# Application for the 2012 ATSIP Data Visualization Project Award
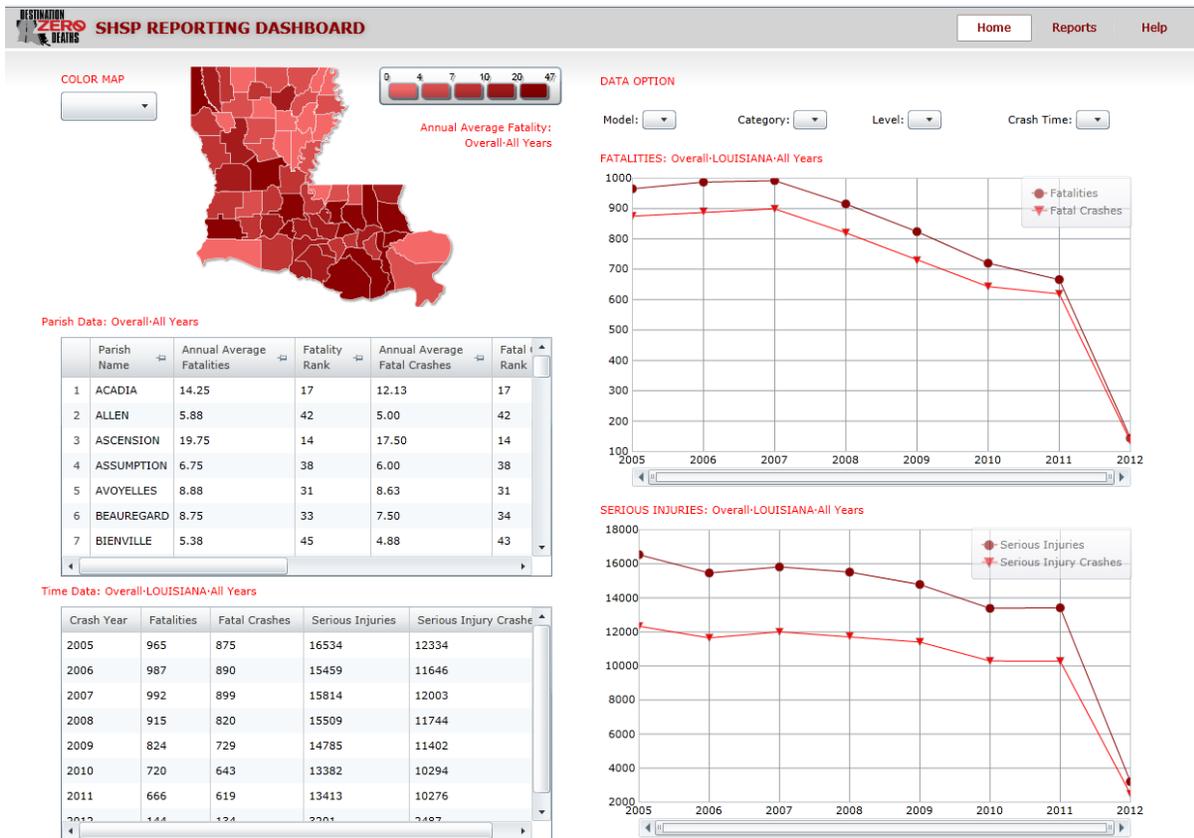
The LA Strategic Highway Safety Plan (LA SHSP) Data website (http://lashspdata.lsu.edu) was designed to support the State of Louisiana Strategic Highway Safety Plan, which aims to reduce the number of fatal and serious crashes on Louisiana roadways. This intuitively-designed website displays fatal and serious injury crash data from 2005 to the present day, which is used to inform, educate, and support decision-making at the state, parish, and local levels, throughout the state of Louisiana.  The state-level data is highly instrumental for agencies such as the Louisiana Department of Transportation and Development, the Federal Highway Administration, the Louisiana Highway Safety Commission, and the Louisiana State Police. Parish-level data is also easily retrieved to support parish and regional law enforcement agencies, safety coalitions, and educational groups.

Regardless of agency-level or affiliation, users of the LA SHSP website enjoy interactive and easy access to crash data, in a visually striking, uncomplicated display. Designed with efficiency in mind, the website's utility is uniquely geared toward allowing users to tailor data to meet their needs. Access and features available on the website[1] are described below, along with two visual screen-captures.



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[1] *Note:* The LA SHSP Data website was designed using Microsoft Silverlight and requires the free of cost Microsoft Silverlight plug-in for access, which is available for download here: http://microsoft-silverlight.en.softonic.com/.

*Access with Ease*
When the LA SHSP Data website is first visited, users are presented with "overall" fatal and serious injury crash data in the state of Louisiana. In the upper left-hand corner, a map of Louisiana (by parish) is displayed. Within this map, parishes are individually color-coded according to their overall number of roadway fatalities or serious injuries. At the bottom left corner, two tables present information concerning overall fatal crashes and fatalities, as well as overall serious injury crashes and serious injuries by data at the parish level (top) and by year (bottom). On the right side of the page, two line graphs accompany the tables, respectively. These graphs depict the same data in the adjacent tables, providing users with an instant visual representation of the overall data trends.[2]

*Data Options*
From here, users can easily change the data category to view one of LA SHSP's main areas of emphasis (e.g., Aggressive Drivers, Alcohol, Inattentive/Distracted, Intersection, Occupant Protection, Roadway Departure, or Young Drivers). Data categories may be changed using the Category drop-down menu (under Data Option section). Once selected, the website instantly updates to display the fatal and serious injury information for the selected emphasis area only.

Within the parish-data table, all Louisiana parishes are listed alphabetically along with their corresponding fatal and serious injury crash data and parish rank. Clicking on any column header will sort the data within that column, allowing the user to easily identify parishes with the most fatalities or serious injuries within the selected emphasis area. Since parishes are not equal in terms of the number of licensed drivers or vehicle miles traveled, users may normalize the data using the Model drop-down menu within the Data Option section.

It is easy to switch between statewide data and parish level data; users can either click on any parish on the color-coded state map or they can use the Level drop-down menu within the Data Option section. Likewise, users can select to view data by a single year, using the Crash Time drop-down menu within the Data Option section. When selecting a single year, the information will be displayed by month.

*Interactive Reports*
Obtaining interactive data reports is simple: users need only select the 'Reports' link located in the upper right-hand corner of the screen. From here, users first select an emphasis area and second, select a parish, to see additional information for the selected parish's data in the selected emphasis area. For example, the Alcohol report shows COBRA (breathalyzer data), displaying DWI arrest data, based on age, sex, refusal rate, and BAC level. The Distracted driver report shows data for cell phone distraction, inside the vehicle distraction, outside the vehicle distraction, and other distraction. Aggressive driving shows careless operation, improper passing, disregard traffic control, exceeding safe speed, exceeding stated speed, failure to yield, and following too closely.

The user can then select up to two additional parishes for a comparison and the data for all three parishes is displayed, side-by-side. At any point in the process, the user can print the charts and

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[2] For help using the website, users may click the "Help" button in the upper right-hand corner to view an "Introduction" video

graphs by using the "Print" icon. Alternatively, the user can save all charts and graphs to a PDF, XML, CSV, MHTML, EXCEL, TIFF, or Word file by clicking the "Save" icon.