

## Transportation Pooled Fund Program

<b>Project Title: “Improving the Quality of Pavement Profiler Measurement”</b>		
<b>Project Manager and Phone Number:</b>  <b>Robert L. Orthmeyer, P.E.</b> (708) 283-3533 robert.orthmeyer@.dot.gov	<b>Project No:</b>  <b>TPF 5(063)</b>	Project is:  <input type="checkbox"/> PLANNING <input checked="" type="checkbox"/> R&D
<b>Reporting Period:</b>  July 1 through September 30, 2007	<b>Multi Year Project</b>  <b>Six Year</b>	
<b>Description of Work Performed and Progress:</b>  <p><b>NEWS!!!! Six Year Study:</b> 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.</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.</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 Two:</b> 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: <a href="http://www.pooledfund.org/projectdetails.asp?id=280&amp;status=4">http://www.pooledfund.org/projectdetails.asp?id=280&amp;status=4</a>.</p>		

**Priority Three:** The TAC reviewed the priority list for ProVAL software upgrades and agreed that the inertial profiler certification module would be the next upgrade to be undertaken. During the process of modifying the contract, the FHWA Office of Acquisition Management agreed to extend the contract for a full five year period and placed an upper ceiling on the contract. This was completed September 7<sup>th</sup>. It is anticipated that ProVAL version 2.73 will be available at the end of November 2007. The latest version (2.72) of ProVAL is available as of January for download free of charge at the website: [www.roadprofile.com](http://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 will be held in Danville, VA on October 17 and 18 after the annual RPUG meeting to review project status for Priority One and Priority Five, review study priorities and the overall status of the study.

**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

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**Project Manager**