

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 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: <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: 6/30/2013	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
\$1,505,268	\$1,480,997	98%

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 loan of Grip Tester #2 to the West Virginia DOT from the beginning of April to the end of June, as part of a special study WVDOH made in the 10th District. Similarly, Grip Tester #1 was shipped at the beginning of May to TRANSTEC as indicated by Mr. Robert Orthmeyer to participate in a demonstration to the Puerto Rico DOT, together with the Dynatest HFT. Afterwards, this unit made several measurements in Iowa, Missouri, and other HFS sites monitored by the FHWA HFS project and then went on to MNRoad for another demonstration. Subsequently, this same Grip Tester participated in the PSU Friction Workshop in State College from June 19-22, 2012.
- Continued support for the organization of the *7th Symposium on Pavement Surface Characteristics (SURF 2012)* included:
 - Monthly meetings have continued to be held with the members of the planning committee. The hotel was evaluated by the organizing committee on May 18th and it was found very suitable for the conference and the meeting rooms for all of the committees have been requested and approved.
 - A tentative presentation scheduled has been made for evaluation of the committee, with a possibility to include more papers, if needed.
 - Most of the tactical items have been defined such as translations, space for meetings, menus, etc.
- The *6th Annual Surface Properties Rodeo* was held in Blacksburg on May 21-25 at the Smart Road.
 - All four states representatives and several invited guests (IGGA, FHWA, FDOT, OHDOT, LANAMME) participated in the equipment roundup, with some presentations made about activities in each of their institutions and the future of surface properties research.
 - There were seven profilers; Georgia, Mississippi, South Carolina, and Virginia (3), and one from the National Road Laboratory of Costa Rica (LANAMME), and a SURPRO reference profiler (MS).
 - Seven friction devices also participated; five locked-wheel skid testers from Georgia, Mississippi, South Carolina, Virginia and one from the International Grinding and Grooving Association (IGGA), and two Grip Testers, one from VTTI operated by the West Virginia DOT personnel and one from LANAMME.
 - Two OBSI devices, VTTI and IGGA were also compared in this event.
 - Additional measurements were made with VTTI's CTMeter and DFT.
 - The Final Draft Report of the 2011 Rodeo was distributed to all members during the Rodeo.
- Edgar de León Izeppi participated in the ASTM E-17 Meeting and the 19th Annual Friction Workshop in State College, Pennsylvania from June 17-22, 2012. The Pavement Friction Management Program study and the Virginia Quiet Pavements Implementation Study were among some of the projects mentioned at these meetings under contract with VTTI. Updates on both were presented to the researchers and practitioners present.

Anticipated work next quarter:

- Both Grip Testers are expected back in Blacksburg during the month of July. The Georgia Dot has requested one of them for the first week of August for a couple of months, to make friction measurements comparisons with their locked-wheel skid testing equipment.
- Complete the development of a 2-page *Friction Technology Brief* and the *Little Book of Friction*.
- Continue measurements for the seasonal monitoring experiment.
- Continue to support the organization of the SURF 2012 conference.
- The Technical Advisory Committee (TAC) will meet in in Norfolk, VA in conjunction with the SURF 2012 conference.

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).

No problems were encountered in this quarter.

Potential Implementation: