PROJECT NUMBER: 00463

PROJECT TITLE: Applications of Video for Traffic Management and Safety in Alabama

PRINCIPAL INVESTIGATORS:
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PROJECT OBJECTIVE:
The goal of this project is to apply and test new video applications on pilot scale projects to ensure that agencies in Alabama can employ video technology to its fullest potential without encountering costly mistakes.

PROJECT ABSTRACT:
There is a rapid expansion of the use of video technology in traffic management and safety in the United States and abroad. Agencies in Alabama have already begun to implement video-based traffic monitoring systems, and it is vital that they have a complete understanding of the potential applications of such systems. This project will examine a number of important areas in which video-based technology can be utilized and provide recommendations to aid agencies in the implementation and operation of their systems.

PROJECT TASK DESCRIPTIONS:
The following tasks will be performed to meet the specific objectives of this study:
1) CARE analysis for location identification
2) Compositional traffic counting using video technology
3) 15th Street corridor modeling
4) Automated video enforcement analysis
5) Variable message sign (VMS) applications
6) Mobile video units for intersection analysis
7) Emergency response
8) Incorporate findings into a final report and disseminate them via a one-day seminar

MILESTONES AND DATES:
Task 1: - months 1-2
Task 2: - months 2-4
Task 3: - months 3-8
Task 4: - months 4-8
Task 5: - months 6-10
Task 6: - months 7-11
Task 7: - months 7-12
Task 9: - month 12

TOTAL BUDGET:
One-year project: ALDOT (SPR funds) $57,554; total budget $110,666.

STUDENT INVOLVEMENT:
Two graduate students and three undergraduate students will also contribute to the completion of this project.

RELATIONSHIP TO OTHER RESEARCH PROJECTS:
This project is not related to any other UTCA projects, nor have other research projects been identified that are similar to this effort.

TECHNOLOGY TRANSFER ACTIVITIES:
This project will be conducted to identify appropriate uses of video for traffic management and safety, and the results will be immediately transferable to practitioners through a seminar to be conducted by the principal investigators.

POTENTIAL BENEFITS OF THE PROJECT:
This project has the potential to examine a number of important areas in which video-based technology can be utilized for traffic management and safety.

TRB KEYWORDS:
CARE, compositional traffic counting, corridor modeling, automated video enforcement, variable message sign, mobile video units, emergency response.