



Progress Report 2005-3 (July-September)

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/>

Progress Report:

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| • 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*):

- The test data from the state shadow projects conducted in Texas, Iowa, and North Dakota were made available on the web site.

Interaction with Technical Monitor and/or Project Advisory Committee:

- The regular monthly teleconferences with the executive committee were held on July 12, August 10 and September 14.
- A briefing was held after the September 14 conference call with Sandra Larson (Iowa DOT), and Max Grogg (FHWA), to review the proposed agenda for the upcoming TAC meeting.

Brief summary of this quarter's research:

- Continued the review of the final draft of the IMCP Manual by the research staff and Peter Taylor.
- Presented project information and research results at the 8th International Conference on Concrete Pavements.
- Conducted the Minnesota shadow project August 29-September 8, 2005.
- Jim Grove reviewed, with Tom Bold, on September 13, a cracking problem experienced on the North Dakota shadow project built west of Bismarck.
- Continued laboratory testing at the ISU lab on shadow project concrete samples. Rapid air, chloride permeability, compression, flow table, slump, XRF, Blaine, and I-Q drum (calorimetry) tests were conducted.
- Began the analysis of the data from the field test results to date and prepared preliminary correlations for presentation at the TAC meeting in October.

	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	60%
4	Technology transfer Develop initial standards/guidelines ("Best Practices") Demonstrate tests and procedures Conduct technology transfer	2007	25

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

DATA FOR THE QUARTER ENDING SEPTEMBER 30, 2005

BUDGET CATEGORY DESCRIPTION	AMOUNT BUDGETED	EXPENDITURES THIS PERIOD	CUMULATIVE EXPENDITURES
SALARIES/WAGES	\$172,275.00	\$26,331.71	\$129,317.55
BENEFITS	\$57,762.00	\$6,443.06	\$35,685.40
TRAVEL	\$83,756.00	\$11,358.08	\$29,254.60
SUPPLIES/MATERIALS	\$1,300.00	\$551.23	\$691.82
OTHER DIRECT COSTS	\$42,277.00	\$17,900.57	\$41,202.50
TOTAL DIRECT COSTS	\$357,370.00	\$62,584.65	\$236,151.87
INDIRECT COSTS (University Overhead)	\$92,916.00	\$15,460.12	\$61,399.48
CATEGORY TOTALS	\$450,286.00	\$78,044.77	\$297,551.35

NOTES:

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