

## TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT): Federal Highway Administration (FHWA)

### INSTRUCTIONS:

Lead Agency contacts 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.

<b>Transportation Pooled Fund Program Project #</b> TPF-5(470)	<b>Transportation Pooled Fund Program - Report Period:</b> <input checked="" type="checkbox"/> Quarter 1 (January 1 – March 31) <input type="checkbox"/> Quarter 2 (April 1 – June 30) <input type="checkbox"/> Quarter 3 (July 1 – September 30) <input type="checkbox"/> Quarter 4 (October 1 – December 31)	
<b>TPF Study Number and Title:</b> TPF-5(470): Traffic Signal Change and Clearance Interval Pooled Fund Study		
<b>Lead Agency Contact:</b> Jamie Mackey	<b>Lead Agency Phone Number:</b> 385-831-4262	<b>Lead Agency E-Mail</b> jamie.mackey@dot.gov
<b>Lead Agency Project ID:</b>	<b>Other Project ID (i.e., contract #):</b> 693JJ322A000005_693JJ323F00330N	<b>Project Start Date:</b> 09/22/2023
<b>Original Project Start Date:</b> 09/22/2023	<b>Original Project End Date:</b> 09/21/2026	<b>If Extension has been requested, updated project End Date:</b> N/A

Project schedule status:

☐ On schedule      ☒ On revised schedule      ☐ Ahead of schedule      ☐ Behind schedule

Overall Project Statistics:

Total Project Budget	Total Funds Expended To Date	Percentage of Work Completed to Date
\$1,036,655.77	\$402,195.13	50%

### Project Description:

Define a sound, data-driven, research approach and work plan to address the current limitations and challenges in the determination and assessment of traffic signal change and clearance intervals (CCI). Conduct research based on statistically valid data and robust methods to establish a defensible and practical methodology for agencies to use for assessing and making CCI decisions. Provide a report, companion data, and materials to support review and understanding of the findings, including presentation slides, factsheets, practical documented summary examples, to facilitate building awareness among traffic signal operators.

<p><b>Progress this Quarter (includes meetings, work plan status, contract status, significant progress, etc.):</b></p> <ul style="list-style-type: none"> <li>Continued collection and analysis of BSM/CV, video, crash, LiDAR, and telematics data.</li> <li>Began work on a final methodology development plan.</li> <li>Began preparations for an ad-hoc technical panel meeting to be held on May 20, 2025.</li> </ul>
<p><b>Anticipated work next quarter:</b></p> <ul style="list-style-type: none"> <li>Finalize collection and analysis of BSM/CV, video, crash, LiDAR, and telematics data.</li> <li>Finalize the methodology development plan.</li> <li>Hold an ad-hoc technical panel meeting on May 20, 2025.</li> <li>Develop the final methodology.</li> <li>Prepare annotated outline documents for the project report and methodology white paper.</li> </ul>
<p><b>Significant Results:</b></p> <ul style="list-style-type: none"> <li>Data collection sample sizes have increased for the CV data (50 intersections), LiDAR data (2 intersections), video data (50 approaches), telematics data (5 cities), and crash data (250 approach legs). This includes collection of data from new cities and States.</li> <li>Initial methodology development planning indicates that elements of a new methodology could include: <ul style="list-style-type: none"> <li>Refinement of kinematic equation assumptions.</li> <li>A probability of stopping model that estimates sensitivity of driver behavior to the CCI duration.</li> <li>An observed stopping distance model that assesses if increasing the CCI duration could be helpful.</li> <li>A crash and surrogate safety risk model that estimates sensitivity of safety to the CCI duration.</li> </ul> </li> </ul>
<p><b>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).</b></p> <p>In 2024 Q4, the team successfully executed a contract modification to transfer a portion of the available equipment/materials and travel funding to labor, to improve the sample size of data collection/analysis that will be needed to address the top-priority research questions. This contract mod also included a schedule modification request to provide an additional three months of data collection and analysis, pushing subsequent deliverable due dates back by approximately three months.</p>
<p><b>Potential Implementation:</b></p> <p>The research team will turn its focus to implementation considerations (e.g., developing a practical new CCI methodology and field validation method) in Spring 2025, following twelve months of data collection and analysis.</p>

Task	Deliverable	Complete?
1	Kick-off Meeting	Y
1	Project Management - Final Work Plan	Y
2	Technical Panel Meeting 1	Y
2	Feasibility and Gaps White Paper	Y
2	Technical Panel Meeting 2	Y
2	Final Project Research Work Plan	Y
3	Final White Paper on Survey Results	Y
3	SQL Database and Dashboard	Y
4	Data Collection and Analysis*	Ongoing
4	Technical Panel Meeting 3**	Y
5	Technical Panel Meeting 4	Fall 2025
5	Final White Paper - Final Methodology	Summer 2025
6	Project Report Annotated Outline	Summer 2025
6	Final Project Report	Fall 2025
6	Technical Panel Meeting 5	Fall 2025
7	Final Outreach Plan Report	Fall 2025
7	Final Outreach Plan Materials	Fall 2025
7	External Webinar 1	Y
7	External Webinar 2	Y
7	External Webinar 3	Fall 2025
8	Travel Estimate Log	Y
8	Detailed Travel Reimbursement Log	Fall 2025

\* Monthly time and materials (T&M) payments.

\*\* No milestone payment for Technical Panel Meeting 3.