

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	
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		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
\$338,500*	\$27,438	9%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
\$ 22,405(7%)	\$22,405	9%

* Committed; the actual contracted budget is \$70,222

Project Description:

Through a regional pooled fund, 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 will focus 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 asset management systems, including support for MAP21-related initiatives. It will also seek participation of industry through traditional membership or an industrial affiliate program. The program includes the following main broad activities:

- ✓ **Equipment Rodeos:** continue equipment comparisons by hosting the annual equipment roundups and provide consortium members with a forum for discussion of common challenges, and a unique opportunity to seek solutions for these challenges, learn from each other, and be exposed to emerging practices and technologies.
- ✓ **Technology Transfer:** The Consortium will continue to support the development of a body of knowledge in pavement surface characteristics and vehicle-road interaction and facilitate the transition from research to practice of new and existing methods and technologies for measurement of functional highway surface properties and enhanced pavement surfaces.
- ✓ **Research on Emerging Topics:** the consortium provides a unique opportunity to conduct specific studies of common interest that require measurement of pavement surface properties under controlled traffic and/or environmental conditions on different types of road surfaces. Examples of potential topics include: Evaluation of emerging 3D systems, new methods for characterizing macrotexture, and implications for FAST act requirements on current practices.

Progress this Quarter (includes meetings, work plan status, contract status, significant progress, etc.):

- With the grant from the Federal Highway Administration (FHWA), the SCRIM equipment participated in an equipment comparison at the Texas Transportation Institute (TTI). The team collected friction and texture data at the Area Reference Friction Measurement Systems (ARFMS) available at the TTI Friction Test Center (FTC) which is regularly used in the US for calibration of locked-wheel skid testers (ASTM E-274). Additionally, data was also collected with the Texas Department of Transportation locked-wheel skid tester. All three devices will be compared in the final report of this study due in December. This work will contribute to the Acceptance Testing and Demonstration of the Continuous Friction Measurement Equipment (CFME) Project from FHWA.
- The organization for the mid-year TAC meeting in conjunction with this year's RPUG meeting in San Diego, CA on November 2016 continues.
 - Completed the analysis of the data collected during the *10th Annual Surface Properties Rodeo* and prepared a report and a presentation for the TAC meeting.
 - Prepared a presentation addressing the new emphasis on Pavement Friction Management. This builds on the work done to compare measurements with locked-wheel skid testers and Continuous Friction Measurement Equipment (CFME) and investigating the relationships between friction measurements and crashes on the nation's highways. It is expected that this will contribute to the Towards Zero Deaths (TZD) goal in the US.

Anticipated work next quarter:

- Hold the mid-year TAC meeting in conjunction with this year's RPUG meeting in San Diego, CA on November 1-4, 2016.
- The TAC meeting will also be used to discuss with the members a proposal to refocus the goals of the consortium and the possible participation of other member states that have expressed their willingness to join once the focus is centered more on Pavement Friction Management.
- Prepare a poster accepted for TRB in 2016 on behalf of the standing committees of the TRB Technical Activities Division, as part of the State Department of Transportation High-Value Research Projects which highlight the top High Value research projects from various State DOTs. Top projects are solicited and selected from each of the four AASHTO Regions. These posters represent successful implementation of research projects by Transportation Agencies.

Significant Results:

Recognition from the State DOT organizations on the high value of the research performed by the Consortium.

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: