# 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 #**<br>*TPF-5(483)* | **Transportation Pooled Fund Program - Report Period:**<br>XQuarter 1 (January 1 – March 31)<br>Quarter 2 (April 1 – June 30)<br>Quarter 3 (July 1 – September 30)<br>Quarter 4 (October 4 – December 31) | |
| **Project Title:**<br>Implementation of New Traffic Signal Actuation Concepts using Enhanced Detector | | |
| **Project Manager:**<br>Chris Poole | **Phone:**<br>515-239-1513 | **E-mail:**<br>chris.poole@iowadot.us |
| **Project Investigator:**<br>Chris Day | **Phone:**<br>515-294-3015 | **E-mail:**<br>cmday@iastate.edu |
| **Lead Agency Project ID:** | **Other Project ID (i.e., contract #):**<br>Addendum 791 | **Project Start Date:**<br>02/01/2022 |
| **Original Project End Date:**<br>02/28/2026 | **Project End Date:** | **Number of Extensions:** |

X 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 | $6,151 | %1 |

***Quarterly*** Project Statistics:

| Total Project Expenses This Quarter | Total Amount of Funds Expended This Quarter | Percentage of Work Completed This Quarter |
|---|---|---|
| $6,151 | | % |

**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 official project start date was February 1, 2022. A kick-off meeting with the project panel was held on January 26, 2022 in which plans for the overall project were presented, with some detail on goals for the first half of 2022.

The research team mainly spent time preparing for upcoming tasks, and began working on Task 1 (Literature Review) and Task 2 (Product Review). The product of these tasks will be a draft working paper encapsulating both reviews, which is scheduled to be completed at the end of the fourth project month (end of May 2022). In anticipation of future tasks, the research team began to identify sources of data to support Task 3 (City of Colorado Springs and additional locations are anticipated).

**Anticipated work next quarter:** In the second quarter of 2022, the research team will complete Task 1 and Task 2, and begin working on Task 3 (Sensor Evaluation) and Task 4 (Establish Algorithm Environment).

**Significant Results:** The project recently started and there are no significant results yet to report.