**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(139)* | **Transportation Pooled Fund Program - Report Period:**□Quarter 1 (January 1 – March 31)□ Quarter 2 (April 1 – June 30)X Quarter 3 (July 1 – September 30)□Quarter 4 (October 4 – December 31) |
| **Project Title:**Implementation of Concrete Pavement Preservation and PCC Surface Characteristics: Tire Pavement Noise Program |
| **Project Manager: Phone: E-mail:**Tom Cackler 294-3532 tcackler@iastate.edu |
| **Project Investigator: Phone: E-mail:**Tom Cackler 294-3532 tcackler@iastate.edu |
| **Lead Agency Project ID:**RT 215 | **Other Project ID (i.e., contract #):**Addendum 286 | **Project Start Date:**1/27/07 |
| **Original Project End Date:**12/31/10 | **Current Project End Date:**12/31/11 | **Number of Extensions:**2 |

Project schedule status:

□ On schedule x 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** |
| $617,088 | $573,006 | 90% |

***Quarterly*** Project Statistics:

|  |  |  |
| --- | --- | --- |
|  **Total Project Expenses** **This Quarter** |  **Total Amount of Funds**  **Expended This Quarter** | **Percentage of Work Completed** **This Quarter** |
| $3,421 |  | 5% |

**Project Description:**

One of the most pressing issues to the Portland Cement Concrete Pavement industry is the surface characteristic issue. Surface characteristics are defined as those properties of pavement that affect the smoothness, friction, noise, drainage, splash and spray, rolling resistance, and reflectance of the pavement. Although all of these are important, it is the noise issue that has recently begun to significantly affect the U.S. pavement community.

This project is the third in a series of initiatives. In Part 1, ISU and FHWA developed the long term research plan and as well as the documents required to build innovative test sections. Part 2 is 98% completed and consists of the collecting and organization of texture and noise data from over 900 different pavement sections.

The purpose of Part 3 is to fully implement the PCC Surface Characteristics program and 3 will consist of four major objectives:

* Continue comprehensive data collection on new and existing pavements started in 2005 under the Type 1 and Type 2 experiments, through the end of 2009 for time/history data.
* Analyze the data to identify clear relationships between texture, noise, friction, etc.
* Develop and evaluate construction specifications of conventional texture techniques including grinding.
* Develop and evaluate innovative construction techniques that have the potential to significantly reduce noise.

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

**Tech Briefs:** Variability and Visualization of Tire-Pavement Noise Measurements

**Presentations:** TRB ADC40 Summer Mtg./Noise-Con 2011, Portland, OR

 TPF-5(135) Meeting, Portland, OR

 TRB Webinar on Quieter Pavements, co-sponsored by ADC40 and AFD90

 Internoise 2011, Osaka, JP (not funded by pooled fund)

**Brief summary of this quarter’s research:**

* Publication of the tech brief dealing with “Variability and Visualization of Tire-Pavement Noise Measurements
* Implementation activities continued with ongoing discussions with the states of NC, DE, and CO.
* Implementation visit to the State of Washington as part of a project on I-90 in Snoqualmie Pass. During the visit, there were meetings with the state pavement and materials engineers, and an on-site review of the construction operations was made.
* A field report from the WA implementation visit is being drafted, and includes data that continues to be received from WSDOT.
* Continued work on drafting of the final reports from this project.

**Anticipated work next quarter:**

* As needed for the implementation effort, development of program for senior DOT senior management.
* Further refinements and completion of the final How To Guide.
* Further refinements and completion of the guide for selecting the right texture for the project.
* Development of extended training and support program for other agencies including possibly DE, NC, and CO.
* Complete Final Report.

**Significant Results:**

**(see tech brief http://www.cptechcenter.org/publications/SC\_variability\_tech\_brief.pdf)**