ALDOT Progress Report for the

State Planning and Research Program

PROJECT TITLE: Southeast Superpave Center			
PROJECT MANAGER(S): Don Watson and Randy West	SPR Project No: TPF-5(037) ALDOT Research Project	Project is:PLANNING	
Ph #: (334) 844-6857	No. 930-370P	X RESEARCH & DEVELOPMENT	
Annual Budget	Multi Year Project Total Budget for Project: \$2,670,117.00 Total Cost to Date for Project: \$2,042,854.68		

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 eleven technician certification classes (5-Radiation Safety, 5-Roadway Tech, and 1-Asphalt Level 1) have been taught for ALDOT this quarter with a total of 174 attending (93-ALDOT and 81-contractors).

There were two Asphalt Technology Courses taught during this period that was attended by five ALDOT employees and one Alabama contractor. The course provides a full overview of HMA technology from mix design to construction and maintenance. Information regarding the latest laboratory and field performance measuring equipment and test procedures is also presented.

A Superpave mix design course was held March 23-26, 2009 and was attended by twelve personnel from across the U.S. as well as four participants from the Sultanate of Oman.

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 Alabama and Colorado, and other states have expressed an interest in test sections as well. 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. **Newsletter** – Don Watson

Articles have been prepared for a Spring, 2009 newsletter for the Superpave Center that will discuss research activities, research findings, Expert Task Group recommendations, upcoming activities and events, and training opportunities provided by NCAT. Articles have been submitted to Purdue University for publishing and distribution of the newsletter which is expected in April.

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 are being evaluated and plans are continuing to be developed for the coming year. A schedule of training courses available is listed on the NCAT website www.ncat.us. NCAT will host an annual Professor Training Course June 16-25, 2009.
- ♦ Completing the 4.75-mm Mix.
- ♦ Continuing the performance of noise studies on the quiet pavement test sections of the NCAT Test Track and for other states that express an interest.
- ◆ Providing additional documentation for warm mix projects as they are constructed.
- Conducting forensic testing as needed.
- ♦ Working on an NCHRP study as well as a structural study for the 2009 Test Track involving high RAP percentages based on expressed interest in higher RAP mixtures form several states. Agencies will be kept informed of results from these studies.

STATUS AND COMPLETION DATE			
Percentage of work completed to date for total project	77.97 %		
Project is: X on schedule	_ behind schedule, explain:		
Expected Completion Date: June 30, 2009			
Please note that this project has continued with renewed obligations and may be extended beyond the current Ex	· ·		