

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(437)	Transportation Pooled Fund Program - Report Period: Quarter 1 (January 1 – March 31, 2023) X Quarter 2 (April 1 – June 30, 2023) Quarter 3 (July 1 – September 30, 2023) Quarter 4 (October 1 – December 31, 2023)	
Project Title: Technology Transfer Concrete Consortium (TTCC) TPF-5(437)		
Project Manager: Khyle Clute	Phone: 239-1471	E-mail: khyle.Clute@dot.iowa.gov
Project Investigator: John Adam	Phone: 294-3781	E-mail: jfadam@iastate.edu
Lead Agency Project ID:	Other Project ID (i.e., contract #): Addendum 732	Project Start Date: 2/5/20
Original Project End Date:	Contract End Date: 12/31/24	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
\$1,337,000	\$942,739	NA

Quarterly Project Statistics:

Total Project Expenses This Quarter	Total Amount of Funds Expended This Quarter	Percentage of Work Completed This Quarter
\$246,305	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

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

- Information and PowerPoints from the Spring 2023 meeting held April 11-13 are available: <https://cptechcenter.org/nc2-meetings/>
- The meeting had 183 attendees, with 64 TTCC reps
- A brief meeting summary is attached.
- Planning for the Fall 2023 meeting in Portland, Oregon, September 12-14th
- Agenda has been finalized and speakers have been notified
- Venue and hotel arrangements have been finalized
- E-news and MAP Brief was published in Spring: <https://us10.campaign-archive.com/?u=4bf55bc365dca0e5c928442da&id=95f3783143>
- MAP Brief on Climate Change, Resilience, and Concrete Pavements: https://intrans.iastate.edu/app/uploads/2023/05/climate_change_resilience_and_concrete_pvmts_spring_2023_M_B.pdf
- News from the field includes
 - Florida DOT Opens Concrete Test Road
 - Fiber Reinforced Concrete for Bridge Deck Overlays
 - Establishing Fresh Properties of Fiber Reinforced Concrete for PEM
 - Evaluation of Current WI Mixes Using Performance Engineered Mixture Testing Protocols

Anticipated work next quarter (July - September):

- Fall 2023 meeting in Portland Oregon September 12-24.
- E-news and MAP Brief will be published during the next quarter.

Significant Results:

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

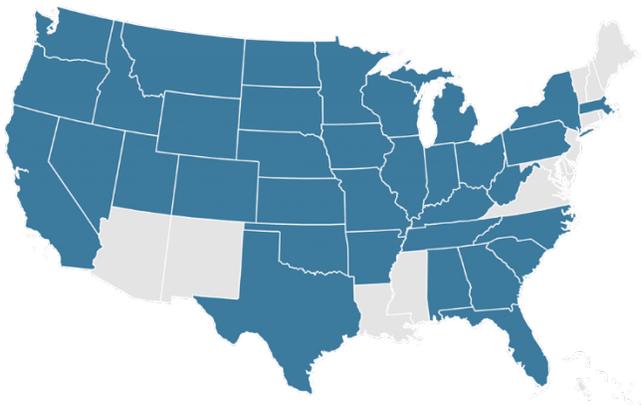
Circumstance affecting project or budget (Describe any challenges encountered or anticipated that might affect the completion of the project within the time, scope, and fiscal constraints set forth in the agreement, along with recommended solutions to those problems). N/A

There are 35 TTCC TPF 5(437) TAC member states. Representative attendance varies by meeting.

State & # of Reps									
Alabama	2	California	3	Colorado	1	Florida	2	Georgia	4
Idaho	2	Illinois	2	Indiana	4	Iowa	2	Kansas	2
Kentucky	2	Massachusetts	2	Michigan	2	Minnesota	2	Missouri	1
Montana	2	Nebraska	2	Nevada	2	New York	2	North Carolina	2
North Dakota	1	Ohio	2	Oklahoma	2	Oregon	1	Pennsylvania	1
South Carolina	2	South Dakota	2	Tennessee	2	Texas	4	Utah	1
Washington	1	West Virginia	2	Wisconsin	1	Wyoming	1	Arkansas	1

Spring 2023 National Concrete Consortium Highlights

Savannah, Georgia – April 11-13, 2022



TTCC TPF 5(437)

35 Member States + Illinois
Tollway

The 2½-day spring meeting of the National Concrete Consortium (NC²), hosted by the Georgia DOT, brought together the expertise and experience of 183 attendees representing 32 member states, FHWA, academia, and industry in an event focused on improving concrete performance and structural concrete applications. Dan Miller, Administrator of the Ohio DOT Office of Materials Management, is the current chairperson. The meeting agenda and technical presentation slides are available on the NC² website <https://cptechcenter.org/national-concrete-consortium/>.

The agenda listed 22 presenters: 4 from state agencies, 2 from FHWA, 5 from academia, 11 from industry.

Meeting presentation highlights include:

- **General Session:**
 - Welcome - Georgia DOT Deputy Commissioner Brad Saxon
 - FHWA Program Update
 - State Reports Summary
 - Election of new Committee Members

- **Pavements**
 - NCHRP Concrete on Asphalt Overlay Project
 - P3C (Performance centered Concrete Construction) Pooled Fund
 - MnROAD Project report
- **Sustainability**
 - FHWA Outlook/Initiatives
 - ACPA Concrete Sustainability Whitepaper
 - Current Greenhouse Gas Reduction Initiatives
 - EPD's Procurement – CDOT Ramping Up for EPD's
- **Current State Practices**
 - Agency Experience with 1L Cements
 - Phoenix W/C Test Experience
 - Optimized gradation and Workability Test Results
- **Materials Specifications and Testing**
 - State research and training needs survey report
 - Concrete Testing Evaluation Program - Colorado
 - AASHTO Comp Update
- **Concrete Materials Updates**
 - Cement Supplies Update
 - Natural Pozzolans
 - Metakaolin
- **Updates/General Discussion**
 - ASTM C1778 ASP Testing Technology
 - Pane/open discussion – Increasing Use of Maturity Testing
 - Field Trip Presentation: Roller Compacted Concrete
 - Ocean Terminal
 - Crossgate Road
- **TTCC TPF 5(437) TAC Meeting – for state agency members**

Future meetings:

- The fall 2023 NC² meeting is being held in Portland, Oregon, September 12-14.
- The spring 2024 NC² meeting dates and location has not yet been determined.