

Period Covered: Through March 31, 2006 (Quarterly Report)

ALDOT Progress Report for the

State Planning and Research Program

PROJECT TITLE: Southeast Superpave Center		
PROJECT MANAGER(S): Don Watson and E.R. Brown (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 2,790,826.00 Total Cost to Date for Project 1,793,410.91	

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 several training workshops were conducted for ALDOT and include Asphalt Plant Level I, Roadway Technology, Aggregate Technology and Nuclear Safety. NCAT staff has taught fourteen courses during January-March, 2006. In addition, two week-long courses of Asphalt Technology and one course of Superpave Mix Design were taught at the NCAT facility.

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

NCAT has tested over 320 pavement surfaces from Michigan, Alabama, New Jersey, Maryland, Colorado, Nevada, California, Arizona, Florida and Texas. Noise testing on special mix sections at the NCAT test track is being sponsored by the FHWA. Various thickness and gradations for OGFC were placed on the inside lane of the north tangent. One of the sections used a European concept of a two-layer OGFC. This two-layer system uses a coarse OGFC for water drainage, but is surfaced with a fine-graded OGFC to provide noise reduction and serve as a filter for the coarse mix to keep the air void structure from becoming clogged over time. Test results show this system performs very well for noise reduction.

Plans are to place additional test sections of other fine-graded mixtures on the inside lane of the southbound tangent section of the NCAT test track when the outside lanes are reconstructed this summer.

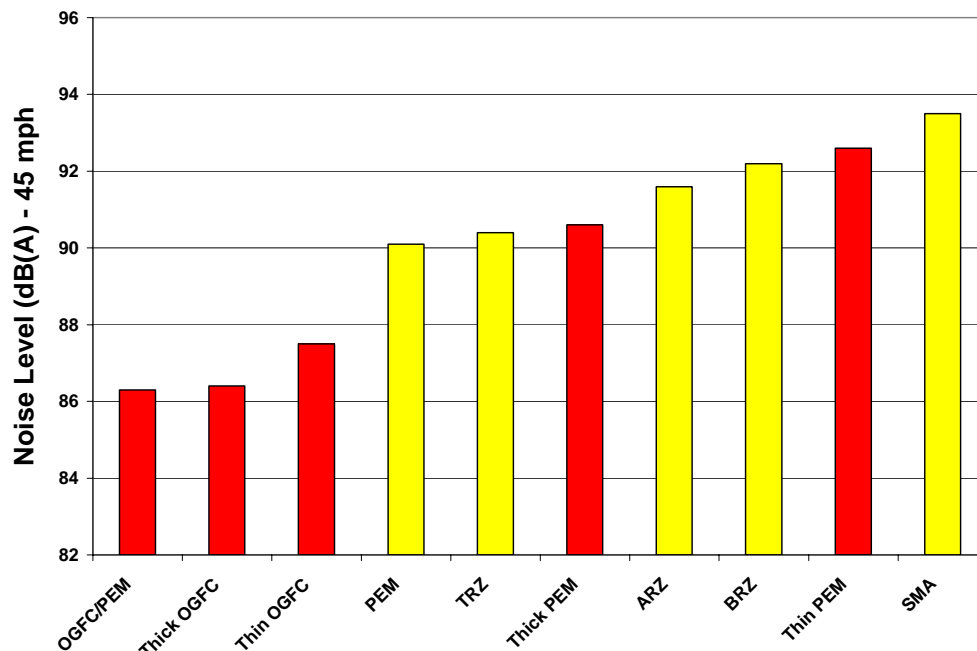


FIGURE 1. Relationship Of Noise Level To Mix Type

In addition to the above work, a noise study was completed for Colorado DOT on various mix types in that state and a report is being submitted.

(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 conducted for several of the aggregate sources used in this study.

(4) **Forensic Pavement Evaluations** – Don Watson and Randy West

During this report period forensic evaluations were conducted on I-65 for ALDOT and on I-10 for FDOT to determine possible reasons for premature pavement failures. I-65 failed due to stripping problems while I-10 had severe rutting distress. Reports are being written for both projects to identify potential causes and prevention measures for the future.

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 for ALDOT personnel will continue. Special training is planned during June for delegations from China and from Pakistan.
- ◆ Work will continue on the 4.75 mm Mix study.
- ◆ The quiet pavement test sections for the south tangent of the NCAT Test Track should be constructed by East Alabama Paving.
- ◆ A forensic analysis of pavement failure on I-65 in Cullman County, Alabama will be completed.
- ◆ A forensic analysis of pavement failure on I-10 in Florida will be completed.

STATUS AND COMPLETION DATE

Percentage of work completed to date for total project 92.45

Project is:
X on schedule behind schedule, explain:

Expected Completion Date: September 30, 2006