

TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Date: _____ 4-29-2015 _____

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 checked="" type="checkbox"/> Quarter 1 (January 1 – March 31) <input 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: 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. Published reports have now been downloaded from the Joint Transportation Research Program website over 6000 times.

Third Party Lab and Testing Services: Work continued on proficiency testing and maintenance of AMRL accreditation Records; the next lab inspection will be this summer. RAP binder was extracted and tested for a contractor in Vermont. DFT testing for the Indiana Local Technical Assistance Program will be conducted early next quarter. Binder testing for the Illinois DOT was completed.

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. The second field project was not constructed as early as anticipated, so samples were not available when planned; the samples were not available until mid- to late December, Therefore, the work is slightly behind schedule and a short extension will be requested.

The PI will participate in a TRB webinar on NCHRP Synthesis 44-04 on *Pavement Patching Practices* on April 1, 2015.

A second NCHRP Synthesis study, 45-15, *Fiber Additives in Asphalt Mixtures*, was published this quarter. The PI achieved a 96% response rate from the states.

Work continued on a study for INDOT entitled *Analysis of the MSCR Asphalt Binder Test and Specifications for Use in Indiana*. A total of 13 binders have been tested to date and previously collected data from Indiana DOT has been analyzed. Mixture samples have been fabricated from four binders and testing is underway. Additional binders will be used in producing and testing more mixtures based on recommendations from the Study Advisory Committee meeting in November. Equipment problems resulted in a short delay in testing.

A new study on *Performance of Warranted Asphalt Pavements* is underway. Existing INDOT data has been collected from the central office and analysis is underway. The draft report will be prepared early next quarter.

A new project entitled *Tack Coat Installation Performance Guidelines* was initiated on January 1, 2015. A masters student been recruited to begin working on the project in June. In the meantime, the PI is gathering information.

The NCSC director and technical director participated in the INDOT Focus Group identifying research needs in the Pavement and Materials area.

Technology Transfer: The North Central Asphalt User Producer Group and NCSC Steering Committee met in February in conjunction with the Illinois Bituminous Conference. Planning is underway for the next meeting in 2016. Based on discussions with Steering Committee, the NCSC will begin hosting periodic web meetings for state and industry members and other interested representatives to discuss issues of regional concern; the first is being planned for next quarter. The technical director participated in the meeting of the Association of Asphalt Paving Technologists. In addition to the patching webinar mentioned above, the technical director gave media interviews on potholes to reporters from Indiana and Pennsylvania.

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 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. Regional web meetings 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 6000 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).

The delay in finding interested graduate students to work on the Warranty and Tack Coat projects has slowed progress on those projects but should be recoverable. A delay in the construction of the second field trial for the Optimizing Compaction study meant the originally planned testing schedule could not be met. Equipment problems caused a short Delay in testing for the MSCR study but the equipment has been repaired and testing resumed.

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 generated interest and should serve an important need.