

TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT): IOWA DOT

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(483)	Transportation Pooled Fund Program - Report Period: Quarter 1 (January 1 – March 31) X Quarter 2 (April 1 – June 30) Quarter 3 (July 1 – September 30) Quarter 4 (October 4 – December 31)	
Project Title: Implementation of New Traffic Signal Actuation Concepts using Enhanced Detector		
Project Manager: Chris Poole	Phone: 515-239-	E-mail: chris.poole@iowadot.us
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Lead Agency Project ID:	Other Project ID (i.e., contract #): Addendum 791	Project Start Date: 02/01/2022
Original Project End Date: 02/28/2026	Project End Date:	Number of Extensions:

On schedule
 On revised schedule
 Ahead of schedule
 Behind schedule

Overall Project Statistics:

Total Project Budget	Total Cost to Date for Project	Total Percentage of Work Completed
\$595,032.00	\$19,990	%1

Quarterly Project Statistics:

Total Project Expenses This Quarter	Total Amount of Funds Expended This Quarter	Percentage of Work Completed This Quarter
\$13,839		%

Project Description: The objective of this research is to develop field-tested methods of integrating vehicle trajectory data into actuated signal control that can be directly implemented in traffic signal controllers. This research will identify the practical requirements and limitations of establishing trajectory-assisted actuated signal control, including requirements for acquisition, storage, and communication of vehicle trajectory data. The findings will be developed into a resource toolkit that will permit implementation and further development of the methods conceived during the course of the research.

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

The team produced a literature review working paper which is being finalized at the time of writing. This working paper will be circulated to the project panel in July of 2022.

In addition, in anticipation of upcoming tasks, the research team has worked to identify sources of trajectory data from different detection systems to evaluate its readiness for providing trajectory-based actuated control. At the time of writing, the first datasets to support an evaluation were in the process of being collected.

Anticipated work next quarter: In the third quarter of 2022, the research team will commence work on Task 3 (Sensor Evaluation) and Task 4 (Establish Algorithm Environment).

Significant Results: There are no significant results to report at this stage of the project.