

## 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.*

<b>Transportation Pooled Fund Program Project #</b> TPF-5(286)	<b>Transportation Pooled Fund Program - Report Period:</b> Quarter 1 (January 1 – March 31, 2014) Quarter 2 (April 1 – June 30, 2014) Quarter 3 (July 1 – September 30, 2014) <input checked="" type="checkbox"/> Quarter 4 (October 4 – December 31, 2014)	
<b>Project Title:</b> Next Generation Concrete Pavement Road Map		
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<b>Lead Agency Project ID:</b> RT	<b>Other Project ID (i.e., contract #):</b> Addendum 482	<b>Project Start Date:</b> 9/15/13
<b>Original Project End Date:</b> 9/30/2018	<b>Project End Date:</b> 9/30/2018	<b>Number of Extensions:</b> 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
\$265,000	\$136,634.87	N/A

Quarterly Project Statistics:

Total Project Expenses This Quarter	Total Amount of Funds Expended This Quarter	Percentage of Work Completed This Quarter
\$64,805.81	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.):**

- October E-news and MAP Brief were distributed. MAP brief topic was "Aggregate Gradations for Concrete Pavement Mixtures". Link to it: <http://www.cproadmap.org/publications/MAPbriefOctober2014.pdf> .
- December E-news and MAP Brief were distributed. MAP brief topic was "Relating Transport Properties to Performance". Link to it: <http://www.cproadmap.org/publications/MAPbriefDecember2014.pdf> .
- Coordination with Iowa DOT for development of the upcoming E-News.
- Completed draft PCC overlay guide specification.
- A TAC meeting was held November 25th (minutes are attached).

**Anticipated work next quarter:**

- Finalize dates, locations, and topics for training events.
- Issue next new e-news newsletters and MAP Briefs.
- Continue to work with States toward finalization of new PCC overlay specifications.
- Continue to update research database as further state interviews are completed.
- A TAC meeting will be scheduled.

**Significant Results:**

Opportunity for state DOTs to go to a single source to find concrete related research.

**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.

November 25, 2014 TAC Meeting Minutes

Attendees:

Kevin Merryman, Iowa DOT  
Todd Hanson, Iowa DOT  
John Staton, Michigan DOT  
Tom Cackler, CP Tech Center  
Peter Taylor, CP Tech Center  
Dale Harrington, Snyder & Associates, Inc.  
Steve Klocke, Snyder & Associates, Inc.  
Gary Fick, Trinity Construction

Tom welcomed the attendees to the conference call. He stated since only two of the states were on the call that we would review the guide specifications for their comments and reschedule the other agenda items for another call with the TAC.

### Overlay Guide Specification

- Dale went through Part I & II stating anything in red are the changes that were made to the specification after the committee comments from last TAC call.
- Table 1 – Material Testing - Stress relief course was eliminated and replaced with separation layers.
- Scheduling and Conflicts – opening traffic and use of shoulders was added; D – Shoulder is misspelled.
  - John was concerned the document is getting too particular for some states. Some issues may be too sensitive and it should be softened.
  - Dale stated they will state to comply with contract documents and put a note at the bottom to explain the shoulder use. The TAC agreed.
  - Peter stated if you do use the document in a spec you would remove the items that don't comply.
  - Kevin stated the statement, "comply with DOT standard specification should say comply with "contract documents".
  - Dale stated the committee wanted this document to show everything. Dale stated they will change the statements in the document to "comply with contract documents".
  - Dale stated "contract documents" will be defined up front of the document for the purpose of this specification and be included where applicable.
  - Peter stated contract documents is a global term.
  - Tom stated this document will probably be used as supplemental specification.
- Limitations was deleted from Part 1 and moved to Part III
- Curb and Gutter was removed per the committee's request.
- Notes were added to clarify fixtures and fiber reinforcement.

- The Note: Aggregate gradation for Hot Mix Asphalt Separation Layer – Table 3. (a period needs to be added after traffic).
  - John had a concern on aggregates for the gradation. Kevin agreed with this issue with designers and aggregate industry.
  - Dale stated to clarify each state needs to examine the gradation.
  - John stated the designer should make sure the material is available.
  - Kevin and John stated to remove the gradation (Table 3) and a not be added to the bottom of page about checking with local suppliers for gradation.
- Clarified Geotextile Fabric as Separation Layer for Unbonded Overlay. Make sure there is continuity for the separation layer.

### Part III – Execution

- Gary went Part III stating the footnotes reference the Overlay Guide, third edition.
- 3.02 PAVEMENT CONSTRUCTION - 2. Pavement Temperature: If the surface of the HMA is above 110°F, the Contractor may apply water mist to the surface of the HMA ahead of the paving operation in order to cool the surface. Apply water mist far enough in advance of the paving operation so that the surface will dry from evaporation before concrete is placed.
  - Kevin stated - No standing water is an issue and need to be included.
  - Gary stated they will say cool.
- H. Bar and Reinforcement Placement: comply with standard specification requirements.
  - Gary stated they will make a global change to say, comply with contract requirements.
- Gary stated the footnote is for the dowel basket placement. The reason for the footnotes is so there is cross references for the user.
- Kevin – had issue with using evaporation retardant. Gary asked if evaporation retardant should be removed.
  - John asked how to qualify evaporation retardant. Should leave it to each state if they want to allow evaporation retardant it up to the contract documents.
  - Gary and Dale suggested if the curing is delayed you need to utilize their policy for the use of evaporation retardants.
  - John stated to say to minimize the rate of evaporation and not use the term evaporation retardant.
  - Tom stated you have to have the evaporation retardant on hand if you are going to use it and be ready. Should be discussed at the preconstruction meeting.
  - Peter stated there is a risk of cracking or high rate of drying when curing is delayed. Follow the DOT policy.
  - The committee agreed to reference it and follow the state policy.
- Kevin stated on the application rate of the curing compound note, different states use different compounds. Suggested measures may need to be taken to prevent increased evaporation rate. Suggested removing the specifics.
  - Gary stated saying the application rate may need to be increased. Committee agreed with this change.

- Dale asked if minimum compressive and flexile strength should be removed and keep the footnote.
  - Gary stated the spec writer has the option to modify the specification.
  - John suggested comply with contract documents.
  - Tom stated you can open an overlay earlier before a full depth pavement to traffic.
  - Gary stated we may want to give them some guidance.
  - Dale stated comply with standard contract requirements and note consideration needs to be given to early loading.
  - John wanted the note dropped.
  - Kevin stated their standard specs apply and early opening is dealt with at the field office.
  - It was agreed to state “comply with contract requirements” and remove the entire note.
- Gary and Dale stated all the comments were appreciated and thanked the committee.

Tom stated we will reschedule for the rest of the agenda items. The specifications will be revised and sent to the committee for their review and we will have another TAC call within the next few months.