

TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Date: _____ 2-1-2012 _____

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 type="checkbox"/> Quarter 3 (July 1 – September 30) <input checked="" 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: Continuing	Current Project End Date: Not applicable	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	\$1,675,000	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
\$25,000, 25%	\$25,000	50%

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 formal training was planned for this quarter. Discussions are beginning regarding possible training for the Wisconsin DOT.

Communication: Routine updates were made to the NCSC website. Approximately 30 requests for information on a variety of topics from around the region and beyond were received and responded to via phone and email. Attempts were made to initiate publication of a new issue of the joint newsletter but confusion over the contract status with Auburn University prevented further development; resolving this confusion and publishing a newsletter is planned for early next quarter.

Third Party Lab and Testing Services: Forensic friction testing was completed this quarter for the Pennsylvania DOT under a contract with a consultant to PennDOT and a draft final report was emailed. Indirect tensile strength and compliance testing of asphalt mixtures for FHWA was also completed and a report submitted. Samples were received for performing friction testing of various microsurfacing materials for a material supplier.

Research: Work continued on projects entitled "Optimizing Laboratory Mixture Design as it Relates to Field Compaction in Order to Improve Hot-Mix Asphalt Durability" and "Investigating the Feasibility of Integrating Pavement Friction and Texture Depth Data in Modeling for INDOT Pavement Management System." The draft final report on "Maximizing the Use of Local Materials in HMA" was almost completed and will be submitted early next quarter. Additional testing needed to address Study Advisory Committee comments on "Risk Management of Low Void Content Asphalt Mixtures" was initiated but problems developed that delayed completion; a request for a no-cost time extension was submitted to the SAC. Testing and the draft final report for "Evaluation of Recycled Asphalt Pavement for Surface Mixtures" were completed and the report has been submitted. Copyright permissions have been obtained for materials quoted in the final report on the NCHRP project "Superpave: Anatomy of a Research Program" and editors questions have been addressed; final report should be published by NCHRP next quarter. The final report on "Investigation of Low and High Temperature Properties of Plant-Produced RAP Mixtures, Phase II" was accepted and published by FHWA this quarter. A technical paper based on the RAP study was accepted by the Association of Asphalt Paving Technologists this quarter and will be presented at their meeting in Austin in April 2012 with publication to follow. The Task 1 report on *Hot Mix Asphalt Surface Characteristics Related to Ride, Texture, Friction, Noise and Durability* was prepared and submitted to the Minnesota DOT this quarter. The NCSC participated in developing a proposal in response to an RFP on Warm Mix Asphalt for NCHRP and for a University Transportation Research Center.

Technology Transfer: Work continued on planning and promoting the 2012 North Central Asphalt User Producer Group (NCAUPG) Annual Technical Conference, which will be held in Indianapolis April 15-16. Presentations were made to the equivalent of a national asphalt user producer group in Warsaw in November and to the Senior Design class at Purdue. Technical presentations were prepared for presentation to the Kansas Asphalt Forum but the Technical Director was not able to attend the meeting due to a delayed flight; the presentations were sent via email for a KDOT employee to present and the technical director offered to provide a web conference. Two papers based on Quiet Pavements research for the FHWA were accepted for presentation at TRB, and one was selected as the Harter Rupert Best Paper on Transportation Noise. The Technical Director organized and presided over a symposium on Sustainable Asphalt Technologies at ASTM in December.

Anticipated work next quarter:

Training needs will be discussed with the Steering Committee and Wisconsin Asphalt Pavement Association.

Communication: The contract status will be resolved with Auburn and a newsletter will be initiated.

Third Party Lab and Testing Services: Third party testing will be completed on the microsurfacing and other testing will be performed as needed.

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 facilitate and put on the NCAUPG Annual Asphalt Technical Conference. Presentations will be made at TRB, the Purdue Senior Design class, the Indiana Mineral Aggregates Association Winter Workshops and the NCAUPG.

Significant Results:

The draft final report on "Evaluation of Recycled Asphalt Pavement for Surface Mixtures" suggested that INDOT could consider increasing the allowable RAP content to 20% on Category 3 and 4 roadways. INDOT could consider higher RAP contents if further field monitoring results are favorable and for specific cases where the contractors offer to mill high quality surfaces, such as steel slag mixtures, separately so that the aggregate frictional properties are known.

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).

A small staff and difficulties in finding qualified graduate students interested in asphalt make completion of some of the work quite challenging.

Potential Implementation:

Research results are considered individually for possible implementation by the states as they become available. The results of the FHWA RAP study have already generated a lot of interest, and this is expected to increase after presentation of the findings at the NCAUPG Technical Conference and Association of Asphalt Paving Technologists Annual Meeting.