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(345) Pavement Surface Properties Consortium – A Research Program at the Virginia Smart Road Phase II**	**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: A Research Program**		
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
$832,181*	$ 355,526	43%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
$75,256 (9%)	$75,236	43%

* Committed; the actual contracted budget is $396,445 (VTTI)

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.):

- The Annual TAC meeting was held on Monday September 17, 2018 before the start of the RPUG 2018 conference in Rapid City, South Dakota. At the beginning of the meeting, Maryland was introduced to the group as the newest member of the Consortium. After approving the minutes from the last meeting in June in Ohio, the group discussed the following items:
  - ✓ Gerardo Flintsch reviewed with the group (CT, IL, MS, OH, SC, and MD) the *Report EFTC – 608 Report DOT Pooled Funds TPF-345 Consortium For Pavement Surface Properties Twelfth Annual Equipment Roundup (Rodeo 2018)* prepared by the Transportation Research Center Inc. (TRC). This is the final report of the activities of the Rodeo and the comparison made to the area reference locked-wheel skid tester.
  - ✓ All the members of the TAC also reviewed the results of the 2017-18 activities and discussed the need to plan the future activities for 2019. Some of the ideas for new projects/initiatives included:
    - Collect data to answer the main questions about friction and macrotexture
    - Continue best practice documentation
    - Wallops-like workshop or define more standardized procedures.
    - Study finer mixes (4.75 mm)
    - Warranty-projects - how can the pavement and safety folks use friction?
    - Work more with the tire industry.
    - Operator certification or training
    - Using network aggregate monitoring to support PFMP
    - Build portfolios of treatments and the levels of friction and macrotexture that can be achieved.
    - Use of CFME and correlation with LWST
    - Looking at micro and macro with dry and wet friction – create catalogue for different surfaces/ treatments.
- The following presentations at RPUG 2018 from activates connected to the consortium (in addition to other related efforts/projects) were delivered by the members of the group:
  - K. McGhee, "Update on TPF-5(345) Managing the Pavement Properties for Improved Safety,"
  - E. de León Izeppi, "Pavement Friction Management Support Program,"
  - G. Flintsch, "Guidance to Predict and Mitigate Hydroplaning NCHRP 15-55,"
  - R. Burdisso, "Tire Pavement Interaction Noise and Correlation with Pavement Texture Parameters," and
  - V. Bongioanni, "Protocols for Network Level Macrotexture NCHRP 10-98."

Anticipated work next quarter:

- Prepare the consortium contributions to the *98th Annual Meeting of the Transportation Research Board*, January 13-17, 2019 in Washington, D.C.

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).

No problems were encountered in this quarter.

Potential Implementation: