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.

<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)</td>
</tr>
<tr>
<td></td>
<td>□ Quarter 2 (April 1 – June 30)</td>
</tr>
<tr>
<td></td>
<td>X Quarter 3 (July 1 – September 30)</td>
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<td></td>
<td>□ Quarter 4 (October 4 – December 31)</td>
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<table>
<thead>
<tr>
<th>Project Title: Technology Transfer Concrete Consortium (TTCC)</th>
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<tbody>
<tr>
<td>Project Manager: Tom Cackler</td>
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<tr>
<td>Phone: 294-3532</td>
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<td>E-mail: <a href="mailto:tcackler@iastate.edu">tcackler@iastate.edu</a></td>
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<td>Project Investigator: Tom Cacker</td>
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<thead>
<tr>
<th>Lead Agency Project ID: RT 0273</th>
<th>Other Project ID (i.e., contract #): Addendum 315</th>
<th>Project Start Date: 1/27/07</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Project End Date: 6/30/12</td>
<td>Current Project End Date:</td>
<td>Number of Extensions:</td>
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</table>

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>
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<tbody>
<tr>
<td>519,000</td>
<td>303,408</td>
<td>On-going activities</td>
</tr>
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</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>$45,141</td>
<td></td>
<td></td>
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</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 and Analysis Track
- Provide assistance as requested by the CP Road Map Executive Committee on other select tracks as needed

Progress this Quarter (includes meetings, work plan status, contract status, significant progress, etc.):
- Fall meeting in South Dakota, September 13-15; – presentations and notes are available on the CP Tech Center’s website.

Theme: **Sustainable Concrete Pavements**

**Tues., Sept. 13**
- FHWA’s Sustainable Pavements TWG – Gina Ahlstrom (FHWA)
- LCA/LCCA - Jon Ochsendorf (MIT)
- RCA Technical Deployment Plan – Gina Ahlstrom (FHWA)
- Partial Depth Repair Guide - Dale Harrington (CP Tech Center)
- Research Updates
  - Pavement Vehicle Interaction – Franz Ulm (MIT)
  - Pavement Foundations TPF 5(183) – David White (ISU)
  - Joint Deterioration Interim Report– Tom Cackler, Peter Taylor, and Dale Harrington (CP Tech Center)
  - Ternary Mixes Using High SCM’s - Tyson Rupnow (LaDOT)
  - Mix Track Update – Peter Taylor (CP Tech Center)
- Illinois Tollways Approach to Sustainable Pavements – Steven Gillen (IL Tollways)
- Update on Use of Fly Ash - Ben Franklin (Headwaters)
- Concrete Delivery Time Update - Maria Masten (MN DOT)

**Wed., Sept 14**

**Pavement Management and Concrete Pavements** – Larry Scofield

**MEPDG Implementation: Successes and Challenges**
- Overview of FHWA/AASHTO Implementation Efforts - Gary Crawford (FHWA)
- Understanding the MEPDG - Jim Mack (Cemex)
- State experience:
  - Sensitivity analysis - Tommy Nantung (IN DOT)
  - Missouri - Brett Trautman (MO DOT)
  - Pavement Foundation Considerations for DARWin-ME – David White (ISU)

Concrete technical tour and GPR demo
Thurs., Sept. 15  TTCC/NCC Business Meeting and State Reports
Committee Report on DOT Technical Support - Brett Trautman (MO DOT)
TRB Problem Statements – Steve Tritsch (CMC Americas)
State Reports on MEPDG Implementation

State Report Questions on MEPDG Implementation:
1. Summarize your state’s status as far as MEPDG Implementation.
2. What efforts have been made toward local calibration?
3. What additional information/support would assist your state with implementation?

Anticipated work next quarter:
• Begin planning for Spring meeting in Oklahoma City, April 10-12

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).