## **Transportation Pooled Fund Program**

Project Title: "Improving the Quality of Pavement Profiler Measurement"		
Project Manager and Phone Number:	Project No:	Project is:
Robert L. Orthmeyer, P.E. (708) 283-3533 robert.orthmeyer@fhwa.dot.gov	TPF 5(063)	PLANNING _X R&D
Reporting Period:	Multi Year Project	
July1 to September 30, 2005	Four Year	
Description of Work Performed and Progress:		
<ul> <li>The following list of priorities is adjusted for priority one: <ol> <li>Reference Profile Device (development of) <ul> <li>Footprint</li> </ul> </li> <li>Critical Profile Accuracy Requirements (definition)</li> <li>Construction Acceptance and Correction Software (acquisition of existing)</li> <li>Certification / Validation Sites</li> <li>Evaluating Upper Limits of Single Accelerometer and Single Height Sensor</li> <li>Emerging Technology That Enhances Profile Measurement</li> <li>Portable Validation Device Feasibility</li> <li>Lightweight Profilers Unique Problems</li> <li>Portable Validation Device Implementation</li> </ol></li></ul>		
The Technical Advisory Committee met September 28 <sup>th</sup> and 29 <sup>th</sup> in Columbus, OH. The TAC reviewed ProVAL priorities, Priority Two final report, and provided recommendations on how to accomplish Priority One – build and evaluate inertial profiler reference device(s).		
<b>PRIORITY THREE</b> : The latest version of ProVAL is available for download free of charge at the website: <u>www.roadprofile.com</u> . Additional upgrades that were defined through a task order are being worked on		

by Transtec. A BETA version became available August 20<sup>th</sup> for a 45 day testing period. Plans are to have the BETA testing completed by October 28, 2005.

At the September meeting in Columbus, OH, the Technical Advisory Committee (TAC) after reviewing the submitted priorities agreed to pursue additional upgrades as put forward by Maryland.

**PRIORITY TWO**: 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: <u>http://www.pooledfund.org/projectdetails.asp?id=280&status=4</u>.

**Priority One – Reference Device(s):** At the Columbus meeting, the TAC decided to pursue two separate proposals to accomplish this priority. The first would be for a contractor to provide necessary bench mark testing. The second RFP would be soliciting the actual reference device manufacturers. It was agreed that we were not seeking one device, but would look at providing funding to assist with the development of several devices.

**Priority Five - Evaluating Upper Limits of Single Accelerometer and Single Height Sensor:** A research statement has been developed by the participating agency technical representatives for South Dakota and Florida. The problem statement was reviewed and anticipated to be awarded during the next quarter. Approximately \$130,000 will be reserved for this award.

**Funding -** There is currently \$989,800.00 of obligated funds from the participating STD's in the pooled fund study account. Of this \$102,025 has been awarded to UMTRI for Priority Two. Priority three has \$147,239 set aside for funding from the pooled fund study. (Funding from the FHWA HIPT is being used to allow the acquisition of the Bumpfinder software and ProVAL support to proceed.) 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: <u>http://www.pooledfund.org/projectdetails.asp?id=280&status=4</u>.

**NEXT MEETING:** The next meeting has not been scheduled, but the TAC anticipates a meeting to review the Priority One proposals for both the reference devices and the benchmark testing.

## STATUS AND COMPLETION DATE

Percentage of work completed to date for total project Project is: <u>50</u>%

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

The Technical Advisory Committee has recommended a deadline extension on the critical accuracy requirements project until analysis and results of the FHWA Profiler Roundup are available. This was recommended in order to take full advantage of the synergistic benefits of the two related research projects. Contracts for Priority One are anticipated to begin during the first quarter of FHWA FY2006.

Expected Completion Date: \_\_\_\_September 30, 2007

Robert L. Orthmeyer, P.E. Project Manager