



RTI Semi-Annual Progress Report

Fiscal Year 2006

Date of This Report: March 1, 2006 Project Number: 9-1523 / TPF-5(087) RMC: 3

Period Covered by This Report: September 1, 2005 – February 28, 2006

Project Title: Electronic Appraisal Development Study

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1. Requested Changes for Possible Project Modification

Project Termination: As briefly discussed at the project meeting with the PC, PD, and PMC on February 15, 2006, the researchers request that the project be extended for one more year, with a termination date of August 31, 2006. The reasons for this requested extension are:

- The prototype EAS will be demonstrated to the participating states in early May, 2006. After the demonstration, there might be additional features that have to be added to the prototype;
- Even though the researchers would have developed the algorithms for the Statistical Process Control (SPC) according to the current work plan of the project, testing and fine-tuning the algorithms requires additional time and resources, as the prototype EAS has to be populated with a reasonable number of appraisals. Since such data entry cannot begin until the prototype EAS has been finalized, we propose to populate the prototype EAS with existing appraisal during the proposed extension, in order to further test the SPC algorithms.
- It is recognized that the prototype EAS can be greatly enhanced if a GIS component is seamlessly integrated into the existing system features; therefore, it is proposed that a prototype GIS interface be developed as part of the work to be conducted during the project extension.

Project Personnel: No personnel change during this reporting period.

Funding Needs: No funding change is anticipated for FY 2006.

Work Plan: No change is anticipated.

Deliverables Table: No change is anticipated.

2. Program Development Information

This project is scheduled to terminate on August 31, 2006. The RS will discuss with the PC and PD for potentially extending the project for one more year.

3. Equipment

No equipment was purchased during this reporting period.

4. Progress to Date, by Task

Task 1. Conduct Research Project with Good Practices of Project Management

This task has been completed as scheduled. The project plan has been developed and submitted to the PD on June 24, 2005, along with a list of technical memorandum to be delivered as the project progress.

Task 2. Review State-of-the-Art Technologies Potentially Useful for the Development of the Electronic Appraisal System

This task has been completed as scheduled. A comprehensive review of the state-of-the-art technologies with potential application to the development of an electronic appraisal system (EAS) has been conducted. Since the state-of-the-art is a moving target, the researchers are keeping a close eye on the latest development of related technologies. Using the information obtained under this task, a conceptual framework for the EAS has been developed.

Task 3. Gather and Organize Business Requirements and Technologies from TxDOT and Other State Participants

This task has been completed according to the schedule. The draft conceptual framework, user functional needs, and data requirements were developed and sent to TxDOT and other participating DOTs for review and ranking. The results were summarized and presented to the PD and PMC on July 18, 2005. The conceptual framework, user functional needs, and data requirements have been revised after the meeting and submitted as technical memorandums to the PD in July 2005.

Task 4. Analyze Requirements, Processes, and Technologies for Recommendation and Prototyping

This task has been completed as scheduled. An analysis of the user functional needs has been conducted, with its outcome as the system technical requirements, processes, and technologies for recommendations and prototyping. The results have been documented in a technical memorandum and submitted to the PD in August 2005.

Task 5. Design the Prototype Including: Input Form; Database; Process Analysis; Reporting; and, Technologies

This task has been completed as scheduled. Based on the review of various ROW appraisal forms, reports, as well as the system requirements, processes, and technologies for recommendations and prototyping developed under Task 4, the research team has developed a design of the prototype, including major components of the prototype EAS and their relationships. The prototype design has been documented in a technical memorandum and submitted to the PD in December 2005.

Task 6. Develop the Prototype

This task is in progress. Development of the system architecture and key components of the prototype EAS has been completed. The first demonstration of the prototype EAS was given to the PC, PD, and PMC on February 15, 2006, where valuable comments for improving the system were received. The task will be completed as scheduled.

Task 7. Present / Demonstrate the Prototype

This task has not started according to the work plan.

Task 8. Close-out the Research Project

This task has not started according to the work plan.

5. Progress on Development of “Product” Deliverables

Product #	Product Description	Progress to Date & Implementation Status
P1	Project Plan	Draft version has been sent to the PD. The final version will be delivered by August 31, 2006 as scheduled.
P2	Electronic Appraisal Prototype System	Work is in progress. Electronic Appraisal Prototype System will be delivered by August 31, 2006 as scheduled.
P3	Prototype Documentation	Some parts of the documentation have been sent to the DP as technical memoranda. The complete documentation will be delivered by August 31, 2006 as scheduled.

6. Meetings/Conferences

- The researchers meet regularly to discuss project progress and related issues on the following date:
 - Every Wednesday, 2:00 – 3:00 pm, ECJ 6th Floor Conference Room
- The researchers met with TxDOT personnel on the following dates to discuss technical and other related issues of the project:
 - January 5, 2006, Discussion on project progress
 - February 15, 2006, Demonstration of the prototype EAS

7. Possible Candidates for Formal Presentations at the Upcoming RMC Meeting

It would be beneficial to present the project at the June RMC meeting, as significant progress has been made under this project.

8. Miscellaneous

None.

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