# hhhtransportation pooled fund program QUARTERLY PROGRESS REPORT

Date: January 28, 2012

Lead Agency (FHWA or State DOT): Louisiana Department of Transportation and Development

### **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 Projection	ect # Transportation Pool	Transportation Pooled Fund Program - Report Period:		
TPF-5(212)	□Quarter 1 (January	□Quarter 1 (January 1 – March 31)		
3(212)	□Quarter 2 (April 1 –	June 30)		
	□Quarter 3 (July 1 –	September 30)		
	X□Quarter 4 (Octobe	er 1 – December 31)		
Project Title:				
Southeast Transportation Consortium				
Name of Project Manager(s):	Phone Number:	E-Mail		
Mark Morvant	225-767-9124	mark.morvant@la.gov		
Las I Assault B	Other Brain (ID ()	Brain at Otari Bata		
Lead Agency Project ID: LTRC No. 09-1PF	Other Project ID (i.e., contract #): SIO No. 30000281	Project Start Date: 9/1/2009		
EINO NO. 03 II I	0.0 10.0000201	0/1/2000		
Original Project End Date:	Current Project End Date:	Number of Extensions:		
8/31/2012	8/31/2015	1		
Project schedule status:				
☐ On schedule X On revised schedu	ule	☐ Behind schedule		
Overall Project Statistics:				
Total Project Budget	Total Cost to Date for Project	Percentage of Work		

Total Project Budget	Total Cost to Date for Project	Percentage of Work Completed to Date
\$300,000	\$ 47,820.48	percentage varies by project

## **Quarterly** Project Statistics:

Total Project Expenses	Total Amount of Funds	Total Percentage of
and Percentage This Quarter	Expended This Quarter	Time Used to Date
\$47,820.48 (16%)	\$ 22,598.28	54

### **Project Description:**

STC's objectives are to pool financial, professional, and academic resources to coordinate research and develop improved methods of addressing common problems in the planning, design, construction, maintenance, management, and operation of transportation systems in participating states. The program is intended to supplement ongoing state, federal, and university research activities and other national programs such as the National Cooperative Highway Research Program. It is intended to reduce duplication of research and provide means for better communication of ongoing research activities in the state research programs. The cooperative and collaborative objectives of the STC program are to develop synergy and provide for a more efficient use of resources. Specific objectives include

- Plan and conduct meetings to establish research priorities, share research findings, exchange information, and define direction of the organization. Each member may utilize funds for one representative from each organization to participate
- Discuss and screen potential research projects and seek partners from the public, academic, and private sectors to collaborate on these projects and utilize available resources to ensure research is not duplicative
- Conduct research studies
- Communicate and disseminate research results and innovations through the use of communication products such as development and maintenance of a Web site, periodic electronic newsletter, and fact sheets
- Put research results into practice through technology transfer events

Communicate impacts of the organization's activities to national leaders in transportation

# Progress this Quarter (includes meetings, work plan status, contract status, significant progress, etc.): Program Management/Administrative Activities

- Continued update and maintenance of STC project database
- Presented update at 1013 Annual RAC meeting at TRB in January
- Planned the annual STC meeting to be held in March in Baton Rouge.

### **STC Synthesis Projects:**

STC Syntheses Projects are technical summaries of research performed and state-of-the-practice reports prepared under contract by outside individuals or firms. These reports are oriented toward practical solutions of specific transportation problems. The specific objectives of a Synthesis of State-of-Practice are:

- o To locate and assemble information;
- o To learn what practice has been used;
- To identify ongoing and recently completed research;
- o To learn what problems remain largely unsolved; and
- To organize, evaluate, and document the useful information acquired Best Practices for

SYNTHESIS OF ASPHALT SURFACE TREATMENTS FOR PAVEMENT PRESERVATION (LTRC PROJECT NO. 12-2PF, SIO NO. 30000540)

Objective: The work conducted under this proposal will search the state-of-practice in the United States, with respect to Pavement Surface Treatments. The Synthesis will summarize the results of surface treatments research completed to date, state best practices and implementation status.

Principal Investigator: Hesham Ali, Ph.D., P.E., Florida International University,

	Project Status:		
T1	Literature Review	The Literature review is substantially complete. Research team found a wealth of information on Surface Treatment. The team has developed an outline of the report. The team will attempt to strike a balance on reporting on literature review and practitioners' input from the survey.	90
T2	Develop and Send Survey	A comprehensive survey was developed and shared with Project Manager. Upon review, it was decided to provide 2 surveys; Tier 1 for the general participant, and Tier 2 for highly technical individuals who are interested to answer more technical questions. The survey is being refined to share with the Panel.	80
Т3	Analyze responses and develop a report	No Progress was made in this task at this time.	0

# SYNTHESIS OF BEST PRACTICES FOR DETERMINING VALUE OF RESEARCH RESULTS (LTRC PROJECT NO. 12-3PF, SIO NO. 30000541)

Objective: The overall objective of this project is to synthesize the best practices for determining the value of research results, in order to demonstrate the impact that the research has on transportation system safety, quality and cost effectiveness.

Principal Investigator: Baabak Ashuri, Ph.D., Georgia Tech University Project Status:

_	Review the literature on determining value of research	100
	results	100
T:	Design a survey to identify the best practices.	100
T:	Distribute surveys and analyze the survey responses.	100
_	Conduct follow-up interviews and detailed case studies	25
1 4	with selected agencies.	25
-	Draft the synthesis report: Best Practices for Determining Value of Research Results.	50
13	Determining Value of Research Results.	50
T	Revise and Finalize the Best Practices Synthesis Report.	0

# STC SYNTHESIS OF RESEARCH RESULTS: REGIONAL IMPLEMENTATION OF WARM MIX ASPHALT (LTRC PROJECT NO. 12-4PF, SIO NO. 30000542)

Objective: This synthesis will summarize the results of warm mix research completed to date, state pilot projects and implementation status. Deliverables should include recommended implementation tools and/or additional research if needed to enhance implementation of this technology in the region.

Principal Investigator: Ronnie Clark Graves

Project Status:

Perform exhaustive literature review	The literature search is underway to	40
	compile information on completed Warm	40

		Mix research, this review is being conducted with the assistance of the Kentucky Transportation Center Transportation Library. Several existing surveys have been identified, this information has been used to developed the survey that is to be completed in Task 3.	
Т2	Collect information from research that is on-going	The research team has utilized the Research in Progress database to identify key research projects currently underway, the team has identified more than 25 projects underway which will be reviewed in more detail.	30
ТЗ	Construct and administer surveys to each of the state's Department of Transportation.	A draft survey has been sent to the study chair, it is anticipated this will be sent out sometime toward the end of January	
	Evaluate the results from Tasks 1-3 Synthesize all of the data into a final report		

# STC SYNTHESIS OF RESEARCH RESULTS FOR WATER QUALITY MANAGEMENT AT CONSTRUCTION SITES (LTRC PROJECT NO. 12-5PF, SIO NO. 30000543)

Objective: The objective of this research is to provide a technical summary of the status of implementation programs, projects, and research efforts involving water quality management at construction sites performed by member states.

Principal Investigator: Richard Sheffield, P.E., Thompson Engineering, Ridgeland MS

Project Status:

T1	PRC meeting - Draft of information template		100
T2	Louisiana and Arkansas Research	LA- Made contact with Danny Smith. Plan to follow up week of Jan. 14 2013 or sooner AR- Questionnaire was completed by Elisha Wright-Kehner, ADHT. Located a single report pertaining to Water Quality and Construction.	50
Т3	Mississippi and Tennessee Research	MS- Questionnaire completed by MDOT representative. Located a single research report related to water quality at construction sites TN- No response to questionnaire will follow up week of Jan 14 or sooner. Located a presentation of research relating to turbidity at TN DOT construction sites.	50
Т4	Alabama and Georgia Research	AL- No response to questionnaire will follow up week of Jan 14. Located 3 research reports related to water quality and construction. GA- questionnaire was completed by Jon Griffith, GDOT. Located 3-4 research reports related to water quality and construction	50
T5	Kentucky and North Carolina Research	KY- No response to questionnaire. Will	50

		follow up Jan 14 or sooner. Located 2 research reports concerning water quality and construction NC-NC has conducted multiple research projects involving water quality at construction sites specifically monitoring the effects of highway construction on select watersheds.	
T6	West Virginia and Virginia Research	VA- Survey completed. Located reports from previous research WV- Located a 2012 research project concerning wetland mitigation and highway construction.	50
T7	Florida and South Carolina Research	SC- Survey completed by Ray Vaughn, SCDOT. Located previously completed research projects. FL-Questionnaire completed by Larry Ritchie. Research available through Stormwater Management Academy, University of Central Florida	50
T8	PRC meeting - Findings and Report format		
Т9	Report Preparation	Compiled information gathered from completed surveys and available research into draft report. Choosing the most recent and relevant research to include in the final report. Draft in review internally.	50

