TRANSPORTATION POOLED FUND PROGRAM
QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT): Federal Highway Administration (FHWA)

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 # *(i.e, SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX)*	**Transportation Pooled Fund Program - Report Period:**
TPF-5(178)	☑ Quarter 1 (January 1 – March 31) ☐ Quarter 2 (April 1 – June 30) ☐ Quarter 3 (July 1 – September 30) ☐ Quarter 4 (October 1 – December 31) Year: 2013

Project Title:
Implementation of the Asphalt Mixture Performance Tester (AMPT) for Superpave Validation

Name of Project Manager(s):	**Phone Number:**	**E-Mail**
Jeff Withee	202-366-6429	jeff.withee@dot.gov
Lead Agency Project ID:	**Other Project ID (i.e., contract #):**	**Project Start Date:**
		September 2008
Original Project End Date:	**Current Project End Date:**	**Number of Extensions:**
September 2011	December 2013	

Project schedule status:

☐ On schedule ☑ On revised schedule ☐ Ahead of schedule ☐ Behind schedule

Overall Project Statistics:

Total Project Budget	Total Cost to Date for Project	Percentage of Work Completed to Date
$3,456,090	$2,488,698	72%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
0%	$0	86%

Project Description:

This pooled fund study is open to any highway agency interested in using simple performance tests to aid in material characterization for design and analysis of flexible pavements. The objectives of this pooled fund study are to:

1) Nationally procure the AMPT for highway agencies interested in obtaining and using the AMPT to characterize asphalt mixtures designed using Superpave technology

2) Provide support in training technicians to use the AMPT to perform the proposed standard practices for measuring dynamic modulus, flow number, and flow time of asphalt mixtures compacted using the Superpave Gyratory Compactor (SGC)

3) Advance the nation-wide implementation and use of the AMPT for assessing performance of asphalt mixtures over a wide range of climatic conditions, materials, and structures.

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

- Work on the implementation phase activities continued through a cooperative agreement between FHWA and the National Center for Asphalt Technology.

+ Dynamic Modulus and Flow Number Interlaboratory Study: Participating labs worked on specimen preparations and testing. Overall 19 labs submitted their test results to NCAT to date. Additional labs are still working to complete the study.

+ MEPDG Input Parameters: The synthesis report titled "Use of AMPT for Characterizing Asphalt Material Inputs for Pavement ME Design Implementation" was completed.

- FHWA published a TechBrief on the Asphalt Mixture Performance Tester explaining it basic operations and common uses of the test data. The TechBrief may be useful in educating new staff about the AMPT as well as informing other agency staff about the benefits of AMPT implementation.

Anticipated work next quarter:

- The setup and installation of the Puerto Rico AMPT is still pending.

- Work on the implementation support activities will continue with the National Center for Asphalt Technology. Details for the next quarter are listed after each activity.

+ Dynamic Modulus and Flow Number Interlaboratory Study: Labs which have not yet submitted results will continue working on the interlaboratory study and submit their results to NCAT. NCAT will evaluate the results submitted to date and develop a preliminary results presentation.

+ MEPDG Input Parameters: The distribution and posting of this report will be this next quarter.

+ AMPT Western Workshop: Planning for a workshop targeting western states, where there is currently limited AMPT implementation, and to consider a western AMPT user group of pooled fund states and other agencies will be ongoing.

+ Friction Reducer Study: Efforts are planned to conduct a small study on the potential for spray silicone to improve the consistency and reduce the effort in fabrication of greased latex friction reducers.

- Work plan develop will be underway for implementation support activities on AMPT fatigue testing and specimen preparation including air voids content. These activities are in response to support needs identified at the AMPT National Workshop held in September 2012.

Significant Results:

- A total of 57 technicians and engineers from pooled fund participating agencies and 82 overall have been trained on the Asphalt Mixture Performance Tester through NHI Course # 131118.

- Twenty-four (24) AMPTs have been ordered, delivered, and installed for pooled fund participant agencies. In addition, one AMPT has been delivered and is pending installation.

- The National Pooled-Fund Workshop on the AMPT brought together over 70 members of the AMPT user community representing state DOTs, consultants, equipment vendors, universities, and FHWA to share best practices and identify future AMPT implementation needs.

- A synthesis report titled "Use of AMPT for Characterizing Asphalt Material Inputs for Pavement ME Design Implementation" was completed to document best practices.

Circumstance affecting project or budget. (Please 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).

Potential Implementation:

The AMPT evaluates asphalt mixture properties to assess potential performance. Transportation agencies can use the AMPT to: develop inputs for the structural design of flexible pavements, evaluate new asphalt mixtures including warm mix asphalt (WMA), high reclaimed asphalt pavement (RAP) mixes, and recycled asphalt shingles (RAS) mixes, and obtain information helpful in monitoring asphalt mixes and performing quality assurance.