TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Date:10-29-2015				
Lead Agency (FHWA or State DOT):	Indiana	DOT		
INSTRUCTIONS: Project Managers and/or research project invegoranter during which the projects are active. It each task that is defined in the proposal; a pethe 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)		Transportation Pooled Fund Program - Report Period:		
		□Quarter 1 (January 1 – March 31)		
TPF-5(021)		□Quarter 2 (April 1 – June 30)		
		⊠Quarter 3 (July 1 –	1 – September 30)	
		□Quarter 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:	Current Project 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 Cost to Date for		t to Date for Project	Percentage of Work	
Continuing	•		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.

<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>: 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. Published reports have now been downloaded from the Joint Transportation Research Program website over 7000 times.

<u>Third Party Lab and Testing Services</u>: Work continued on proficiency testing and maintenance of AMRL accreditation records; the next lab inspection will be early next quarter.

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.* Testing has been completed and the draft final report is under internal review before sending to the Study Advisory Committee early next quarter. The technical director has been invited to Kansas to report on this research in December.

Work continued on a study for INDOT entitled *Analysis of the MSCR Asphalt Binder Test and Specifications for Use in Indiana*. A total of 14 binders had been tested and previously collected data from Indiana DOT had been analyzed. Mixture samples have been fabricated and tested using five binders. Two additional binders were requested from Missouri based on recommendations from the Study Advisory Committee; the first was received mid-quarter and testing began immediately. The second, however, was not received by the end of September, because of equipment problems at the blending facility. Testing will be performed as soon as the binder is received and results will be incorporated into the draft final report. This may result in a short (three to four week) delay in the draft final report.

Work neared completion on the study *Performance of Warranted Asphalt Pavements*. Existing INDOT data was collected from the central office and research division. The draft final report has been prepared and is being reviewed internally prior to sending to the Study Advisory Committee. A TRB paper based on the analysis has also been submitted.

Work continued on the study *Tack Coat Installation Performance Guidelines*. A masters student has been preparing the literature review and review of other states' specifications. Attempts to obtain cores from existing milled asphalt and concrete pavements for lab testing have so far been unsuccessful, so the research team is trying to collect intermediate and surface mixes for lab testing. We will again attempt to get cores of milled surfaces for testing in the Spring. The experimental design will reflect the use of lab-compacted specimens instead of cores and will be sent to the Study Advisory Committee next guarter.

<u>Technology Transfer</u>: Planning is underway for the next meeting North Central Asphalt User Producer Group and NCSC Steering Committee in 2016, which will be held immediately following the annual meeting of the Association of Asphalt Paving Technologists. The NCSC hosted the first regional forum to discuss cracking of asphalt pavements; this is a new Initiative to use telephone conference calls and/or web meetings to facilitate an exchange of information between the states and industry on issues of regional concern.

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. Work will continue on maintaining AMRL accreditation and the inspection will be performed.

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 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 second regional forum will be hosted to facilitate the exchange of information and concerns between states and industry in the region.

Significant Results:

Readership reports for the published research reports show that they have been downloaded over 7000 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 major new problems this quarter. There is a delay in obtaining more binder for the MSCR study, but it is not expected to be of long duration, so should be recoverable.

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 Fiber Additives addresses a current need since fibers are again being marketed to states and interest in their use is growing.