

## 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 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)	
<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
1,575,614*	1,560,235	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

\* Without additional funding received in 2013

## 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:
  - Grip Tester #1 that had been with the Georgia DOT in Atlanta on loan since last year was received in January 2013.
  - Grip Tester #2 has been returned to operational status and is ready for deployment if requested by any other agency.
- Started the support for the organization of the *Pavement Evaluation 2014 Conference*, in conjunction with RPUG:
  - The first meeting with the organizing committee was held via GoToMeeting on March 18 with representatives from RPUG, FHWA, VDOT, and VTTI. It was decided on this meeting that the event will be held September 14-18, 2014 in Blacksburg, Virginia, at *The Inn at Virginia Tech*. A visit to the Smart Road with a possible equipment demo/comparison is being discussed.
  - Quarterly meetings will continue to be held to define call for papers, venues, marketing, etc. A full committee meeting will be held during RPUG in San Antonio September 17, 2013, with members from VTTI attending as exhibitors to promote the attendance to next year's event.
- Presented two papers at the *92<sup>nd</sup> Annual Meeting of the Transportation Research Board* in January that used data collected as part of the consortium activities.
  - "Virginia Quiet Pavement Demonstration Projects: Initial Functional Assessment," paper 13-3150, for presentation and publication. This paper has been accepted for publication in the TRR journal and was awarded the 34<sup>th</sup> Harter Rupert Award for the Best Paper on Transportation Noise from the TRB Committee ADC40.
  - "Effect of Air Temperature and Vehicle Speed on Tire/Pavement Noise measured with On-Board Sound Intensity Methodology", presented in the ADC40-(3) sub-committee meeting.
- Defined all organizational details for the *7<sup>th</sup> Annual Surface Properties Rodeo* to be held in Blacksburg on May 20-24 at the Smart Road and shared with the Consortium members.
  - Preparations are under way and it is expected to have 5 profilers and 5 friction devices.
  - Two OBSI devices, VTTI and IGGA are also expected to be compared in this event.
  - The Final Draft Report of the 2012 Rodeo will be distributed to all members before the Rodeo.
  - Preparations for a skid-tester calibration and certification center in VTTI for the use of the consortiums members continues, with all states showing interest in this new benefit.

**Anticipated work next quarter:**

- The 7<sup>th</sup> *Annual Surface Properties Rodeo* will be held in Blacksburg on May 20-24 at the Smart Road. Preparations have begun and the invitations will be made for the partners, friends, and invited equipment.
- One of the Grip Testers will participate in the Friction Workshop to be held in Penn State on May 13–17, 2013, in conjunction with the spring meeting of the ASTM E-17 Committee.
- The loading plates for the skid-tester calibration and certification center will be calibrated in April thanks to a generous offer from John Andrews from the Maryland State Highway Agency, who will also collaborate in the set-up of the facility in VTTI. This equipment was provided to the Consortium by IGGA.
- Members and the research team will support to the Ohio Department of Transportation by assisting them with their profile reference measurements in May.
- VDOT has requested assistance with some measurements on some High Friction Surfaces applications because both friction measuring locked-wheel devices are not operational.
- Continue to support the organization of the PE 2014 conference.

**Significant Results:**

**Circumstance affecting project or budget. (Please describe any challenges encountered or anticipated that might affect 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:**