



Progress Report 2007-1 (January-March, 2007)

Jim Grove, National Concrete Pavement Technology Center

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/>

ISU/FHWA Cooperative Agreement No. DTFH 61-01-H-00011

Project Dates: August 1, 2006 – January 31, 2008

Project Title: MCO, Phase III (Work Order #1)

Principal Investigator: Jim Grove, voice: 294-5988 email: jimgrove@iastate.edu

Project Technical Monitor: Gina Ahlstrom, email: gina.ahlstrom@fhwa.dot.gov

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 draft Testing Guide was circulated for review and discussion at the March 6, 2007 TAC meeting.
- Jim gave a brief presentation January 22, 2006 at the Committee AFH50 meeting at the 85th Annual TRB meeting on the status of the research to date.
- Jim included a brief update of MCO in a presentation at the Illinois Chapter- ACPA 13th Annual Meeting on March 21, 2007 in Springfield, IL.

Interaction with Technical Monitor and/or Project Advisory Committee:

- The regular monthly conference calls with the executive committee were held February 14. It was decided to change to an every other month schedule for 2007. The January call was not held due to the TRB and the normal March meeting was superseded by the TAC meeting held on March 6.

Brief summary of this quarter's research:

- Laboratory testing continued at the ISU lab on shadow project concrete samples.
- Continued analysis of the data from the field test results to date.
- A draft format of the Testing Guide was prepared for review and discussion at the TAC meeting.
- Video taping of revisions to the coffee cup instructional video was completed.
- Work on the AVA instructional material is underway.

Expected activities for next quarter:

- Finish lab testing
- Continue data analysis
- Finish the Coffee Cup training video
- Continue work on the draft of the Testing Guide
- Prepare a draft of the AVA User Guide
- Continue work on a draft of the final report
- Begin preparing a draft of four Tech Briefs

Work Progress by Task:

	Task Description	Expected Completion Date	% of Task Completed
1	Data Collection Survey of past projects which experienced problems Compile local state testing practice Gather research information	September 2006	100%
2	Test Development Develop suite of tests to measure concrete properties Define test procedures	June 2007	95%
3	Demonstration projects Demonstrate test procedures on participating state projects Development of protocol for sampling and testing Field verification of laboratory testing and solutions	June 2007	95%
4	Technology transfer Develop initial standards/guidelines (“Best Practices”) for testing Demonstrate tests and procedures Conduct technology transfer	September 2007	70%