RESEARCH PROJECT DESCRIPTION

PROJECT NUMBER:
02420

PROJECT TITLE:
Problem Identification for the North Carolina Highway Safety Plan

PRINCIPAL INVESTIGATORS:
David B. Brown
CRDL/CS
The University of Alabama
Box 870290
Tuscaloosa, Alabama 35487-0290
(205) 348-6999
(205) 348-0219 (fax)
brown@cs.ua.edu

Brandon Dixon
Department of Computer Science
The University of Alabama
Box 870290
Tuscaloosa, Alabama 35487-0290
(205) 348-0597
(205) 348-0219 (fax)
Dixon@cs.ua.edu

Allen Parrish
Department of Computer Science
The University of Alabama
Box 870290
Tuscaloosa, Alabama 35487-0290
(205) 348-3749
(205) 348-0219 (fax)
parrish@cs.ua.edu

PROJECT OBJECTIVE:
This project will use the Critical Analysis Reporting Environment (CARE) system to review traffic crash data and identify topics and areas for inclusion in the North Carolina Highway Safety Plan.

PROJECT ABSTRACT:
North Carolina has spent the past few years implementing the CARE software package to analyze highway crash data. This effort is being completed by finalizing the import of 2000 crash data, and by arranging training sessions for potential users who want to be familiar with
CARE. The training will demonstrate how CARE can be used to formulate and select countermeasures and to identify problems.

CARE will be utilized to develop the problem identification portion of the North Carolina Highway Safety Plan (HSP). These procedures are documented on the CARE Web site, http://care.cs.ua.edu/basicprinciples.shtml. The problem identification procedures will provide a prototype to guide the current project. The target document will not be limited, and every attempt will be taken to fit the needs of the traffic safety community of North Carolina. While working on HSP, the project team will continue to develop the CARE-based software infrastructure for the North Carolina crash data. The latest year’s data will be imported and training sessions will be developed and presented to increase the CARE user population within the state.

PROJECT TASK DESCRIPTIONS:
1. Import North Carolina 2001 crash data into CARE.
3. Provide three one-day CARE training sessions to the potential user population.

MILESTONES AND DATES:
• Oct.- Dec. 2002 – Obtain the candidate training population information; meet with the NC GHSP (Governor’s Highway Safety Program) to determine subsets, graphical areas and overall problem identification; develop goals and objective components for the HSP; establish a mock-up of selected problem identification sections on current data; and design middleware changes.
• Jan.- Mar. 2003 – Obtain a database export of the NC 2001 crash data, make middleware changes, perform the import of the data into CARE, make the data available over the Web for online analysis and downloading, and conduct a CARE training session.
• Apr-June 2003 – Develop and document the problem identification sections of HSP, complete all Goal 2 objectives and submit it to the GHSP for review, and conduct a CARE training session.
• July-Sept. 2003 – Make changes to the problem identification sections of the HSP as requested by GHSP and conduct a CARE training session.

TOTAL BUDGET:
One year project; total project budget $110,406.

STUDENT INVOLVEMENT:
Students will not be involved in conducting this project.

RELATIONSHIP TO OTHER RESEARCH PROJECTS:
This project is related to the following UTCA projects, also conducted by Dr. Brown:
• 99464 “A CARE Interpreter for North Carolina”
• 01463 “Extend CARE for North Carolina”

TECHNOLOGY TRANSFER ACTIVITIES:
The project will provide three one-day CARE training sessions for potential CARE users.
POTENTIAL BENEFITS OF THE PROJECT:
The project gives CARE users the ability to identify the most appropriate safety issues for the North Carolina Highway Safety Plan. Also, potential users of CARE will benefit from training sessions.

TRB KEYWORDS:
CARE, highway safety plan, safety problem identification