

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(141)		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: <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	E-Mail Kevin.McGhee@VDOT.Virginia.gov
Lead Agency Project ID: 82650		Other Project ID (i.e., contract #):	Project Start Date: 7/1/2006
Original Project End Date: 6/30/2011		Current Project End Date: 6/30/2015	Number of Extensions: 1

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
\$1,771,603	\$1,752,214	99%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
\$18,956 (1%)	\$18,956	99%

Project Description:

Through a regional pooled fund, this program of research focuses on optimizing pavement surface texture characteristics. The initial focus of the program was on the application of inertial and laser-based equipment for measuring pavement surface properties, but the scope has been expanded based on the guidance provided by the Technical Advisory Committee. The program has included the following main broad activities:

- ✓ Establishment equipment comparison and verification facility and hosting of annual equipment roundups.
- ✓ Evaluation of new and existing methods and technologies for measurement of functional highway surface properties and providing enhanced pavement surfaces.
- ✓ Conducting specific studies that require measurement of pavement surface properties under controlled traffic or environmental conditions on different surfaces. These have included (among others):
 - Investigation of seasonal effects on friction measurements,
 - Evaluating the potential adoption of the International Friction Index (IFI), and
 - Determining speed adjustment factors for locked-wheel friction trailers.
- ✓ Supporting the FHWA Continuous Friction Measurement Equipment (CFME) Technology Deployment program.
- ✓ Conducting technology transfer activities, such as: making presentations at national and international conferences and meetings, organizing training workshops, publishing journal papers, and organizing conferences and symposia.

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

- Presentations for papers related to surface properties were made at the 94th Annual Meeting of the Transportation Research Board in January 2015. There were 2 papers from activities developed in parallel to the consortium that were accepted for presentation and publication.
 - “Virginius Experience with High-Friction Surface Treatments” paper 15-4298, session 353.
 - “Adaptive Spike Removal Method for High Speed Pavement Macrotexture Measurements by Controlling the False Discovery Rate” paper 15-4500, session 742.
- Additionally, Edgar de León represented the Consortium with the presentation *US’s Experiences on Pavement Texture Measurement and Interpretation*, as part of TRB’s Workshop 123 International Experience and Perspective of Pavement Texture Measurements and Evaluation.
- The Federal Highway Administration Long Term Pavement Performance (LTPP) high-speed profiler measured the Smart Road on December 3 with a macrotexture laser. These measurements were processed and analyzed to check the accuracy of the AMES equipment that collects macrotexture data. These results were incorporated in the presentation made at the workshop mentioned above.
- Edgar de León made the presentation “*Friction Measurements for QA/QC of High Friction Surface Treatments*” at the HFS Council Meeting in the 2015 ATSSA Traffic Convention Expo in the Tampa Convention Center in Tampa, Florida on Saturday February 7.
- One of the GripTesters continued to be used by VTTI to assist VDOT with measurements for the HSFT program.
- The week of June 1-5, 2015 has been tentatively set apart to conduct the 2015 Equipment Comparison, also known as the 10th Annual Surface Properties Rodeo in Blacksburg at the Smart Road.
 - All six member states have confirmed their participation.
 - The event will include friction and profile equipment comparisons.
 - Skid trailer calibration services will be available for all those members interested.

Anticipated work next quarter:

- Host the 10th Annual Surface Properties Rodeo in Blacksburg on June 1-5, 2015 at the Smart Road.
- Hold the next TAC meeting in Blacksburg, VA in June 2015.
- Finalize papers for publication in the *Journal of the Transportation Research Board*.

Significant Results:

Findings of the consortium were presented at the 95th Annual Meeting of the Transportation Research Board in January 2015.

- “Virginias Experience with High-Friction Surface Treatments” paper 15-4298.
- “Adaptive Spike Removal Method for High Speed Pavement Macrotecture Measurements by Controlling the False Discovery Rate” paper 15-4500.
- The presentation *US’s Experiences on Pavement Texture Measurement and Interpretation*, part of TRB’s Workshop 123 International Experience and Perspective of Pavement Texture Measurements and Evaluation, will get published as a Synthesis by TRB.

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: