## **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	<b>TPF 5</b> (063)	PLANNING X R&D
Reporting Period:	Multi Year Project	1
January 1 through March 31, 2006	Four Year	

## **Description of Work Performed and Progress:**

The following list of priorities is adjusted for priority one:

- Reference Profile Device (development of) RFP's under development.
   a.) Golden Footprint
- 2. Critical Profile Accuracy Requirements (definition) Completed
- 3. Construction Acceptance and Correction Software (acquisition of existing) Ongoing
- 4. Certification / Validation Sites On Hold for completion of Priority One.
- 5. Evaluating Upper Limits of Single Accelerometer and Single Height Sensor Negotiating with FHWA contractor.
- 6. Emerging Technology That Enhances Profile Measurement Ongoing
- 7. Portable Validation Device Feasibility On Hold.
- 8. Lightweight Profilers Unique Problems Ongoing.
- 9. Portable Validation Device Implementation. On Hold.

**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. The RFP's are being fine tuned by the contracting officer and the contracting officer's technical representative.

**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: <a href="http://www.pooledfund.org/projectdetails.asp?id=280&status=4">http://www.pooledfund.org/projectdetails.asp?id=280&status=4</a>.

**Priority Three**: The latest version (2.60.0017) of ProVAL is available for download free of charge at the website: <a href="www.roadprofile.com">www.roadprofile.com</a>. Additional upgrades that were defined by the Technical Advisory Committee (TAC) at the September meeting in OH are being worked on by Transtec. Anticipated delivery date for version 2.7 is August 2006.

Three additional ProVAL workshops were completed during this quarter: TRB, TxDOT and LADOT.

**Priority Five - Evaluating Upper Limits of Single Accelerometer and Single Height Sensor:** The research statement developed by the participating agency technical representatives for South Dakota and Florida is anticipated to be awarded during the next quarter (May 2006). Approximately \$100,000

has been reserved for this award.

**Funding -** There is currently \$1,100,600.00 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: <a href="http://www.pooledfund.org/projectdetails.asp?id=280&status=4">http://www.pooledfund.org/projectdetails.asp?id=280&status=4</a>.

**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. A web conference will be scheduled during the next quarter to initiate Priority Five.

STATUS AND COMPLETION DATE		
Percentage of work completed to date for total project		
Project is: <u>50</u> %		
on schedule X behind schedule, explain:		
Request for Proposals for Priority One are anticipated to be announced during the third quarter of FHWA FY2006. There was		
was unable to obligate funds that had been committed to the program.		
was unable to obligate rands that nad been committed to the program.		
Expected Completion Date: September 30, 2007		

Robert L. Orthmeyer, P.E.

Project Manager