

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.

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|---|--|--|---|
| 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 type="checkbox"/> Quarter 2 (April 1 – June 30) <input checked="" 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: 2 |

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 |
|----------------------|--------------------------------|--------------------------------------|
| \$1,645,605 | \$1,624,931 | 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 |
|--|---|---------------------------------------|
| \$31,524 (2%) | \$31,524 | 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.):

- The results of the 2013 Rodeo were presented at the mid-year technical advisory committee (TAC) meeting, held prior to the start of the 2013 RPUG Conference in San Antonio, Texas, on September 16, 2013. The following activities were completed:
 - A final draft report was distributed and reviewed by the members of the TAC and invited guests with a presentation. The draft report summarized the complete processing of the data collected during the *7th Annual Surface Properties Rodeo* held in May in Blacksburg, including friction, profile, and macrotexture. This draft was distributed to all the members of the TAC and the feedback obtained will be incorporated to finalize the final 2013 Rodeo Report.
 - A comparison of measurements with three OBSI devices tested during the Rodeo has been presented to TRB and it has been accepted for presentation (Paper 14-5210 Tire-Pavement Noise Evaluation and Equipment Comparison Using On-Board Sound Intensity Methodology over Several Pavement Surfaces in Virginia). This document will be attached to the final 2013 Rodeo Report.
- The Consortium participated in the RPUG meeting with an exhibitor booth. This booth advertised the Pavement Evaluation Conference 2014 which will be held in Blacksburg on September 14-18, 2014 in conjunction with RPUG. Additionally, the Consortium made the following three presentations in the 2013 Conference:
 - Harmonization of Friction Measuring Devices Using Robust Regression Methods (Samer Katicha)
 - Profiler Certification Process at the Virginia Smart Road (Edgar de León I.), and
 - Use of Probe Vehicles to Measure Road Ride Quality (Samer Katicha)
- The Grip Tester Loan Program has both Grip Testers operational. One of the units has been used by VTTI to assist VDOT with measurements.
- The first skid-tester calibration was performed on September 22-23 thanks to the collaboration of John Andrews from the Maryland State Highway Agency. The equipment calibrated was one of the two skid trailers from the state of Virginia. This event marked the initiation of the locked-wheel skid trailers calibration facility at VTTI for the use of the consortiums members. Invitations will be sent to all members who have expressed interest in this service.

Anticipated work next quarter:

- The Technical Advisory Committee (TAC) will receive the final Rodeo Report as soon as the comments are included.
- It is expected that at least two member states will bring their skid testers for calibration during this next quarter. (Connecticut and South Carolina)
- 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 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: