

KSDOT Progress Report
for the

State Planning and Research Program

PROJECT TITLE: Construction of Crack-Free Concrete Bridge Decks		
PROJECT MANAGER: Richard L. McReynolds, P.E.	Project No: TPF-5(051)	Project is: <input type="checkbox"/> PLANNING <input checked="" type="checkbox"/> RESEARCH & DEVELOPMENT
Annual Budget	Multi Year Project Budget \$950,000*	
*includes two states that joined during the reporting period		

Progress: Contact has been made with each state technical representative to request information of current practices for design and construction of concrete bridge decks. The each state was asked to send design, construction, and material specifications, and copies of plans for typical concrete bridge decks. Eleven states have sent the requested items. Additional information was requested from these states on typical concrete mix designs.

A complete set of the requested information has been received from Michigan, Missouri, New Hampshire, North Dakota, South Dakota, and Wyoming. Example plans and mix designs have yet to be received from Indiana and Minnesota, and mix designs have yet to be received from Idaho, Montana, and Texas.

The remaining states, from which information has yet to be received, include Delaware, Kansas, Mississippi, and Oklahoma.

A literature review of research for construction of crack-free concrete bridge decks also was begun.

Project Personnel: David Darwin (Principal Investigator), JoAnn Browning (Co- Principal Investigator)

SUMMARY OF ACTIVITIES EXPECTED TO BE PERFORMED NEXT QUARTER:

Planning will be initiated for a meeting of the participating states to be held in April. Invitations and meeting details will be distributed by February 15. The meeting will address the goals of the participating members, timelines, and deliverables for project.

Meetings will be held with contractors and designers to obtain input on the design, construction, and materials aspects of the project.

Work will begin on prototype mix designs for concretes with low cracking potential. The work will emphasize concretes with low paste contents. Optimization of aggregate gradations and the evaluation of cement types (including coarse ground cement) will be emphasized. Properties tested will include workability, finishability, permeability, shrinkage, and freeze-thaw durability.

STATUS AND COMPLETION DATE

Percentage of work completed to date for total project

Project is: 03

 X on schedule behind schedule, explain:

Expected Completion Date: March 30, 2008