

Period Covered: January 1, 2008, through March 31, 2008 (Quarterly Report)

ALDOT Progress Report for the

State Planning and Research Program

PROJECT TITLE: Southeastern 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: \$2,309,062.00 Total Cost to Date for Project: \$1,897,541.10	

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

1. ***Training*** - Don Watson

During this period two courses on Asphalt Technology and one course on Superpave Mix Design were conducted. The courses were well attended by personnel from agencies throughout the U.S.

A total of 42 classes have been scheduled for ALDOT this fiscal year. All but three of the courses have been completed. A special course for Radiation Safety Officers was developed and the Roadway Technician course was changed to include nuclear density testing of soils and aggregate base courses. Several Divisions have developed "test pits" to use for hands-on training.

2. ***Characteristics of Tire/Pavement Interaction On Noise in HMA Pavements*** – Andre Smit

During this quarter, testing continued on special test sections that were placed at the NCAT test track in order to evaluate the noise reduction potential of fine asphalt mixtures. The use of various types of noise measuring equipment is being evaluated, including an Ultralight Inertial Profiler and a Circular Texture Meter to measure texture depth. A sound impedance tube is used to determine the noise characteristics of laboratory mixes and a comparison will be made between the laboratory and field measuring equipment.

A noise study was also conducted for Georgia DOT on OGFC projects at several sites around the state. A comparison was made of PEM and traditional OGFC mixtures. A draft report has been written and submitted to Georgia DOT for review and comments.

3. ***4.75 mm Study*** – Randy West

Eight states have agreed to participate in a study to further develop a 4.75 mm Mix. The study will refine and field validate the mix design procedure and specification criteria. The work will include two phases: a laboratory phase to refine the design criteria and a field validation through construction of experimental test sections.

This quarter mix design work was completed for several of the aggregate sources used in this study. A draft report is being prepared.

4. ***M-E pavement Design Input Values*** – Don Watson

During this quarter laboratory samples were prepared for determining the dynamic modulus of HMA mixtures and testing with the MTS machine began. The pressurized cylinder used in the test procedure has developed a crack and a new cylinder has been ordered. MTS testing will resume as soon as the faulty equipment is replaced. The laboratory values obtained from this study will be used to compare with the default values in the new M-E Design Guide. In addition, pavement structure requirements will be compared using current agency software, the new M-E Design Guide and Perpetual Pavement software to see how much difference the various programs will make in required structure.

5. ***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 in Alabama, Georgia, and Colorado and other states have expressed an interest in test sections as well.

6. ***Newsletter*** – Don Watson

Work is underway to prepare a newsletter for the Superpave Center that will discuss research activities, research findings, Expert Task Group recommendations, and training opportunities provided by NCAT.

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 being developed for the coming year. Provisions for on-line training are being investigated and if successful NCAT will sponsor a program of national technician qualification.
- ◆ Work will continue on the 4.75 mm Mix study.
- ◆ Noise studies will continue to be performed on the quiet pavement test sections of the NCAT Test Track and for other states that express an interest.
- ◆ Laboratory performance tests (dynamic modulus) will continue on the asphalt mixes for the M-E design studies for Georgia.
- ◆ Additional documentation will be provided for warm mix projects as they are constructed.
- ◆ The Superpave Center newsletter for the spring of 2008 will be published and distributed.

STATUS AND COMPLETION DATE

Percentage of work completed to date for total project 83.72 %

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

Expected Completion Date: September 30, 2008

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.