

Transportation Pooled Fund Program

Project Title: "Improving the Quality of Pavement Profiler Measurement"

Project Manager and Phone Number:

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Project No:

TPF 5(063)

Project is:

PLANNING
 R&D

Reporting Period:

January 1 through March 31, 2009

Multi Year Project

Eight Year

Description of Work Performed and Progress:

Priority	Contract Amount	TPF5063 Funds
One - A	\$ 464,894.00	Benchmark Testing FHWA Contract DTFH61-07-C-00024
One - B	\$ 60,000.00	Reference Device APR: FHWA Contract DTFH61-07-P-00204
One - B	\$ 58,909.00	Reference Device ICC: FHWA Contract DTFH61-07-P-00211
One - B	\$ 60,000.00	Reference Device SSI: FHWA Contract DTFH61-07-P-00212
One - B	(FHWA - LTPP)	Ref. Device VATech: FHWA Contract DTFH61-07-P-00213
Two	(FHWA - HIPT)	Critical Profiler Accuracy Requirements: UMTRI:
Three A	(FHWA - HIPT)	Karamihas (FHWA: HIPT) ProVAL Smoothness Assurance Module
Three B - 2	\$ 147,239.00	ProVAL Support - Option Yr 1
Travel Nevada 04	\$ 33,052.00	Nevada Meeting October 2004: TPF 5(063) funds
Travel June 05	\$ 41,575.00	Chicago Meeting- June 2005:HIPT (MD Funds)
Travel - Ohio 05	\$ 39,826.00	Columbus, OH meeting Sept. 2005: TPF 5(063) funds (FMIS)
Travel - Iowa 06	\$ 5,503.00	Des Moines, IA meeting Sept. 2006: TPF 5(063) funds (FMIS)
Travel - MN 07	\$ 16,826.75	Bloomington, MN meeting July 2007: Continuation of study
Travel - VA 07	\$ 17,135.55	Danville, VA meeting October 2007: Priority One & Five
Travel - TX 08	\$ 20,000.00	Austin, TX meeting October 2008: Priority 1, 3, 4, 5
Three - ProVAL	\$ 22,000.00	Transtec for Cross Correlation Upgrade
Five - Phase I	\$ 99,800.00	Starodub, Inc.
Five - Phase II	\$ -	
Total	\$ 1,086,760.30	

There now 21 participating State Highway Agencies wit the addition of Louisiana.

A Technical Advisory Committee (TAC) meeting was conducted October 30 & 31st 2008 at the end of the RPUG annual meeting in Austin, TX. The participating agencies were updated on the study progress. There were 16 participants in the session that included attendance by our newest partner, LA DOTD. An update was provided by UMTRI on the benchmark testing contract and by Transtec on the latest update of ProVAL to version 3.0. The action items included checking with other DOT's regarding the establishment of regional profiler certification centers, 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.

The group voted to extend the pooled fund study for two more years, seek additional participating agencies and seek additional funds. A notice will be sent out through the pooled fund study website once the extension documents have been approved.

The following list of priorities was reviewed and approved by the TAC:

1. Reference Profile Device (development of)
 - a. Benchmark Testing
 - b. Reference Device
2. Critical Profile Accuracy Requirements (definition) - Completed
3. Construction Acceptance and Correction Software (ProVAL: www.roadprofile.com) - Ongoing
4. Certification / Validation Sites – On Hold for completion of Priority One.
5. Evaluating Upper Limits of Single Accelerometer and Single Height Sensor – Contractor is on board.
6. Emerging Technology That Enhances Profile Measurement - Ongoing

Priority One – Reference Device(s): The Benchmark Testing contractor recommendation has been processed by the FHWA Office of Acquisition Management. An award was made on May 21, 2007 to the University of Michigan Transportation Research Institute (UMTRI). The contract has been granted an extension through December 31, 2009. As part of the extension, FHWA will take possession of the Benchmark Testing Cart and support equipment.

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:

1. APR Consultants
2. International Cybernetics Corporation - ICC
3. Surface Systems International, LLC -SSI
4. Virginia Technical Institute (FHWA – LTTP Funds)

Priority Three: ProVAL 2.73 Is Released

The latest version (2.73) of ProVAL is available for download free of charge at the website: www.roadprofile.com.

ProVAL 3.0 is currently under development and scheduled for release at the end of September 2009.

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 \$1,150,600.00 of obligated funds from the participating SHA'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 Agencies: California, Colorado, Connecticut, Florida, Georgia, Illinois, Kansas, Kentucky, Louisiana, 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: There will be a NHI webinar training session on ProVAL 3.0 for the TAC upon completion of the BETA testing. This has not been scheduled.

STATUS AND COMPLETION DATE

Percentage of work completed to date for total project

Project is: 65 %

 on schedule X behind schedule, explain:

Existing contracts and funding mechanisms within FHWA have delayed the study progress. Contracts have been awarded and the study dates have been extended to allow completion of the study priorities. The Benchmark Testing & Evaluation contract with UMTRI has been extended until December 31, 2009.

Expected Completion Date: September 30, 2011

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