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*	$ 395,323	48%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
$39,797 (5%)	$39,797	48%

* Committed; the actual contracted budget is $438,445 (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.):

- Edgar de León Izeppi participated in the E-RPUG meeting this year held in Madrid, Spain on October 18-19, 2018. He made a presentation *"Findings of Network-Level Continuous Friction and Texture Measurements in the United States,"*, and perovided updates on effort of the consortium.
- Gerardo Flintsch and Edgar de León Izeppi participated in the ASTM E-17 committee meeting held in Washington DC on December 3-4, 2018. Kevin McGhee was also present.
- Made arrangements to ship the SCRIM to the UK for maintenance and re-calibration in March 2019. The equipment will participate in the TRL yearly trials held in the MIRA test grounds (operated by the CSTI personnel). It is expected that the SCRIM will be back in the US before May 1, 2019.
- Prepared the following the revised paper and presentations for the *2019 Annual Meeting of the Transportation Research Board*:
  - ✓ Bongioanni, V.I., Maeger, K., Katicha, S. W., de León Izeppi, E.D., Flintsch, G.W., "Repeatability and Agreement of Various High-Speed Macrotexture Measurement Devices," paper 19-01177.
  - ✓ Vélez Rodríguez, K., Katicha, S. W., Flintsch, G.W., "An Enhanced Methodology for the Identification of Locations with High Risk of Wet Crashes," paper 19-04991.

Anticipated work next quarter:

- Participate in the *98th Annual Meeting of the Transportation Research Board,* January 13-17, 2019 in Washington, D.C.
  - ✓ E. de León Izeppi will make a presentation on Safety at the *AFD90 Committee on Surface Properties–Vehicle Interaction*.
  - ✓ Present the papers listed in the previous section.
- Start the organization of the 13th *Annual Surface Properties Rodeo* to be held in Blacksburg on May 20-24, 2019.
- Make the necessary arrangements with TRL and WDM for the participation of the SCRIM USA in the 2019 TRL SCRIM certification trials in the UK.

Significant Results:

- ✓ Barrantes, S., Flintsch G.W., de Leon, E., McGhee, K., "Interconversion of looked-wheel and Continuous Friction Measurement Equipment (CFME) Friction Measurements," *Transport Research Record: Journal of the Transportation research Board,* https://doi.org/10.1177/0361198118797455 (first published October 5, 2018).

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: