RESEARCH PROJECT DESCRIPTION

PROJECT NUMBER:
01464

PROJECT TITLE:
Application of Information Technology to Traffic Safety in Alabama

PRINCIPAL INVESTIGATORS:
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PROJECT OBJECTIVE:
Continue the innovation of the CARE system while satisfying current reporting, evaluation and
problem identification requirements.

PROJECT ABSTRACT:
The Critical Analysis Reporting Environment (CARE) is recognized nationally as one of the
most advanced software packages applied to traffic safety problem identification and evaluation.
However, for CARE to bring about the return of which it is capable, there must be an improved
information technology infrastructure established that includes more accurate and timely
reporting and entry of crash and violation incidents. A task force has been established within the
context of Section 411 to develop a strategic plan for upgrading the State’s entire traffic safety information technology infrastructure. The CARE project team will work in harmony with this plan to assure that the most effective and efficient systems are implemented. In particular, emphasis will be on restraint, alcohol and corridor projects. Deliverables include the statewide problem identification portion of the Highway Safety Program (HSP) and the production and distribution of *Alabama Accidents Facts 2000*.

**PROJECT TASK DESCRIPTIONS:**
1. Develop Information Technology Infrastructure.
2. Develop CARE Capabilities.
4. Training.
5. Produce *Alabama Traffic Accident Facts*.

**MILESTONES AND DATES:**
- **Begin project – Oct 1, 2000** – Initiate training, initiate systems analysis to determine requirements for infrastructure technology improvements, and initiate plan to modify current plan for statewide problem identification and evaluation.
- **Jan 1, 2001** – Continue training, begin development of IT infrastructure, and continue development of CARE capabilities.
- **Apr-Jun 2001** – Continue training, design module extensions, and continue development of BASE modifications.
- **July 2001** – Continue training, reach full-scale development of IT infrastructure and CARE capability development, and continue to modify the problem identification/evaluation capability of CARE.
- **Aug-Sep 2001** – Continue training, continue development of Care capabilities, and produce and distribute Alabama Traffic Accident Facts.

**TOTAL BUDGET:**
One-year project: Alabama Department of Economic and Community Affairs $243,006, University of Alabama $34,993; total funding $277,999.

**STUDENT INVOLVEMENT:**
One undergraduate student will be involved in conducting this project.

**RELATIONSHIP TO OTHER RESEARCH PROJECTS:**
This project is a continuation and expansion of UTCA project 99456, “Crash Analysis Information Division of UTCA,” also conducted by Dr. Brown. It is also similar to several other efforts conducted by the PI for other state and local transportation agencies.

**TECHNOLOGY TRANSFER ACTIVITIES:**
The project will feature a continuing series of training session for practicing safety personnel, involving use of CARE to investigate crash situations and to draw conclusions regarding appropriate safety programs.

**POTENTIAL BENEFITS OF THE PROJECT:**
This project offers incremental improvements to the capability to conduct safety studies and to select safety countermeasures. In effect, the project allows additional optimization of safety funding, and will consequently decrease crashes, injuries and fatalities.

TRB KEYWORDS:
CARE, traffic safety programs, optimization, information mining, crash reduction, information technology.