

TRANSPORTATION POOLED FUND PROGRAM

QUARTERLY PROGRESS REPORT – Q3/2025

Lead Agency: Washington State Department of Transportation (WSDOT)

Transportation Pooled Fund Program Project	Quarterly Report Period	
TPF-5(500) LTPP Forensic Investigations - Stage 2 https://www.pooledfund.org/Details/Study/729	<input type="checkbox"/> Quarter 1: Jan-Mar <input type="checkbox"/> Quarter 2: Apr-Jun <input checked="" type="checkbox"/> Quarter 3: Jul-Sep <input type="checkbox"/> Quarter 4: Oct-Dec	
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Lead Agency Project ID	Other Project ID (e.g. contract #)	Program Start Date
Y12819	WSP 6420230016	Sep 2, 2022
Contract Start Date (Original)	Contract End Date (Original)	Revised Contract End Date
Aug 17, 2023	Mar 31, 2026	--

Program Schedule Status

On original schedule On revised schedule Ahead of schedule Behind schedule

Overall Program Statistics

Commitments to date \$	Obligations to date \$	% Obligated to date	Contracted to date \$	Expended to date \$	Expended this quarter \$
440,000	440,000	100%	340,000	224,664	44,311

Note: More than \$10,000 of remaining contracted budget is set aside for travel.

Project Description

The objective of this pooled fund study is to create a mechanism to allow for rapidly completing forensic evaluations of LTPP sections before going out of service. Test sections that are no longer active, but which have remained unchanged (i.e., no maintenance or rehabilitation has been applied), may also be considered for forensic evaluation. Possible reasons for carrying out forensic evaluations include:

- Determining reasons for poor pavement performance/premature failures
- Understanding exceptional pavement performance and/or longevity
- Validating pavement performance prediction

(predicted vs actual) • Collecting data to support development and/or calibration of pavement performance prediction models • Closing out or conducting final investigations of experimental test sections. Ultimately, the primary reason for carrying out the evaluations will be to determine if the data contained in the LTPP database adequately explains the performance of the test sections and why they performed as they did. If the existing information is insufficient, then identifying and collecting additional information to inform the performance will be strongly considered.

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

The work performed in each of the tasks specified by the project's scope of work (SOW) is summarized below. Table 1 provides further information on the Task 2 and Task 3 activities, while Figure 1 shows the location of the LTPP test sections selected to date for investigation. As was the case in the previous reporting period, *progress on the project tasks was significant over the current reporting period.*

Task 1. Project Management: • Began preparations for the October 6, 2025 project TAC meeting • Prepared and submitted July, August, and September 2025 invoices • Prepared and submitted quarterly progress report for the July 1 to September 30, 2025 period • Continued to perform subcontractor management activities • Continued to coordinate project activities with FHWA LTPP Team and its Data Collection Services Contractor (DCSC) • Conducted other required project management activities.

Task 2. Test Section Nominations: • Continued to work on identifying LTPP test sections for possible forensic evaluation – to date, 67 LTPP test sections at 19 locations in 17 states have been identified • New test sections identified during the reporting period in question include two California SPS-2, two California SPS-8 (PCC), two South Dakota SPS-8 (AC), and two Wisconsin SPS-8 (AC) test sections • Continued to work with the FHWA LTPP Team and its DCSC to identify additional candidate test sections.

Task 3a. Desktop Studies: • Completed forensic desktop evaluations for six Iowa SPS-2, two Colorado SPS-2, two Colorado SPS-8, six Oklahoma SPS-10, and four Florida SPS-10 test sections – draft technical memoranda were prepared and submitted to WSDOT for review and approval and most of them are being revised based on agency input • Commenced working on forensic desktop evaluations for three South Dakota SPS-8 (AC), two Wisconsin SPS-8 (AC), and two Washington SPS-8 (PCC) test sections – completion of these evaluations is anticipated in the upcoming reporting period.

