

## Highway safety improvements proven to save lives

EVERY \$100 MILLION invested in highway safety improvements saves approximately 145 lives over a 10-year period, according to the Road Information Program (TRIP) website sponsored by FHWA and the National Highway Traffic Safety Administration.

At right is a list of key road and bridge improvements evaluated over a 20-year period by FHWA, along with related percent reduction in fatality rates.

For more information, see the TRIP website, [www.tripnet.org/hsfactsheet.htm](http://www.tripnet.org/hsfactsheet.htm). •

Improvements at Intersections	Reduction in Fatality Rate (in %)
Turning lanes and traffic channelization	47
Sight distance improvements	56
New traffic signals	53
Bridge Improvements	
Widening a bridge	49
New bridge	86
Upgrade bridge rail	75
Roadway Improvements	
Construct median for traffic separation	73
Widen or improve shoulder	22
Realign roadway	66
Groove pavement for skid treatment	33
Roadside Improvements	
Upgrade median barrier	66
New median barrier	63

## SAVER enhances crash data analysis

THE IOWA DOT has developed new software that can help improve safety and save lives.

In Iowa, there are approximately 65,000–70,000 motor vehicle crashes annually. Agencies collect crash-related data like location, date and time, driver and vehicle characteristics, and injury details. State and local agencies can analyze the data and then, based on the analyses, make safety improvements and/or target law enforcement at certain locations.

The Iowa DOT Office of Traffic and Safety (TAS) has a long history of providing tools, like accident location and analysis systems (ALAS), to help local agencies analyze crash data. The latest version of ALAS is the Safety Analysis, Visualization, and Exploration Resource (SAVER), renamed due to an expanded focus beyond crash data.

SAVER allows users to analyze a variety of safety-related data, including enforcement-related data.

Michael Pawlovich, traffic safety and crash analysis engineer, developed SAVER to

provide a single resource (data and user interface) that automates various safety data analyses to the extent possible.

“SAVER allows users to view highway safety data in context,” Pawlovich says.

SAVER can integrate safety data from the Iowa DOT Motor Vehicle Division (MVD) crash database and local law enforcement agencies. SAVER data include the following:

- Iowa DOT road and corporate limit maps
- Iowa DOT mapped crash data
- Iowa DNR hydrology maps
- Enforcement data (e.g., citations and criminal incidents) collected using the Traffic and Criminal System (TraCS) software.

SAVER is available to state, city, and county agencies and consultants that analyze safety data.

To use SAVER, organizations currently must have ArcView GIS 3.2/3.3 software. The

SAVER GUI system runs within that software.

However, Pawlovich plans to revamp SAVER using Visual Basic and GeoMedia Objects, the components used to develop GeoMedia GIS software. The revamped SAVER will be both more compatible with internal Iowa DOT systems and less costly for users. (The SAVER GUI system is free, but ArcView can cost up to \$1,200. The new version will cost \$100 or less and will not require any GIS.)

Organizations can also use the data analysis services of the Iowa Traffic Safety Data Service (ITSDDS) at CTRE. ITSDDS is currently making the transition to SAVER as its primary data analysis tool.

### For more information

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For more information about ITSDDS, call 515-294-2329, or visit [www.ctre.iastate.edu/ITSDDS/](http://www.ctre.iastate.edu/ITSDDS/). •