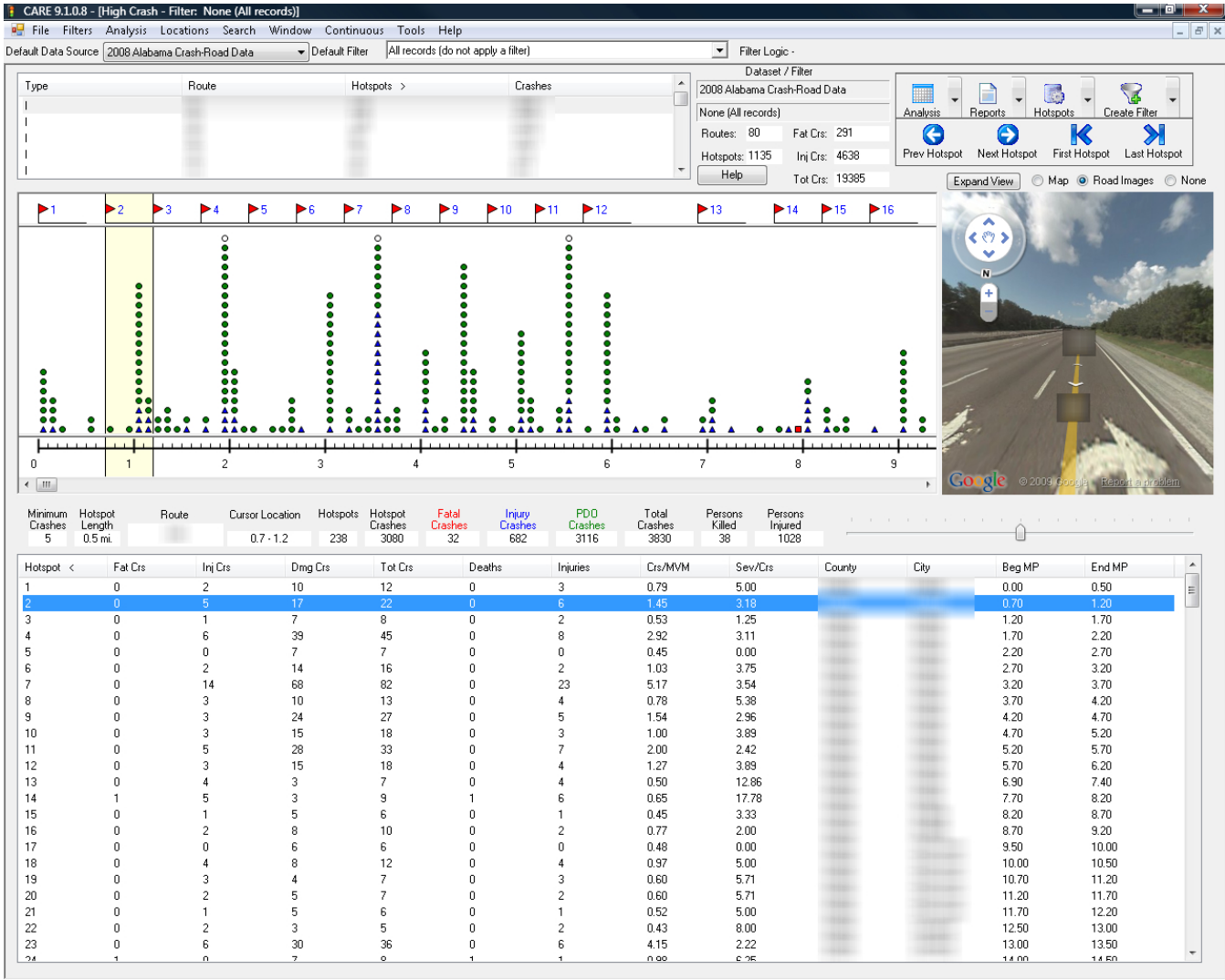


CARE'S LOCATION FUNCTIONALITY



One of the most important functions of CARE is the determination of high crash locations. This capability enables you to identify hotspots and problem intersections in a variety of ways. A map is pictured of the highlighted hotspot. The map has viewing options such as GIS, satellite or road images.

CARE'S VERSATILITY

Historically, CARE has been applied primarily to crash reports to improve traffic safety. However, CARE's information discovery capabilities have been applied to aviation safety data, traffic citations, medical data, several survey applications and other data. The information mining capability of the CARE software is applicable to any database and can be adapted for use in virtually any commercial or governmental field.



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HOW CAN I SAVE LIVES WITH CARE?

The CARE software is free. All that is required to take full advantage of it is to get your state's data into a CARE dataset. Your state's current database has to be converted into the proper format using CARE's Extract-Translate-Load (ETL) tool in order for CARE to use it as input. The CAPS staff has many years of experience with this process and can create the initial CARE files for your state for a nominal fee.

Contact us:
1-866-349-CARE
care@cs.ua.edu
caps.ua.edu

Connect with UACAPS  



CRITICAL ANALYSIS REPORTING ENVIRONMENT

SAVE LIVES WITH CARE



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■ WHAT IS CARE?

Critical Analysis Reporting Environment (CARE) is a national award winning data analysis software package designed for information discovery, problem identification and countermeasure development purposes.

CARE software was originally developed over 25 years ago. It is continually being improved and enhanced by the staff of the Center for Advanced Public Safety (CAPS) at the University of Alabama in the Computer Science Department. CARE uses advanced analytical and statistical techniques to generate valuable information directly from the data. The proprietary data structure format can process millions of records with full filtering capability in less than a second. CARE is amazingly fast!

The CARE software exists in both a desktop Windows and Web versions. You can easily download CARE to your desktop from our website. You can also analyze highway safety data online at the CARE Online Analysis site.

