SPR RESEARCH PROJECT DESCRIPTION

PROJECT NUMBER:
03418

PROJECT TITLE:
GASB Statement 34 Compliance-Phase III (Bridges)

CO-PRINCIPAL INVESTIGATORS:
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PROJECT OBJECTIVE
This project will provide four Asset Management information system components for bridge maintenance management for the Alabama Department of Transportation (ALDOT). It will prepare outcome-based system definition specifications for a comprehensive Bridge Maintenance Management System, which will be compliant with the GASB 34 directive.

PROJECT ABSTRACT
This project focuses on development of one of four components of ALDOT’s envisioned asset management system that deals with bridge maintenance management – the development of detailed goals and processes for the Bridge Maintenance Management Planning System module and roadmap solution (decision processes, alternative analysis techniques, available data and system components, system requirements, commercially available systems, and procurement analysis).

PROJECT TASK DESCRIPTIONS:
1. Conduct analysis of bridge management planning module procurement
2. Develop bridge inspector sufficiency rating calculator
3. Develop longitudinal bridge family decay curves
4. Verify process and calculation of 2003 GASB 34 condition ratings
5. Prepare final report
MILESTONES AND DATES:
Task 1: Aug 1, 2003 – May 1, 2004
Task 4: Sep 30, 2003 – May 1, 2004
Task 5: Apr 1 – May 31, 2004

TOTAL BUDGET:
Alabama Department of Transportation, State Planning and Research (SPR) funds $175,773

STUDENT INVOLVEMENT:
This project will engage multiple students during the design, construction, testing and deployment of the systems.

RELATIONSHIP TO OTHER RESEARCH PROJECTS:
This project is a continuation of UTCA Project 01459: “ALDOT and GASB 34 - Phase I,” and UTCA Project 02411: “GASB 34 Compliance – Phase II.” This project will incorporate the results of UTCA Project 02114: “GIS-Resource Allocation Visualization” and UTCA Project 03112: “Bridge Decay/Maintenance Forecasting.”

TECHNOLOGY TRANSFER ACTIVITIES:
The only direct tech transfer activities from this project will be production of a final report, and training of ALDOT managers and bridge inspectors in the processes developed during the project.

POTENTIAL BENEFITS OF THE PROJECT:
This project will develop tools to enhance bridge inspector training, increase the consistency of the rating process across multiple inspectors, and reduce the time required to determine a bridge’s sufficiency rating.

TRB KEYWORDS:
GASB 34, asset management, management information system, information resource information system, bridge management system, bridge decay curves, bridge sufficiency rating