

Period Covered: October 1, 2004 through December 31, 2004

KSDOT Progress Report  
for the

## State Planning and Research Program

PROJECT TITLE: Implementation Of The 2002 AASHTO Design Guide For Pavement Structures

<b>PROJECT MANAGER:</b>  Richard L. McReynolds, P.E., Admin. Contact Dr. Stefan Romanoschi, KSU, PI	<b>Project No:</b> TPF-5(079) RE-0361-01	<b>Project is:</b>  <input type="checkbox"/> PLANNING <input checked="" type="checkbox"/> RESEARCH & DEVELOPMENT
<b>Annual Budget (active projects)</b> FY 2003: \$162,000	<b>Multi Year Project Budget</b>	

Progress: The objective of this research is to develop the calibration procedure for the AASHTO 2002 design guide models for both flexible and rigid pavement structures for this region and to assist the state highway agencies in region in the implementation of the new Guide for pavement design and surface selection practices.

The research efforts in 2004 were concentrated on the development of the library of material characterization data for typical pavement materials and the identification of pavement test sections for which performance data may be available. The survey of literature has been conducted to identify existing material characterization data and pavement performance data collected already by the highway agencies and reported in internal documents. The testing program for measuring the dynamic resilient modulus of typical asphalt concrete mixes and the binder shear modulus and phase angle has commenced. Testing has been performed on more than 15 HMA mixes.

#### SUMMARY OF ACTIVITIES EXPECTED TO BE PERFORMED NEXT QUARTER:

Dynamic resilient modulus testing will continue. The low-temperature creep testing for asphalt mixes will also be performed in the next quarter. A database of needed input data for the 1-37A model will be created in Access format, to ease the assembly of pavement construction and performance data for both rigid and flexible pavements. The data collected will allow runs of the 1-37A software to calibrate the model to local conditions.

#### STATUS AND COMPLETION DATE

Percentage of work completed to date for total project is: 50%

X on schedule \_\_\_\_ behind schedule, explain

Expected Completion Date: December 31, 2005