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.

<table>
<thead>
<tr>
<th>Transportation Pooled Fund Program Project #</th>
<th>Transportation Pooled Fund Program - Report Period:</th>
</tr>
</thead>
<tbody>
<tr>
<td>TPF-5(159)</td>
<td>Quarter 1 (January 1 – March 31, 2014)</td>
</tr>
<tr>
<td></td>
<td>Quarter 2 (April 1 – June 30, 2014)</td>
</tr>
<tr>
<td></td>
<td>X Quarter 3 (July 1 – September 30, 2014)</td>
</tr>
<tr>
<td></td>
<td>Quarter 4 (October 4 – December 31, 2014)</td>
</tr>
</tbody>
</table>

| Project Title:                               | |
| Technology Transfer Concrete Consortium (TTCC) TPF-5(159) |

<table>
<thead>
<tr>
<th>Project Manager:</th>
<th>Phone:</th>
<th>E-mail:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linda Narigon</td>
<td>239-1471</td>
<td><a href="mailto:linda.narigon@dot.iowa.gov">linda.narigon@dot.iowa.gov</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project Investigator:</th>
<th>Phone:</th>
<th>E-mail:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tom Cackler</td>
<td>294-3532</td>
<td><a href="mailto:tcackler@iastate.edu">tcackler@iastate.edu</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lead Agency Project ID:</th>
<th>Other Project ID (i.e., contract #):</th>
<th>Project Start Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>RT 0273</td>
<td>Addendum 315</td>
<td>1/27/07</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Original Project End Date:</th>
<th>Contract End Date*:</th>
<th>Number of Extensions:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12/31/2014</td>
<td>Incremental funding, PFS</td>
</tr>
</tbody>
</table>

*Administrative contract end date: 12/30/14. Project is proposed to start under a new TPF number on January 1, 2015. Currently under Solicitation Number 1363 on FHWA’s pooledfund.org website.

Project schedule status:
X On schedule  □ On revised schedule  □ Ahead of schedule  □ Behind schedule

Overall Project Statistics:

<table>
<thead>
<tr>
<th>Total Project Budget</th>
<th>Total Cost to Date for Project</th>
<th>Total Percentage of Work Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>$927,800.00</td>
<td>$830,095.90 base contract +</td>
<td>95%</td>
</tr>
<tr>
<td></td>
<td>$ 27,000.00 special studies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>=857,095.90 Total expended</td>
<td></td>
</tr>
</tbody>
</table>

Quarterly Project Statistics:

<table>
<thead>
<tr>
<th>Total Project Expenses This Quarter</th>
<th>Total Amount of Funds Expended This Quarter</th>
<th>Percentage of Work Completed This Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>$39,905.81</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
**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.):**

- Rhode Island has joined for 2015, making for 29 states + the Illinois Tollway.
- This project is proposed to continue in 2015 with as a new 5 year TPF project, with a new TPF number and accounts. Presently there are 21 states (CA, IA, IL, IN, KS, LA, MI, MN, MO, MT, NC, ND, NE, NV, OH, OK, PA, RI, SD, TX, WA) that have committed to continuing this project.
- The Fall meeting was held September 9-11, 2014
  - DoubleTree Hotel, Omaha, Nebraska
  - 160 attendees
  - 54 state DOT reps from 27 states plus 2 DOT reps from the Canadian province of Manitoba
  - September’s agenda is attached
  - Presentations from the meeting are available at: [http://www.cptechcenter.org/ncc/TTCC-NCCMeetings.cfm](http://www.cptechcenter.org/ncc/TTCC-NCCMeetings.cfm)

**Anticipated work next quarter:**

- Planning for Spring NCC conference in Reno, Nevada. A western partner state was desired.
- Conference is scheduled to be held April 20-23,2015

**Significant Results:**

See [http://www.cptechcenter.org/t2/ttcc_ncc_meeting.cfm](http://www.cptechcenter.org/t2/ttcc_ncc_meeting.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).**

TTCC TAC committee is listed on following page:

