RANSPORTATION 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.

Quarter 1 (January 1 – March 31) Quarter 2 (April 1 – June 30) Quarter 3 (July 1 – September 30) Quarter 4 (October 1 – December 31)	Transportation Pooled Fund Program Proje	ect #	Transportation Pooled Fund Program - Report Period:		
Quarter 3 (July 1 – September 30) Quarter 4 (October 1 – December 31) Project Title: Demonstration and Purchase of PG Binder Testing Equipment Project Manager: James A. Fallon Phone: 860-594-2975 Project Investigator: James M. Mahoney Phone: 860.486.9299 E-mail: james.mahoney@uconn.edu Lead Agency Project ID: TPF-5(236) Original Project End Date: June 30, 2012 Project schedule status: Project September 30) Quarter 3 (July 1 – September 30) Quarter 3 (July 1 – September 30) Quarter 3 (July 1 – September 30) Quarter 4 (October 1 – December 31)	TPF – 5(236)		X Quarter 1 (January 1 – March 31)		
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☐ On schedule ☐ On revised schedule ☐ Ahead of schedule	Project schedule status: ☐ On schedule ☐ On revised schedule	ule □	Ahead of schedule	${\sf X}$ Behind schedule	

Overall Project Statistics:

Total Project Budget	Total Cost to Date for Project	Total Percentage of Work Completed
Contract Amount: \$757,164 Commitments Received: \$443,430 Phase 1 – Under Contract to UConn: \$42,263 Phase 2 – Under Contract to UConn: \$714,901	\$60,107	70%

Quarterly Project Statistics:

Total Project Expenses	Total Amount of Funds	Percentage of Work Completed
This Quarter	Expended This Quarter	This Quarter
\$39,452	\$39,452	25%

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:

- Funding from five States has been made available to UConn for purchasing equipment (CT, ME, NH, NY, VT).
 Funds have been received by ConnDOT from Massachusetts and Rhode Island. These funds are being moved internally through ConnDOT to make them available for purchases as soon as possible.
- 2. Purchase Orders are in place for the Dynamic Shear Rheometer, Bending Beam Rheometer, Vacuum Degassing Oven, Pressure Aging Vessel and Rolling Thin Film Oven.

Phase 2:

1. Some of the equipment has begun to arrive at the various state DOTs and is expected to continue into next guarter.

Anticipated work next quarter:

Phase 1:

- 1. Request a no-cost time extension for this project and prepare necessary documents to accomplish this.
- 2. Continue to work with states to get their funding in place for Phase 2. Establish pricing for Rotational Viscometers and the Asphalt Binder Cracking device. Release Purchase Orders as additional funding becomes available from Massachusetts and Rhode Island.

Phase 2:

1. Continue purchasing and processing payments upon receipt of the equipment based upon pricing that has been received.

Significant Results:

It may appear that there is a significant amount of funding that has not been expended, but the purchase orders have been issued for most of the equipment purchases and the vast majority of the unexpended funds were used to issue the purchase orders.

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).

A complaint by one of the DSR manufacturers regarding the bidding process has delayed the DSR evaluation process. 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. These have resulted in a request for a no-cost time extension for this project.