

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>(i.e., SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX))</i> <p style="text-align: center;">TPF-5(178)</p>	Transportation Pooled Fund Program - Report Period: <input type="checkbox"/> Quarter 1 (January 1 – March 31) <input checked="" type="checkbox"/> Quarter 2 (April 1 – June 30) Year: 2013 <input type="checkbox"/> Quarter 3 (July 1 – September 30) <input type="checkbox"/> Quarter 4 (October 1 – December 31)	
Project Title: <p style="text-align: center;">Implementation of the Asphalt Mixture Performance Tester (AMPT) for Superpave Validation</p>		
Name of Project Manager(s): <p style="text-align: center;">Jeff Withee</p>	Phone Number: <p style="text-align: center;">202-366-6429</p>	E-Mail <p style="text-align: center;">jeff.withee@dot.gov</p>
Lead Agency Project ID:	Other Project ID (i.e., contract #):	Project Start Date: <p style="text-align: center;">September 2008</p>
Original Project End Date: <p style="text-align: center;">September 2011</p>	Current Project End Date: <p style="text-align: center;">December 2013</p>	Number of Extensions:

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	91%

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 Gyrotory 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 completing their testing and submitting results. A preliminary results webinar was held May 22, 2013 based on the 19 labs submitting their test results at that time. A final deadline for results submission was set as July 12, 2013.

+ MEPDG Input Parameters: The synthesis report titled "Use of AMPT for Characterizing Asphalt Material Inputs for Pavement ME Design Implementation" was distributed to participant agencies and is posted on the NCAT website at: <http://www.eng.auburn.edu/research/centers/ncat/files/reports/2013/rep13-04.pdf>

+ 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 is on-going. The workshop is planned for September 24-25 in Carson City, Nevada.

Anticipated work next quarter:

- 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 analyze the submitted results and develop a final report.
 - + AMPT Western Workshop: Planning for the workshop is continuing.
 - + 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 development will continue 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.
- Two additional AMPT equipment orders (VA and WV) will continue through the procurement process.

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.