Task 3b. Follow-Up Forensic Investigations: • Prepared for and participated in virtual or in-person meetings with Florida, Iowa, Kansas, Missouri, North Carolina, Oklahoma, and Texas DOTs; provided update of TPF-5(500) activities to date and discussed forensic evaluation results for the respective LTPP test sections • Continued working on preparations for virtual meeting with Arizona, California, Mississippi and Oklahoma (follow-up) DOTs; will provide update of TPF-5(500) activities to date and discussed forensic evaluation results for the respective LTPP test sections • As appropriate, follow-up forensic investigation plans are being formulated based on outcomes from the referenced meetings.

Task 4. Final Report: Began preparation of draft project report. Outline was prepared and about 30% of the outline has been populated. While effort was not anticipated until the next reporting period, the project team began working on the report to allow ample time for its completion.

Anticipated work next quarter

The anticipated work to be performed in each of the tasks specified by the project's SOW is summarized below.

Task 1. Project Management: • Prepare for and participate in project TAC meeting, which is tentatively scheduled for October 6, 2025 • Prepare and submit monthly invoices • Prepare and submit quarterly progress report for the September 1 to December 31, 2025 period • Continue to perform

subcontractor management activities • Continue to coordinate project activities with FHWA LTPP Team and its DCSC • Conduct other required project management activities.

Task 2. Test Section Nominations: Continue to work on identifying LTPP test sections for possible forensic evaluation • Continue to prepare and submit test section nomination forms for WSDOT approval for conduct of forensic evaluations.

Task 3a. Desktop Studies: Complete desktop evaluations for three South Dakota SPS-8 (AC), two Wisconsin SPS-8 (AC), and two Washington SPS-8 (PCC) test sections • Begin working on desktop evaluations for other test section nominations approved by WSDOT • Finalize technical memoranda where input has been received or is anticipated from the agencies in response to draft memoranda.

Task 3b. Follow-Up Forensic Investigations: Continue preparations for and participate in meetings with Arizona, California, Mississippi and Oklahoma (follow-up) DOTs, as well as with the FHWA LTPP Team to review draft desktop forensic evaluation memoranda • As appropriate, formulate follow-up forensic investigation plans based on outcomes from referenced meetings.

Task 4. Final Report: Complete initial draft of project report and submit it to WSDOT for review and comment.

Significant results

The project continued to realize important results and findings. For example, based on the forensic evaluation desktop study for the WA test sections, an issue requiring correction of the LTPP InfoPave tool was identified. More specifically, the plots of rutting versus time for the three test sections in question showed incorrect trends, even though data associated with these plots were determined to be correct. The project team prepared and submitted LTPP Data Analysis and Operations Feedback Report (DAOFR) to the FHWA LTPP Team for corrective action; correction has been incorporated in the 2024 LTPP InfoPave release. Since then, other data (distress, traffic, etc.) issues have been identified during other forensic evaluations in the LTPP database and the project team is working with the FHWA LTPP team to address these issues. Another important outcome of the forensic investigations to date is the confirmation that all test sections investigated to date, without exception, have adequate data to explain their performance. Moreover, recommendations are being made to further collect data elements that would further enhance the available data – e.g., within test section thickness measurements, close-out performance testing, laboratory testing, etc. We also learned, based on meetings with WSDOT, planned rehabilitation on the Washington SPS-10 project has been postponed, providing additional time to assess test section performance. Likewise, there were several positive outcomes from the June 18, 2025 Texas DOT discussion regarding potential future work and a commitment to perform sampling, as needed. Similar results have been realized from meetings with other agencies and more are anticipated from the meetings being planned.

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)

There are no technical challenges to report at present (and none are anticipated), which may affect completion of the project. However, if additional funds remain that have not been allocated, those funds could help further enhance the results of the project. This issue will be added as an agenda item to the October 6, 2025 TAC meeting for discussion.

Potential Implementation

The primary outcome of the test section forensic evaluations is memoranda documenting the major findings, conclusions, and recommendations, both for each investigation and for the overall project. As with the Stage 1 effort (TPF-5(332)), numerous important findings have been made as a direct result of the forensic evaluations, which will directly affect, and therefore improve, the LTPP database and will advance knowledge in the pavement community – please see earlier Significant Results section. Many more findings are anticipated over the remainder of the project.

