

TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Date: _____ 1-8-2015 _____

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 type="checkbox"/> Quarter 2 (April 1 – June 30) <input checked="" 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 is reported below in terms of the major areas of activity as directed/approved by the Steering Committee.

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: No training was planned for this quarter. 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. Updates to the website and hosted sites (Multi-Regional Training and Certification Group (M-TRAC) and Combined State Binder Group (CSBG) were also posted. A survey was sent to state steering committee members to determine the most pressing asphalt-related issues facing the region. Published reports have now been downloaded from the Joint Transportation Research Program website over 5000 times.

Third Party Lab and Testing Services: Work continued on proficiency testing and maintenance of AMRL accreditation records. Testing of one potential new aggregate source was completed after repairs to the dynamic friction tester (DFT). Plans were made to perform DFT testing for CalTrans next quarter under a subcontract with Fugro Consultants. The NCSC agreed to perform binder testing for the Illinois DOT when samples are received in the next quarter or after the beginning of 2015.

Research: Work continued on the project entitled *Optimizing Laboratory Mixture Design as it Relates to Field Compaction in Order to Improve Hot-Mix Asphalt Durability*, including testing of materials from a field test section. A three-month time extension was approved to allow more time for testing of field samples caused by equipment problems. The possibility of constructing a second field test section is being explored.

The final report on NCHRP Synthesis 44-04 on *Pavement Patching Practices* was published by NCHRP this quarter. The PI will participate in a TRB webinar on this topic in 2015.

A second NCHRP Synthesis study, 45-15, *Fiber Additives in Asphalt Mixtures*, is underway. The first draft of the report was reviewed and a panel meeting was held in late July. The second draft will be submitted next quarter and, following review, the final manuscript will be submitted by the end of the year.

Work continued on a study for INDOT entitled *Analysis of the MSCR Asphalt Binder Test and Specifications for Use in Indiana*. Eight binders have been tested to date and previously collected data from Indiana DOT has been analyzed. Additional testing recommended during a Study Advisory Committee meeting in May is underway.

A new study on *Performance of Warranted Asphalt Pavements* was approved by INDOT last quarter and some work was done, but lack of a student to work on the project has not allowed significant progress to occur. A visiting scholar assisted with data collection and analysis this quarter.

NCSC staff had joined a team proposing an innovative power source for transportation for possible NSF funding. The proposal was submitted last quarter and results are pending.

Technology Transfer: Work is underway to plan the next meeting of the North Central Asphalt User Producer Group, to be held in Illinois in February. The technical director participated in a meeting of the TRB Design and Construction Group.

Anticipated work next quarter:

Training: No training is currently planned.

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 and as described above. Work will continue on maintaining the AMRL accreditation.

Research: Work will continue as planned on the research projects. New research needs will be identified and proposals prepared as appropriate.

Technology Transfer: The NCSC staff will explore the possibility of scheduling state visits with states in 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

Significant Results:

Readership reports for the published research reports show that they have been downloaded over 5000 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).

No problems this quarter other than lack of an interested graduate student to work on the new Warranty project.

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. The NCHRP synthesis on Pavement Patching Practices is already generating interest and should serve an important need.