

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@fhwa.dot.gov	Project No: TPF 5(063)	Project is: ___ PLANNING <u>X</u> R&D
Reporting Period: January 1 to March 31, 2005	Multi Year Project Four Year	
Description of Work Performed and Progress: The following list of priorities remains the same: <ol style="list-style-type: none"> 1. Reference Profile Device (development of) 2. Critical Profile Accuracy Requirements (definition) 3. Construction Acceptance and Correction Software (acquisition of existing) 4. Certification / Validation Sites 5. Evaluating Upper Limits of Single Accelerometer and Single Height Sensor 6. Emerging Technology That Enhances Profile Measurement 7. Portable Validation Device Feasibility 8. Lightweight Profilers Unique Problems 9. Portable Validation Device Implementation <p>PRIORITY THREE: The Profile Viewer and Analysis software, ProVAL, version 2.5 that includes the localized roughness and grinder simulation capabilities (Smoothness Assurance Module – SAM) was completed and released on January 10, 2005. The new version was available for distribution and demonstration at the TRB annual meeting. Four workshops that were part of the contract with The Transtec Group, Inc. and with Steve Karamihas were conducted at the following locations: Florida: Gainesville – January 24th & 25th Kentucky: Frankfort – February 15th & 16th Connecticut: Rocky Hill – March 3rd (a live webcast) Colorado: Denver – March 21st & 22nd</p> <p>The Connecticut DOT is planning to release the recorded version of the ProVAL workshop by the end of April 2005. A link to the recorded session will be distributed to the member agencies. This will allow a viewer to follow the workshop presentations at their discretion.</p> <p>The latest version of ProVAL is available for download free of charge at the website: www.roadprofile.com. Additional upgrades that were defined through a task order are being worked on by Transtec.</p> <p>PRIORITY TWO: It was agreed by the Technical Advisory Committee (TAC) to pursue this priority before asking for a reference device to be constructed. The “Defining of Critical Profile Accuracy Requirements” project was issued to the University of Michigan Transportation Research Institute (UMTRI) with the Principal Investigators to be Tom Gillespie and Chris Winkler with Steve Karamihas as the primary analyst. During conversations with UMTRI, a completion schedule was agreed upon that provides a final report for priority two by June 1, 2005.</p>		

Priority One – Reference Device(s): It is anticipated that a Request for Proposals will be finalized by the end of final delivery of Priority Two.

Priority Five - Evaluating Upper Limits of Single Accelerometer and Single Height Sensor: A research statement is being developed by the participating agency technical representatives for South Dakota and Florida. The problem statement was reviewed and anticipated to be advertised during the next quarter.

Funding - There is currently \$948,400.00 of obligated funds from the participating STD's in the pooled fund study account. Of this \$98,000 has been awarded to UMTRI for Priority Two. Priority three has \$292,450 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.

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.

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 technical advisory panel will meet in Chicago on June 8th and 9th to review the Priority Two report and prepare a Request for Proposals (RFP) for Priority One: “Develop a Reference Device.”

STATUS AND COMPLETION DATE

Percentage of work completed to date for total project
Project is: 25 %

 on schedule X 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.

Expected Completion Date: September 30, 2007

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Project Manager