TRANSPORTATION POOLED FUND PROGRAM
QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT): Virginia DOT (VDOT) .

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(463) Pavement Surface Properties Consortium: Phase III - Managing the Pavement Properties for Improved Safety**	**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: Pavement Surface Properties Consortium Phase III		
Name of Project Manager(s): Harikrishnan Nair	**Phone Number:** (434) 293-1948	**E-Mail** harikrishnan. nair@VDOT.Virginia.gov
Lead Agency Project ID: 82650	**Other Project ID (i.e., contract #):** 467191 (VT)	**Project Start Date:** 1/01/2021
Original Project End Date: 9/30/2026	**Current Project End Date:** 9/30/2026	**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
$1,750,000*	$938,259	54%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
$198,794 (11%)	$198,794	54%

* Committed; includes direct transfer from Arkansas DOT. The actual contracted budget is $1,410,000 (VTTI).

Project Description:

This applied research effort focuses on enhancing the level of service provided by the roadway transportation system by optimizing pavement surface characteristics. Phases I and II included regular verification and validation of the participants' equipment, opportunities for technology transfer, and the accumulation of a significant body of knowledge on the measurement of pavement surface properties and the integration of these measurements into the next generation of pavement asset management systems. The objective this phase is: (1) to continuing to support the implementation of asset management approaches and tools that help improve the safety of our road networks by reducing the number of crashes and related fatalities, and (2) to bring pavement design and evaluation experts together with maintenance and safety professionals to maximize the contribution of the pavement community Towards Zero Deaths on US highways.

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

- Completed the review of the AASHTO standards with representatives from various equipment and data collection companies and is now being reviewed by FHWA to allow starting the document that will guide the certification efforts for macrotexture certification.
- Completed the analysis of the SCRIM measurements at different temperatures to recommend a temperature correction factor.
- Scheduled an online meeting with the pooled fund members in October to review the activities done in 2024 and plan those to hold the Macrotexture Rodeo in 2025.
- Completed the data collection in Arkansas in September 2024 and will continue processing the data merging with the crash and pavement data to complete the Safety Performance Evaluation and do the Final Report for the Project.
  - ✓ Significant changes were made to the processing and viewing software used by the SCRIM by the manufacturer resolving the issues that were hampering the data collection with the line laser.
  - ✓ CSRI will continue to collaborate and verify that this device is working properly.
- The FHWA SCRIM was used by the Pavement Friction Management (PFM) and Continuous Pavement Friction Measurement (CPFM) to Intersection Safety Focus States project to make a demonstration of the CPFM equipment in Denver, Colorado on July 24-25, 2024, where around 150 miles were surveyed in the state.
- Edgar de León Izeppi participated in the ATSSA Midyear Meeting in Louisville, Kentucky on August 21-23, 2024, at the High Friction Surface Treatment (HFST) Council. He participated in the discussions to increase the use of HFSTs on state highways by pointing out that what is required are more Safety Performance Evaluations using Continuous Pavement Friction Measurements. FHWA Safety reported there are plans to increase funding to pay for more HFSTs.
- The following papers were submitted for presentations at the 2024 Annual TRB Meeting:
  - ✓ Crash Modification Factors and Functions for Management of Pavement Friction for Safety for Roadway Segments
  - ✓ Quality Assurance of Chip Seals Using Macrotexture Metric

Anticipated work next quarter:

- An online meeting with the pooled fund members to review the activities is planned for October 7th to discuss the plans for the Rodeo in 2025.
- CSRI will present the results of the SCRIM temperature correction study to the consortium TAC.
- CSRI will continue work on the Report for Arkansas DOT, aiming for a final presentation in early 2025.
- Edgar de León Izeppi will participate in two conferences next period:
  - ✓ ERPUG 2024 in Cologne, Germany in October 2024 , which will include be an equipment comparison at the BAST test track for many surface properties measurements by different vendors in Europe.
  - ✓ The 2024 Illinois Bituminous Conference in December in Urbana, Champagne as part of the program "Effective Friction for Safe and Sustainable Pavements" with participations from Jeff Shaw (FHWA), Priscilla Tobias (ARORA), and John Senger (IDOT).

Significant Results:

- The following papers were submitted for presentations at the 2024 Annual TRB Meeting:
  - ✓ Crash Modification Factors and Functions for Management of Pavement Friction for Safety for Roadway Segments
  - ✓ Quality Assurance of Chip Seals Using Macrotexture Metric

Circumstance affecting project or budget. (Please describe any challenges encountered or anticipated that might the completion of the project within the time, scope and fiscal constraints set forth in the agreement, along with recommended solutions to those problems).

Potential Implementation: