. List all tasks, even if no work was done during this period.

Transportation Pooled Fund Program Project # TPF-5(377)		Transportation Pooled Fund Program - Report Period: Quarter 1 (January 1 – March 31) Quarter 2 (April 1 – June 30) X Quarter 3 (July 1 – September 30) Quarter 4 (October 1 – December 31)	
Project Title: Enhanced Traffic Signal Performance Measures			
Name of Project Manager(s): James R. Sturdevant	Phone Number: (317) 691-9091	E-Mail jsturdevant@indot.in.gov	
Lead Agency Project ID: TPF 5(377)	Other Project ID (i.e., contract #):	Project Start Date: July 1, 2018	
Original Project End Date: June 30, 2021	Current Project End Date: June 30, 2021	Number of Extensions: 0	

Project schedule status:

On schedule
 On revised schedule
 Ahead of schedule
 Behind schedule

Overall Project Statistics:

Total Project Budget	Total Cost to Date for Project	Percentage of Work Completed to Date
\$30,000	0	0

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
0	0	8.3%

Project Description

Background

The Pooled Fund Project TPF-5(258) led by Indiana and with participation from FHWA, California, Georgia, Minnesota, Mississippi, New Hampshire, Pennsylvania, Texas, Utah, Wisconsin, and City of Chicago produced the following technical reports:

- Performance Measures for Traffic Signal Systems: An Outcome-Oriented Approach.
<http://dx.doi.org/10.5703/1288284315333> [1]
- Integrating Traffic Signal Performance Measures into Agency Business Processes.
<http://dx.doi.org/10.5703/1288284316063> [2]

The following states have made commitments totaling \$750,000 for TPF-5(377): Enhanced Traffic Signal Performance Measures: Georgia, Minnesota, Texas, Utah, Wisconsin, North Carolina, Pennsylvania, Ohio. Indiana has committed \$275,000 via SPR-4205 Connected Vehicle Corridor Deployment and Performance Measures for Assessment. In addition, College Station, TX, has committed \$3,000 to join the PFS as a local agency partner.

Project Objectives

The project will address the following initiatives that complement and expand on the past work the multi-state team has done in the area of traffic signal performance measures:

1. **Traffic Signal Data Logger Update:** Update the data logger specification to provide secure file transfer, incorporate new enumerations that have emerged, and logging new connected vehicle messages.
2. **Probe Data:** Current probe data tools are focused on freeway data. There is a need to build upon the work of Indiana and Pennsylvania DOTs to develop methodologies and tools for using high resolution vehicle trajectory data to compute traffic signal performance measures.

Progress this Quarter (includes meetings, work plan status, contract status, significant progress, etc.):

July 1 – September 30, 2018

- Conducted telecom for participating states on May 2, 2018, and reached concurrence on the project objectives, task list and timeline.
- INDOT issued a purchase order for \$30,000 to Purdue University to establish the project. Additional funds will be transferred to Purdue as funds are received by INDOT from participating states.
- Participating states approved tasks for University of Alabama for work on the traffic signal data logger update. A sub-contract proposal was submitted by University of Alabama to Purdue University for those tasks.

Anticipated work next quarter:

1. Schedule annual meeting for partner states.
2. Establish subcontract for University of Alabama for traffic signal data logger tasks.

Significant Results:

N/A – work on project was delayed pending transfer of funding for year 1.

Circumstance affecting project or budget. (Please describe any challenges encountered or anticipated that might affect the completion of the project within the time, scope and fiscal constraints set forth in the agreement, along with recommended solutions to those problems).

INDOT awards PFS funds to Purdue University after they receive transfer of funds from the partner states. Initially, the project was funded for \$30,000, which was insufficient to initiate subcontract with University of Alabama and fund panel meeting planning and travel.

An additional \$170,000 funding for year 1 was awarded to Purdue in early October 2018. We do not anticipate that the 90-day delay in year 1 funding will significantly affect the timeline for the project. The funds received to date will be used to initiate the sub-contract to University of Alabama, fund the first annual meeting for the partner states and begin engagement with industry stakeholders for probe data.

Potential Implementation: N/A at this time.