# TRANSPORTATION POOLED FUND PROGRAM
# QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT): Louisiana Transportation Research Center (LTRC)

**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 #** *(i.e, SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX)* TPF-5(242), Phase III | | **Transportation Pooled Fund Program - Report Period:** ☐ Quarter 1 (January 1 – March 31) ☑ Quarter 2 (April 1 – June 30) ☐ Quarter 3 (July 1 – September 30) ☐ Quarter 4 (October 1 – December 31) |
|---|---|---|
| **Project Title:** Prep-ME Software Implementation and Enhancement | | |
| **Name of Project Manager(s):** Doc Zhang | **Phone Number:** 225-767-9162 | **E-Mail** Doc.Zhang@LA.GOV |
| **Lead Agency Project ID:** | **Other Project ID (i.e., contract #):** | **Project Start Date:** July 1 2015 |
| **Original Project End Date:** September 30 2016 | **Current Project End Date:** September 30 2016 | **Number of Extensions:** 0 |

Project schedule status:

☑ On schedule ☐ On revised schedule ☐ Ahead of schedule ☐ Behind schedule

Overall Project Statistics:

| Total Project Budget | Total Cost to Date for Project | Percentage of Work Completed to Date |
|---|---|---|
| $91,953 | $0 | 0% |

***Quarterly*** Project Statistics:

| Total Project Expenses and Percentage This Quarter | Total Amount of Funds Expended This Quarter | Total Percentage of Time Used to Date |
|---|---|---|
| $0 and 0% | $0 | 0% |

**Project Description**:

Pavement ME Design (previously MEPDG/DARWin-ME) is a significant advancement in pavement design, but requires much more inputs from various sources. Through the transportation pooled fund study TPF-5(242), the Phase II final deliverable Prep-ME software is capable of pre-processing, importing, checking the quality of raw Weigh-In-Motion (WIM) traffic data, and generating three levels of traffic data inputs with in-built clustering analysis methods for Pavement ME Design. This software complies with FHWA Traffic Monitoring Guide (TMG) and TMAS for quality assurance and quality control (QA/QC), and can be used by state highway agencies for the QA/QC of traffic data collection, analysis of truck loading data, and preparation of input for AASHTO Pavement ME software.

The objective of proposed Phase III project is to assist participating state DOTs on the full implementation of Prep-ME software for traffic data collection and Pavement ME Design and to deliver new generation of Prep-ME software with enhanced and customized features for each individual state. The proposed tasks to be performed in Phase III include:

- Task 1 - Provide On-Site and Webinar Training for Participating States,
- Task 2 - Develop Portable Version of Prep-ME for Field Data Collection and WIM Calibration,
- Task 3 - Enhance Existing Traffic Module in Prep-ME,
- Task 4 - Provide Technical Support to Meet State Needs.

Upon completion of this project, participating state DOTs will have a software and database tool set used not only by pavement design engineers to prepare input for Pavement ME Design, but also traffic data collection engineers to collect better traffic data and manage those data for other applications.

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

The Phase III of the TPF-5(242) project has not started yet in this quarter (April - June 2015). In the previous quarter, the Phase III technical and budget proposals were finalized based on the comments from the participating states, and sent to LTRC for contracting in March 2015 with the anticipated starting date on April 1, 2015. However, in May 2015 it was found that the total remaining budget for Phase III should be $50,000 less than that was proposed in the March proposal. The major work in this quarter is to revise the technical scope of work based on the budget change. The technical proposal and budget proposal (with the total of $91,953) have been submitted to LTRC for contracting with the anticipated starting date on July 1, 2015.

In addition, in this quarter the OSU team contacted the state representatives who attended the Regional Pavement ME Design Peer Exchange Workshops organized by FHWA, and provided multiple webinars demonstrating Prep-ME software and its capabilities to DOTs who showed the interest to implement Prep-ME for their states, including PennDOT, NVDOT, Oregon DOT (ODOT). NVDOT has decided to join the pooled-fund study.

**Anticipated work next quarter**:

The revised anticipated starting date of Phase III is July 1, 2015. The OSU team will start working on all the four tasks in the next quarter immediately after the project contract has been signed:

(1) TASK 1 - PROVIDE ON-SITE AND WEBINAR TRAINING FOR PARTICIPATING STATES
The OSU research team will work with the six participating states on dates for on-site trainings, prepare data sets and training documents. WIM data sets will be obtained from these states and the training will be customized for each state using their own data sets.

(2) TASK 2 DEVELOP PORTABLE VERSION OF PREP-ME FOR FIELD DATA COLLECTION AND WIM CALIBRATION
In the next quarter, the OSU team will start developing a portable version of Prep-ME that is capable to check traffic data in the field is of great importance. It is anticipated that the beta version of the portable Prep-ME software will be delivered to participating states for testing in the third quarter of 2015.

(3) TASK 3 ENHANCE EXISTING TRAFFIC CAPABILITIES IN PREP-ME
The research team will continue improving the Prep-ME software based on further feedback from participating states during the implementation process. Any issues or bugs will be addressed or corrected in a timely manner. New desired features from participating states will be added to enhance the existing capabilities in Prep-ME.

(4) TASK 4 - PROVIDE TECHNICAL SUPPORT TO MEET STATES' SPECIAL NEEDS
During the implementation of Prep-ME for daily traffic data collection and ME based pavement design, technical support will be provided on a need basis aiming to help state DOTs deploying the Prep-ME software. Any special needs arose from participating states during the implementation process will be addressed by the research team. Desired enhancement of particular software features or modules will be developed with close consultation with the participating states.

**Significant Results:**

The technical proposal has been revised based on the change of total remaining budget for Phase III, and been submitted to LTRC for contracting with the anticipated starting date on July 1, 2015. The team contacted the state representatives and provided multiple webinars demonstrating Prep-ME software and its capabilities to PennDOT, NVDOT, Oregon DOT (ODOT). NVDOT has decided to join the pooled-fund study.

**Circumstance affecting project or budget. (Please 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).**

Due to the significant decrease ($50,000 less) of available budget for Phase III, the technical scope of work has been revised and submitted to LTRC for approval and contracting with the anticipated starting date on July 1, 2015.

**Potential Implementation:**

No new information on implementation at this time, other than what has been reported on the application of Prep-ME at individual states.