

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>(i.e., SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX))</i> TPF-5(345) Pavement Surface Properties Consortium – A Research Program at the Virginia Smart Road Phase II		Transportation Pooled Fund Program - Report Period: <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)	
Project Title: <p style="text-align: center;">Pavement Surface Properties Consortium: A Research Program</p>			
Name of Project Manager(s): Kevin Kenneth McGhee		Phone Number: (434) 293-1956	
Lead Agency Project ID: 82650		Other Project ID (i.e., contract #):	
Original Project End Date: 2/28/2022		Current Project End Date: 10/31/2022	
		E-Mail Kevin.McGhee@VDOT.Virginia.gov	
		Project Start Date: 5/19/2016	
		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
\$1,402,079*	\$1,141,764	81%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
\$84,372 (6%)	\$84,372	81%

* Committed; the actual budget contracted with VTTI is \$1,283,774

Project Description:

This program of research focuses on optimizing pavement surface texture characteristics. Phase I of the program demonstrated that a collaborative research program can provide an accessible and efficient way for highway agencies and other organizations to conduct research on pavement surface properties. This second phase focuses on addressing some of the emerging challenges in the evaluation of pavement surface properties and the changes needed to best support the next generation of pavement and asset management systems, including support for MAP21-related initiatives. The program includes the following main broad activities: (1) equipment comparisons; (2) technology transfer; and (3) research on emerging topics.

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

- CSRI participated in the *101st Annual Meeting of the Transportation Research Board*, January 9-13, 2022, in Washington, D.C. Representing the pooled fund, Edgar de León Izeppi presented the following updates to the TRB AKP50 Committee about the TPF-5(345/463) Managing the Pavement Properties for Improved Safety Pooled Fund, and the Task Group V – Safety, Environmental, on Wednesday January 12, 2022.
 - The pooled fund is actively participating in two large FHWA projects which involve the use of the consortium’s CFME (continuous pavement friction measurement/management and a state-of-the-practice safety analysis demonstration). A list of more than 15 projects was presented to help keep track of all the work that is going on and the resulting publications.
 - FHWA CPFM and PFM for safety tasks project is performing the review of technical needs, engaging stakeholders, developing crash modification factors and investigatory thresholds, conducting state demonstrations, and providing technical assistance, and identifying proven safety countermeasures, among other tasks.
 - The pooled fund surface properties “rodeo” will return in 2022 in late summer/early fall; the schedule will be determined at RPUG this year. The focus of the rodeo will be on preventing fatal/serious injury crashes and 12+ state DOT operators are expected to attend. FHWA, Virginia DOT, AARB, and Via Tech (Norway) are expected to participate with equipment, along with many state DOT friction testers.
 - An update was also provided on ERPUG 2021 which had 100 participants from 23 countries and 27 presentations on various topics. An update on the Safer Roads conference, which will now be held until 2023 in Richmond, was also provided.
- Edgar de León Izeppi participated in the ATSSA 52nd Annual Convention in Tampa Florida on February 11-15, 2022, at the High Friction Surface Treatment Council.
 - He made a presentation about CPFM Friction Related Research through FHWA projects and provided a list of links to documents that have been produced through the various FHWA projects and the Pavement Surface Properties Pooled Fund Project TPF-5(345/463).
 - He also made a presentation with Erika Simple from the Arkansas DOT about Improving Friction with Surface Treatments and Friction Data in Arkansas, to showcase some of the findings of the demo.
- The Pooled Fund TAC members and other invited guest held a virtual meeting in this quarter, on February 22. The following were some of the topics discussed:
 - Edgar de Leon gave an update on the travel arrangements for the TAC members attending the RPUG meeting in New York next April. He also made a presentation on the results of the task force that discussed the logistics and possible items to be done for the Rodeo 2022.
 - Mike Vaughn provided the background, objectives, and major details of the friction data collection effort that the Kentucky Transportation Cabinet is pursuing in approximately 15,000 miles of their state roads. Ryland Potter followed with some of the major findings that the data collection and analysis has shown regarding the friction parameters (micro- and macrotecture values measured).
 - Shawn Troy gave an update of the macrotecture and friction research work that he presented in our meeting in September 2021. He informed that this work is completed and will be shared with everyone attending RPUG in April by the PI of the work Shane Underwood. He added that this work has been followed by another research project that is oriented towards investigating the asphalt mix design processes to improve the macrotecture in pavements.
 - Kevin McGhee spoke about the project “Pavement Friction Management Program Demonstration”, which will also be presented by Edgar de León Izeppi in RPUG 2022.
- CSRI continued the processing and analysis of the data collected in Illinois.

Anticipated work next quarter:

- CSRI staff will continue communications with Arkansas DOT and Missouri DOT to expedite their incorporation to the pooled fund and maybe allow some CFME measurements to be scheduled during the summer of 2022.
- An in-person TAC meetings will be scheduled in April at the RPUG conference in New York.

Significant Results:

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: