**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) 2012 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:**September 30, 2012 | **Number of Extensions:** |

Project schedule status:

√ On schedule On revised schedule Ahead of schedule Behind schedule

Overall Project Statistics:

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|  **Total Project Budget** |  **Previous Total Cost for Project** |  **Percentage of Work**  **Completed to Date** |
| $972,129 Note: Project budget was increased this period | $152,671 | 18 |

***Quarterly*** Project Statistics:

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|  **Total Project Expenses to Date** **and Percentage of Budget** |  **Total Amount of Funds**  **Expended This Quarter** |  **Total Percentage of**  **Time Used to Date** |
| $189,239 (19.5% of budget) | $36,568 | 83 |

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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.):****MEPDG CLIMATE DATABASE:** Met with Project Review Committee of sponsoring agency to discuss the methods that would be used to develop future climate files. The DOT has requested additional work and the estimate for that effort is being prepared. The ISU Climate Team completed the historic files and NCAT has begun verifying the files. The next steps are completing the file verification, developing the future files, and providing an estimate on the requested additional work.**AGGREGATE FRICTION STUDY:** NCAT developed blending charts for the aggregate substitutions, recommended blending proportions to the DOT, and received approval to proceed with the recommended friction aggregate substitutions. The NCAT lab has all the aggregates split and has started blending aggregates. The next step is to verify the mix designs and compact slabs.**HIGH RAP STUDY:** Four states have sponsored a study of the use of high RAP proportions in asphalt mixtures. The RAP proportion will be varied so that the RAP binder will replace 10, 25, and 50 percent of the virgin binder. The study will evaluate whether increasing the effective binder content or using a softer grade binder will be most effective at reducing potential for cracking. We have completed mix designs, and energy ratio testing. There are five more overlay tester samples to complete and APA testing remains to be finished. Once that is done, a draft report will be prepared.**DETERMINE APPROPRIATE TEMPERATURE FOR FLOW NUMBER TESTING:**One agency has asked for a review of LTPPBind data to determine what temperature flow number testing with the AMPT should be conducted at. Of particular interest was whether a single temperature was satisfactory for all geographical areas or if multiple regions needed to be created with a different temperature for each region. The reviewhas been completed and a draft report is being reviewed.**TECHNOLOGY TRANSFER/TECHNICAL MEETINGS:** Several agencies used funds this period to pay travel and registration expenses for employees to attend technical meetings such as ASTM annual meetings. **Anticipated work next quarter**:Work will be started on the friction study for one agency. Mix design work and laboratory performance testing will be started for the friction study. The high RAP study should be nearing completion and a draft report prepared. A final report will be prepared on the LTPPBind climate data evaluation for determining the temperature to use for flow number testing.  |
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| **Significant Results:**A review of LTPPBind climate data revealed that one weather station in a mountainous area was causing the recommended flow number test temperature to be skewed toward a lower temperature than reasonable for thearea. Using the data as typically recommended would result in asphalt mixtures passing the test criteria at higher traffic loadings than which the mix would be able to perform. |
| **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).**Additional work has been requested that would extend beyond the end date of this project. For that reason, aproject extension has been requested.. |

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| **Potential Implementation:** The climate data being obtained will be useful for one agency by providing specific climate data that is more compre- hensive and more accurate than the original data used in the MEPDG development.The high RAP study will provide information to agencies that will give increased confidence for decision-making in regard to whether increased RAP proportions can be used without fear of cracking failure.After reviewing LTPPBind data for one agency, a more accurate temperature for conducting flow number testing will beRecommended for that geographical area. |