

Period Covered: April 1, 2009 Through June 30, 2009 (Quarterly Report)

ALDOT Progress Report for the
State Planning and Research Program

PROJECT TITLE: Southeast Superpave Center		
PROJECT MANAGER(S): Don Watson and Randy West Ph #: (334) 844-6857	SPR Project No: TPF-5(037) ALDOT Research Project No. 930-370P	Project is: <input type="checkbox"/> PLANNING <input checked="" type="checkbox"/> RESEARCH & DEVELOPMENT
Annual Budget	Multi Year Project Total Budget for Project: \$2,670,117.00 Total Cost to Date for Project: \$2,087,312.13	

Several projects are being conducted by the Southeast Superpave Center. A summary of the projects is listed below.

1. **Training** - Don Watson

A total of 8 technician certification classes (3-Radiation Safety, 3- Roadway Tech, 1- Aggregate Technology and 1- Asphalt Level 1) have been taught for ALDOT this quarter with a total of 151 attending (68-ALDOT and 83-contractors).

There was also a Chinese delegation that was taught in a 3-day asphalt technology workshop. A total of 17 Chinese engineers attended the workshop. A total of 20 Professors from around the country as well as 2 Professors from Venezuela were taught a 10-day Professor Training class in HMA technology.

2. **4.75 mm Study** – Randy West

Eight states have participated in a study to further develop a 4.75 mm Mix. The objective of the study is to refine and field-validate the mix design procedure and specification criteria. The work has included two phases: a laboratory phase to refine the design criteria, and field validation through construction of experimental test sections.

The draft final report is being prepared.

3. ***Pavement Design Structural Number Input Values – Dave Timm***

This study will look at input values for structural numbers used in pavement design calculations and determine the sensitivity of the design procedure using materials available to ALDOT. The research will consider that all HMA mixtures may provide different levels of structural support depending on aggregate type, mix type, and use of polymer modified asphalt.

4. ***Warm Mix – Andrea Kvasnak***

Several projects throughout the U.S. are being constructed for agencies and contractors who want to get more familiar with the various warm mix technologies being used. Test projects have been visited and results documented in several states across the U.S. A draft report is being prepared for the Colorado project based on a recent annual review, but test data from FHWA is needed to complete the report.

5. ***Bond Strength - Nam Tran***

This study will evaluate the bond strength of several different tack coat materials. The research study includes evaluation of bond strength between various layers from roadway cores as well as making laboratory samples for evaluation. Tack coats will include different emulsions and asphalt cement.

6. ***MEPDG Climate Data - Mike Heitzman***

The purpose of this research is to coordinate and oversee research by the Climate Science Initiative at Iowa State University (ISU) for the development of climate data input files for use by the Mississippi DOT during the calibration and application of the M-EPDG. The development of site-specific historical climate data files for M-E PDG calibration sites will improve the ability to adjust the pavement prediction models to better reflect actual performance under Mississippi climate conditions.

7. ***Newsletter – Don Watson***

A Spring, 2009 newsletter for the Superpave Center was published this quarter and is being distributed. The newsletter discusses research activities, research findings, Expert Task Group recommendations, and upcoming activities and events. Training opportunities provided by NCAT are mentioned as well. Editors are beginning to solicit articles for the Fall issue of the newsletter.

Work to be Performed next Report Period

The Southeast Superpave Center will continue to work on the above listed projects until they are complete.

- ◆ Training sessions and training needs will be discussed in a meeting with ALDOT Training Office in July. Based on input from the meeting, courses and schedules will be developed for the coming year. A schedule of training courses available will be listed on the NCAT website www.ncat.us.
- ◆ The 4.75 mm Mix study should be completed.
- ◆ Additional documentation will be provided for warm mix projects as they are constructed.
- ◆ Iowa State University will begin development of climate data files for Mississippi. Those files will then be validated by NCAT. The contract for this work should be authorized and work begun during the next quarter.
- ◆ Several states have expressed an interest in higher RAP mixes. NCAT is working on an NCHRP study as well as a structural study for the 2009 Test Track involving high RAP percentages. Agencies will be kept informed of results from these studies.

STATUS AND COMPLETION DATE

Percentage of work completed to date for total project 79.66 %

Project is:
X on schedule _____ behind schedule, explain:

Expected Completion Date: August 15, 2009

Please note that this project has continued with renewed requests for services and additional funding obligations and may be extended beyond the current Expected Completion Date listed above.