

## 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(141)</b>		<b>Transportation Pooled Fund Program - Report Period:</b> <input 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 checked="" 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>E-Mail</b> <a href="mailto:Kevin.McGhee@VDOT.Virginia.gov">Kevin.McGhee@VDOT.Virginia.gov</a>
<b>Lead Agency Project ID:</b> 82650		<b>Other Project ID (i.e., contract #):</b>	<b>Project Start Date:</b> 7/1/2006
<b>Original Project End Date:</b> 6/30/2011		<b>Current Project End Date:</b> 6/30/2013	<b>Number of Extensions:</b> 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
\$1,565,614	\$1,549,252	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

## 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.):

- The Grip Tester Loan Program continued this quarter with the Georgia DOT having to exchange the units as the one the agency was operating was constantly having malfunctions.
  - At the beginning of October Grip Tester #1 was taken and #2 was returned to Blacksburg. The unit that returned is being fixed and reviewed in Virginia to fix any possible malfunctions and have it ready should any state require it. The unit in Georgia will probably stay there until the end of the year.
- All of the presentations from the *7th Symposium on Pavement Surface Characteristics (SURF 2012)* held in Norfolk (total of 16 technical sessions and over 64 presentations) have been posted at the following link <http://www.vtti.vt.edu/conferences/surf-2012.php>. They are all available for download in PDF format.
- The week of May 20-24, 2013 has been tentatively set apart to conduct the 2013 Equipment Comparison, also known as the 2013 Rodeo.
  - During the meeting in Norfolk, it was agreed to continue the Pooled Fund for another two years, pending permission from each state for funds for it from their DOT.
  - The possibility of setting up a skid-tester calibration and certification center in VTTI for the use of the consortiums members was also discussed, with all states showing interest in this new benefit, should it materialize.
- Work on the Draft Report of the 2012 Rodeo continues and will be distributed to all members before the end of the year.
- Revised manuscripts for two papers related to surface properties for the *92<sup>st</sup> Annual Meeting of the Transportation Research Board* in January 2013 have been revised as needed resubmitted. There will be 2 papers from activities developed in parallel to the consortium to be presented:
  - “Virginia Quiet Pavement Demonstration Projects: Initial Functional Assessment,” paper 13-3150, for presentation and publication.
  - “Effect of Air Temperature and Vehicle Speed on Tire/Pavement Noise measured with On-Board Sound Intensity Methodology” will be presented in the ADC40-(3) sub-committee meeting.
- Drs. Gerardo Flintsch and Edgar de León Izeppi participated in the ASTM E-17 Committee is meeting in Atlanta December 3-4, 2012.

**Anticipated work next quarter:**

- The Wisconsin DOT has requested the use of a Grip Tester for the year 2013. It is anticipated that it will be shipped at the beginning of the spring.
- Work on the presentations for *Transportation Research Board Annual Meeting* to be ready for the meeting in January 13-17, 2013 in DC.
- Start the organization of the *7<sup>th</sup> Annual Surface Properties Rodeo* to be held in Blacksburg on May 20-24, 2013 at the Smart Road. Preparations will begin this quarter with the partners and seeking invited equipment.
- Start the work to support the organization of the *2014 Pavement Evaluation Conference* in Roanoke or Blacksburg.
- Finalize the *Little Book of Friction*.

**Significant Results:**

**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:**