

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: X Quarter 1 (January 1 – March 31, 2017) Quarter 2 (April 1 – June 30, 2017) Quarter 3 (July 1 – September 30, 2017) Quarter 4 (October 1 – December 31, 2017)	
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: Steve Tritsch	Phone: 294-8103	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: 12/31/2017	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
\$568,000	\$505,493.37	NA

Quarterly Project Statistics:

Total Project Expenses This Quarter	Total Amount of Funds Expended This Quarter	Percentage of Work Completed This Quarter
\$55,287.85	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.):

- In October and November additional webinars on Internal Curing, Recycling of Concrete Pavements, and Supplementary Cementitious Material were held.
- The Spring 2017 meeting will be in Salt Lake City, April 25-27.
- Hotel contracts have been signed and the agenda has been set.
- All arrangements have been made. Proposed agenda is attached.

Anticipated work next quarter:

- The Spring meeting will be held in Salt Lake City April 25-27

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).

Agenda

April 25-27, 2017 – Little America Hotel, Salt Lake City

Tuesday, April 25

- 6:45 am **Breakfast available until 8:00 am**
- 7:00-10:00 **Registration – please check in at the registration table**
- 7:30 - 9:30 **DOTs breakfast meeting**
- 9:30 **Morning Break**

GENERAL SESSION

- 10:00 am Welcome –Randy Park, UDOT Director of Project Development and Maria Masten, NC2 Chair, Minnesota DOT
- 10:15 Looking Back on 20 Years of MC²/NC²
- Steve Tritsch, P.E., CP Tech Center and Jim Grove, P.E., ATI Inc./FHWA
 - Kansas K-96 High Performance Concrete Pavement – 20 years later – Dave Meggers, P.E., KDOT and Todd LaTorella, P.E., MO/KS ACPA
- 11:30 FHWA Updates –
- FHWA’s Sustainable Pavement Program – Heather Dylla, Ph.D., FHWA
 - FHWA Mobile Concrete Lab – Mike Praul, P.E., FHWA
- 11:45 CP Tech Updates – Steve Tritsch
- 12:00 pm **Lunch**
- 1:00 State Reports Summary: Bridge Deck Overlays/Approaches – Maria Masten, P.E., MnDOT
- 1:45 States presentations
- Precast Concrete Pavements Update - Mehdi Parvini, Ph.D, P.E., Caltrans
 - Polyester Concrete – Lonnie Marchant, P.E., Utah DOT
 - Indiana Research on Early Opening to Traffic of Pavement Patches - Tommy Nantung, PhD., P.E., Indiana DOT and Jason Weiss, Ph.D, Oregon State University
- 3:00 **Afternoon break**
- 3:30 States Presentations (continued)
- Illinois Early-Age Response to Fatigue Loading – James Krstulovich, P.E., Illinois DOT
 - Concrete Shrinkage and Its Relationship to Internal Curing – Tommy Nantung, Ph.D., P.E., Indiana DOT and Jason Weiss, Ph.D., Oregon State University
- 4:30 NRRA Update – Brett Trautman, P.E., Missouri DOT
- 4:45 Q & A – Open Discussion
- 5:00 **Adjourn for the day**

Note that all presentations will be viewable online at www.cptechcenter.org after the conference.

Wednesday, April 26

6:45 am **Breakfast available until 8:00 am**

8:00 RCC Future: Results from LTRC's Accelerated Loading Facility – Tyson Rupnow, Ph.D., P.E., Louisiana TRC

8:30 Laboratory and Fatigue Evaluation of Continuously Fiber Reinforced Concrete Pavement – John Kevern, Ph.D., P.E., University of Missouri-Kansas City

9:00 Today's Fly Ash With a Look Toward Tomorrow's Fly Ash – Rafic Minkara, Ph.D., P.E., and Ben Franklin, Headwaters Resources

9:30 **Morning Break**

10:00 ASR

- Harmonization with ASTM – Colin Lobo, Ph.D., P.E., NRMCA
- Emerging VCMD (Aggregate) and ACCT (Concrete) Test Methods for Formulating Performance Based ASR-Resistant Concrete Mixes – Anol Mukhopadhyay, Ph.D., P.G., Texas A&M TTI
- TX ASR Exposure Sites Update – Andy Naranjo, P.E., Texas DOT
- State Experience Implementing PP65
 - Neal Fannin, P.E., Pennsylvania DOT
 - Lieska Halsey, P.E., Nebraska DOR

11:45 Q & A - Open Discussion (15 min)

12:00 pm **Lunch**

1:00 Business Meeting and Elections

1:30 Quick Updates

- Dowel Bar TPF – Maria Masten, P.E., MnDOT
- HIPERPAVE – Jagan Gudimettla, P.E., FHWA

2:00 Technical Tour Presentation – Joe Kammerer, P.E., UDOT, Project Manager for Mountain View Corridor

2:30 **Afternoon Break**

3:00 Performance Engineered Mixes (PEM)

- FHWA Perspective – Mike Praul, P.E., FHWA
- AASHTO PP84 – Cecil Jones, P.E., Diversified Engineering Services
- TPF Solicitation Update - Peter Taylor, Ph.D., P.E., CP Tech Center
- Q & A – Tyler Ley, Ph.D., P.E., Oklahoma State; Jason Weiss, Ph.D., Oregon State; Peter Taylor, Ph.D., P.E., CP Tech Center, ISU

4:00 Shrinkage Testing

- Jafar Allahham, University of Utah
- Tests Available – Pro's and Con's – Jason Weiss, Ph.D., Oregon State University

4:45 Q & A – Open Discussion

5:00 Adjourn

6:00 **Group Dinner –Caffe Molisse**

Thursday, April 27

6:45 am **Breakfast available until 8:00 am**

8:00 Buses depart for technical tour – Mountain View Corridor (tentative)

12:00 pm Buses drop off: one at the airport and one at Little America Hotel

TTCC TPF 5(313) TAC members are meeting attendees from the 30 member states. Attendance varies by meeting.

	TTCC States TPF 5(313)	Number of Representatives
1	Alabama	2
2	California	1
3	Colorado	2
4	Florida	2
5	Georgia	2
6	Idaho	2
7	Illinois	2
8	Indiana	3
9	Iowa	2
10	Kansas	2
11	Louisiana	2
12	Michigan	2
13	Minnesota	2
14	Missouri	1
15	Montana	2
16	Nebraska	1
17	Nevada	1
18	New York	1
19	North Carolina	2
20	North Dakota	1
21	Ohio	2
22	Oklahoma	2
23	Pennsylvania	1
24	Rhode Island	1
25	S Dakota	2
26	Tennessee	2
27	Texas	2
28	Utah	1
29	Washington	1
30	Wisconsin	1