# TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Date:7-10-2014	<del></del>			
Lead Agency (FHWA or State DOT):	Indiana	DOT		
INSTRUCTIONS: Project Managers and/or research project inve- quarter during which the projects are active. It each task that is defined in the proposal; a pet the current status, including accomplishments during this period.	Please provide rcentage comp	a project schedule stat pletion of each task; a co	us of the research activities tied to oncise discussion (2 or 3 sentences) of	
Transportation Pooled Fund Program Project # (i.e, SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX)  TPF-5(021)		Transportation Pooled Fund Program - Report Period:		
		□Quarter 1 (January 1 – March 31)		
		☑Quarter 2 (April 1 – June 30) ☐Quarter 3 (July 1 – September 30)		
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		□ Quarter 4 (October	uarter 4 (October 1 – December 31)	
Project Title: North Central Superpave Center Base Fundin	g	L		
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: Curr		ject End Date:	Number of Extensions:	
Project schedule status:  ☑ On schedule ☐ On revised sched  Overall Project Statistics:	ule 🗆	Ahead of schedule	☐ Behind schedule	
Total Project Budget	Total Cos	t to Date for Project	Percentage of Work	
Continuing			Completed to Date Continuing	
			Somming	
Quarterly Project Statistics:				
•		ount of Funds d 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.

<u>Training</u>: No training was planned for this quarter. Training will be developed and provided to participating states and other groups upon request..

<u>Communication</u>: The publication of the next joint newsletter has been delayed because of continuing personal commitments of the main contact with the Southeast Superpave Center. 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 Certifica Group (M-TRAC) and Combined State Binder Group (CSBG) were also posted. Plans are being made to visit the states in the region to learn what their biggest asphalt issues are and to explore how the NCSC could help.

<u>Third Party Lab and Testing Services</u>: Work continued on proficiency testing and maintenance of AMRL accreditation records. Testing of one potential new aggregate source this quarter has been delayed by problems with the dynamic friction tester (DFT). The equipment repairs are expected to be completed in early July. Samples of RAP and of four mixtures containing RAP were characterized this quarter. Binder samples were received and tested for a contractor.

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. Equipment problems have caused delays in tested field materials, so a short, three-month extension has been requested to allow time for more testing and short-term monitoring of the field test section.

The final report on NCHRP Synthesis 44-04 on *Pavement Patching Practices*, is in the publication process and will be published by NCHRP this quarter.

A second NCHRP Synthesis study, 45-15, *Fiber Additives in Asphalt Mixtures*, is underway. The first draft of the report is review; a panel meeting will be held in late July.

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. A Study Advisory Committee meeting was held in May and plans were laid for additional testing. Additional binders and Aggregates have been requested. Binder and mixture testing will begin as soon as the materials are available.

A new study on *Performance of Warranted Asphalt Pavements* was approved by INDOT and some work has been done, but lack of a student to work on the project has not allowed significant progress to occur. A visiting scholar will assist beginning in July and a student will begin in August.

NCSC staff had joined a team proposing an innovative power source for transportation for possible NSF funding. The proposal was submitted this quarter.

<u>Technology Transfer</u>: Work is underway to plan the next meeting of the North Central Asphalt User Producer Group, to be held in Illinois in December. The technical director participated in meetings of TRB Committee AFK10, General Issues in Asphalt Technology, as a member and chair of the TRB Asphalt Section, chaired the meeting of the Long Term Pavement Performance Committee Special Activities ETG (LSPEC), served as LSPEC liaison to the Long Term Pavement Performance Committee, and participated in meetings of ASTM D04 Road and Paving Materials Subcommittees as vice chair.

#### 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. The newsletter will be published electronically.

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 continue to 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 For information-gathering efforts will be prepared.

## **Significant Results:**

Readership reports for the published research reports show that they have been downloaded over 4000 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 getting newsletter articles from contributors and 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.