PROJECT DESCRIPTION

PROJECT NUMBER:
99464

PROJECT TITLE:
Development of a CARE Interpreter for the North Carolina Crash Records Oracle Database

PRINCIPAL INVESTIGATORS:
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PROJECT OBJECTIVE:
This project will enhance and expand the existing application of the Critical Analysis Reporting Environment (CARE) in North Carolina, including installation of a new Oracle BASE translator.

PROJECT ABSTRACT:
North Carolina has an aggressive attitude toward traffic safety, and the current project will enhance the State’s CARE safety software by providing a BASE program for old crash data, so that it can be addressed simultaneously with current crash data, which is Oracle based.
PROJECT TASK DESCRIPTIONS:
1. Design and develop the BASE software to translate raw data to the CARE format.
2. Create the labels and codes needed for integration into CARE, customized to the North Carolina uniform crash report.
3. Create the population tables that are needed to drive the Area Criticality Technique (ACT) module.

MILESTONES AND DATES:
• Sept – Nov 1999: (Task 1), using sample data, create BASE table, develop a prototype and test it.
• Dec 1999 – Feb 2000: convert prototype to production quality code, convert example date to CARE format, finalize BASE documentation, create labels and codes (Task 2), and train personnel.
• Mar – May 2000: (Task 3) obtain population tables, create file to support ACT, test and finalize ACT, and prepare documentation.
• Jun – Aug 2000: (Task 4) install converted data on CARE web site, conclude project.

TOTAL BUDGET:
One-year project: North Carolina Governor’s Highway Safety Program $39,199.

STUDENT INVOLVEMENT:
No students are involved in this project.

RELATIONSHIP TO OTHER RESEARCH PROJECTS:
This project is not directly related to any other UTCA project.

TECHNOLOGY TRANSFER ACTIVITIES:
Technology transfer will occur in early 2000, when State personal will be trained in the use of the BASE program associated with the modified CARE program.

POTENTIAL BENEFITS OF THE PROJECT:
This project will initiate the step-wise improvement of the North Carolina CARE installation, which will provide incremental improvements in the speed and efficiency of safety studies, and of the allocation of safety funding.

TRB KEYWORDS:
CARE, traffic safety software, crash data analysis, Oracle, traffic safety systems analysis, safety optimization