CARE is used statewide in Alabama and CARE implementations have been made for twelve other states in order to help save lives. CARE datasets have been created for several years of FARS data and these are available for anyone to use for analysis purposes. Use of the CARE program will undoubtedly assist the traffic safety program of any organization that chooses to use it and best of all, CARE software is FREE.

■ CARE FEATURES

GET VALUABLE STATISTICS

Retrieve data for the entire database or a user-specified subset of it. The Filters Menu allows you to create or combine filters that define the specific subset of the database of interest. These filters can range from a certain time of day to a particular type of crash to any other subset of the data you want (e.g., DUI, motorcycle, bicycle, pedestrian, CMV, speeding, driver age, etc). CARE has many options for filter creation and very complex filters can be created to allow the user to analyze exactly the subset of data desired. CARE's

ability to create filters within seconds directly from frequency or cross-tabulation outputs is one of its most powerful capabilities.

NON-CATEGORICAL VARIABLES

CARE is not limited to variables only having a small, finite, known list of values such as a “day of the week” variable. Specifying non-categorical variables when creating a CARE dataset allows the user to create a list of values directly from the available raw data as opposed to being restricted to a known list of values. This is of particular interest for doing advanced statistical analyses.

GENERATE REPORTS

There are many options for producing various helpful reports with just the click of the mouse. These reports can include a simple listing of crashes at a particular location as well as detailed information about each crash that occurred there. All reports can be exported to Word and Excel.

WEB-ENABLED

CARE can be installed on your desktop or utilized online. The Windows version offers additional features that the online version doesn't have.

NARRATIVE DATA SEARCHING

CARE can handle text descriptions such as traffic crash narratives. Search capabilities allow the user to search on a word or phrase to find specific reports of interest without even knowing if the data exists prior to searching. The user can view a short section of the narrative where the

search term was found, or the complete text for the particular records you select. The “Generate Filter” button creates a filter that includes all of the records selected. This enables hidden information in a narrative. For example, the word “deer” could create a filter of all deer-related crashes where the hit object may not have been the deer.

GIS INTEGRATION

CARE has been integrated with ESRI ArcGIS. A GIS map can be produced based on the current filter (or all crashes

if no filter is in effect). Maps can also be generated to provide visualization of specific hotspots and the crashes at those hotspots.

CREATE COLLISION DIAGRAMS

CARE has a collision diagram generator that has been incorporated to automatically draw collision diagrams for any location specified by CARE. This tool enables all crashes at a specific location to be shown on the collision diagram.

INFORMATION MINING

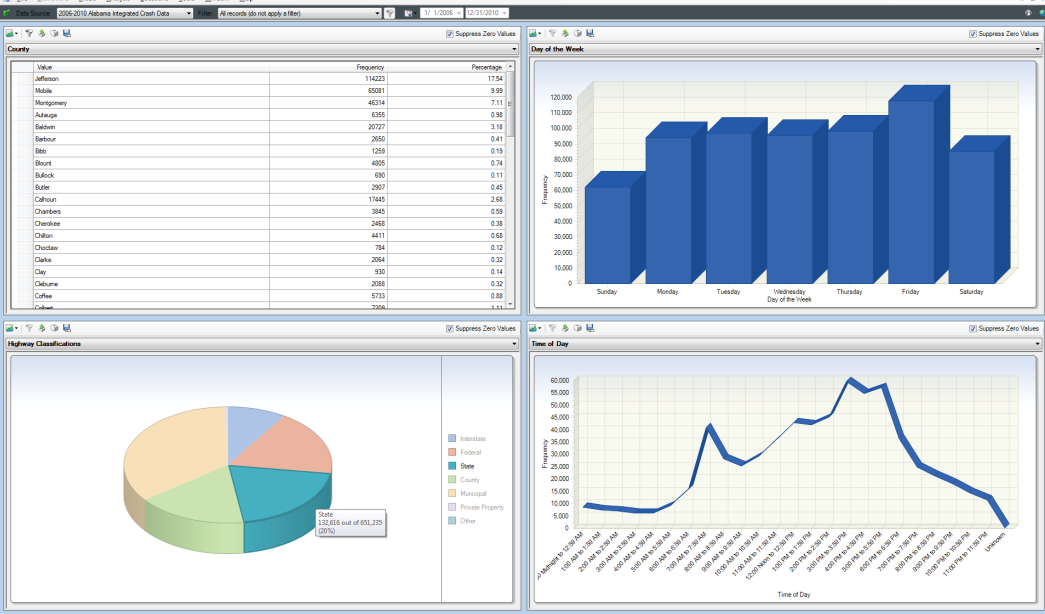
Perhaps CARE ’s greatest potential lies in its information mining capability, called IMPACT. This process provides the user with the ability to obtain crucial information from the database without having to generate endless queries. Latent information is mined out of the database, analyzed, and instantly presented

in both graphical and tabular charts. The results are prioritized indicating areas where countermeasures will provide maximum gain. The information discovery potential is unlimited, offering decision-makers unprecedented power - if there is information in the database, CARE will surface it.

This IMPACT output shows that DUI crashes are over represented for many of the late night and early morning hours. Example Of Typical Impact Result: Red Bars show DUI Crashes, Blue Bars show Non-DUI Crashes

ANALYZE DATA

Charts and graphical displays are produced for any and all variables in the database. A frequency output of any variable or a cross-tabulation of any two variables is instantly displayed.



UPGRADES
IN
CARE 10

- Dashboard interface choices
- 3D crosstabs
- Data series (contingency) graphs
- Time line analysis
- User saved analysis
- Date range controls
- Expanded filter creation capabilities
- Icon to denote user created filters
- Even faster than before!

