

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(286)	Transportation Pooled Fund Program - Report Period: Quarter 1 (January 1 – March 31, 2015) Quarter 2 (April 1 – June 30, 2015) Quarter 3 (July 1 – September 30, 2015) XQuarter 4 (October 4 – December 31, 2015)	
Project Title: Next Generation Concrete Pavement Road Map		
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	Other Project ID (i.e., contract #): Addendum 482	Project Start Date: 9/15/13
Original Project End Date:	Project End Date: 9/14/18	Number of Extensions: Pooled fund project – yearly budgets

☒ 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
\$635,000	\$228,283.12	N/A

Quarterly Project Statistics:

Total Project Expenses This Quarter	Total Amount of Funds Expended This Quarter	Percentage of Work Completed This Quarter
\$60,024.20	N/A	N/A

Project Description:

This pooled fund project will carry on the work started by FHWA's initial Concrete Pavement Road Map Pooled Fund, TPF-5(185) and continue the effort to identify and prioritize needed research but will have a stronger focus on supporting the sponsoring states with technology deployment activities so that advancements in technologies can be implemented into practice.

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 with fewer resources. One of the strategies for achieving longer life pavements is to foster new technologies and practices. Experts from state DOTs, 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 concrete research, training and technology transfer needs through the CP Road Map.

Work under this task order relates to tasks 1 through 4.

1. Provide training workshops and/or webinars for each participating state on a topic of interest.
2. Develop specifications for new technologies
3. Maintain a database addressing research gaps
4. Conduct quarterly TAC

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

- The October 2015 MAP Brief was developed and distributed. The MAP Brief topic was on the importance of curing – why it's important, recommended practices, and emerging technologies for improving it. Link to it: <http://www.cproadmap.org/publications/MAPbriefOctober2015.pdf>
- The December 2015 MAP Brief was developed and distributed. The MAP Brief topic was internal curing. The concept, benefits, and recommendations for implementation of internal curing were explained. Link to it: <http://www.cproadmap.org/publications/MAPbriefDecember2015.pdf>
- The October E-News newsletter brought attention to recent research on fiber reinforced concrete, ultra-thin whitetopping for parking lots, and the use of precast concrete panels for pavement repairs. In addition, the newsletter highlighted state DOT survey summaries on tie bar placement and skid resistance. The newsletter is available here: http://www.cproadmap.org/publications/e-news_Oct2015.cfm
- The December E-News newsletter highlighted NCC State survey summaries on curing compound application rates. The News from the Road segment highlighted the new "Guide Specifications for Concrete Overlays" developed by the CP Tech Center as well as other recent research. The newsletter is available here: http://www.cproadmap.org/publications/e-news_Dec2015.cfm
- Planned and held TAC meeting on October 26, 2015. (see minutes below).
- Discussions with Canada on CP Roadmap process.
- Coordination with Pennsylvania DOT on training for PCC overlay workshop.

Anticipated work next quarter:

- Begin work on guide specifications for Internal Curing.
- Development of internal curing webinar.
- Issue additional E-News newsletter and MAP Brief in February for NCC
- Hold a TAC meeting (Date TBD).

Significant Results:

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).

No budget issues.

TPF-5(286) Next Generation Concrete Pavement Road Map Pool Fund (CP Road Map)
October 26, 2015 TAC Meeting Minutes

Attendees:

Brian Worrel, Iowa DOT
Josh Freeman, Penn DOT
Steve Koser, Penn DOT
Peter Taylor, CP Tech Center
Tom Cackler, Representing the CP Tech Center
Dale Harrington, Snyder & Associates, Inc.

Peter thanked everyone for attending and reviewed the agenda.

Specifications

- Dale stated the next topic for the guide specification will be on Internal Curing as voted on by the five pool fund states. Four states out of five rated internal curing as first or second choice. The TAC agreed this subject was fine.
- Once internal curing is done in 2016, a new survey will be submitted for topics.
- Jason Weiss and Peter Taylor will be involved in the development of the specification for Internal Curing.

Technical Advisory Committee for Specifications

- A draft list of the members for the Technical Advisory Committee for Specifications is listed below. There will be four state DOTs and three industry on the TAC.
- Dale suggested Kenny Seward be on the TAC and he will contact him to see if he is interested. Dale asked if any of the other TAC on the call would like to be on the committee. They didn't feel they were best suited with the subject matter to serve.
- Dale stated any other pool fund state would be welcome to be on the TAC.
- Currently the TAC members will be:
 - David Meggers
 - Steve Gilliam
 - Todd Streeter
 - Randy Riley
 - Dan DeGraaf
- Dale will also talk to Mark Snyder for his input on TAC.
- Peter stated they will be looking for applying the technology into the state specification needs. Will be looking for help from the state DOTs on what the states need.
- Dale stated we are planning an internal curing MAP Brief this month that Jason Weiss will be writing.
- Dale stated they would like to get case studies on bridges and pavements for internal curing. The TAC felt this was fine.
- Dale explained there will be a specification, MAP Brief and case studies on the internal curing subject.
- The TAC thought the approach for internal curing was fine.

Webinars

- Dale stated they went to NCC and they selected web-based training for one hour presentations for three regions. One was on internal curing. A one hour presentation will be developed on internal curing for the webinar and will be developed by Jason Weiss.

News from the Road

TPF Program Standard Quarterly Reporting Format –12/2012

- Dale explained we keep a listing of all the E-News and News from the Road topics. We review each so when we develop the E-News we don't repeat the subject. We try to bring new subjects to the E-News.
- Dale asked the TAC if they have any new subjects for the E-News on research. Dale stated if they have any research please send it to him.

MAP Briefs

- Dale stated a MAP Brief went out today on Concrete Curing. He explained two other MAP Briefs have been done since the June TAC meeting. The November MAP Brief will be on Internal Curing.

Upcoming MAP Briefs

- Tom Cackler stated we would like to get the TAC's feedback on MAP Brief topics. He stated we have a couple more to put out this year. Below is a list of topics:
 - Use of the Paradigm in Recycling. Tom explained the paradigm is on site recycling; using it as a base material.
 - Performance of Geotextile Interlayers
 - Dowel Coating Technologies
 - Stringless Paving (previously done in 2010)
 - Real-Time Smoothness
 - Louisiana DOT, RCC Accelerated Loading Project – will probably write this in spring 2016.
 - FHWA Sustainable Pavements Technical Working Group (SPTWG)-concrete strategies.

Tom also added:

- Partial Depth Patches
- Full Depth Reclamation of Asphalt Pavements
- Two Lift Paving
- Geotextile Interlayers sounded good to PennDOT. They are working on a specification on this topic.
- Tom and Dale stated Iowa DOT used the paradigm on I-35. It is an interesting approach to see. Penn DOT stated they are familiar with the recycling. One concern was the concrete pavements they had built used slag and it makes the pavement none usable with recycling. The slag is a concern environmentally and for costs to be removed off site.
- PennDOT also thought the Dowel Coating Technologies would be interesting for PennDOT. They are not very interested in the Stringless Paving as it is more for the contractor.
- PennDOT stated real time smoothness they had Gary Fick out with the Contractor and it seemed to work well. It would be interesting also.
- Brian stated he would talk to Iowa DOT and get back to Dale on topics.
- Tom stated they will send an email to the TAC and have them prioritize the list for upcoming MAP Brief topics.

Tom stated at the NCC meeting FHWA is willing to support the continuation of the E-News and the MAP Briefs but would like to move the funding under the TTCC Pooled fund. The specifications and IMCP manual will continue through the CP Road Map. The TAC had no problem with the move of the E-News in January 2016 to NCC.

Training

- PennDOT will get training on concrete paving construction and design under the CP Road Map. PennDOT is having a concrete overlay workshop under the cooperative agreement. Dale explained the agenda is tailored toward what each state needs. Dale asked Josh and Steve to get with Lydia and they can have a conference call with the CP Tech Center on what subjects

they would like. Josh stated they are looking more on a national level how things are done. They are still using the '93 AASHTO. Dale will get the NHI course and send it to them to see what they would like. Josh and Steve agreed this would be a good approach.

- Tom explained the slide showing the NCC results for training.
- Tom stated the CP Road Map will continue with the IMCP Manual refresh and continue with the database. The training will continue for PennDOT and Georgia.
- Tom explained the E-News and MAP Brief will continue under the TTCC.

Database Status

Peter Taylor stated the database is still being updated. It has been updated last month so it is current. Peter stated it is updated every six months. He stated the URL is on the CP Tech Center website. You can search by key words and agency.

The meeting adjourned at 1:42pm.