## Quarterly Progress Report

# For the period October 1, 2010 to December 31, 2010 ISU/FHWA Contract No. DTFH61-06-D-00023

**Project Dates:** September 11, 2008 – March 31, 2011 (Task Order 3)

November 1, 2010 – June 30, 2011 (Task Order 4)

**Project Title:** CP Road Map Administrative Support Contract

(Task Order No. 3& 4 – Continue Activities to Initiate CP Road Map)

**Principal Investigator:** Tom Cackler, voice: 515-294-3230, e-mail: tcackler@iastate.edu **Project Monitor:** Ahmad Ardani, 202-493-3151, email: ahmad.ardani@dot.gov

Project is on schedule:

Project is within budget:

Problems (current or anticipated):

Yes

Yes

None

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

- Two MAP Briefs were developed:
  - o Stringless Concrete Paving
  - o Deleterious Chemical Effects of Deicing Solutions on Concrete Pavements
- Developed two monthly e-news which included state highlights from Pennsylvania (October 2010) and Washington (November 2010).
- Prepared and gave two presentations on the CP Road Map at the Fall 2010 ACI Convention.

## **Interaction with Technical Monitor and/or Project Advisory Committee:**

- A conference call was held with FHWA technical and contract advisors, Ahmad Ardani, Dennis Sixbey, Lise Lyles to discuss the project tasks and timeline.
- The Sustainability Track Leadership conference call was held on December 8, 2010.

## Brief summary of this quarter's research and activities pertaining to the project:

• For the following months a new edition of the e-News was developed and distributed which includes a MAP Brief. Subjects include:

## October

- CPTP publishes tech brief on performance of sealed and unsealed concrete pavement joints
- Iowa research investigates the freezing-thawing durability of low-permeability concrete
- Louisiana research evaluates the durability of titanium dioxide photocatalyst coating for concrete pavement
- Quebec research documents three-year performance of continuously reinforced concrete pavement with glass fiber reinforced polymer bars

#### November

- Wisconsin research investigates standardized test procedures for evaluating deicing chemicals
- FHWA conducts interlaboratory study on measuring the coefficient of thermal expansion of concrete
- Wisconsin research evaluates open-graded base course with doweled and non-dowled transverse joints
- Research in Malaysia investigates construction and performance of recycled rollercompacted concrete pavements
- Toronto research evaluates performance of permeable pavements in cold climates
- Preparation began for the CP Road Map Executive Committee meeting scheduled for January 11, 2011 in Chicago, Illinois. The draft agenda and presentation were developed and discussed with the project team.
- Development of Task Order No. 3 Final Report began this month and will be finalized and distributed to FHWA early January 2011.

## Main emphasis for next quarter:

- Continue to work to set up discussions for industry and DOT interaction
- Develop e-news and MAP Briefs for continued distribution
- Implement changes to the Design Track Leadership's key areas of concentration and subcommittee membership as necessitated by the conference call of January 6, 2010.
- Set up a conference call with state DOTs.
- Set up conference call with all track leadership groups.
- It is planned to hold regular web-meetings on the sustainability track and invite researchers around the country to participate.
- The existing CP Road Map will be reviewed for realignment with current research needs particularly as it pertains to pavement preservation/rehabilitation and pavement foundations. The tracks will also be examined to determine if they need revisions and/or updating.

| Task # | Task Description                                  | Completion Date | % of Task 4 |
|--------|---|-----------------|-------------|
|        |   | Expected/Actual | Completed   |
| A      | Support Executive Committee & Pool Fund Committee | 6/30/11         | 25%         |
| В      | Support Research Track Teams                      | 6/30/11         | 25%         |
| С      | Conduct Communications and Outreach Activities    | 6/30/11         | 25%         |

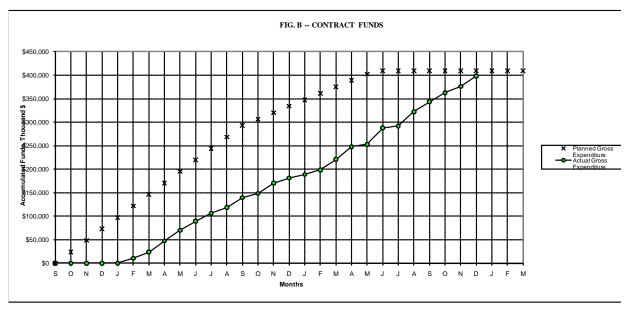
## **TASK 3 FINANCIAL REPORT**

#### PROGRESS SCHEDULE TASK ORDER 3

| Research Agency        | Concrete Pavement Technology Center/Iowa State University | FY 2011      |
|------------------------|---|--------------|
| Principal Investigator | Tom Cackler   | Qtr 12/31/10 |

