

## HIGHWAY SAFETY RESEARCH GROUP

# Analyzing Crash Data to Reduce Fatalities and Serious Injury Crashes



# Strategic Highway Safety Plan



The **Strategic Highway Safety Plan (SHSP)** is a comprehensive, multidisciplinary approach to reducing the devastating effects of motor vehicle-related fatalities and injuries on Louisiana roadways.

The Louisiana **SHSP** is based on Data Driven approaches to reduce fatalities/serious injuries.

Crash data is collected by the HSRG, integrated with other systems, and stored in a data warehouse. Tableau dashboards are used to make the data more accessible, visual, and informative for decision makers.

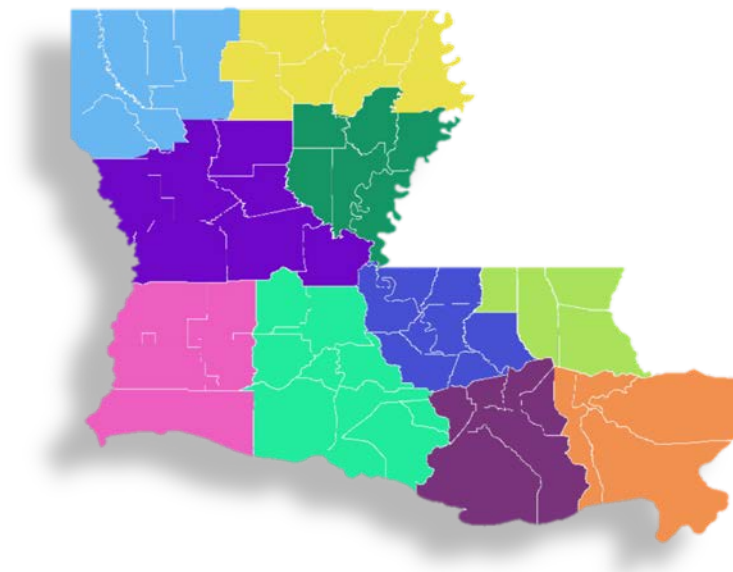
# Louisiana Regional Safety Coalitions

9 Regional Safety Coalitions across the state

Involve Numerous Agencies

Address local needs and concerns

Facilitate the development of action plans



Use the procedures of the LA SHSP to identify problems and produce countermeasures

# Louisiana Regional Safety Coalition Data

To accommodate each Safety Coalition, HSRG produces Tableau dashboards consisting of 3 Levels



# Level 1 – Identify Problem Areas

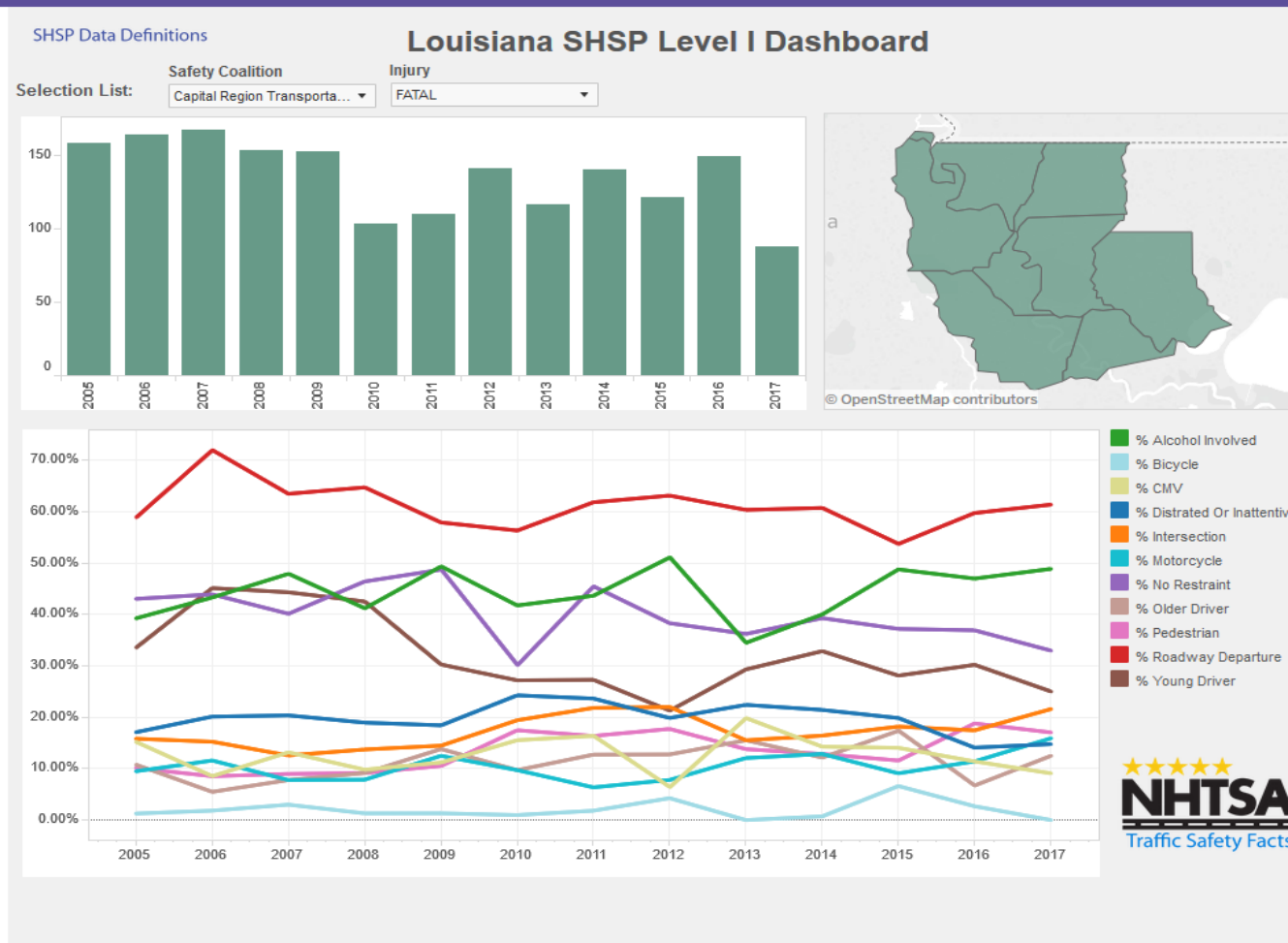
What are the major reasons people are dying or being seriously injured?

