

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 type="checkbox"/> Quarter 1 (January 1 – March 31) <input type="checkbox"/> Quarter 2 (April 1 – June 30) <input checked="" 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: 2/28/2022	
		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*	\$1,005,316	72%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
\$68,208 (5%)	\$68,208	72%

* 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.):

- A presentation was made to the AASHTO Comp 5D meeting (held on August 2, 2021) about the update to the 2008 AASTHO Guide for Pavement Friction (GPF) produced with under the FHWA Continuous Pavement Friction Measurement (CPFM) and Pavement Friction Management for Safety Project. The revisions to the GPF were made with two participating groups from the AASHTO Pavement Maintenance and Safety Committees and is expected to be approved by AASHTO and made available in 2022. The major modifications made to the GPF were incorporating AASTHO Highway Safety Manual safety performance analysis methodologies to the friction measurement data to reduce crashes and using Benefit-Cost (B/C) to evaluate the use of pavement friction treatments.
- The TAC members and other invited guest have held two virtual meetings in this quarter on the following dates: a) February 16, March 25, and March 30. The following were some of the topics discussed:
 - August 17; Kevin McGhee informed about the financial and operational details of the pooled fund, John Senger gave an update on the next RPUG meeting, and Edgar de León Izeppi presented the web links to several documents published related to PFMP and other topics that have been recently published.
 - September 23: Two presentations were made by members of the TAC group
 - Kansas experience with continuous pavement friction measurement (Rick Miller)
 - Wet Crash Data Discussion from North Carolina (Shawn Troy)

Anticipated work next quarter:

- The FHWA SCRIM will be used by the Continuous Pavement Friction Measurement (CPFM) project to make three demonstrations of the CFM equipment in October in New Jersey, Maryland, and Pennsylvania where about 150 miles of pavements will be surveyed in each state. These results will be presented to the DOTs after merging the data with crashes and pavement surface mix types.
- Further measurements with the CFM equipment will be done in District 1 in Illinois (Chicago) to obtain measurements on ramps, and other areas of interest that were expressed by the Pavement Management and Safety Divisions. CSRI staff will make a demonstration of the equipment in the District 1 office.
- Another virtual TAC meeting will be scheduled in October, and possibly another one in December.

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:

- Knowledge gained from the consortium activities has been incorporated into the proposed revised version of the *AASTHO Guide for Pavement Friction (GPF)*.