

TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Date: _____ 11-15-2013 _____

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: Continuing study	Current Project End Date: Continuing study	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. The NCSC and Indiana DOT hosted the annual meeting of the Multi-Regional Training and Certification Group (M-TRAC) in Indianapolis in July.

Communication: The next joint newsletter with the Southeast Superpave Center was planned out this quarter; requested articles are due December 1 and the newsletter will be published electronically next quarter. Information requests are processed as they arrive; about 20-25 per month are received. Routine updates to the website were also posted.

Third Party Lab and Testing Services: Work continued on proficiency testing and maintenance of AMRL accreditation records. The on-site inspection was completed in September. After participating in a round robin at NCAT in July, staff learned that our dynamic friction tester and circular track meter needed service and calibration, so the equipment was delivered to a service technician in Chicago. As soon as the equipment is returned, testing will begin on a thermoplastic pavement marking material and a potential new aggregate source. The NCSC was contacted by the Michigan DOT about performing bond testing of a tack coat; work is underway to fabricate a testing jig and the testing will be performed next quarter.

Research: Work continued on projects 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. Preparation of the draft final report is underway and will be completed early next quarter. A paper was prepared for submission to AAPT. The draft final report for *Risk Management of Low Void Content Asphalt Mixtures* was reviewed by the Study Advisory Committee, the comments were addressed and the report was published this quarter. The Task 4 report for *Hot Mix Asphalt Surface Characteristics Related to Ride, Texture, Friction, Noise and Durability* was revised after a conference call with the Minnesota DOT to discuss a previous draft. The revised report will be submitted next quarter. Work began on the Task 5 draft final report for the entire project. Work on NCHRP Synthesis 44-04 on *Pavement Patching Practices* was completed and the draft prepared for submission. The report will be published by NCHRP by around the end of the year. A new proposal was submitted and approved in August on a study for INDOT entitled *Analysis of the MSCR Asphalt Binder Test and Specifications for Use in Indiana*. Work began in September. A proposal was submitted and accepted to perform an NCHRP synthesis on Fiber Additives in Asphalt Mixtures; a conference call was held with the panel and work will begin on the project November 1. A new proposal on pavement warranty specifications will be present INDOT next quarter. Proposals were submitted for a project on high binder replacement and for advancing innovative asp technologies, but were not awarded.

Technology Transfer: Work is underway on planning the 2014 North Central Asphalt User Producer Group (NCAUPG) Annual Technical Conference. The technical director made presentations at the M-TRAC meeting and to the Asphalt Pavement Association of Indiana. She also addressed a class of Civil Engineering undergraduates as part of a panel describing what civil engineers do.

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 joint 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. The new dynamic shear rheometer needed for the MSCR study will be installed and staff will be trained. The graduate student assigned to the project will attend training at the Asphalt Institute.

Technology Transfer: The Technical Director will chair the next meeting of the Long Term Pavement Performance (LTPP) Committee on Special Activities and participate in the meeting of the LTPP Oversight Committee. She will also participate in the meeting of the Board of the Association of Asphalt Paving Technologists (as immediate past president) and ASTM D04 Road and Paving Materials (as vice chair). She will make invited presentations at the Arizona Pavement Materials Conference and the Missouri Asphalt Paving Conference.

Significant Results:

Readership reports for the published research reports show that they have been downloaded nearly 3000 times.

A response rate of 96% was achieved for the survey on Pavement Patching Practices.

The field trial for the optimizing compaction study showed that achieving the required density in the field could be accomplished with no additional compaction equipment nor any changes in the compaction process.

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.

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.