TRANSPORTATION POOLED FUND PROGRAM
QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT): Wisconsin 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.e, SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX)* TPF-5(302)	**Transportation Pooled Fund Program - Report Period:** ☑ Quarter 1 (January 1 – March 31) ☐ Quarter 2 (April 1 – June 30) ☐ Quarter 3 (July 1 – September 30) ☐ Quarter 4 (October 1 – December 31)	
Project Title: Modified Binder (PG+) Specification and Quality Control Criteria		
Name of Project Manager(s): Barry Paye	**Phone Number:** (608)246-7945	**E-Mail** barry.paye@dot.wi.gov
Lead Agency Project ID: 0092-14-20	**Other Project ID (i.e., contract #):**	**Project Start Date:** 9/30/2014
Original Project End Date: 9/30/2015	**Current Project End Date:** 9/30/2015	**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
$195,686.00	$30,004.11	35%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
$20,031.63 10%	$20,031.63	30%

Project Description:

The intent of this project is to provide essential information to five partner state agencies (Wisconsin, Ohio, Idaho, Kansas and Colorado DOTs) to support standardization of PG+ specifications by identifying those PG+ test methods that are reproducible and show promise in simulating actual field performance.

Based on the stated needs and goals, the main objectives of the proposed pooled fund research include:

1- Perform detailed assessment of current PG+ and modified binder quality control procedures in partnering states in terms of reliability, applicability, and relevance to performance and quality of modified asphalt binders.

2- Use a range of modified binders, representative of the products currently specified by partner states, to develop unified test procedures and specification criteria based on products placed in the field.

3- Improve product quality and reliability through conduct of ruggedness studies and development of precision and bias statements for selected tests.

4- Introduce consistency to current products supplied by elimination or reduction of differences in modified binder acceptance tests and criteria throughout member states.

5- Validate and establish relevance of suggested PG+ and quality control procedures in terms of mixture performance

Progress this Quarter (includes meetings, work plan status, contract status, significant progress, etc.):

During this quarter the literature review on the current Pg plus tests used by state DOTs was performed by the research team and the shortcomings of each test were evaluated. Based on the result of survey done last quarter it was clear that all the partner states are willing to move toward faster easier tests (Using DSR) as long as the polymer loading is satisfied at the desired content. Therefore candidate test methods were selected during this quarter in four category listed below:

1- High Temperature/Phase angle
2- Elastic Recovery/Polymer Loading
3- Fatigue Resistance
4- Low-Temperature Cracking resistance

Candidate test methods were selected in a way to address the shortcomings of currently used PG plus specifications. Relationships between current PG plus and new suggested PG plus tests as well as their relationships with mixture testing were evaluated. Therefore by the work done at this point the work area number 1 in the proposal considered to be complete and the progress on second work area has been started.

A summary report of the work done so far (Composing of Literature review, Survey results, commentary on MSCR test, and studying the effectiveness of current and new PG plus tests) was prepared that will be presented to the group at the annual meeting to be held in Madison in May 2015.

Anticipated work next quarter:

Next quarter the results of the work done so far will be presented to the state partners in the annual face to face meeting that will be held on May 7th in Madison. The experimental testing plan and material collection from each state will be started this quarter and the research team aims to finish the ruggedness testing as well as the establishment of presicion statements for the newly selected tests during next quarter. The results of the testings from the materials collected from all state partners will be presented in a memorandum.

Significant Results:

A report was prepared to be submitted to partner state DOTs.

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).

None.

Potential Implementation:

N/A