

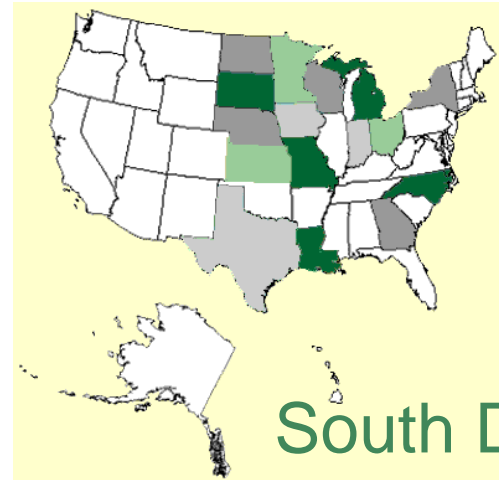
Material and Construction Optimization for Prevention of Premature Pavement Distress in PCC Pavements

Overview

*Center for Portland Cement Concrete Pavement
Technology*

Iowa State University

Participating States



Georgia

Louisiana

Nebraska

South Dakota

Indiana

Michigan

New York

Ohio

Iowa

Minnesota

North Carolina

Texas

Kansas

Missouri

North Dakota

Wisconsin

Oklahoma



Not So Tangible Results

- Initiated discussions on concrete issues within the departments
- TAC meetings twice per year
 - Discuss state issues with colleague
 - Learn of other state research
 - Learn of other state new practices and innovations
 - Developed a network



Not So Tangible Results

- Performed new testing on active project
 - Demonstrated the tests
 - Raised awareness
 - Aid in implementation
- Initiated the IMCP Manual and training



Not So Tangible Results

- Related State Research
 - KS- Boil test
 - MO- Set time test
 - MN- James Cementometer
 - IN- Permeability pooled fund



Not So Tangible Results

□ Related CP Tech Center Research

- Heat Evolution- Calorimetry tests and testing
- AVA correlation and precision

□ Related Research

- Purdue TDR
- North Carolina A&T: Free-free resonant column test
- CTL- Set time test
- Task 4
- Task 64

Proposed Schedule



■ = States
 ■ = PCC Center
 ■ = Industry
 ■ = Other

	2003	2004	2005	2006	2007
1 Data Collection					
A. State Survey	■				
B. On-site consultation w/ each state	■				
2. Test Development					
A. Develop initial suite of tests to measure concrete properties	■				
B. Refinements based on demonstration projects		■			
C. Development of next generation of tests		■			
3. Demonstration Projects					
A. Pilot project in Iowa	■				
B. Mobile field laboratory	■				
C. Demo project in each participating state		■			
4. Technology Transfer					
A. Initial standards/guidelines for testing incorporating state practices and initial test	■				
B. Best Practices for concrete paving which will include refined suite of tests plus		■			
C. Variety of T ² venues					TBD

Change Happens!

