

TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Date: _____ 7-3-2017 _____

Lead Agency (FHWA or State DOT): _____ Indiana DOT _____

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> TPF-5(021)	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) <input type="checkbox"/> Quarter 3 (July 1 – September 30) <input type="checkbox"/> Quarter 4 (October 1 – December 31)	
Project Title: North Central Superpave Center Base Funding		
Name of Project Manager(s): Tommy Nantung	Phone Number: 765/463-2532 x 248	E-Mail: tnantung@indot.in.gov
Lead Agency Project ID: TPF-5(021)	Other Project ID (i.e., contract #):	Project Start Date: October 1, 2002
Original Project End Date:	Current Project End Date:	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
Continuing		Continuing

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date

Project Description:

The North Central Superpave Center began on July 1, 1995, as one of five regional centers established to assist the states/provinces and industry in the region with the implementation of the Superpave mix design system for hot mix asphalt. The role of the NCSC has evolved to include all general hot mix asphalt issues as states in the region have adopted Superpave. The Center is administered through the Joint Transportation Research Program at Purdue University and is guided by a Steering Committee consisting of representatives of the agencies and industry in the participating states.

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

Progress will be reported in terms of the major activities planned for this project as established by the Steering Committee.

Training: Training will be developed and provided to participating states and other groups upon request.

Communication: Information requests are processed as they arrive; about 20-25 per month are received. The server for the NCSC website and hosted sites (Multi-Regional Training and Certification Group (M-TRAC) and Combined State Binder Group (CSBG) was somehow "compromised" so the sites need to be migrated to another server. NCSC staff is working with the site developer to migrate the sites and get access to the folders so they can be updated as needed. Currently the M-TRAC site is back up but problems with the other sites are still being worked on. Published reports have now been downloaded from the Joint Transportation Research Program website over 9500 times.

Third Party Lab and Testing Services: Work continued on proficiency testing and maintenance of AMRL accreditation records. An internal lab audit was completed at the end of July.

Research:

Work continued on the study *Tack Coat Installation Performance Guidelines*. Attempts to schedule a Study Advisory Committee (SAC) meeting this quarter proved unsuccessful so the SAC meeting is scheduled for early July; Adding some new test sections from contracts let last quarter that will use additional materials/methods (hot applied asphalt cement and a spray paver) for bonding the layers will be discussed with the SAC at that time.

Testing continued on an industry-supported project on *Determining the Fiber Content in Crack Sealing*. A presentation on the proposed method was given to the ASTM Subcommittee on Formed In-Place Sealants and Cracks in Pavements. The subcommittee expressed interest in seeing more results and will consider adopting the test as a new ASTM standard.

Work continued on *Development of a Friction Performance Test for Compacted Asphalt Mixtures*. Proof of concept testing is underway and looks promising. A Study Advisory Committee meeting will be held in early July.

Testing of RAP samples for *Investigation of Delta T_c for Implementation in Indiana* is underway along with a comprehensive literature review. Seven virgin binders have been tested after 20-hr and 40-hr PAV aging. One source of shingles has been obtained for testing. A Study Advisory Committee meeting is scheduled for early July to get input on which blends to continue testing.

Survey responses are being analyzed and the literature review is continuing for *Best Practices for Patching Composite Pavements*. A SAC meeting will be held in early July.

Technology Transfer: The Technical Director participated in the TRB workshop on implementation of Warm Mix Asphalt and why some states are lagging behind in May 2017. She attended the FHWA Asphalt Mix and Binder Expert Task Group meetings in May as well. She also participated in the ASTM Road and Paving Material committee week as Vice Chair.

Anticipated work next quarter:

Training: No training is currently planned but will be developed and provided upon request.

Communication: Updates to the NCSC and NCAUPG websites will be posted. Information requests will be answered as received.

Third Party Lab and Testing Services: Third party testing will be performed as needed. Work will continue on maintaining the AMRL accreditation. The NCSC staff is awaiting the establishment of a recharge center for billing this type of testing; it is hoped that this will be ready next quarter. The staff also received training on a new lab scheduling and billing system called iLab that is being rolled out at Purdue; this is now live for the NCSC.

Research: Work will continue as planned on the research projects. New research needs will be identified and proposals prepared as appropriate. A proposal will be written for a new study on actual pavement service lives in Indiana.

Technology Transfer: The NCSC staff will attempt to schedule state visits throughout the region to learn of their top issues regarding asphalt mixtures and pavements and to reacquaint DOT staff with the Superpave Center and its resources. Based on the findings, proposals for pooled fund research and/or funding requests will be developed. A third regional forum will be scheduled.

Significant Results:

Readership reports for the published research reports show that they have been downloaded over 9500 times.

An increase in third party testing requests demonstrates the value of AMRL accreditation of the lab and represents an increasing funding source.

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).

Delays in getting access to the folders for our websites have hampered updating the sites but are beyond our control; we hope to gain access early in the next quarter. Delays in getting the recharge center established have slowed billing for testing work completed in the last two years, which is inconvenient for our customers.

Potential Implementation:

Research results are considered individually for possible implementation by the states as they become available. There is great interest across the country in the study on optimizing compaction and on past recycling research, which is leading to numerous speaking engagements, which serve to spread the results to a broader audience. INDOT is constructing another trial of so-called Superpave5 based on a completed project and is pursuing reinstating an asphalt warranty program based on results of another.