

BUS INCIDENT REPORTING, TRACKING AND ANALYSIS SYSTEM

BACKGROUND

Florida transit systems are required to investigate accidents and incidents, and to identify causal factors and corrective actions on an individual basis. However, many Florida transit systems do little formal analyses of all accidents on an aggregate basis. Many transit systems do not track or analyze accidents and incidents to identify common trends from types of incidents or by location, driver, bus route, roadway characteristics, and other variables that could reduce transit incidents in the future.

OBJECTIVES

The goal of the project was to develop a basic bus incident reporting system that would allow Florida's public transit agencies to manage bus transit accident and security incident data. The developed product would be expected to allow transit systems to easily enter data and track types of accidents and incidents by developing incident forms. It should also provide the ability to analyze and report common trends in accident data over time. A secondary goal was that the system be developed to allow for future migration of the data to a statewide, web-based incident tracking system.

FINDINGS AND CONCLUSIONS

The Florida Bus Incident Reporting Tracking and Analysis System was developed for small rural agencies to facilitate a shift from manual reporting (incident data in a file cabinet) to a computer-based reporting system. The database, developed in Microsoft Access, was designed to allow rural transit systems to easily enter their incident data into a database and run queries and reports that have been developed for the database. This software relieves an agency's responsibility to either develop their own or purchase a database. The program is ready to use and can be easily modified to meet the needs of the transit agency.

In February 2006, four of Florida's rural transit properties were selected to beta test the Bus Incident Reporting, Tracking and Analysis System: Pasco County Public Transportation, LeeTran, Collier Area Transit, and Polk County Transit Services. Each agreed to test the software for two months, during which time the research team communicated with and provided support to the beta users. Although no significant functionality issues were identified, several users experienced problems testing the system as the result of not using a current version of Microsoft Access. These users upgraded their software and successfully tested the system.

Hillsborough Area Regional Transit (HART) and Gainesville Regional Transportation System (RTS) also requested copies of the beta version of the program. HART was interested in using the program as an interim tool until their Risk Management Program was in place, whereas RTS needed an incident management program. The Florida Bus Incident Reporting Tracking and Analysis System was sufficiently advanced in the development process that these larger agencies were able to immediately use and modify it to meet their needs. RTS has been using the program after making only minor changes. Many other transit agencies in the state are anxious to receive the program.

BENEFITS

The Florida Bus Incident Reporting, Tracking and Analysis System will provide a means for Florida's transit systems to electronically track and analyze incidents and trends. In so doing, it will provide these agencies with a simple method for complying with Florida Department of Transportation safety standards and requirements for investigation and analysis of incidents.

The database allows transit systems to easily enter, analyze, and print reports for accidents, security incidents, and other incidents. This database has been developed to give transit agencies the option of using existing fields, queries, and reports available in the database or to customize the fields, queries, and reports to meet their needs. This database will allow transit systems to begin identifying trends in their accidents and incidents. Driver training can then be targeted to select types of incidents to prevent future occurrences. This database will also provide standardization of data to facilitate in the future easy transference of the data to a statewide web-based incident tracking system.

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