**TRANSPORTATION POOLED FUND PROGRAM**

**QUARTERLY PROGRESS REPORT**

Lead Agency (FHWA or State DOT): Alabama 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.*

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| **Transportation Pooled Fund Program Project #**  *(i.e, SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX)*  TPF-5(228) | | **Transportation Pooled Fund Program - Report Period:**  **√** Quarter 1 (January 1 – March 31) 2018  Quarter 2 (April 1 – June 30)  Quarter 3 (July 1 – September 30)  Quarter 4 (October 1 – December 31) | |
| **Project Title:**  Superpave Regional Center, Southeastern Region | | | |
| **Name of Project Manager(s):**  Don Watson and Randy West | **Phone Number:**  (334) 844-7306 | | **E-Mail**  watsode@auburn.edu |
| **Lead Agency Project ID:**  ALDOT Research Project No. 930-763P | **Other Project ID (i.e., contract #):**  224574 | | **Project Start Date:**  April 28, 2010 |
| **Original Project End Date:**  September 30, 2012 | **Current Project End Date:**  February 28, 2020 | | **Number of Extensions:**  4 |

Project schedule status:

On schedule √ On revised schedule Ahead of schedule Behind schedule

Overall Project Statistics:

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| **Total Project Budget** | **Total Cost to Date for Project** | **Percentage of Work**  **Completed to Date** |
| $2,000,353 | $1,317,140 | 75 |

*Quarterly* Project Statistics:

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| --- | --- | --- |
| **Total Project Expenses**  **and Percentage as of This Quarter** | **Total Amount of Funds**  **Expended This Quarter** | **Total Percentage of**  **Time Used to Date** |
| $1,317,140 (64% of budget) | $43599 | 80 |

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| **Project Description**:  The Southeastern Superpave Center has been supported by state agencies through a pooled-fund project that has been largely used to provide training, verify ruggedness of equipment, check equipment calibrations, provide materials research, and aid in keeping agency personnel abreast of changes in asphalt technology. In order to continue the efforts in training, technology transfer, and implementable research, it is essential that the pooled-fund effort be continued.  ***NOTE:*** *This pooled-fund project is not limited to states located in the southeast. Agencies throughout the country are invited to participate and take advantage of the research and training opportunities provided by the Southeastern Superpave Center.*  **OBJECTIVES**  Several short-term and long-term objectives of the Southeastern Superpave Center are listed below. Several objectives deal with evaluating recently-developed performance test equipment and conducting research to address materials and tests issues. Objectives of the Center are:   1. Conduct training in regard to Superpave binders, mix design, and performance testing. Provide training on special topics as requested by participating agencies at their on-site locations. 2. Perform research, both cooperatively and agency-specific, sponsored by members of the pooled-fund. 3. Perform precision and bias testing for asphalt-related performance test equipment. 4. Conduct noise studies in an effort to develop quieter pavements. 5. Perform forensic evaluations on materials or projects that have experienced premature distress. 6. Prepare research articles of regional and national interest. |

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| **Progress this Quarter (includes meetings, work plan status, contract status, significant progress, etc.):**  **TRAINING**  This quarter technician certification courses were conducted for Puerto Rico, Pavement Preservation courses were held  for Alabama, and an Asphalt Engineers Workshop was held for Georgia. A total of 142 personnel participated in training  courses this quarter.  **TRAVEL**  SCDOT used funds for personnel to attend the annual TRB meeting and a MEPDG workshop.  **TESTING**  Puerto Rico used funds for asphalt binder PG classification tests for terminal supplied binders.  **Research**  A plan was approved to assist ALDOT with implementation of pavement preservation. The project will involve conducting regional workshops for pavement condition assessment and project selection. Pavement management data collected since 2010 will be used to develop pavement performance curves for the southeast region of the state. To motivate implementation of the preservation program, a mechanism will be developed to recognize those Districts that achieve outstanding performance.  MDOT has approved three research projects:  Mississippi plans to conduct a study to evaluate thermal properties of asphalt mixtures. In Pave ME, the thermal parameters constitute the required inputs to the Enhanced Integrated Climatic Model (EICM), and include parameters such as the mix coefficient of thermal contraction, thermal conductivity, heat capacity, and surface shortwave absorptivity for Hot Mix Asphalt (HMA). The default values used in the software may not be representative of pavements in Mississippi and could result in errors in performance predictions by up to 15% so it is important that properties related to Mississippi asphalt mixtures be determined.  Current pavement condition ratings (PCR) are based on deduct values for various distresses and severity levels from data developed over 30 years ago. Due to changes in asphalt mixture design procedures and in technological methods and equipment used for conducting and evaluating pavement condition, there is a need to revisit the accuracy of the rating procedure.  MDOT is implementing a new pavement management system that will include optimization strategies by modeling and analyzing pavement conditions. The distress models used to assess pavement deterioration were developed using the Markov transition probability matrix and need to be reviewed and verified for accuracy as more data and collection methods have been added.  **Anticipated work next quarter**  Additional training opportunities will be presented next quarter. A schedule for Puerto Rico training has been approved  and will continue through summer months for roadway technicians, asphalt plant technicians and technicians on  earthwork and base projects. Work will begin on the ALDOT pavement preservation project that will involve training,  project condition surveys, and evaluation of survey data. Work will continue on the three MDOT projects. |
| **Significant Results:** Pavement preservation workshops have been successful for ALDOT by educating and challenging  engineers in the evaluation of pavement condition surveys and determination of appropriate preservation treatments to  extend pavement serviceability. |
| **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).**  NA. |
| **Potential Implementation:** |