

Innovations in Alabama Crash Reporting



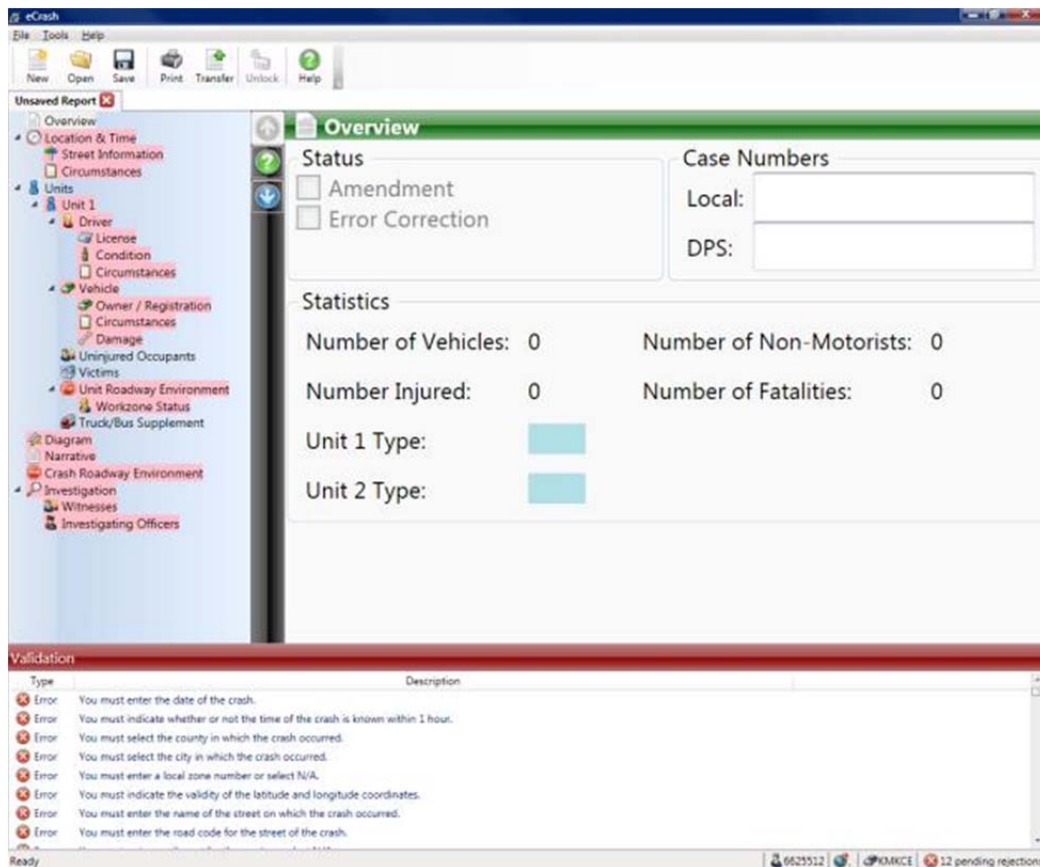
The Alabama Department of Public Safety, with the support of the Governor's Highway Safety Office (within the Alabama Department of Economic and Community Affairs), recently directed a project at the Center for Advanced Public Safety at the University of Alabama to develop an electronic crash reporting system for Alabama. Called eCrash, the project was completed and began to be rolled out in June of 2009, and to date over 100,000 motor vehicle collision records have been entered into the state system using eCrash. The target date for the entire state to be totally converted over to eCrash from the current paper forms is December 31, 2010.

With the exception of the reports for motorists involved in a crash, eCrash is totally paperless, eliminating the need for officers to mail in paper crash forms. The electronic submissions are available immediately once they are transmitted to DPS in Montgomery, so the timeliness of the data is now almost instantaneous compared to a previous average delay of over a month to get the data entered into the database.

The advantages of eCrash go way beyond timeliness. Consistency and completeness checks are done right in the field enabling the officer to assure that the most accurate and complete entries are made. Electronic entry enables driver license barcodes or magnetic stripes and GPS data to pre-populate the report with accurate data, saving countless hours and keeping the officer in the field during the process. It also eliminates the errors and the time consumed in the method of entering data from the old paper forms.

In 2003 the electronic citation (eCite) system was introduced in the state of Alabama, beginning with the Heflin weigh station, and by 2007 this program was deployed to every state trooper, and now it has been rolled out to almost all law enforcement agencies throughout the state. The need for a similar system for entering and processing over 120,000 annual traffic crash reports within Alabama was readily apparent, as was the fact that the majority of law enforcement already had the equipment and the software infrastructure to handle eCrash. At about this same time, the state made the final decision to move to new crash report codes that were compatible with the federal standard that assures that all states have a minimal set of data elements.

From the outset of the eCrash project, the Alabama Department of Public Safety insisted that eCrash would employ the most current technology to make field data entry as effortless and uncomplicated as possible. As a result, CAPS software designers set up eCrash as indicated by the following illustration:



Note that the screen is divided into four basic sections:

- A row of icons across the top of the screen that deal with strategic issues (creating a new report, saving an existing report, etc.).
- A side panel that essentially controls and directs the data collection for the current report. While officers can elect to move through the report systematically, this side panel enables direct access to each section of the report. This facilitates updating or changing a previous entry to maintain consistency. Each section has a red background until it is totally completed.
- The data entry portion of the screen, to the right of the control side panel. This panel will change depending on the particular portion of the report that is under consideration for updating.
- The validation section at the bottom of the page that keeps track of each data element and will not allow the report to be submitted until all data elements are completed.

Drop-down menus are provided for all data elements where this is possible. This approach, along with the flexibility of direct access to all data elements through the quad-screen layout, has been found through field testing to provide the easiest possible data entry method.

The eCrash system as designed enables the entry of any number of involved drivers, units, persons, pedestrians or other non-motorists. Unlike systems that are paper-based, eCrash can automatically generate the data space needed for storing the respective data elements, and it automatically sets up the output report to handle any eventuality.

To summarize, eCrash is a major innovation in that it enables the entry of this important data as close to the crash scene as possible, thus assuring completeness, consistency and fewer interpretation errors. It also saves money and resources in reducing all duplicative efforts (i.e., officer's entering data on hard copy forms only to have these data re-entered into the computer), while keeping officers in the field and able to respond more effectively to emergencies. The electronic submission eliminates the need to mail in paper crash forms. The timeliness of the data is now virtually instantaneous and readily available for processing.

An eCrash User Guide and an eCrash Data Element Training Manual have been developed. These are available upon request to eCrash users. To request one or both of these, please email care@cs.ua.edu. For more information about eCrash, see <http://caps.ua.edu/eCrash.aspx>. For technical support questions from eCrash users, contact the CAPS Technical Support Desk at caps.support@cs.ua.edu or call 1-866-588-9830. If you are interested in CAPS developing eCrash for your state, contact Rhonda Stricklin at rstricklin@cs.ua.edu or call 1-866-349-CARE.