

## Transportation Pooled Fund Program

<b>Project Title: “Improving the Quality of Pavement Profiler Measurement”</b>		
<b>Project Manager and Phone Number:</b>  Robert L. Orthmeyer, P.E. (708) 283-3533 robert.orthmeyer@.dot.gov	<b>Project No:</b>  TPF 5(063)	Project is:  <input type="checkbox"/> PLANNING <input checked="" type="checkbox"/> R&D
<b>Reporting Period:</b>  April 1 through June 30, 2008	<b>Multi Year Project</b>  <b>Six Year</b>	
<p><b>Description of Work Performed and Progress:</b> 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: <a href="http://www.pooledfund.org">www.pooledfund.org</a>.</p> <p>A Technical Advisory Committee (TAC) meeting was conducted April 28<sup>th</sup> using the NHI webinar to update the participating agencies on the study progress. There were 19 participants in the session that included an update by UMTRI on the benchmark testing contract and an update by Transtec on ProVAL 3.0. The action items included checking with other DOT's regarding the establishment of regional profiler certification centers, meeting with the Office of Finance to review current funding, develop an automated faulting activity proposal for FHWA FALCON process and send a copy of the automated faulting Statement of Work to the entire TAC.</p> <p>The following list of priorities is adjusted for priority one and has been <b>revised</b> by the TAC:</p> <ol style="list-style-type: none"> <li>1. Reference Profile Device (development of)             <ol style="list-style-type: none"> <li>a. Benchmark Testing</li> <li>b. Reference Device</li> </ol> </li> <li>2. Critical Profile Accuracy Requirements (definition) - Completed</li> <li>3. Construction Acceptance and Correction Software (ProVAL: <a href="http://www.roadprofile.com">www.roadprofile.com</a>) - Ongoing</li> <li>4. Certification / Validation Sites – On Hold for completion of Priority One.</li> <li>5. Evaluating Upper Limits of Single Accelerometer and Single Height Sensor – Contractor is on board.</li> <li>6. Emerging Technology That Enhances Profile Measurement - Ongoing</li> </ol> <p><b>Priority One – Reference Device(s):</b> The Benchmark Testing contractor recommendation has been processed by the FHWA Office of Acquisition Management. An award was made on May 21<sup>st</sup> to the University of Michigan Transportation Research Institute (UMTRI). The contract will be for a 20 month period. Progress reports have been submitted and the contractor is slightly behind schedule.</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"> <li>1. APR Consultants</li> <li>2. International Cybernetics Corporation - ICC</li> <li>3. Surface Systems International, LLC -SSI</li> <li>4. Virginia Technical Institute</li> </ol> <p><b>Priority Three: ProVAL 2.73 Is Released</b></p>		

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.

ProVAL workshops were conducted in MT in April and Arkansas in June.

The latest version (2.73) of ProVAL is available as of December 2007 for download free of charge at the website: [www.roadprofile.com](http://www.roadprofile.com).

ProVAL 3.0 is currently under development and scheduled for release at the end of October 2008 – in coordination with RPUG to be held in Austin, TX (see link): <http://www.rpug.org/2008/intro.html>.

**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 will tailgate onto the RPUG meeting in Austin, TX.**

#### STATUS AND COMPLETION DATE

Percentage of work completed to date for total project

Project is: 65 %

X  on schedule \_\_\_\_\_ behind schedule, explain:

Expected Completion Date: September 30, 2009

Robert L. Orthmeyer, P.E.

**Project Manager**