TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT): Connecticut Department of Transportation

INSTRUCTIONS:

Project Managers and/or research project investigators should complete a quarterly progress report for each calendar quarter during which the projects are active. Please provide a project schedule status of the research activities tied to each task that is defined in the proposal; a percentage completion of each task; a concise discussion (2 or 3 sentences) of the current status, including accomplishments and problems encountered, if any. List all tasks, even if no work was done during this period.

Transportation Pooled Fund Program Project # TPF – 5(236)		Transportation Pooled Fund Program - Report Period: X Quarter 1 (January 1 – March 31)		
		□Quarter 2 (April 1 –	June 30)	
		□Quarter 3 (July 1 –	September 30)	
		□Quarter 4 (October	4 – December 31)	
Project Title: Demonstration and Purchase of PG Binder Testing Equipment				
Project Manager: Ravi V. Chandran	Phone: 860-258-0372		il: ravi.chandran@ct.gov	
Project Investigator: James M. Mahoney Phone: 860-486-9299 E-mail: james.mahoney@uconn.edu				
Lead Agency Project ID:	Other Project	ct ID (i.e., contract #):	Project Start Date:	
			February 1, 2011	
Original Project End Date: June 30, 2012	June 30, 201	ject End Date: 2	Number of Extensions: 0	
Project schedule status:				
X On schedule	ule 🗆	Ahead of schedule	☐ Behind schedule	
Overall Project Statistics:				
Total Project Budget	Total Cos	t to Date for Project	Total Percentage of Work Completed	
Contract Amount: \$216,500 Commitments Received: \$228,430	\$3,380		10%	

Quarterly Project Statistics:

\$42,263

Phase 1 – Under Contract to UConn:

Total Project Expenses This Quarter	Total Amount of Funds Expended This Quarter	Percentage of Work Completed This Quarter
\$3,380	\$3,380	10%

Project Description:

Background:

To help expedite the implementation of the Superpave methods in the mid-1990s, the Federal Highway Administration (FHWA) conducted a Pooled Fund project that allowed state transportation agencies to purchase shares in the Pooled Fund. Each share provided the state transportation agency with one full set of Superpave test equipment - both for the asphalt binder and the hot mix asphalt (HMA). The pooling of funds gave the states greater purchasing power that resulted lower costs as compared to states purchasing the equipment individually.

The majority of the equipment that was purchased under the Pooled Fund was for testing of asphalt binder in accordance with the Performance Grading (PG) system. The binder testing equipment is highly sophisticated and contains sensitive electronics for making the necessary measurements. As most of this equipment has been in service for approximately 15 years, it is nearing the end of its service life and manufacturers are no longer carrying repair parts.

With the advent of new test methods such as the Multiple Stress Creep Recovery Test, older direct-shear (DSR) equipment is either not able to run these tests or the results are suspect because of the limitations of the older equipment. States must replace this equipment in order to adopt these new and improved test methods.

Objectives:

To conduct a Pooled Fund project similar to the one conducted earlier by FHWA, here in the northeastern part of the country. In Phase 1, researchers will arrange for participating state DOTs a demonstration of lab equipment options for PG binder testing. Then in a second phase, CAP Lab will facilitate a pooled-fund purchase of asphalt-binder laboratory test equipment for interested states DOTs

Progress this Quarter (includes meetings, work plan status, contract status, significant progress, etc.):

Phase 1:

Conducted the binder testing equipment demonstration on February 7-9, 2011. Representatives from Anton Paar, Applied Test Systems, Brookfield, Canon Instruments, Malvern, Prentex, and TA instruments were present. The technical committee for the project evaluated the equipment and made purchasing recommendations. Requests for quotations from the selected vendors were made for the DSR, BBR, PAV and Vacuum Degassing Ovens. The BBR, PAV and Vacuum Degassing quotations were accepted. The DSR process was halted by the University Purchasing Department and was required to go for a full proposal from the vendors.

Anticipated work next quarter:

Phase 1:

Obtain pricing for the Rolling Thin Film Oven, Brookfield Rotational Viscometer, and the Asphalt Binder Cracking Device. Also, the documentation will be prepared for the DSR request for proposals.

Begin process to purchase purchasing equipment based upon pricing that has been received.

Circumstance affecting project or budget (Describe any challenges encountered or anticipated that might affect the completion of the project within the time, scope, and fiscal constraints set forth in the agreement, along with recommended solutions to those problems).				
There have been delays in the transferring of funds through the pooled fund system and then getting them to UConn so we can conduct the purchasing.				

Significant Results:

None.