

**TRANSPORTATION POOLED FUND PROGRAM
FINAL REPORT**

Lead Agency (FHWA or State DOT): _____Kansas 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(127)	Transportation Pooled Fund Program - Report Period: 01/01/12-12/31/15	
Project Title: Midwest Accelerated Pavement Testing Pooled Fund/ Consortium of Accelerated Pavement Testers (CAP)		
Project Manager: Susan Barker, P.E. Phone: (785) 291-3847 E-mail: SusanB@ksdot.org		
Project Investigator: Mustaque Hossain Phone: (785) 532-1576 E-mail: mustak@ksu.edu		
Lead Agency Project ID: KS0592	Other Project ID (i.e., contract #): -	Project Start Date: 01/01/12
Original Project End Date: Multi-year project	Current Project End Date: 12/31/15	Number of Extensions: 3

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	Total Percentage of Work Completed
\$197,784	\$29,854.73	33.5%

Project Description:

The Consortium of Accelerated Pavement Testers (CAPT) has been formed to address some of these common issues. The current participating states of this pooled funds program are Alabama, California, Indiana, Kansas, Minnesota, New York, Ohio and Texas with Kansas being the lead agency. The overarching purposes of the CAPT are:

1. To identify and implement products and activities that would improve communication between APT facilities, APT technical capabilities and facility operations; and
2. To communicate the value that APT provides to state DOT funding programmers and decision makers.

The following were identified as the scopes of the CAPT program:

- Organize and structure a program that identifies and produces key technical deliverables.
- Provide a means to define, support and share APT technology of mutual interest.
- Develop a longer-range plan of collaboration (strategic plan), including potential cooperation with the international community.
- Provide for special studies, investigations, research, and training.

The objectives of this project were to do a few selected tasks and to provide management support to the CAPT program. Kansas State University, under the direction of the Project Monitor from the lead agency, Kansas Department of Transportation (KDOT), would essentially provide (a) Technical support and meeting/travel coordination; (b) Note taking and administrative organization; (c) Selected Tool development; (d) Subcontracting and monitoring; and (e) Reporting.

Work Plan

In the “pre-draft” statement of work floated by the Federal Highway Administration (FHWA) and tentatively agreed upon in January 2009, the following tasks were outlined:

Goal 1: Procedures to Quantify APT Benefits

- Organize a Webinar with the objective to consolidate and document the procedures from each facility; if possible reinforce correct procedures or identify alternatives from other facilities.
- Illustrate how to avoid pitfalls
- Focus on implement-able products and measurable results
- Archive Webinars for future reference
- When developing syntheses and recorded webinars, consider the training opportunities that APT offers for young engineers & technicians in a wide variety of pavement related topics. For example, see Moffat et al. in 2008 IAPT Paper “The Accelerated Loading Facility as an Accelerated Learning Facility: Three Case Studies”
(http://www.cedex.es/apt2008/html/docs/TS05/The_accelerated_loading_facility.pdf)

Goal 2: Instrumentation “How To”

- Dedicated CAPT Web Page
- Liaison with TRB Committee AFD40
- Set up a template that is generic but not sprawling - Follow HVSIA model
- Illustrate how to avoid pitfalls
- Archive photographs, videos, installation manuals
- Post and record instrumentation gaps
- Calibration procedures (**essential**)

- Installation procedures (**essential**)

Two meetings per year were also planned – one on web during summer of 2012 and one face-to-face in fall of 2012.

Kansas State University identified following tasks are proposed in this study for the first year (01/12-12/12):

Task 1: Set up a Face-to-Face Meeting of CAPT States

- Arrange CAPT to meet to discuss the scope, work plan for year, study topics/tasks, working groups and selection of at least two contractors

Task 2: Subcontract with the Consultant(s)

- Set up the subcontracts
- Monitor the progress of the work
- Maintain liaison with the working groups

Task 3: Create a CAPT Web Page

- Provide relevant information for CAPT states and programs
- Provide links to other sites
- Make a repository of APT-related information, reports, news, etc. Examples include, but not limited to:
 - Equipment Types/Track (scaled or small, medium or large)
 - Capabilities (Load, Heat/Cool, Dry/Wet)
 - Instrumentation (installation and calibration)
 - Data archive and access
 - Test procedures
 - Failure conditions
 - Results (report available or not)
 - Implementation

Task 4: Arrange Regular Teleconference with the Contractor

- Arrange regular teleconference between the working group and the contractor
- Synthesize and archive information

Task 5: Reporting

- Prepare quarterly reports and a final report

Project Progress (includes meetings, work plan status, contract status, significant progress, etc.):

- The participating agencies met in February, 2012 in Kansas City, Missouri to prioritize the tasks to be done. Kansas State University then collected proposals for the tasks selected and sent to the CAPT leadership for selection of the contractors.
- A subcontract with Dr. Richard Willis of Auburn University to do “how to” for instrumentation. A position paper and videos for instrumentation were developed in this subcontract.
- A web developer was hired at Kansas State University to develop a dedicated website for CAPT (<http://pavementtesters.org/>) and the database was populated with information from different CAPT states.
- A workshop on instrumentation at the 4th International Conference on Accelerated Pavement Testing, Davis, California in September 2012 was developed and delivered by Dr. Richard Willis of Auburn University under the sponsorship of CAPT.
- A “Go To” meeting among member states was arranged in March of 2014 with the new project monitor, Mark Greg Schieber (GregS@ksdot.org), Geotechnical Engineer of KDOT as chair. The developments of the project and specifics of the searchable database were discussed. Development of a searchable database was agreed upon.
- In a June 2014 “Go To” meeting, member states indicated a different approach for the searchable database. The KSU team decided to wait on a face-to-face meeting to get specifics of the direction to be taken. However, due to leadership changes at KDOT this meeting never occurred.
- Some changes have been made for the web site for CAPT (<http://pavementtesters.org/>) by KSU over the years and the website is being maintained by KSU till subscription for domain name expires this summer.
- In December 2015, the contract with KSU was cancelled. KSU prepared this final closeout report for the project.

Significant Results:

- A dedicated website for CAPT
- A position paper on “how to” for instrumentation
- Professional videos on “how to” do instrumentation
- All files for website, video, report, etc. are available at: <http://capt.engg.ksu.edu/files/capt/capt.zip>