

Period Covered: July 1, 2010 Through September 30, 2010 (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) 844-7306	SPR Project No: TPF-5(228) ALDOT Research Project No. 930-763P	Project is: <input type="checkbox"/> PLANNING <input checked="" type="checkbox"/> RESEARCH & DEVELOPMENT
Annual Budget	Multi Year Project Total Budget for Project: \$507,129.00 Total Cost to Date for Project: \$6,598.60	
OBJECTIVE: <p>Several short-term and long-term objectives of the Southeastern Superpave Center are listed below. Several objectives deal with evaluating recently-developed performance test equipment and conducting research to address materials and tests issues. Some objectives of the Center are:</p> <ol style="list-style-type: none">1. Conduct training in regard to Superpave binders, mix design, and performance testing, and provide training on special topics as requested by participating agencies.2. Perform research, both cooperatively and agency-specific, sponsored by members of the pooled-fund.3. Conduct noise studies in an effort to develop quieter pavements.		
RESEARCH PERFORMED THIS QUARTER: <p>Work began on an accelerated pavement friction study in which the three-wheeled polishing device (TWPD) developed by NCAT is used to polish pavement surfaces. The surface of 36 slabs is then tested with a dynamic friction tester and circular texture meter in increments of 20,000 cycles. Previous research indicated the TWPD results compared very well with the polishing effect of traffic at the NCAT Test Track.</p> <p>Work was also performed for a noise study using NCAT's close-proximity acoustical sound trailer that measures noise at the tire-pavement interface. The study involved different target gradations for the mixture and different asphalt modifiers for the binder. The combination of finer gradation and special modifiers slightly reduced noise levels an average of about one decibel.</p>		
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RESEARCH PLANNED NEXT QUARTER:

Work will continue on the accelerated friction study with 36 slabs. The objective is to be able to evaluate friction properties of an asphalt mix during the mix design stage in order to avoid problems with low friction after construction.

A special mix design workshop for technicians who will design SMA mixtures is being planned.

SIGNIFICANT RESULTS:

Noise testing showed a slight improvement can be made to reduce noise characteristics of a pavement by using finer gradations and modified binders such as rubberized asphalt.

PROBLEMS ENCOUNTERED OR ANTICIPATED:

No problems have been encountered to date.

POTENTIAL IMPLEMENTATION:

Noise testing may be used as a basis for changing specifications for gradation and binder type in order to produce quieter pavements.

Friction results conducted during the mix design stage may save an agency the expense of long-term test sections and potential litigation.

Cost Estimate: **Total Expenses:** \$6,599 (1.3% of budget)

Time Used: 33%

STATUS AND COMPLETION DATE

Percentage of work completed to date for total project 1.3 %

Project is:
X on schedule behind schedule, explain:

Expected Completion Date: 9/20/12

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.