Reps as per TPF website are noted with *
State | First | Last
--- | --- | ---
1 | Alabama | Larry Lockett
   | Andrew Waldrop
2 | California | Bill Farnbach
   | Mehdi Parvini
3 | Colorado | Eric Prieve
   | Brandon Joy
4 | Florida | Rhonda Taylor
   | Bouzid Choubane
5 | Georgia | Jay Page*
   | Jason Waters
6 | Idaho | Clint Hoops
   | John Arambarrri
7 | Illinois | James Krstulovich
   | Matt Mueller*
8 | Indiana | Tommy Nantung*
   | Tony Zander
9 | Iowa | Todd Hanson*
   | Peggi Knight
   | Kevin Merryman
   | Linda Narrigon
10 | Kansas | Rodney Montney*
   | Dave Meggers
   | Jennifer Distlehorst
11 | Louisiana | John Eggers
   | Harold Paul*
   | Tyson Rupnow
12 | Michigan | John Staton*
   | Tim Stallard
   | Andy Bennett
13 | Minnesota | Maria Masten*
   | Tom Burnham
14 | Missouri | Brett Trautman*
15 | Montana | Bob Weber
   | Susan Sillick
16 | Nebraska | Wally Heyen*
   | Lieska Halsey
17 | Nevada | Ken Chambers
   | Reid Kaiser*
   | Michele Maher
   | Kelly Yokotake
   | Vivekananth Yatheepan
18 | New York | Bill Coerdon*
19 | North Carolina | Nilesh Surti*
   | Richard Burley
20 | North Dakota | Clayton Schumaker*
21 | Ohio | Craig Landefeld*
   | Stephen Slomski
22 | Oklahoma | Kenny Seward*
   | Matt Romero
   | Jeff Dean
23 | Pennsylvania | Steve Koser
   | Larry Ligon
   | Josh Freeman
24 | S Dakota | Darin Hodges*
   | Jason Smith
   | Chris Leibrock
25 | Texas | Andy Naranjo*
   | Hua Chen
   | Ruben Carrasco
   | Jaime Gandara
26 | Utah | Bryan Lee
   | Scott Andrus*
   | W Pope
27 | Washington | Jeff Uhlmeyer
   | Mark Russell
   | Kim Willoughby*
   | David Luhr
28 | Wisconsin | Jim Parry*
29 | Illinois Tollway | Steve Gillen*
Agenda
Omaha, NE – September 9-11, 2014

Tuesday, September 9
6:30 am  Breakfast – Ballroom (available each morning from 6:30 – 8:00 am)
7:15 am  Registration
8:00 am  Welcome and Introductions - Randy Peters, Director of NE Department of Roads
Moderator - Maria Masten, NCC Executive Committee Chair (MnDOT)
8:30 am  State Reports: Aggregate Quality and Acceptance A-Z – Maria Masten, MnDOT
   • Aggregate quality specs and tests for acceptance
     o Tony Zander, Indiana DOT
     o Robert Dawson, Iowa DOT
     o Andy Naranjo, Texas DOT
10:00 am  Morning Break
10:30 am State Reports (continued)
11:00 am Freeze/Thaw Pooled Fund – Dr. Tyler Ley, Oklahoma State University
11:30 am MnDOT Carbonate Study - Dr. Fatih Bektas, Iowa State University
12:00 pm Lunch – State PFS DOT representatives to sit at reserved tables.
1:15 pm MnRoad Research Update – Ben Worel, Minnesota DOT
2:15 pm Update on Alabama’s Moratorium on Limestone – Drew Waldrop, Alabama DOT
2:30 pm Microsphere-Based Admixture for F/T Resistant Concrete - Charles Nmai, BASF
3:00 pm Afternoon Break
3:30 pm NCHRP Fly Ash Research - Dr. Larry Sutter, Michigan Tech
4:15 pm Aggregate Gradation – Dr. Tyler Ley, Oklahoma State University
4:45 pm Research Update - Prasada Rangaraju, Clemson University
5:00 pm Adjourn for the day

Wednesday, September 10
8:00 am  Iowa DOT Remarks – John Adam, Director, IA DOT Highway Division
8:15 am  History of Concrete Paving – Dave Howard, Koss Construction
9:00 am  Pavement Foundation TPF 5(183) Research Update – Dr. David White, Iowa State University
10:00 am Morning Break
10:30 am How to Get Contractor Quality for Building Quality - Matt Zeller, Concrete Paving Association of Minnesota and Robert Kennedy, Koss Construction
11:15 am FHWA Update – Gina Ahlstrom, FHWA
11:45 am Geology of Weeping Water, Nebraska - Rory Martin, Martin Marietta Geologist
12:15 pm Pick up box lunches, return to meeting room to view safety presentation for mine tour
1:15 pm Buses depart from the hotel for technical tour –
   Martin Marietta Limestone Mine – Weeping Water, Nebraska
6:10 pm Meet in lobby and walk to 6:30 Group Dinner at Upstream (514 S 11th Street, Omaha)
Thursday, September 11

7:45 am  Business Meeting
   - NCHRP research priorities – Tyson Rupnow, Louisiana DOT
   - AASHTO update – John Staton, Michigan DOT and Maria Masten, MnDOT
   - TTCC TPF transition update – Iowa DOT

8:30 am  I-680 Reconstruction - George Feazell, Iowa DOT, Brian Higginbotham, HGM, and Wade Greiman, Snyder and Associates

9:15 am  Patching (Tying and Opening Strength) Panel - Tommy Nantung and Tony Zander, Indiana DOT, and John Staton, Michigan DOT

10:00 am  **Morning Break**

10:15 am  Dowel Bar Task Force Report – Tom Burnham, MnDOT, and Mark Snyder, Engineering Consultant

10:40 am  Cement Reciprocity Task Force Report – Lieska Halsey, NDOR, and Todd Hanson, Iowa DOT

11:00 am  CP Tech Center Updates
   - Performance Engineered Mixes – Peter Taylor, CP Tech Cente

11:30 am  Adjourn

*Note that all presentations will be viewable online at [www.cptechcenter.org](http://www.cptechcenter.org) after the conference.*