



Executive Committee Conference Call (2/9/05)

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/>

Present:

Tom Cackler
Fred Faridazar
Max Grogg
Jim Grove
Lieska Halsey
Sandra Larson
Bob Rea
Doug Schwartz
John Staton
Jerry Voigt

Absent:

Dan DeGraaf

All calls will use the same call-in number and access code:

Call in number: 866-809-4014 Access Code: 294 8100

Next call date: March 9, 2005 at 8:30 AM.

Site Visits Update:

Jim reported although the lab is now home for the winter, it has gone to Nebraska for their ACPA workshop and back to Featherlite for some maintenance and repairs.

Tech Transfer Discussion:

The *Framework for Technology Transfer* summary was discussed. A copy of the outline is attached.

I. MCO

1. Tech Transfer Briefs: They will be distributed to the pooled fund partners and the MCO committee will be encouraged to distribute the summaries widely. They will also be available on the website and perhaps on a CD when more have been published.
2. Suite of tests: Discussion on whether it would be feasible to have a second round of site visits, or at least have someone go to each state when they do their first project using the suggested testing. A comprehensive manual used during the "train the trainer" will be very helpful to continue the training back in the states.
3. Precision and bias tests: Jerry Voigt commented this was a critical component and the project should not be considered complete until the tests are implemented. However, options on how to complete the testing need to be set aside until the end of the project to be able to develop scope.
4. Upper management briefing: This "buy-in" is important but perhaps the method for incorporating it into the training will be different for each state. The method for incorporating new testing is different between states and that may determine the level of management briefings necessary. Industry involvement must also be included in the briefings.
5. Second site visit: The states that had the first site visits will be interested in having a second site visit to see the suite of tests after it has been refined. Many states will be interested, funding will be the key. Perhaps a menu of various options could be made available and state reps will chose as funding is available for second site visit, or train the trainer, or upper management briefing, etc.

II. IMCP Manual

The authors are making good progress on the manual. It was recognized that in order for the manual to be effective it will need continual updating. It was suggested the updates may be part of future pooled fund projects.

III. Comprehensive Concrete Paving Manual

This manual will be extensive and should be funded as a separate project under the CP Roadmap.

IV. On-going Training

Max will check with NHI as to possibility of them funding a NHI course. The exact needs are hard to discuss until the project is nearing completion.

MCO Project: TPF-5(066)

Framework for Technology Transfer

I. MCO

1. Tech Transfer Briefs: Products that will be developed through the life of the project to communicate early results and good concreting practice. Current topics:

Air Void Analyzer

\$24,000: 6 topics - pubs time and printing 2,000 copies (\$4,000 each)

2. New suite of tests recommended for design and field control of concrete mixes.

a. Written test procedures – MCO contract (Jim Grove/Gary Fick)

b. Data supporting relevance of the test – MCO contract

c. Training material for each test in DVD format – MCO contract

d. Develop QC/QA plan – MCO contract

e. Technical support/assistance - need for ongoing support?

f. Training for “state trainers” – 1 week, 2/state, at PCC Ctr, \$75,000

3. Precision and Bias plan for tests. Perhaps round robin testing to ensure competency of testers and equipment. AASHTO acceptance of new procedures.

Todd Hanson, Scott Schlorholtz, Jim Grove

This should be deferred to the end of the project

4. Upper management briefing for agency and industry personnel in each state to insure support and buy-in for new test procedures.

Note: This should be done before the end of the project. \$100k

a. Overview project results

b. Discuss recommended QC/QA plan

c. Quantify benefits in terms of cost and extended service life

d. Address assignment of risk and liability

“workshop” in each location:
 Executives: ½ hr
 Mgmt staff: 2 hrs
 Tom & Jim together, 3 day total =
 \$100,000

5. Second visit to each state with the PCC Center’s Mobile Lab \$170k

a. Provide “hands-on” workshop environment

b. Demonstration of final tests

Training: \$10,000/wksp
 ●3 day hands-on with mobile lab
 (1 week total trip) = \$170,000

6. National communication opportunities:

a. ACPA state chapter meetings \$2100 (2 days total)

b. TRB

c. AASHTO subcommittees

d. Task 65

e. Regional workshops \$2100 (2 days total)

f. Intl Society on Concrete Pavements \$5,000

(August 2005, Colorado)

Based on:
 Mobile lab truck/day: \$190
 Use of equipment/day: \$165
 Mileage @.23/mile: \$200
 Jim /day: \$415
 2 techs/day: \$360

II. IMCP manual

Early tech transfer piece on current state of the knowledge on understanding material and concrete properties to ensure good performance of pavements.

(Development funded by PCC Center Federal Appropriation)

In July 2005 manual will be complete and distributed in several formats:

- CDs – supplied by the contract
- website – PCC Center
- manual – FHWA (printing & distributing). Soft bound manual is preferred

format. There will probably be significant changes for the update in 3-5 years so a reprint of the entire manual is not prohibitive and a bound manual is easier to “throw under the seat of the truck”. Having the manual available on-line will allow for printing of specific sections.

- Need for continual updates. Funding -?

III. Comprehensive Concrete Paving Manual (This would include IMCP update)

- CPRoadmap to address need for comprehensive manual and funding sources
- Manual should be started in 2005
- Funding for updating needs to be considered

IV. On-going training

- Web based training – \$200k for interactive video; \$120k for high quality video.
- NHI developed course: Research team would develop course and give it to NHI to include in their offerings. NHI would then assume cost of instructors, etc.

SUMMARY

I.1. \$24,000

I.2. \$75,000

I.3. \$100,000

I.5 \$170,000

$\$379,000 \div 17 = \$23,000/\text{state}$

Allowing for inflation, \$25,000/state for an additional year (CY 2008)