TRANSPORTATION POOLED FUND PROGRAM
QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT): FHWA

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)* TPF 5(361)	**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: SHRP2 Naturalistic Driving Study Pooled Fund: Advancing Implementable Solutions		
Name of Project Manager(s): Charles Fay	**Phone Number:** 202-493-3336	**E-Mail** charles.fay@dot.gov
Lead Agency Project ID: TPF 5(361)	**Other Project ID (i.e., contract #):**	**Project Start Date:** 3/17/2017
Original Project End Date: 3/17/2022	**Current Project End Date:** 2/2023	**Number of Extensions:** 2

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
$2,310,000.00	$1,980,000	86%

Quarterly Project Statistics:

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

Project Description:

This pooled fund study will support research using data from the second Strategic Highway Research Program (SHRP 2) Naturalistic Driving Study (NDS). The goal is to advance the development of implementable solutions for State and local transportation agencies with an emphasis on the broad areas of Safety, Operations, and Planning.

The Technical Advisory Committee (TAC) developed a list of 30+ research topics and prioritized these topics based on input from the AASHTO Research Advisory Committee. Using the prioritized list of research topics -- a request for proposals was issued. The response included 25 proposed projects, totaling over $8 million. With the available funds, the TAC picked 6 out of the 25 to fund for research.

The six projects are:

"Investigating How Multimodal Environments Affect Multitasking Driving Behaviors"

This study will use the SHRP 2 NDS data to examine multi-tasking behaviors when drivers are in environments that include large numbers of pedestrians and cyclists. Multi-tasking behavior refers to any secondary activity not related to the primary driving task, such as engagement with mobile devices, eating, drinking and talking to passengers. More specifically, this study will focus and provide guidance on: 1) the likelihood of drivers engaging in (or disengaging from) secondary task activities given the presence of pedestrians and cyclists; and 2) the effect of different types of crosswalks and bike lanes (including pavement markings and signage) on secondary task activities.

"Incorporating the Impacts of Driver Distraction into Highway Design and Traffic Engineering"

The objective of this research is to leverage the SHRP 2 NDS data to examine and quantify the impacts of driver

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

Due to COVID and travel restrictions limiting access to a secure data enclave, as well as to accommodate report review - all six projects were issued a no cost time extension from 9/28/2022 to 2/27/2023.

Projects are in process of completing their research and final reports. Below is a list of TAC final project review meetings for each of the six projects as well as some preliminary high level results. The TAC meetings began August 2022 and run through February 2023.

Final reports are due end of February 2023 and it expected to take a few months before these get published on-line.

If interested in reviewing draft final reports before publication-please contact Charles Fay, charles.fay@dot.gov.

TAC review meetings:

TAC review meeting on 8/22/2022.
Project: "Freeway Guide Sign Performance at Complex Interchanges: Reducing Information Overload".

This study sought to identify performance-based recommendations for guide-sign design at complex freeway interchanges. Using the SHRP 2 data this study examined freeway interchange guide-sign information overload thresholds by roadway, traffic, background, and visibility conditions, and the impacts of sign information complexity levels on driver behavior relevant to safety. The primary sign complexity variable, “Number of Words on Subject Sign,” was found to be significantly correlated with a large number of driver behavior variables at the analysis segments. Overall, the sign complexity models showed that sign complexity affected unfamiliar drivers much more than it did on familiar drivers.

Anticipated work next quarter:

Final reports are due February 2023 and teams will be finalizing their research and reports.

Remaining TAC review meetings are scheduled for Nov, Jan, and Feb.

It is expected to take a few months before these final reports get published on-line.

If interested in reviewing draft final reports before publication-please contact Charles Fay, charles.fay@dot.gov.

Significant Results:

Final reports are due end of February 2023 and it expected to take a few months before these get published on-line.

Significant results will be summarized once all projects are finalized. In the meantime some preliminary results can be gleaned from the "Progress this Quarter' section above.

If interested in reviewing draft final reports before publication-please contact Charles Fay, charles.fay@dot.gov.

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).

No issues to report

Potential Implementation:

Project implementation videos will be developed by FHWA in 2023 to complement the written final reports and tools developed under this pooled fund study(PFS). This activity will occur after the end date of this PFS, unless a time extension is requested. These videos will be posted on-line. We also anticipate webinars in 2023 on the research.