

TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT): IOWA DOT

INSTRUCTIONS:

Project Managers and/or research project investigators should complete a quarterly progress report for each calendar quarter during which the projects are active. Please provide a project schedule status of the research activities tied to each task that is defined in the proposal; a percentage completion of each task; a concise discussion (2 or 3 sentences) of the current status, including accomplishments and problems encountered, if any. List all tasks, even if no work was done during this period.

Transportation Pooled Fund Program Project # TPF-5(313)	Transportation Pooled Fund Program - Report Period: Quarter 1 (January 1 – March 31, 2015) XQuarter 2 (April 1 – June 30, 2015) Quarter 3 (July 1 – September 30, 2015) Quarter 4 (October 1 – December 31, 2015)	
Project Title: Technology Transfer Concrete Consortium (TTCC) TPF-5(313)		
Project Manager: Brian Worrel	Phone: 239-1471	E-mail: brian.worrel@dot.iowa.gov
Project Investigator: Peter Taylor	Phone: 294-9333	E-mail: ptaylor@iastate.edu
Lead Agency Project ID: RT 0273	Other Project ID (i.e., contract #): Addendum 532	Project Start Date: 2/5/15
Original Project End Date:	Contract End Date*: 12/31/2015	Number of Extensions: Incremental funding, PFS

Project schedule status:

On schedule On revised schedule Ahead of schedule Behind schedule

Overall Project Statistics:

Total Project Budget	Total Cost to Date for Project	Total Percentage of Work Completed
\$255,000	\$8,895.93	NA

Quarterly Project Statistics:

Total Project Expenses This Quarter	Total Amount of Funds Expended This Quarter	Percentage of Work Completed This Quarter
\$56,282.13	N/A	N/A

Project Description:

Increasingly, state departments of transportation (DOTs) are challenged to design and build longer life concrete pavements that result in a higher level of user satisfaction for the public. One of the strategies for achieving longer life pavements is to use innovative materials and construction optimization technologies and practices. In order to foster new technologies and practices, experts from state DOTs, Federal Highway Administration (FHWA), academia and industry must collaborate to identify and examine new concrete pavement research initiatives. The purpose of this pooled fund project is to identify, support, facilitate and fund concrete research and technology transfer initiatives.

The goal of the TTCC is to:

- Identify needed research projects
- Develop pooled fund initiatives
- Provide a forum for technology exchange between participants
- Develop and fund technology transfer materials
- Provide on-going communication of research needs faced by state agencies to the FHWA, industry, and CP Tech Center
- Provide guidance as part of the Track Team for the CP Road Map Mix Design/Analysis Track
- Provide assistance as requested by the CP Road Map Executive Committee on other select tracks

Progress this Quarter (includes meetings, work plan status, contract status, significant progress, etc.):

- The meeting was held in Reno, Nevada April 21-23, 2015
- Agenda and presentations are available at: <http://www.cptechcenter.org/ncc/TTCC-NCC-2015.cfm>

Highlights from the meeting include:

- One integral part of the meeting is highlighting state practices on a particular subject. The theme for this meeting was curing including materials, testing and practices. Maria Masten presented a summary of DOT responses to the survey. Each individual DOT response can be found on the NCC website, as well as the summary presentation.
- The FHWA is initiating two significant programs in the areas of performance engineered mixtures (PEMs) and concrete recycling. Gina Ahlstrom, Senior Pavement Engineer from the FHWA, gave an introduction of both programs followed by detailed technical presentations. DOTs are encouraged to participate in both programs by becoming a champion state. These champion states will form the technical advisory committees that will oversee the national effort to advance the state of practice in both areas. If your state is interested in participating in either program please contact Gina Ahlstrom (gina.ahlstrom@fhwa.dot.gov) or Dr. Peter Taylor, Director of the National Concrete Pavement Technology Center (ptaylor@iastate.edu).
- Internally cured concrete continues to be a subject of interest as promising results are being obtained when using the technology for bridge deck concrete. Consideration is now being given to pavement and overlay applications. Positive experiences with bridge deck applications were presented by several states and Dave Meggers with KDOT gave an overview of its application to a concrete pavement.

- An update on fly ash quality and supply was presented by Tom Adam, President of ACAA, and Ben Franklin with Headwaters.
- The Cement Task Force had presentations by Dr. Jason Weiss, Purdue University, and Tim Cost, Holcim, on the promising research and project experience using SCMs in concrete mixtures.
- Tom Burnham with MnDOT and Dr. Mark Snyder gave the group an update on the Dowel Bar Task Force. They requested feedback from the NCC Membership on whether they are headed in the right direction in regards to acceptance of different types of dowel bars from a structural capacity and corrosion resistance standpoint.
- Dale Harrington with the National CP Tech Center shared an update on training opportunities for concrete overlays and pavement preservation. States interested in a workshop or technical support for these FHWA sponsored programs should contact Dale Harrington (515.964.2020) for preservation and Tom Cackler (515.460.4512) for overlay needs.
- Dr. Tom Van Dam and Dr. Tyler Ley co-presented on the relative effects of curling and warping, their causes, and how they can be controlled. This session raised a lot of discussion among the agency representatives.
- A tour of a recently constructed roadway, including several bridges, provided attendees with an opportunity to learn about the challenges of providing infrastructure on a heavy traffic route in the Northwest. A second site visited was a working cement plant – a first for many.
- Feedback from many attendees was a request to provide more opportunities for informal discussion so that people can learn from each other in an informal one-on-one setting. This is clearly a critical part of the value of the meeting.

Anticipated work next quarter:

- Planning the Fall meeting. Scheduled for September 15-17 in Milwaukee, WI

Significant Results:

See <http://www.cptechcenter.org/ncc/TTCC-NCCMeetings.cfm>

Circumstance affecting project or budget (Describe any challenges encountered or anticipated that might affect the completion of the project within the time, scope, and fiscal constraints set forth in the agreement, along with recommended solutions to those problems).

TTCC TAC committee: (Reps as per TPF website are noted with *)

First	Last	State
Andrew	Waldrop*	AL
Mehdi	Parvini	CA
Eric	Prieve	CO
Rhonda	Taylor	FL
Jay	Page*	GA
Clint	Hoops	ID
James	Krstulovich	IL
Matt	Mueller*	IL
Tommy	Nantung*	IN
Tony	Zander	IN
Todd	Hanson*	IA
Brian	Worrel	IA
Kevin	Merryman	IA

First	Last	State
Will	Lindquist*	KS
Rodney	Montney	KS
Dave	Meggers	KS
Jennifer	Distlehorst	KS
Randy	Billinger	KS
John	Eggers	LA
Harold	Paul*	LA
Tyson	Rupnow	LA
Zachary	Collier	LA
John	Staton*	MI
Tim	Stallard	MI
Andy	Bennett	MI
Maria	Masten*	MN
Tom	Burnham	MN
Brett	Trautman*	MO
Matt	Collingwood	MT
Matthew	Needham	MT
Susan	Sillick	MT
Matthew	Strizich	MT
Bob	Weber	MT
Wally	Heyen*	NE
Lieska	Halsey	NE
Darin	Tedford*	NV
W	Young	NV
Michele	Maher	NV
Kelly	Yokotake	NV
Vivekananthan	Yatheepan	NV
Bill	Cuerdon*	NY
Nilesh	Surti*	NC
Richard	Burley	NC
Jessica	Earley	NC
Clayton	Schumaker*	ND
Craig	Landefeld*	OH
Dan	Miller	OH
Kenny	Seward*	OK
Matt	Romero	OK
Jeff	Dean	OK
Steve	Koser*	PA
Neal	Fannin	PA
Josh	Freeman	PA
Seth	Wolfinger	PA
Mark	Felag	RI
Christopher	Hart	RI
Darin	Hodges*	SD
Jason	Smith	SD
Chris	Leibrock	SD
Harvey	Fitzgerald	SD
Jamie	Waller	TN
Heather	Purdy	TN
Andy	Naranjo*	TX
Hua	Chen	TX
Ruben	Carrasco	TX
Rachel	Cano	TX
Bryan	Lee	UT
Scott	Andrus*	UT
W	Pope	UT
Jeff	Uhlmeier	WA
Mark	Russell	WA
Kim	Willoughby*	WA
David	Luhr	WA
Amir	Ahmadi	WA
Jim	Parry	WI
Chad	Hayes*	WI