Table 1. Summary of Task 2 and Task 3 Activities to Date

Study #	# of Sites	# of Sections	State(s)	LTPP ID	Experiment Type ¹	Pavement Type ²	Purpose of Investigation	Status
1	1	6	AZ	04-0213	SPS-2	JPCP	Performance Comparison; Other	Draft memorandum completed; waiting for agency input
				04-0214				
				04-0215				
				04-0217				
				04-0262				
				04-0268				
2	1	4	CA	06-0201	SPS-02	JPCP	Performance Comparison; Other	Draft memorandum completed; waiting for agency input
				06-0203				
				06-0811				
				06-0812				
3	1	2	CA	06-A805	SPS-08	AC	Performance Comparison; Other	Draft memorandum completed; waiting for agency input
				06-A806				
4	1	4	CO	08-0213	SPS-02	JPCP	Performance Comparison; Other	Draft memorandum completed; waiting for agency input
				08-0215				
				08-0811				
				08-0812				
5	1	4	FL	12-AA01	SPS-10	AC	Performance Comparison; Other	Draft memorandum completed; revisions per agency input ongoing
				12-AA02				
				12-AA03				
				12-AA61				
6	1	6	IA	19-0214	SPS-2	JPCP	Performance Comparison; Other	Draft memorandum completed; revisions per agency input ongoing
				19-0215				
				19-0219				
				19-0221				
				19-0224				
7	1	4	KS	19-0259	SPS-2	JPCP	Performance Comparison; Other	Draft memorandum completed; revisions per agency input ongoing
				20-0202				
				20-0203				
8	1	2	MS	20-0206	SPS-2	JPCP	Performance Comparison; Other	Memorandum finalized per agency input
				20-0210				
9	1	2	MO	28-0805	SPS-08	AC	Performance Comparison; Other	Draft memorandum completed; no input from agency to date
				28-0806				
				29-AA01				
				29-AA02				
				29-AA03				
				29-AA61				
				29-AA62				
				29-AA63				
				29-AA64				
				29-AA65				
10	1	1	MT	29-AA66	SPS-10	AC	Performance Comparison; Other	Draft memorandum completed; revisions per agency input ongoing
				29-AA67				
11	1	3	NC	30-7075	GPS-6S	AC	Excellent Performance; Other	Draft memorandum completed; no input from agency to date
				37-0801				
12	1	6	OK	37-0802	SPS-08	AC	Performance Comparison; Other	Draft memorandum completed; no input from agency to date
				40-AA01				
				40-AA02				
				40-AA03				
				40-AA61				
				40-AA62				
13	2	2	PA	40-AA63	SPS-10	AC	Performance Comparison; Other	Draft memorandum completed; revised per input from one of two agencies
				WA				
14	1	3	SD	42-1597	GPS-6S	AC	Performance Comparison; Other	Desktop study in progress
				53-1007				
				46-0803				
15	1	2	TX	46-0804	SPS-08	AC	Performance Comparison; Other	Draft memorandum completed; no input from agency to date
				46-0859				
16	1	3	TX	48-0801	SPS-08	AC	Performance Comparison; Other	Draft memorandum completed; no input from agency to date
				48-0802				
				48-AA01				
17	1	3	WA	48-AA02	SPS-10	AC	Performance Comparison	Memorandum finalized per agency input
				48-AA03				
				53-AA01				
18	1	2	WI	53-AA02	SPS-10	AC	Performance Comparison; Other	Memorandum finalized per agency input
				53-AA03				
				55-0805	SPS-08	AC	Performance Comparison; Other	Desktop study in progress
				55-0806				

¹ Experiment Type

GPS-6S = AC Overlay of Milled PCC Pavement Using Conventional or Modified Asphalt Experiment