| Professional Staffing Hours Worked Calculation |         |                                |         |            |                      |        |                     |        |                     |        |                    |        |   |        |        |
|--|---------|--------------------------------|---------|------------|----------------------|--------|---------------------|--------|---------------------|--------|--------------------|--------|---|--------|--------|
| Otr Ending 12-31-08                            |         | Otr Ending 03-31-09 Otr Ending |         | ıg 6-30-09 | 9 Otr Ending 9-30-09 |        | Otr Ending 12-31-09 |        | Otr Ending 03-31-10 |        | Otr Ending 6-30-10 |        | project<br>extended Qtr<br>ending 9-30-<br>10 |        |        |
| Staff  | Planned | Actual                         | Planned | Actual     | Planned              | Actual | Planned             | Actual | Planned             | Actual | Planned            | Actual | Planned                                       | Actual | Actual |
| Tom Cackler                                    | 41      | 0                              | 41      | 40.99      | 41                   | 61.5   | 41                  | 86.35  | 82.83               | 74.54  | 82.83              | 61.28  | 82.83   | 48.06  | 128.97 |
| Peter Taylor                                   | 50      | 0                              | 50      | 49.98      | 50                   | 74.98  | 50                  | 74.98  | 78.32               | 70.13  | 78.32              | 100.5  | 78.32   | 26.1   | 38.04  |
| Paul Wiegand                                   | 70.5    | 0                              | 70.5    | 70.46      | 70.5                 | 85.2   | 70.5                | 126.37 | 94.55               | 60.8   | 94.55              |        | 94.55   |        |        |
| Sharon Prochnow                                | 46      | 0                              | 46      | 45.99      | 46                   | 68.99  | 46                  | 72.43  | 10.33               | 10.3   | 10.33              | 11.12  | 10.32   | 8.62   |        |

FIG. A -- OVERALL PROJECT SCHEDULE



Funds Expended Contract Amount Expended this Quarter Total Exp. to Date Balance

| 97%       |  |
|-----------|--|
| \$409,588 |  |
| \$32,765  |  |
| \$398,320 |  |
| \$11,268  |  |

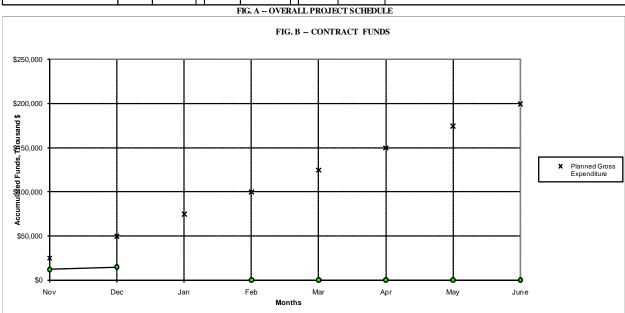
## TASK 4 FINANCIAL REPORT

## PROGRESS SCHEDULE TASK ORDER 4

Research Agency Concrete Pavement Technology Center/Iowa State University

Principal Investigator Tom Cackler

| Professional Staffing Hours Worked Calculation |                     |        |                     |        |  |                    |        |  |  |  |
|--|---------------------|--------|---------------------|--------|--|--------------------|--------|--|--|--|
|  | Qtr Ending 12-31-10 |        | Qtr Ending 03-31-11 |        |  | Qtr Ending 6-30-11 |        |  |  |  |
| Staff  | Planned             | Actual | Planned             | Actual |  | Planned            | Actual |  |  |  |
| Tom Cackler                                    | 50                  | 42.66  | 60                  |        |  | 60                 |        |  |  |  |
|  |                     |        |                     |        |  |                    |        |  |  |  |
| Peter Taylor                                   | 75                  | 69     | 100                 |        |  | 100                |        |  |  |  |
|  |                     |        |                     |        |  |                    |        |  |  |  |
| Sharon Prochnow                                | 34                  | 25.5   | 33                  |        |  | 33                 |        |  |  |  |
|  |                     |        |                     |        |  |                    |        |  |  |  |



Funds Expended Contract Amount Expended this Quarter Total Exp. to Date Balance 7% \$199,366 \$14,742 \$14,742 \$184,624