Quarterly Progress Report For the period January 1, 2011 to March 31 2011 ISU/FHWA Contract No. DTFH61-06-D-00023

Project Dates: November 1, 2010 – June 30, 2011 (Task Order 4) **Project Title:** CP Road Map Administrative Support Contract

(Task Order No. 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: Yes

Project is within budget: Yes

Problems (current or anticipated): None

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

- Three MAP Briefs were developed and are listed as follows:
 - o Intelligent Compaction for Concrete Pavement Bases and Subbases
 - o SmartCure: An Integral Part of an Intelligent Construction System
 - o Fly Ash as a supplementary cementitious material in concrete mixes
- Developed two monthly e-news which included state highlights from Virginia (January 2011) and Mississippi (February 2011) and working on Iowa for March 2011.
- 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:

- Conference calls are held every two weeks with the Technical Monitor /Project Monitor, Ahmad Ardani to discuss the project's progress.
- The CP Road Map Executive Committee held a face-to-face committee meeting on January 11, 2011 in Chicago, Illinois and a web conference on March 29, 2011.
- Weekly conference calls are held with the team.

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

- The development of Task Order No. 3 Final Report was finalized and the report was distributed to FHWA at the January 11, 2011 Executive Committee meeting.
- Prepared a "whitepaper" for the CP Road Map program that provides information on what the Road Map is and how it works for states.
- For the following months a new edition of the e-News was developed and distributed which includes a MAP Brief. Subjects include:

January

- ACPA publishes mechanistic-empirical tie bar design approach for concrete pavements
- Texas conducts evaluation of M-EPDG with TxDOT rigid pavement database
- FHWA publishes tech brief on precast, prestressed concrete pavements
- PCA releases updated *Design and Control of Quality Concrete Mixtures*
- Cement and Concrete Aggregates Australia publishes Use of Recycled Concrete Aggregates in Construction
- Updates from the States: Virginia

February

- There's an app for that...
- Louisiana Transportation Research Center evaluates performance of polyurethane foam as a rehabilitation option
- FHWA publishes state-of-the-technology report on high-performance materials for highway applications
- TRB report investigates use of silica-rich rice husk as a supplementary cementitious material
- Updates from the States: Mississippi

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 and priority 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	38%
В	Support Research Track Teams	6/30/11	38%
С	Conduct Communications and Outreach Activities	6/30/11	38%

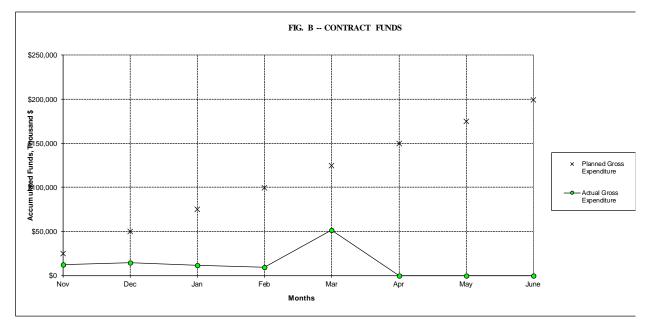
PROGRESS SCHEDULE TASK ORDER 4

 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 Endin		ng 6-30-11								
Staff	Planned	Actual	Planned	Actual		Planned	Actual				
Tom Cackler	50	42.66	60	64		60					
Peter Taylor	75	69	100	103		100					
Sharon Prochnow	34	25.5	33	38		33					

FIG. A -- OVERALL PROJECT SCHEDULE



Funds Expended Contract Amount Expended this Quarter Total Exp. to Date Balance 49% \$199,366 \$71,717 \$98,620 \$100,746