SPS-2 = Strategic Study of Structural Factors for Rigid Pavements Experiment

SPS-8 = Study of Environmental Effects in the Absence of Heavy Loads

SPS-10 = Warm Mix Asphalt Overlay of Asphalt Pavement Study

² Pavement Type

AC = Asphalt Concrete

JPCP = Jointed Plain Concrete Pavement

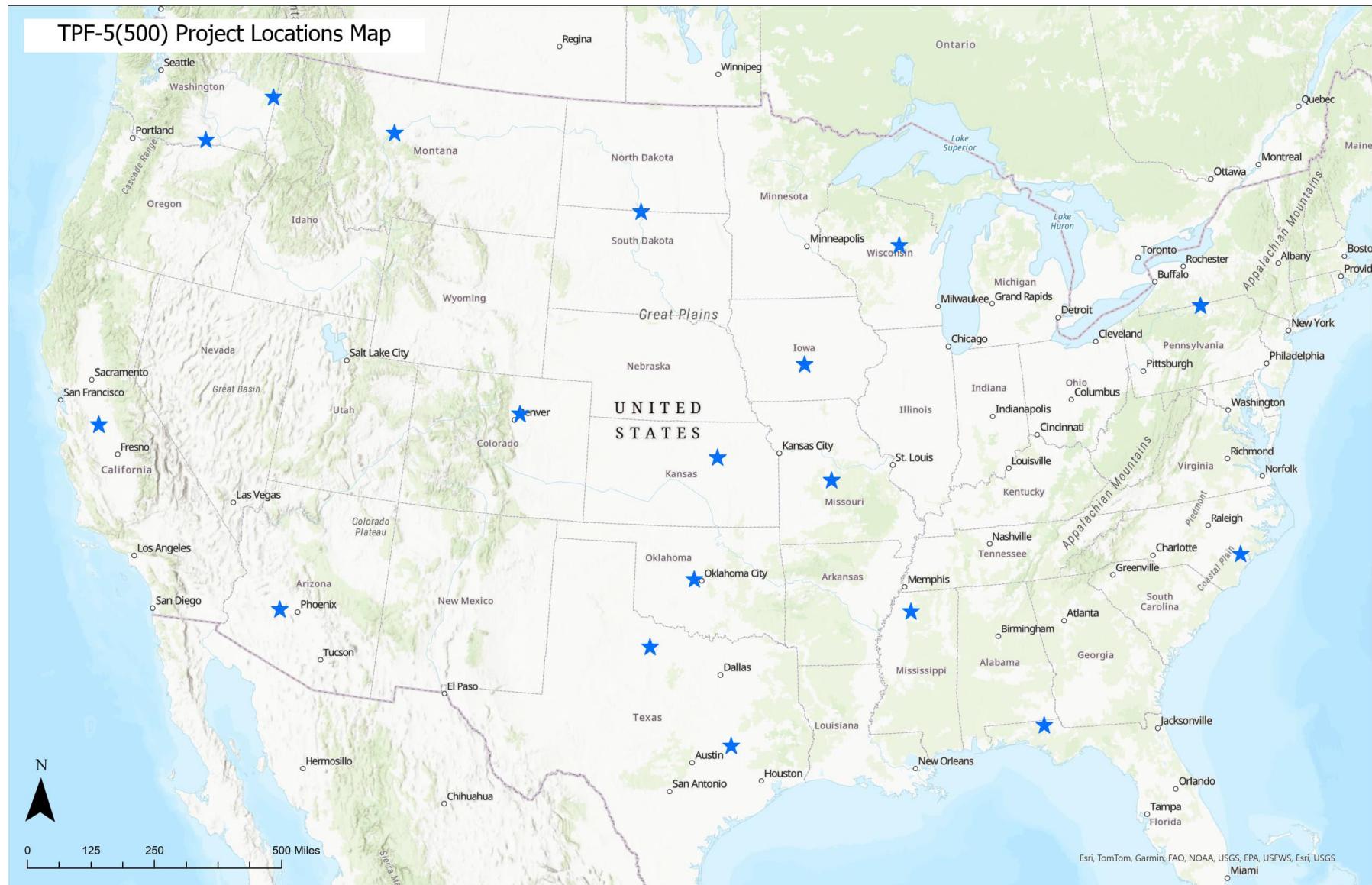


Figure 1. Geographical Location of TPF-5(500) LTPP Test Sections.