UTC PROJECT DESCRIPTION

PROJECT NUMBER:
00103

PROJECT TITLE:
Providing Technical and Management Expert Services in Intelligent Transportation Systems for Alabama.

PRINCIPAL INVESTIGATOR:
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PROJECT OBJECTIVE:
The objective of this research is to review the past, assess the present and plan for the future needs of Alabama’s Intelligent Transportation System (ITS) initiative.

PROJECT ABSTRACT:
The specific objective of this study is to review the past, assess the present and plan for the future needs of Alabama’s Intelligent Transportation System initiative. A preliminary review of the ITS initiative for three locations within Alabama showed that the dominant ITS-related technology is the use of video technology for traffic management. There are traffic management/control centers in Mobile, Montgomery and Tuscaloosa. Contacts at ALDOT indicate future research needs related to Alabama’s ITS initiative should be focused on the following areas: video detection for traffic management and safety, highway advisory radio, dynamic message signs, diversion rates, and transportation management center operations. These topics will be researched and reported on within the scope of this project. The final report will be disseminated to transportation and political professionals throughout the state. The findings of this study will also be disseminated via a short course.

PROJECT TASK DESCRIPTIONS:
1. ITS Literature Review/Project Review (national and Alabama review of ITS literature and projects)
2. Examine Political and Technical Issues Related to Alabama’s ITS Initiative
3. Provide Technical and Management Support to Public and Private Officials Regarding Alabama ITS Programs
4. Perform Research/Feasibility Studies Related to ITS Projects in Alabama
5. Disseminate Findings of Study

MILESTONES AND DATES:
Project Start Date: January 1, 2000
Task 1 completion: June 1, 2000
Task 2 completion: August 1, 2000
Task 3 completion: December 31, 2000
Task 4 completion: December 31, 2000
Task 5 completion: December 31, 2000
Project completion: December 31, 2000

TOTAL BUDGET:
One-year project: UTCA $49,738; total budget $99,991.

STUDENT INVOLVEMENT:
Two graduate students and two undergraduate students will participate in this research. The graduate students will be expected to write theses based on the findings of this study.

RELATIONSHIP TO OTHER RESEARCH PROJECTS:
The findings of this project could contribute to two other UTCA projects. The first one is Project 00202 - "Transfer of Transportation Management and Safety Technology," which is being conducted at the UAB campus by Dr. Norbert Delatte. The second one is Project 00102 - "Potential Applications of Video Technology for Traffic Management and Safety in Alabama," which is being conducted on the UA campus by Dr. John McFadden.

TECHNOLOGY TRANSFER ACTIVITIES:
The findings from this project will be incorporated into a final report that will be disseminated to transportation professionals throughout the state. The study findings will also be included in another UTCA project entitled "Technology Transfer of Traffic Management and Safety" which involves the development of an ITS short course. The findings of this research will be used in the ITS course offered at the University of Alabama.

POTENTIAL BENEFITS OF THE PROJECT:
This research is expected to provide critical information related to the future of ITS programs in Alabama. Direction of future funding allocations will be recommended in this project. The research findings of this study will be incorporated into a final report and will be distributed to transportation professionals throughout the state.

TRB KEYWORDS:
Safety, management, Intelligent Transportation Systems.