SUPERPAVE CENTER NEWS

The Federal Highway Administration helped establish five Superpave Centers around the U.S. to serve as regional sources of expertise to promote the successful implementation of Superpave. The five Superpave Centers were established at Pennsylvania State University at State College, Pennsylvania; the National Center for Asphalt Technology at Auburn University in Alabama; Purdue University in West Lafayette, Indiana; University of Texas at Austin; and University of Nevada at Reno.

The centers are involved in such things as ruggedness testing of the Superpave Shear Tester (SST) and the Indirect Tensile Tester (IDT), SPS-9 testing, mix designs and analysis for experimental or pilot projects, forensic analysis, referee testing and proficiency testing. The centers are also an important source of hands-on training for engineers and technicians at the local level.

The Southeast Superpave Center at NCAT serves eight states, Alabama, Georgia, North Carolina, South Carolina, Mississippi, Florida, Virginia and Tennessee. The primary function of the center is to support implementation of SHRP research results by state DOTs and the asphalt industry in the Southeast.

During the next fiscal year, the center will conduct seminars on mixture analysis procedures. It will provide problem-solving expertise on Superpave technology to the DOTs and the asphalt industry within the region, as well as conduct a series of round robin studies on modified binders, unmodified binders and on the Superpave Gyratory Compactor. The primary tools used by the center will the Superpave Shear Tester (SST) and the Indirect Tensile Tester (IDT).

The North Central Superpave Center is working with states in its region to establish key concepts that asphalt industry personnel need to learn.
One of its primary functions, as established by its steering committee, is communication. To that end, NCSC publishes a quarterly newsletter and has established a www site. Its home page can be found at http://ce.een.purdue.edu/~spave/.

At the request of the North Central Asphalt User Producers Group, the NCSC has coordinated a binder round robin testing program to investigate the amount of variation in binder testing from different labs under normal testing conditions. This identified lab results and allowed comparison of one lab with another. Test results were returned by 25 labs that tested 26 sets of samples. Four asphalt cements, including one polymer-modified binder, were tested for compliance with known grades in the rotational viscomter, bending beam rheometer (BBR) and dynamic shear rheometer (DSR).

The results revealed relatively high amounts of variation in some tests, which emphasized the need to follow the standardized procedures closely to eliminate sources of error.

The Superpave Center at Austin represents a unique partnership among TxDOT, FHWA, and the University of Texas at Austin, Center for Transportation Research. Its mission is to: 1. evaluate and improve Superpave products through applied research, 2. assist and promote uniform Superpave technology, 3. be an information resource for management level personnel, 4. provide training in Superpave technology, and 5. provide testing and technical assistance to Superpave Center partners.

At its new location, the center's laboratory contains virtually every laboratory apparatus needed to conduct Superpave mix design and analysis and Superpave binder analysis. Because training is a key function of the center, the new site also contains a meeting room that will accommodate thirty people in classroom style. The center also is located across the corridor from the Asphalt and Bituminous Sections of the TxDOT Materials & Tests Division. TxDOT not only supports the center financially, but makes its equipment and personnel available for applied research aimed at implementing Superpave in Texas and in its partnering states.

Current activities at the **Western Regional Superpave Center** include equipment shakedown on SST, IDT, and additional binder equipment; setting up an additional laboratory for training purposes only with volumetric mix design and binder equipment; Superpave volumetric mix design and binder training; developing training courses for the specific needs of neighboring states; forensic work for neighboring states using Superpave technology; materials characterization of WesTrack binder and mixes; and preliminary work on SST ruggedness testing. ▲