

Transportation Pooled Fund Program

Project Title: “Improving the Quality of Pavement Profiler Measurement”		
Project Manager and Phone Number: Robert L. Orthmeyer, P.E. (708) 283-3533 robert.orthmeyer@.dot.gov	Project No: TPF 5(063)	Project is: <input type="checkbox"/> PLANNING <input checked="" type="checkbox"/> R&D
Reporting Period: October 1 through December 31, 2007	Multi Year Project Six Year	
Description of Work Performed and Progress: <p>NEWS!!!! Six Year Study: During the July meeting of the Technical Advisory Committee (TAC), it was agreed to extend the study two more years with the completion date of September 30, 2009. This will allow the study to achieve the goals that have been set. It was also agreed that additional study partners would be allowed during this time frame extension. The study priorities were updated to conform to the study objectives. FHWA is in the process of implementing new procedures for managing funds for FHWA led pooled fund studies. More information to follow. Please see the pooled fund study web site for details on funding: www.pooledfund.org.</p> <p>The following list of priorities is adjusted for priority one and has been revised by the TAC:</p> <ol style="list-style-type: none"> 1. Reference Profile Device (development of) <ol style="list-style-type: none"> a. Benchmark Testing b. Reference Device 2. Critical Profile Accuracy Requirements (definition) - Completed 3. Construction Acceptance and Correction Software (ProVAL: www.roadprofile.com) - Ongoing 4. Certification / Validation Sites – On Hold for completion of Priority One. 5. Evaluating Upper Limits of Single Accelerometer and Single Height Sensor – Contractor is on board. 6. Emerging Technology That Enhances Profile Measurement - Ongoing <p>Priority One – Reference Device(s): The Benchmark Testing contractor recommendation has been processed by the FHWA Office of Acquisition Management. An award was made on May 21st to the University of Michigan Transportation Research Institute (UMTRI). The contract will be for a 20 month period.</p> <p>FHWA has issued four awards under the Broad Agency Announcement process that was used to solicit interest in developing a potential profile reference device. The awards were to:</p> <ol style="list-style-type: none"> 1. APR Consultants 2. International Cybernetics Corporation - ICC 3. Surface Systems International, LLC -SSI 4. Virginia Technical Institute <p>Priority Two: Completed. The “Defining of Critical Profile Accuracy Requirements” final report was delivered to the FHWA. The project was conducted by Steve Karamihas from the University of Michigan Transportation Research Institute (UMTRI). A copy of the final draft is available that the pooled fund web site: http://www.pooledfund.org/projectdetails.asp?id=280&status=4.</p>		

Priority Three: ProVAL 2.73 Is Released

Ever feel frustrated doing hundreds of cross correlations to produce reports for profiler repeatability tests and accuracy tests (as in the [AASHTO PP49 Standard Practice for Certification of Inertial Profiling Systems](#))? The pain is no more ... when you have ProVAL 2.73!

A new feature, Profiler Certification Module, will make this process a joy with simply a few mouse clicks! Also, the classic Cross Correlation module is now revamped and added with powerful features! With ProVAL 2.73, you can now easily evaluate whether a profiler can produce repeatable and accurate results.

The latest version (2.73) of ProVAL is available as of December for download free of charge at the website: www.roadprofile.com.

Priority Five - Evaluating Upper Limits of Single Accelerometer and Single Height Sensor: The project has begun with Dr.'s Nicolas Gagarine and James Mekemson of Starodub, Inc. providing the research and report. The phase I report has been provided to FHWA. The second phase will quantify the aspects identified in the first phase report.

Funding - There is currently \$1,100,600.00 of obligated funds from the participating STD's in the pooled fund study account. A total of \$1.43 Million has been committed to the project over the four year time frame from the participating SHA's. When combined with FHWA funding, a total of \$2,007,700 has been committed to this pooled fund study.

Participating State Highway Departments: California, Colorado, Connecticut, Florida, Georgia, Illinois, Kansas, Kentucky, Maryland, Mississippi, New Jersey, New York, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, South Dakota, Texas and Wisconsin. Also assisting FHWA Federal Lands, FHWA LTPP, and FHWA Office of Pavement Technology (HIPT).

Note: A web site has been developed to manage all of the pooled fund study proposals, solicitations and projects. The TPF-5(063) Profile Quality study can be found at: <http://www.pooledfund.org/projectdetails.asp?id=280&status=4>.

NEXT MEETING: The next full TAC meeting has not been scheduled.

STATUS AND COMPLETION DATE

Percentage of work completed to date for total project

Project is: 60%

X on schedule _____ behind schedule, explain:

Expected Completion Date: September 30, 2009

Robert L. Orthmeyer, P.E.

Project Manager