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 # *(i.e, SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX)* SPR-TPF5(505)-8H-00	**Transportation Pooled Fund Program - Report Period:** ☐ Quarter 1 (January 1 – March 31) ☑ Quarter 2 (April 1 – June 30) ☐ Quarter 3 (July 1 – September 30) ☐ Quarter 4 (October 1 – December 31)	
Project Title: An Investigation of the Factors Surrounding Crashes of ADAS-Equipped Vehicles		
Name of Project Manager(s): Cheryl Roe	**Phone Number:** 319-335-6803	**E-Mail** cheryl-roe@uiowa.edu
Lead Agency Project ID: University of Iowa Driving Safety Research Ins	**Other Project ID (i.e., contract #):** L230100-CG	**Project Start Date:** January 1, 2023
Original Project End Date: December 31, 2023	**Current Project End Date:** December 31, 2023	**Number of Extensions:**

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
$150,000	$66,712.74 (incl. prelim for June)	25%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
21%	$31,041.51 (incl. prelim for June)	44%

Project Description:

This research aims to help fill the gaps in knowledge about the impact of ADAS features in real-world crashes occurring in Iowa and Colorado, including whether the driver had an accurate mental model of the vehicle's ADAS feature(s), crash characteristics such as the environmental and traffic conditions, and whether the feature(s) potentially contributed to or mitigated the crash.

Interview guides to facilitate the gathering of information from motorists operating vehicles likely to be equipped with ADAS features that have been involved in crashes will be developed. Another guide will be developed in order to interview officers who have investigated crashes of ADAS-equipped vehicles.

Qualitative analysis will be conducted and a final report will present findings and recommendations for various stakeholders, including infrastructure owners/operators, law enforcement, crash reporting agencies, departments of transportation, and original equipment manufacturers (OEMs). The summary of the tasks is as follows. Tasks 1 - 3 and tasks 4 - 7 will occur concurrently.

Task 1: IRB approval, TAC formation, Data usage agreements
Task 2: Develop motorist interview guide
Task 3: Develop officer interview guide
Task 4: Identify respondents
Task 5: Interview motorists
Task 6: Interview officers
Task 7: Conduct analysis
Task 8: Prepare deliverables
Task 9: Progress meetings and reports

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

TAC update: Sgt. Michael Messerich will be representing ISP instead of Lt. Corey Champlin.

Meetings with Iowa and Colorado DOT liaisons were held on April 27 and May 25. An email update was provided for the month of June due to minimal updates caused by the delay with getting IRB approval.

IRB materials were submitted on March 31 and we received the notes from a partial review on April 14. We held meetings with IRB staff on April 19 and April 25 to seek clarification and there were four rounds of questions/comments between those meetings and the IRB full board meeting which Michelle attended on May 24. Meeting minutes were received on June 6th in which the IRB requested changes to how we advise subjects the risk of providing their VIN, how long we will keep their personal data and the video recordings, and the creation of a flow chart detailing study procedures. There was another round of comments before the board reconsidered our application at their regular meeting held June 28. We have heard (informally from our colleague who serves on the board) that our project will be approved pending a change of wording about the risk related to a subject providing us with the VIN number. However, as of June 30, our team has not received the meeting minutes back from the IRB. During the back-and-forth with IRB, participant inclusion/exclusion data, motorist survey, and study procedures were updated, including rules on how PII will be collected, stored, and deleted.

Motorist Interview guide was shared with TAC for comments on May 22. Reminders were sent May 31. There were only three replies with minimal edits. Motorist guide was revised.

A revised strategy was proposed to the DOT liaisons to address concerns with the identification and recruitment of law enforcement officers to participate in our interviews. We initially proposed interviewing the officer who investigated the crash of a motorist who has participated in an interview. As we have made connections and talked with more people, we

Anticipated work next quarter:

Research team will continue to meet weekly to discuss study progress.

UI will host virtual monthly meetings with IDOT and CDOT to discuss study progress.

Submit IRB modifications to add IDOT recruitment letter and CDOT social media to recruitment plan.

Begin recruiting motorists to complete the survey phase of the research study.

Distribute recruitment materials via IDOT letter.

Conduct practice interviews.

Finalize research activities for the officer arm of the study and submit to IRB for approval.

Start interviews with motorists and if possible investigators. Interviews will be recorded with two methods. Teams with audio and video (when possible) and with audio recording software provided by UI. The Teams recording will also create a real-time transcription. Recordings will be stored on UI protected server. After the transcriptions are reviewed for accuracy, one of the recordings (Teams if video is recorded) will be deleted. If no video is collected, the recording with the best audio quality will be kept. Interviews will be coded for key terms.

Significant Results:

Not at this time

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).

UI has encountered a substantial delay with getting IRB approval for the project. A significant amount of effort this quarter was spent responding to the IRB comments and concerns. Based on the proposal timeline, we are behind schedule. The full impact of this delay to the timeline and budget is not clear at this time. Once recruitment begins, we will have a better understanding of the impact, but it is likely that an extension will be necessary. The impact to the budget could potentially be offset by unused funds designated for a trip to visit partners in Colorado during the first half of the project.

Potential Implementation: