

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)		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 – Managing the Pavement Properties for Improved Safety</p>			
Name of Project Manager(s): Kevin Kenneth McGhee	Phone Number: (434) 293-1956	E-Mail Kevin.McGhee@VDOT.Virginia.gov	
Lead Agency Project ID: 82650	Other Project ID (i.e., contract #):	Project Start Date: 5/19/2016	
Original Project End Date: 2/28/2022	Current Project End Date: 2/28/2022	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
\$892,181*	\$559,028	63%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
\$163,705 (18%)*	\$163,705	18%

* Committed; the actual contracted budget is \$610,776 (VTTI)

** Includes the cost of shipping the SCRIM to the UK for calibration and certification and a refundable deport required by the UK customs.

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.):

- Participated in the *98th Annual Meeting of the Transportation Research Board*, January 13-17, 2019 in Washington, D.C.
 - ✓ E. de León Izeppi made a presentation on Safety at the *AFD90 Committee on Surface Properties–Vehicle Interaction*.
 - ✓ Vincent Bongioanni made a presentation on “Repeatability and Agreement of Various High-Speed Macrotecture Measurement Devices” (paper 19-01177).
 - ✓ Kenneth Vélez Rodríguez made a presentation on “An Enhanced Methodology for the Identification of Locations with High Risk of Wet Crashes” (paper 19-04991).
- Edgar de León Izeppi and Gerardo Flintsch participated in the *ATSSA 49th Annual Convention & Traffic Expo* held in Tampa, Florida on February 9 – 12, 2019.
 - Edgar de León Izeppi co- participated in the presentation Highway Asset Management and Big Data and the HFST committee meeting.
 - During this meeting, details of the organization of the Safer Roads 2020 Conference to be held in Richmond, Virginia on May 2020 were also discussed. VTTI, VTRC, VDOT and other organizations have pledge their support for this conference and are working together with ATSSA organizing the technical reviews and other aspects of the conference.
- The SCRIM participated and passed the *Sideway-Force Skid Resistance Survey Devices Accreditation Trials* in the United Kingdom that were held by TRL on March 25-28, 2019. The SCRIM left for the UK in December and will return to the United States in early May. During its stay in the UK, the SCRIM was serviced and repaired by WDM in Bristol to make sure that it was in the best conditions to continue working for at least the next two years.
- A conference call was held on February 5 with participants from 8 states to plan some of the activities for this years’ Rodeo. A list of possible topics for presentations during the Rodeo was made, the two more important being a Best Practices presentation and a Portfolio of Treatments and the levels of friction and macrotecture that can be achieved. The members were also informed of some of the details of the calibration of the SCRIM in the UK.
- Continued working on the organization of the *13th Annual Surface Properties Rodeo* to be held in Blacksburg on May 20-24, 2019.

Anticipated work next quarter:

- Finalize the details to have the *13th Annual Surface Properties Rodeo at the Virginia Smart Road* on May 20-24, 2019, and organize and collect the data for the *Second Transversal Profile and Macrotecture Rodeo* from May 21 – 23, 2018.
- North Dakota DOT has gotten in contact with the Pooled Fund to become the 10th member state and allow VTTI to collect data and guide them in the implementation of a PFMP using CFME technology (SCRIM).

Significant Results:

- The following paper was published:
 - ✓ Bongioanni, V.I., Maeger, K., Katicha, S. W., de León Izeppi, E.D., Flintsch, G.W., “Repeatability and Agreement of Various High-Speed Macrotecture Measurement Devices,” *Transportation Research Record: Journal of the Transportation Research Board*, 2019, Vol. 2673(2),2019 pp. 650–662, <https://doi.org/10.1177/0361198119830309>.

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).

No problems were encountered in this quarter.

Potential Implementation: