UTC PROJECT DESCRIPTION

PROJECT NUMBER:
01101

PROJECT TITLE:
Integrated Traffic and Emergency Response: Success Factors

PRINCIPAL INVESTIGATOR:
Michele D. Bunn
Department of Management and Marketing
Box 870225
Culverhouse College of Commerce and Business Administration
University of Alabama
Tuscaloosa, Alabama 35487-0225
(205) 348-8918
mbunn@cba.ua.edu

PROJECT OBJECTIVE:
The main objective of this project is to identify key success factors for integrating traffic management and emergency response systems and share these findings with the relevant Alabama stakeholders.

PROJECT ABSTRACT:
Building on the efforts of a previous UTCA project and the work of others across the country, this project develops and implements a quantitative survey of integrated traffic management and emergency response systems. The project focuses on calibrating important success factors of integrated programs to reach clear conclusions about what works and what doesn’t work – and the circumstances that impact success or failure. These findings are critical to both Alabama and national stakeholders who recognize the benefits of working to integrate traffic management and emergency response systems and the need to make the best use of their limited resources toward this goal. The project is supported and endorsed by the Intelligent Transportation Society of America. Membership in the ComCARE Alliance (a national, non-profit organization) assures contacts with important stakeholders relevant to the emergency response and traffic management communities.

PROJECT TASK DESCRIPTIONS:
1) Industry literature review and focus group meetings
2) Develop research model
3) Research literature search and review
4) Measurement development
5) Design data collection procedures and instruments
6) Develop sampling frame
7) Pretest survey
8) Administer survey instrument
9) Data coding and entry
10) Data analysis
11) Assessment of finding
12) Report generation
13) Dissemination

MILESTONES AND DATES:
Startup – Jan 1, 2000
Task 1 – Jan 1 – Nov. 30, 2000
Task 2 – Feb 1 – Jul 31, 2000
Task 3 – Mar 1 – Jul 31, 2000
Task 4 – May 1 – Jun 30, 2000
Task 5 – Jun 1 – Jul 31, 2000
Task 6 – May 1 – Aug 31, 2000
Task 7 – Jul 1 – Jul 31, 2000
Task 8 – Jul 1 – Aug 31, 2000
Task 9 – Aug 31 – Sep 30, 2000
Task 10 – Sep 1 – Oct 31, 2000
Task 11 – Oct 1 – Oct 31, 2000
Task 12 – Nov 1 – Dec 31, 2000
Task 13 – Sep 1 – Dec 31, 2000

TOTAL BUDGET:
One-year project: UTCA $64,999; total budget $142,730.

STUDENT INVOLVEMENT:
Three different graduate student research assistants will work on this project (One Ph.D. student and one MBA student during the academic year, and one Ph.D. student during the summer). One of the Ph.D. students is expected to co-author a manuscript from the project.

RELATIONSHIP TO OTHER RESEARCH PROJECTS:
The project builds on the foundation of UTCA Project 00110-Feasibility of an Integrated Traffic Management and Emergency Communication System for Birmingham, Alabama conducted by the same investigators (Bunn/Savage). The previous project focused on the identification of stakeholder issues surrounding the feasibility of an integrated deployment. Many of those issues will be incorporated into the conceptual model and data collection efforts in the 2001 project. In addition, the relationships previously nurtured with national organizations will be tapped as a major resource for the completion of the new project.

TECHNOLOGY TRANSFER ACTIVITIES:
The findings and guidelines for successful traffic management and emergency response initiatives will be disseminated to professionals in Alabama and across the U.S. The means to achieving this technology transfer will be through small-group meetings, presentations at national conferences and meetings, and the dissemination of a final report.
POTENTIAL BENEFITS OF THE PROJECT:
The project incorporates both traffic management and safety issues consistent with UTCA’s central theme and supports several priority topics from UTCA’s 2001 Annual Research/Training Program. Specifically, this project will report the practices that worked in other states and municipalities so the most practical and effective lessons can be applied in the Alabama context. The challenges of integrating traffic management and emergency response include individual resistance, institutional barriers, and system constraints. The ability of a quantitative survey approach to calibrate the specific issues provides enormous benefits when dealing with this complex mix of issues. In turn, the payoff of well-designed systems for integration projects will mean more accurate, complete, and timely information can be shared across organizations. This could be done more efficiently; at the same time, it can improve the critical, sometimes life and death decisions made by the various stakeholders.

TRB KEYWORDS:
Integrated, traffic management, safety, system.