

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 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)	
Project Title: <div style="text-align: center;">Pavement Surface Properties Consortium: A Research Program</div>			
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	
		E-Mail Kevin.McGhee@VDOT.Virginia.gov	
		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
\$1,422,181*	\$875,815	62%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
\$67,748 (5%)	\$67,748	5%

* Committed; the actual contracted budget is \$1,283,774 (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 *100th Annual Meeting of the Transportation Research Board*, January 5-29, 2020 in Washington, D.C.
 - Gerardo Flintsch delivered the Lectern Session for the TRB AKP50 Committee meeting titled “*New Advances in Pavement Surface Characteristics*”, on Friday January 29, 2021.
 - Edgar de León Izeppi presented the following updates to TRB AKP50 Committee (a) TPF-5(345) Managing the Pavement Properties for Improved Safety Pooled Fund, (b) Task Group V – Safety, Environmental, and (c) Safer Roads 2023, on Friday January 8, 2021.
 - Ross McCarthy made a presentation on Determining Investigatory Levels of Friction with Crashes on Monday January 13, 2020 at the *Design and Analysis of Pavement Friction and Texture* session 1243 sponsored by AFD90.
- The TAC members and other invited guest have held three virtual meetings in this quarter on the February 16, March 25, and March 30. The following were some of the topics discussed:
 - Gerardo Flintsch presented the final presentation of the NCHRP 10-98 Project, which is under review by TRB staff. NCHRP will make available a copy of the report soon.
 - Ross McCarthy made a presentation summarizing the contents of TRL Reports 957 and 962. These reports have generated discussions that will continue in the meetings in the next quarter.
 - Brian Schleppi talked about several proposals for the Pooled Fund. He also made a presentation on questions about the TRL Reports and other topics.
 - John Ferris made a presentation “Friction and lateral force vs. slip”.
- Edgar de León Izeppi participated in the ATSSA 52th Annual Convention occurred virtually on February 8-11, 2021. The meeting updated the details of the Safer Roads 2023 Conference that will take place in Richmond, Virginia on May 2023. VTTI, VTRC, VDOT and other organizations have pledge their support for this conference and will continue working with ATSSA. The TAC will have to decide whether to send participants from each member state to the conference.
- Continued the processing and analysis of the data collected in Illinois.

Anticipated work next quarter:

- Complete processing the data collected in Illinois.
- Schedule TAC meetings during the next quarter to discuss plans for RPUG in 2021 and other topics.

Significant Results:

- Published the following journal paper:
 - McCarthy, R. Flintsch, G.W. and de León Izeppi, E. "Comparison and Harmonization of the Locked-Wheel Skid Tester and the Sideway-Force Coefficient Routine Investigation Machine," *Journal of Testing and Evaluation*, vol. 49 (published online Jan 2021). <https://doi.org/10.1520/JTE20200120>.

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).

Potential Implementation: