

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) <input checked="" type="checkbox"/> Quarter 2 (April 1 – June 30, 2015) Quarter 3 (July 1 – September 30, 2015) Quarter 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: 12/31/14 (extension requested)	Project End Date: 9/14/18	Number of Extensions: Pooled fund project

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	\$228,258.92	N/A

Quarterly Project Statistics:

Total Project Expenses This Quarter	Total Amount of Funds Expended This Quarter	Percentage of Work Completed This Quarter
\$38,005.97	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.):

- April 2015 E-News and MAP Brief were developed and distributed. MAP Brief topic was "Concrete Pavement Curling and Warping". Link to it: <http://www.cproadmap.org/publications/MAPbriefApril2015.pdf>
- Coordinated with Nebraska for development of the April E-News.
- Wrote five summaries on research projects for April E-News.
- June 2015 E-News and MAP Brief were developed and distributed. MAP Brief topic was "Concrete Pavement Joint Deterioration". Link to it: <http://www.cproadmap.org/publications/MAPbriefJune2015.pdf>
- Coordinated with South Dakota for development of the June E-News.
- Wrote five summaries on research projects for June E-News.
- Continued work on the final draft of the PCC overlay guide specifications.
- Reviewed the specifications with the CP Tech Center Overlay Committee.
- Set up training with Pennsylvania and Georgia for Fall 2015.
- Held TAC meeting on June 18, 2015 (minutes are attached).

Anticipated work next quarter:

- Finalize dates, locations, and topics for training events for Penn DOT and Georgia DOT.
- Issue next new E-News newsletters and MAP Briefs.
- Finalization of new PCC overlay specifications.
- Continue to update research database as further state interviews are completed.
- A TAC meeting will be scheduled for Sept/Oct 2015.
- Submit plan to NCC for support of CP Road Map program as requested by TAC.

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).

TPF-5(286) Next Generation Concrete Pavement Road Map Pool Fund (CP Road Map)
June 18, 2015 TAC Meeting Minutes

Attendees:

Gina Ahlstrom, FHWA
Kenny Seward, Oklahoma
Lydia Peddicord, Penn DOT
Josh Freeman, Penn DOT
Kim Rice, Penn DOT (Training Division)
Dan DeGraff, Michigan Concrete Association
Peter Taylor, CP Tech Center
Tom Cackler, Representing the CP Tech Center
Gary Fick, Trinity Construction Management Services, Inc.
Dale Harrington, Snyder & Associates, Inc.

Status for Training

Dale stated training has been completed in Oklahoma and Michigan on 3D Stringless Paving and in Iowa on Preservation.

He stated Pennsylvania is currently discussing plans for an Overlay workshop in fall 2015. Also Georgia is preparing for a Preservation workshop sometime fall 2015.

Kim Rice from the PennDOT training division asked about the Pennsylvania workshop. Dale stated Tom Cackler had been talking with Steve Koser from PennDOT. Tom Cackler asked Lydia Peddicord to send him Kim's contact information and he will work with her to continue preparations for the workshop.

Overlay Guide Specification

Dale stated the specification has been reviewed 2 or 3 times by the TAC. He stated it was also sent to the Concrete Overlay committee for their review. A number of comments have been received and addressed. Dale stated the comments below were the last comments received from the TAC. The committee discussed the comments as follows:

Josh Freeman's comments:

- Page 14, I.1 – What is SSD? This should be spelled out. *Dale stated they will spell this out.*
- Page 15, N.2 – Transverse Joints: Cut intermediate transverse joints between existing transverse joints such that the overlay panel length does not exceed 15 feet. Saw cut depth must be equal to the full thickness of the overlay plus ½ inch. *Gary Fick suggested inserting a footnote to refer them to the Overlay Guide. It was suggested that panels greater than 15 ft. should be considered for intermediate joints and longitudinal joints should be addressed for sealing. Committee agreed to this approach.*
- Should provide guidance for Unbonded Concrete Overlays when making cross slope adjustments. *The committee agreed this can be handled by adding a footnote referencing the Overlay Guide.*
- How to handle dowel bar placement, *It was agreed to add only when 7" or greater.* Depth of saw cut joints, etc. *It was agreed to add that saw cut may vary.*
- Should also mention about transition areas at the beginning and end of projects, as well as approaches to bridges. *Committee agreed to add a footnote.*
- Construction Standards would also be useful with this specification guide. *It was agreed to leave the design standard separate for future discussion. Some states add standard drawings to specifications and some do not. The design standards for some details are in the Overlay Guide.*

Steve Koser comments:

- PADOT will not be paying separately for curing nor sampling and testing. *It was agreed if a state doesn't want to do it they can leave it out of the specification.*
- PADOT has revised some of the requirements for the PAMS curing compound. *This is information only and does not need to be addressed.*
 - removed the % Solids requirement.
 - PADOT is only requiring the ASTM C 309 % Reflectance of 60 minimum. We found the color of the cement used in the specimens has an effect on the test results.
 - PADOT is not requiring a 24 hr loss of water requirement.
- PADOT had difficulty locating manufacturers meeting the weight/SY requirements for the geotextile fabric. *Josh Freeman stated they have a hard time finding a manufacturer who can make the size they are need for their project. Dale has two manufacturers that they have used in Iowa and can send him these contacts. Jason said they are trying to get a certain weight and are talking to a manufacturer.*
- For the temperature limitations, Steve Koser suggested covering with insulating blankets for air temperatures <50 F. *Dale stated in cold weather states they usually cover around 40 degrees and start protecting at 30 degrees. Dale mentioned it is stated in the spec to comply with your state guidelines. This was fine with the TAC.*
- PADOT recommends vacuuming the surface after milling and using compressed air immediately before the overlay. *The TAC agreed they don't need to vacuum on the overlays. The TAC agreed to leave the spec the way it is and not include vacuuming.*

Dale stated the specification was reviewed by the overlay committee in great detail. Dale thanked Dan DeGraff and the overlay committee and the TAC for their comments.

The TAC agreed to make adjustments based on PennDOT comments and move forward with publication of the specification.

Other Specification Subjects

Tom Cackler stated there are 3 more specifications to be developed under the CP Road Map program. Dale Harrington asked the committee what they would like to see for future specifications and suggested some topics below.

- Internal Curing
- Partial Depth Patches
- Precast Concrete Panels
- Full Depth Reclamation of Asphalt Pavement
- Stringless Paving
- Future Real Time Smoothness
- Roller Compacted Concrete
- Two Lift Concrete Paving - Gina
- Diamond Grinding
- Geotextile Interlayers

Peter stated the CP Tech Center has been hired by OH DOT to write a spec on bridge decks for internal curing and so this will be done under a separate contract.

Gina asked what the intent was for the real time smoothness. Gary Fick stated the CP Tech Center is also under contract to develop a spec on real time smoothness so this does not need to be done under the CP Road Map program.

Suggested Future Approach for CP Road Map E-NEWS

Tom Cackler stated at the end of 2015 E-News will no longer be funded unless FHWA adds money to the project. He mentioned FHWA is looking for broader base support for E-News and could consider support through the TTCC. Tom stated that NC2 has discussed the need for an E-News in the past and the CP Road Map E-News could be replaced by a NC2 E-News as part of the technology deployment products under the TPF and allow national support for the program. *The CP Road Map TAC agreed to bring it up to the NCC but agreed to the approach. Gina Ahlstrom also felt this is a good time to bring it up to NCC.*

Tom stated we will develop a proposal for NCC at the fall 2015 meeting and hopefully get it funded in 2016.

E-News Update

Dale stated they would like to focus on News from the Road and not highlight each State. He stated some states do not have the information or a system to deliver the information. Dale stated they would like to expand the range of topics and summarize results of NCC State Surveys. He stated the surveys are on the NCC website and can be summarized easily. *The TAC thought this would be a good idea.*

Future MAP Briefs

Dale stated it has been suggested to do a MAP Brief on something other than concrete pavements. He mentioned Kansas suggested doing one on airports concrete surfaces. *The TAC thought this would be a good idea. Airport pavements will be the focus on the next MAP Brief and the CP Tech Center will get back to the TAC on the future topics.*

Database Status

Peter Taylor stated the database is still being updated. He stated the URL is on the CP Tech Center website. You can search by key words and agency.

IMCP Update

Peter Taylor stated the CP Tech Center is working on updating the IMCP manual. The update will be made electronically friendly using EPubs. This is set up at the beginning of the process. Peter stated the CP Tech Center has a team member who will be working on the EPubs. Peter stated the IMCP Manual will also be offered manually via a website where you will need to pay for the printing. *The TAC thought the EPubs format will be very useful to have, especially in the field.*

Peter stated the IMCP Manual update team has been assembled and an outline is in place for the team to review. He stated an advisory committee will be developed for the update and they would like to get representatives from NCC states and industry on the committee.

Meeting Adjourned