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: 2012

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
5%	$185,100	77%

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.):

- AMPTs for Puerto Rico and Colorado were delivered and the AMPT for Ontario was installed. AMPTs for Pennsylvania and Virginia were ordered, which represent the final two units based on current pooled fund participation.

- 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: The study plan was finalized and presented at the AMPT National Workshop.

+ AMPT National Workshop: This workshop was held on September 11-12, 2012 in Atlanta, GA. Speakers covered topics including: the need for performance testing, development of the AMPT, testing best practices, uses of AMPT data, state DOT experiences, and fatigue testing. In addition there were round table discussion sessions for AMPT users to share their experiences and discuss future implementation support needs. Registration was open to anyone interested in asphalt mixture performance testing and there were over 70 attendees, including 45 state DOT representatives from 22 agencies.

+ MEPDG Input Parameters: Work proceeded on the synthesis report with a working title of "Use of the AMPT for Characterizing Asphalt Material Inputs for MEPDG Implementation."

Anticipated work next quarter:

- The delivery and installation of the Pennsylvania and Virginia AMPTs as well as the setup and installation of the Puerto Rico AMPT are expected to be completed.

- 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: NCAT will identify an asphalt mixture for sampling in the fall of 2012. NCAT will perform preliminary testing of the basic mixture properties and distribute those results along with detailed testing instructions to all participants.

+ AMPT National Workshop: Presentations and a write-up of discussions and recommended future AMPT implementation activities will completed and distributed to all workshop and pooled fund participants.

+ MEPDG Input Parameters: Work will continue on the synthesis report.

Significant Results:

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

- Twenty-two (22) AMPTs have been ordered, delivered, and installed for pooled fund participant agencies. In addition, one AMPT is pending installation and two AMPTs have been ordered for future delivery.

- 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.

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).

- The discussion and feedback gathered during the round table sessions at the AMPT National Workshop in September 2012 will be used to establish specific activities to continue AMPT implementation. Those activities will then be programmed considering the pooled fund project's scope, schedule, and budget.

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) and high reclaimed asphalt pavement (RAP) mixes, and obtain information helpful in monitoring asphalt mixes and performing quality assurance.