



Progress Report 2006-1 (January-March, 2006)

Jim Grove, Center for PCC Pavement Technology

TPF-5(066) Material and Construction Optimization for Prevention of Premature Pavement Distress in PCC Pavements

Purpose of Project: To develop optimal mix design and test methods for monitoring Key performance parameters and conduct demonstration tests in participating states.
<http://www.ctre.iastate.edu/pccpoolfund/>

Project Dates: October 15, 2004 – ~~December 31, 2005~~ August 31, 2006

Project Title: Material and Construction Optimization for Prevention of Premature Pavement Distress in PCC Pavements (**Project No. 18**)

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Progress Report:

- Project is on schedule Yes
- Project is within budget Yes
- Significant changes in project description No

Products and tangible results this quarter (reports/articles written, oral reports/interviews given):

- A presentation was given January 22, 2006 at a workshop at the 85th Annual TRB meeting on the results to date.
- The final reports of the eleven shadow projects completed to date are posted on the web site.

Interaction with Technical Monitor and/or Project Advisory Committee:

- The regular monthly conference calls with the executive committee were held January 11, February 8, and March 8.

Brief summary of this quarter's research:

- Held a meeting regarding the IMCP Manual with FHWA at the TRB meeting in Washington.
- Preparing a project summary brief, providing significant data findings and a preliminary discussion of recommended tests and procedures to be distributed at the TAC meeting in April.
- Conducted the Louisiana shadow project March 20-30, 2006 on US 167, north of Ruston.
- Finished shadow project reports for all the eleven states visited to date
- Developed an outline for the final report and began writing sections of the report.
- Continued laboratory testing at the ISU lab on shadow project concrete samples from North Dakota and Minnesota. Rapid air, chloride permeability, compression, flow table, slump, XRF, and I-Q drum (calorimetry) tests were conducted.
- Presented preliminary material from the IMCP manual at conferences in Nashville, Iowa, Utah, Colorado, Detroit, and Kansas City.

Expected activities for next quarter:

- Conduct shadow projects in Oklahoma, Georgia, and South Dakota.
- Conduct the spring TAC meeting on April 18.

- Prepare a brochure outlining progress to date and preliminary test evaluation results.
- Send the IMCP Manual to the printers.
- Continue lab testing of materials from completed shadow projects.
- Continue analysis of the data from the field test results to date.
- Continue work on the final MCO report.

Quarterly report –April 2006

	Task Description	Expected Completion	% of Task
1	Data Collection Survey of past projects which experienced problems Compile local state testing practice Gather research information	Dec 2005	95%
2	Test Development Develop suite of tests to measure concrete properties Define test procedures	2006	85%
3	Demonstration projects Demonstrate test procedures on participating state projects Development of protocol for sampling and testing Field verification of laboratory testing and solutions	2006	65%
4	Technology transfer Develop initial standards/guidelines (“Best Practices”) Demonstrate tests and procedures Conduct technology transfer	2007	40%

**QUARTERLY BUDGET REPORT FOR
COOPERATIVE AGREEMENT NO. DTFH61-01-X-00042: Project No. 18
MATERIALS AND CONSTRUCTION OPTIMIZATION**

DATA FOR THE QUARTER ENDING MARCH 31, 2006

BUDGET CATEGORY DESCRIPTION	AMOUNT BUDGETED	EXPENDITURES THIS PERIOD	CUMULATIVE EXPENDITURES
SALARIES/WAGES	\$205,039.00	\$37,234.50	\$194,638.74
BENEFITS	\$66,926.00	\$8,328.32	\$50,699.32
TRAVEL	\$83,756.00	\$0.00	\$37,578.84
SUPPLIES/MATERIALS	\$1,300.00	\$417.36	\$1,271.50
OTHER DIRECT COSTS	\$53,720.00	\$25,408.75	\$107,403.60
TOTAL DIRECT COSTS	\$410,741.00	\$71,388.93	\$391,592.00
INDIRECT COSTS (University Overhead)	\$106,792.90	\$17,110.05	\$100,362.84
CATEGORY TOTALS	\$517,533.90	\$88,498.98	\$491,954.84

NOTES:

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