

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 type="checkbox"/> Quarter 1 (January 1 – March 31) <input checked="" 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: Pavement Surface Properties Consortium – Managing the Pavement Properties for Improved Safety		
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*	\$607,359.	68%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
\$48,331(5%)*	\$48,331	5%

* Committed; the actual contracted budget is \$610,776 (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 SCRIM returned to the United States on May 7, 2019. It is now available to continue demonstrations; North Dakota will be using this Federal resource to collect data and implement a PFMP using CFME technology, through the Pooled Fund.
- The 13th Annual Surface Properties Rodeo was held at the Virginia Smart Road on May 20-24, 2019.
 - The emphasis of the Rodeo this year was: (a) Friction Workshop with presentations made from the FHWA PFM Support Program, and (b) Presentations made by members of the consortium about the topic selected in February: a
 - Best Practices for Friction Measurements and,
 - Portfolio of Treatments and the levels of friction and macrotexture that can be achieved.
 - The *Second Transversal Profile* was also held in the Smart Road from May 21 – 23, 2018. This event provided field measurements for the project Calibration, Certification, and Verification of Transverse Pavement Profile Measurements that is being conducted for the *Transportation Pooled Fund TPF-5(299) Improving the Quality of Pavement Surface Distress and Transverse Profile Data Collection and Analysis*.
 - Friction measurements were made in the Smart Road at 40 and 60 mph with the SCRIM and the South Carolina LWST.
- The Consortium Technical Advisory Committee (TAC) met during the rodeo on May 20-24, 2019.
 - During the TAC meeting, John Senger was elected as the new chair of the Pooled Fund. The TAC also approved to hold this year's mid-year meeting in conjunction with the *Pavement Evaluation 2019 Conference* in Roanoke, VA, on Monday September 16 from 3 pm to 6 pm. The report of the measurements done in the Rodeo will be reviewed at the RPUG meeting.
 - The TAC also agreed to attend the *SaferRoads 2020* conference, which will take place in Richmond, Virginia on May 12-14, 2020 in lieu of the annual Rodeo in Blacksburg.
 - A proposal was made to investigate the possibility of studying the topic of friction demand and friction demand categories. John Senger and Edgar de León Izeppi will make an RNS with the intention to present it at the next TRB AFD90 Committee Meeting to seek the possibility of getting NCHRP funding or have the Pooled Fund proceed to do it.
- The initial trip to Bismarck, North Dakota was on June 17-20, 2019. Preliminary routes were reviewed, the team made several presentations to explain the data collection, processing, and analysis required for the project. Work will begin in the next quarter after NDDOT has had a chance to gather the necessary information to start the measurements.

Anticipated work next quarter:

- The results of the Rodeo will be processed to have available for the next TAC meeting that will be held in conjunction with this year's RPUG meeting in the *Pavement Evaluation 2019 Conference* in Roanoke, VA, in September.
- Data collection in North Dakota will be done in the months of July and August

Significant Results:

- The following paper was published:
 - ✓ Vélez Rodríguez*, K., Katicha, S. W., Flintsch, G.W., (2019) "Enhanced Methodology for the Identification of Locations with High Risk of Wet Crashes," *Transportation Research Record: Journal of the Transportation Research Board* (first published June 5, 2019). <https://doi.org/10.1177/0361198119849906>

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: