

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) Quarter 2 (April 1 – June 30, 2015) X 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	\$110,370.63	NA

Quarterly Project Statistics:

Total Project Expenses This Quarter	Total Amount of Funds Expended This Quarter	Percentage of Work Completed This Quarter
\$45,192.57	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 Fall meeting was held in Milwaukee, WI September 15-17, 2015
- 155 attendees; 52 state DOT participants from 29 states.
- Agenda and presentations are available at: <http://www.cptechcenter.org/ncc/TTCC-NCC-2015.cfm>
- A state only meeting was held on Tuesday morning



DOT Breakfast Meeting Agenda

- 7:30 am **Introductions**
- 7:45 am **Future tech transfer products and deployment**
 - Dale Harrington, CP Tech Center
- 8:15 am **Joint NCC/ICCP Meeting**
 - Discuss whether or not Fall 2016 should coincide with ICCP Conference on Concrete Pavements in San Antonio, TX 8/28-8/31/2016 <http://www.acpa.org/wp-content/uploads/2015/02/11th-ICCPBrochure-Aug2016.pdf>
 - Meeting length options if we do hold joint meeting
- 8:30 am **Future meeting topics in Ohio**
 - High performance bridge substructure and superstructure concrete
 - Shotcrete for bridge repair
 - Alternatives to steel reinforcing for bridge application (CFRP, GFRP, etc...)
 - Bridge deck surface characteristics
 - Bridge joint seals
 - Specifying and fabricating high performance prestressed concrete bridge elements
 - Prefabricated bridge element systems (PBES)
 - Accelerated bridge construction (ABC)
 - Other
- 9:00 am **NCHRP discussion**

Highlights from the meeting are following the list of the TAC members

Anticipated work next quarter:

- Planning for the Spring meeting will begin.
- Spring meeting will be in Ohio in April

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 *)

Andrew	Waldrop*	AL	Will	Lindquist*	KS	Wally	Heyen*	NE	Mark	Felag	RI
Shannon	Golden	AL	Rodney	Montney	KS	Lieska	Halsey	NE	Christophe	Hart	RI
Bill	Farnbach	CA	Dave	Megggers	KS	Darin	Tedford*	NV	Darin	Hodges*	SD
Mehdi	Parvini	CA	Jennifer	Distlehorst	KS	W	Young		Jason	Smith	SD
Eric	Prieve	CO	Randy	Billinger	KS	Michele	Maher	NV	Chris	Leibrock	SD
Gary	DeWitt	CO	John	Eggers	LA	Kelly	Yokotake	NV	Harvey	Fitzgerald	SD
Rhonda	Taylor*	FL	Harold	Paul*	LA	Vivekanant	Yatheepan	NV	Jamie	Waller	TN
Bouzid	Choubane*	FL	Tyson	Rupnow	LA	Bill	Cuerdon*	NY	Heather	Purdy	TN
Michael	Bergin	FL	Zachary	Collier	LA	Nilesh	Surti*	NC	Andy	Naranjo*	TX
Jay	Page*	GA	John	Staton*	MI	Richard	Burley	NC	Hua	Chen	TX
Jason	Waters	GA	Tim	Stallard	MI	Jessica	Earley	NC	Ruben	Carrasco	TX
Clint	Hoops	ID	Andy	Bennett	MI	Clayton	Schumaker	ND	Rachel	Cano	TX
John	Arambarri	ID	Maria	Masten*	MN	Craig	Landefeld*	OH	Bryan	Lee	UT
James	Krstulovich	IL	Tom	Burnham	MN	Dan	Miller	OH	Scott	Andrus*	UT
Matt	Mueller*	IL	Brett	Trautman*	MO	Kenny	Seward*	OK	W	Pope	UT
Tommy	Nantung*	IN	Matt	Collingwo	MT	Matt	Romero	OK	Jeff	Uhlmeyer	WA
Tony	Zander	IN	Matthew	Needham	MT	Jeff	Dean	OK	Mark	Russell	WA
Todd	Hanson*	IA	Susan	Sillick	MT	Steve	Koser*	PA	Kim	Willoughby*	WA
Peggi	Knight	IA	Matthew	Strizich	MT	Neal	Fannin	PA	David	Luhr	WA
Kevin	Merryman	IA	Paul	Bushnell	MT	Josh	Freeman	PA	Amir	Ahmadi	WA
						Seth	Wolfinger	PA	Jim	Parry	WI
		KS							Chad	Hayes*	WI

Fall 2015 National Concrete Consortium Highlights

Milwaukee, Wisconsin-September 15-17, 2015

The Fall 2015 National Concrete Consortium was held in Milwaukee, Wisconsin, on September 15-17, 2015, with 47 representatives from 29 states and the Illinois Tollway present. Total attendance was over 150. Maria Masten, Concrete Materials Engineer from the Minnesota Department of Transportation, is the current chairperson. The meeting agenda and all presentations are on the NCC website: <http://www.cptechcenter.org/ncc/TTCC-NCC-2015.cfm>. Highlights from the meeting include:

- DOT members of the NCC started the meeting with a session specifically intended to address state needs. Topics included planning future technical deliverables under the pooled fund and a review of the budget. Voting on priorities for technical products was held during the NCC 2½ day conference, and a summary is provided below. Members also discussed priorities for future NCHRP projects that can address member needs. It was reinforced that it is important to include bridge and structural topics related to concrete on future agendas.
- DOT members expressed support for seeking approval to combine the Fall 2016 NC2 meeting with the Eleventh International Conference on Concrete Pavements to be held in San Antonio, Texas, on August 28-31. The conference planning for technical sessions and workshops is being led by Tom Burnham, MnDOT, and Dr. Peter Taylor, National CP Tech Center. The program is being structured to enable TTCC members to take advantage of the international technical exchange at a very low cost to the pooled fund. Chair Masten will be requesting approval on behalf of the TTCC members.
- Also approved by the member states was the publishing of an electronic newsletter beginning in 2016. This newsletter will be issued six times a year and will keep members apprised of ongoing research, advancements in practice, new technical material, and training opportunities. The newsletter will be supported by FHWA's contribution to the pooled fund.
- There were two significant sessions on performance engineered mixtures (PEMs). One related to states' experiences with new field test methods, and the second focused on review of the proposed specification for PEM. FHWA, the research team, and many states participated in these sessions.
- State practices relative to joint sawing and sealing were summarized, and presentations related to unsealed joint performance, saw cutting depth, topical sealant performance, and industry best practices were of high interest.
- The Dowel Bar task force, being led by Dr. Mark Snyder and Tom Burnham, reported on a proposed standard specification for structural and corrosion testing for all dowel systems. The consensus was to move forward with development of one specification that will address project specific performance requirements.
- The business meeting included bylaw approval to realign the state districts and special elections to balance state representation on the NCC Executive Committee. The NCC Executive Committee is:

Name	Organization	Representing	Term Expires
Neal Fannin	Pennsylvania DOT	AASHTO Region 1-2	2017
Bouzid Choubane	Florida DOT	AASHTO Region 1-2	2016
Tommy Nantung	Indiana DOT	AASHTO Region 3	2017
Steve Gillen	Illinois Tollway	AASHTO Region 3	2016
Mehdi Parvini	California DOT	AASHTO Region 4	2017
Darin Hodges	South Dakota DOT	AASHTO Region 4	2016
Maria Masten	Minnesota DOT	Chair	2017

Mike Byers	Indiana ACPA	Contractor	2017
Matt Ross	CTS Cement	Supplier	2017
Tyler Ley	OK State University	Academia	2016
Jim Mack	CEMEX	At-Large	2016
Gina Ahlstrom	FHWA	FHWA ex-officio	
Peter Taylor	CP Tech Center	CP Tech Center	

- A technical tour of WE Energies Oak Creek Power Plan was very well received and relevant to the ongoing concerns about the quality and supply of usable ash sources for concrete.

The spring meeting of the National Concrete Consortium is being planned for April 26-28, 2016, in Columbus, Ohio. The technical program for this meeting will include concrete issues related to many structural applications.