## **Collaborative Efforts**

- Timber Bridge Inspection Demonstration Project sponsored by the US Dept of Agriculture. Louisiana is the southeast regional research partner working through the STC to demonstrate the technology.
  - o Louisiana, Georgia, Alabama, North Carolina are participating in the program
  - Planning/Demonstrations to State Bridge Maintenance personnel in North Carolina, Georgia and Louisiana have been completed
  - o Bridge Selection approved by US Dept of Agriculture
  - o Bridge testing being scheduled
  - Accepting commitments for new pooled fund solicitation #1318: Develop A Design and Analysis
     Procedures for Asphalt Mixtures Containing High-RAP Contents and/or RAS. Current commitments:
     Louisiana, Florida, Colorado. Project will be initiated with current commitments.

### Anticipated work next quarter:

- Continued update of state projects into database
- Present status of activities Annual RAC meeting
- Planning STC annual meeting in Baton Rouge
- Manage contracts for the four active synthesis projects (12-2PF, 12-3PF 12-5PF, 12-4PF)

## STC SYNTHESIS OF RESEARCH RESULTS: REGIONAL IMPLEMENTATION OF WARM MIX ASPHALT (LTRC PROJECT NO. 12-4PF, SIO NO. 30000542)

Т	III	The literature search will be completed and the results summarized.
Т	2 <mark>on</mark>	A summary of the current active research and any interim findings from these projects will be developed and presented to the study team.
Т		The survey will be completed and the results will be presented to the study team.

## SYNTHESIS OF BEST PRACTICES FOR DETERMINING VALUE OF RESEARCH RESULTS (LTRC PROJECT NO. 12-3PF, SIO NO. 30000541)

T5 Draft the synthesis report: Best Practices for Determining Value of Research Results.

T6 Revise and Finalize the Best Practices Synthesis Report.

#### SYNTHESIS OF ASPHALT SURFACE TREATMENTS FOR PAVEMENT PRESERVATION

-			Once the Survey is reviewed and approved by the Project Panel, it will be sent out. The PI will seek the Panel's input on the target participants. Survey should
			be sent out electronically by Feb 01, 2013.
F	Г3	Analyze responses and develop a report	30 days will be allowed for participants to complete the survey. Once survey is received, the the team will analyze the response and develop the final report.

(LTRC PROJECT NO. 12-2PF, SIO NO. 30000540)

## STC SYNTHESIS OF RESEARCH RESULTS FOR WATER QUALITY MANAGEMENT AT CONSTRUCTION SITES

T2Louisiana and Arkansas Research	Follow up with Danny Smith	
T3 Mississippi and Tennessee Research	Follow up with Brian Egan, TDOT	
T4Alabama and Georgia Research	Follow up with Alabama contact to get completed questionnaire	
T5 Kentucky and North Carolina Research	Follow up with KY contact to get completed questionnaire.	
T8 Report Preparation	Continue to prepare Draft Report	
(LTRC PROJECT NO. 12-5PF, SIO NO. 30000543)		

### Significant Results:

- Developed database for member state research projects
- Developed website for STC pooled fund program
- Established the STC synthesis project program
  - o Initiated first series of synthesis projects identified above
- Held annual meetings to promote collaboration among member states
- Identified additional pooled fund initiatives

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).

This pooled fund project is a continued effort to collaborate resources for the southeast region member states. The tasks are ever-evolving as member state set priorities on issues and collaboration opportunities. Administrative activities are accomplished by volunteers from member states as their work schedules allow.

### **Potential Implementation:**

In order to reduce redundancy of state research projects and promote transfer of knowledge on completed research, there exists a need to classify and quantify the focus, status and implementation of all member state research projects and programs. The STC Syntheses program was established to prepare technical summaries of research performed and state-of-the-practice reports prepared under contract by outside individuals or firms. These reports will be oriented toward practical solutions of specific transportation problems. The specific objectives of the synthesis are:

- 1. To focus on research projects conducted in the southeast region on a specific synthesis topic and issues;
- 2. To perform a literature search on the synthesis topic to identify other on-going or completed research;
- 3. To review the commonality of project scopes and methodology of studies performed in the STC region;
- 4. To review the commonality of project results, conclusions and recommendations;
- 5. To identify differences in results, conclusions and/or recommendations that would affect regional implementation and practice;
- 6. To review implementation status of individual state project results and recommendations;
- 7. To recommend applicability of applying research results to other states within the southeast region;
- 8. To recommend additional research (if needed) to enhance implementation within the region.
- 9. To organize, evaluate, and document the useful information acquired.

Completion of these synthesis reports will enhance implementation efforts for all states.