

State of Wisconsin/Department of Transportation
RESEARCH PROGRESS REPORT FOR THE QUARTER ENDING: June 30, 2007

Program: SPR-0010(36) FFY99	Part: II Research and Development
Project Title: Database Development for a Hot-Mix Asphalt Pavement Performance Analysis System	Project ID: MRUTC 07-11 (0092-06-13)
Administrative Contact: Jason Bittner	Sponsor: MRUTC
WisDOT Technical Contact: James McDonnell	Approved Starting Date: November 16, 2006
Approved by COR/Steering Committee: FY07, \$50,000, 12 months	Approved Ending Date: November 15, 2007
Project Investigator (agency & contact): Robert Schmitt, UW-Platteville	

Description:

Total study budget	Current FFY budget	Expenditures for current quarter	Total Expenditures to date	Percent Complete
\$50,000	\$50,000	\$20,000	\$42,000	80%

Progress This Quarter:

(Includes project committee mtgs, work plan status, contract status, significant progress, etc.)

A teleconference with the project oversight panel on September 20th updated the project status, reviewed a powerpoint file for integrating databases, and identified any items warranting further investigation. Meeting notes can be found in separate stand-alone document.

Task 1. Literature Review

The objective of Task 1 is to identify, collect, review, and synthesize literature and research to understand all relevant literature on the relationship of pavement performance to design, construction, maintenance, and environmental variables. Task 1 is 100% complete.

Task 2. Survey and Review of Pavement Management Systems

The objective of Task 2 is to survey state highway agencies to acquire information on their pavement management systems. Task 2 is 100% complete.

Task 3. Database System Development.

The objective of Task 3 is the development of a database system including several elements, such as the overall purpose of the system, data types and formats to be collected and managed, software and hardware requirements, as well as institutional issues involved in the implementation and use of the system. Task 3 is 100% complete.

Task 4. Numerical Modeling and Statistical Analysis

The objective of Task 4 is to develop an analysis template for aligning design and construction datasets with the pavement performance indicator datasets, and demonstrating methodologies for analyzing the data. Task 4 is 90% complete.

This quarter, on-going NCHRP Project 9-22, Performance Related Specification (PRS) for Hot Mix Asphalt (HMA), was investigated. Products from NCHRP 9-22 can be used with the integrated dataset generated by this research study.

Task 5. Final Report.

The objective of Task 5 is to submit a final report documenting all findings in the project. Work on the draft report began this quarter. Task 5 is 50% complete.

Work Next Quarter:

Task 1. Literature review

The literature review is 100% complete.

Task 2. Survey and Review of Pavement Management Systems

Task 2 is 100% complete.

Task 3. Database System Development.

Task 3 is 100% complete.

Task 4. Numerical Modeling and Statistical Analysis

Work on Task 4 will be completed by creating an export data file for use by NCHRP 9-22 software, *HMA Spec*.

Task 5. Final Report.

Work on Task 5 is planned during the next quarter.

Circumstances affecting progress/budget:

None. However, a no-cost time extension is requested for a new completion date of December 31, 2007, so that there is adequate time to review the final report.

Gantt Chart:

Project Progress Chart		Updated: September 30, 2007													
MRUTC Project 0092-06-13		Database Development of an HMA Pavement Performance Analysis System													
Task	Description	Qtr 1		Qtr 2			Qtr 3			Qtr 4			Qtr 5		Percent Complete
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	
1	Literature Review	█	█	█	█	█									100
2	PMS Review	█	█	█	█	█	█								100
3	System Development			█	█	█	█	█	█	█	█				100
4	Statistical Modeling				█	█	█	█	█	█	█	█			90
5	Final Report											█	█	█	50
	Proposed	█													
	Actual	█													80