

## 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.

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

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*	\$250,148	30%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
\$39,632 (5%)	\$39,632	30%

\* 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.):**

- Participated in the *97<sup>th</sup> Annual Meeting of the Transportation Research Board*, January 7-11, 2018 in Washington, D.C.
  - ✓ Edgar de León Izeppi made a presentation on the workshop 119 Implementation of Pavement Friction Management Programs scheduled on Sunday January 7, 2018.
  - ✓ Kevin McGhee and Edgar de León Izeppi made a presentation on the workshop 879 Balancing Durability and Safe Function in Dense-Graded Asphalt Pavements scheduled on Thursday January 11, 2018.
  - ✓ FHWA requested the presence of the SCRIM device for the Exhibit Hall during TRB and support personnel in the SCRIM booth.
  - ✓ The following papers were presented during the conference:
    - “A Comparison of Locked Wheel and Continuous Friction Measurement Equipment”, poster session 314, Monday 1-8-2018, 10:15 am – 12:00 pm.
    - “Interconversion of Locked-Wheel and CFME Friction Measurements”, lectern session 345, Monday 1-8-2018, 1:30 – 3:15 pm.
    - “Impact of Surface Cleaning on Pavement Skid Resistance Inside Tunnels”, Maintenance and Operations Management Committee Meeting, Wednesday 1-10-2018, 8:00 am – 12:00 pm.
- Finalized the plans for the Transversal Profile and Macrotexture Rodeo to be held in the Smart Road from April 9–13, 2018.
- Started planning the *12<sup>th</sup> Annual Surface Properties Rodeo* to be held in East Liberty, Ohio at the Transportation Research Center (TRC) skid tester calibration facility, on June 4-8, 2018. Preparations began with the partners and other invited representatives and equipment from other states and other organizations.

**Anticipated work next quarter:**

- Organize and collect the data for the Transversal Profile and Macrotexture Rodeo to be held in the Smart Road from April 9 – 13, 2018.
- Finalize the details to do the *12<sup>th</sup> Annual Surface Properties Rodeo* to be held in East Liberty, Ohio at the Transportation Research Center (TRC) skid tester calibration facility, on June 4-8, 2018.

**Significant Results:**

- ✓ Barrantes, S., Flintsch, G. W., de León, E., & McGhee, K. K. (2018). “Interconversion of Locked-Wheel and Continuous Friction Measurement Equipment (CFME) Friction Measurements,” *Proceedings of the Transportation Research Board 97<sup>th</sup> Annual Meeting*, Washington, D.C., 2018.
- ✓ McCarthy, R., de León Izeppi, E., Flintsch, G., and McGhee, K., Comparison of Locked-Wheel and Continuous Friction Measurement Equipment,” *Proceedings of the Transportation Research Board 97<sup>th</sup> Annual Meeting*, Washington, D.C., 2018.
- ✓ de León Izeppi, “Pavement Friction Management Programs” presentation (with notes) was included to the E-Circular, *Pavement Friction*, to be published by the Transportation Research Board, Washington, D.C. in 2109.

**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:**