We used Tableau to build a dashboard displaying trends and ranking the different emphasis areas.

<http://datareports.lsu.edu/SHSPLevel1.aspx>

## Level 1 – Identify Problem Areas

### DATA REPORTS



Capital Region  
fatal data

Target Areas:

Roadway Departures  
Alcohol Involved  
No Restraint  
Young Driver

## Level 2 – Setting Target Measures

How much of a reduction can we expect to achieve?

What are our actual numbers?

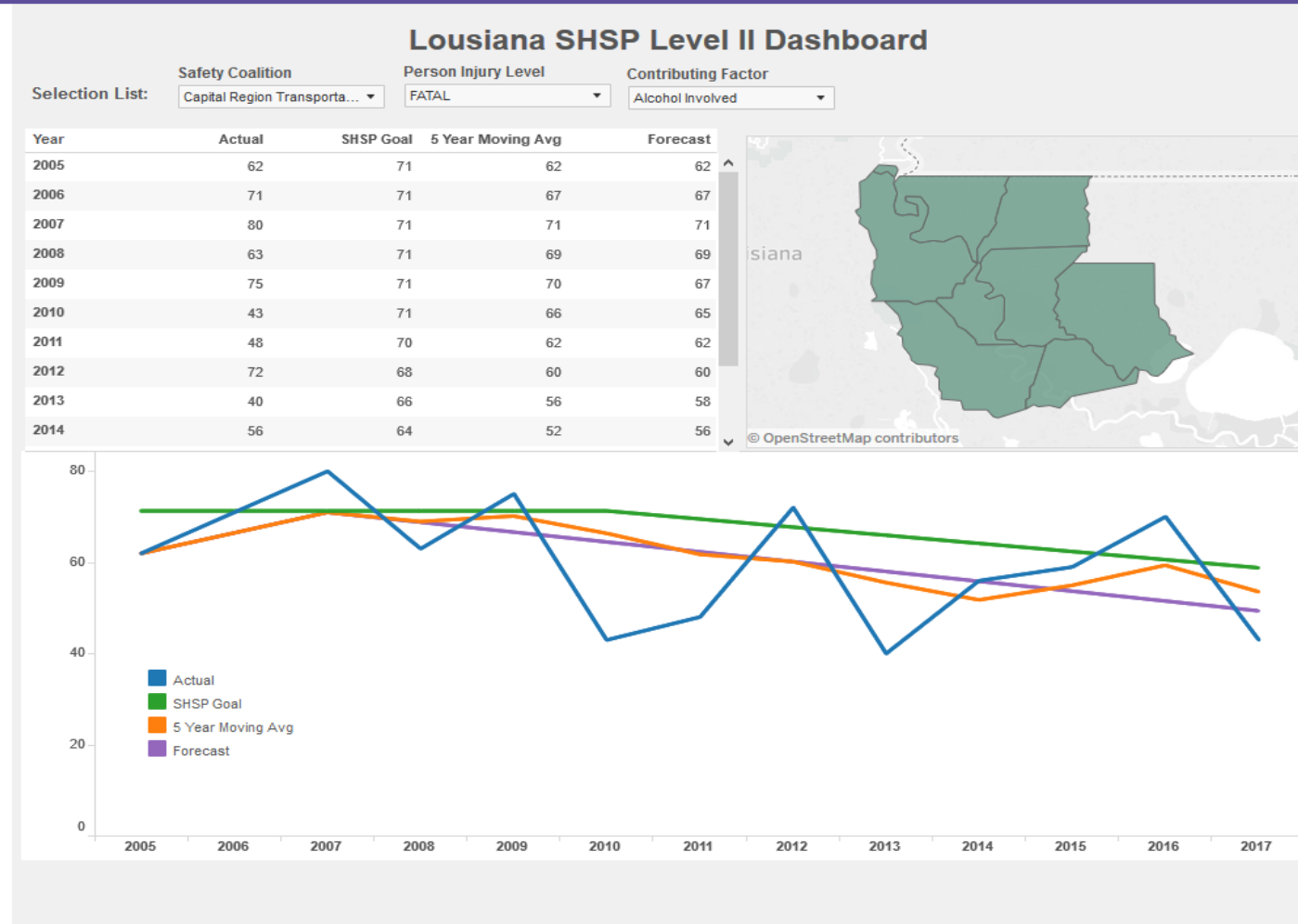
How does our target numbers compare to actual numbers and our SHSP Goal numbers?

We used Tableau to build a dashboard displaying trends in actual, SHSP Goal, 5 Year Moving Average, and Forecasted numbers.

<http://datareports.lsu.edu/SHSPLevel2.aspx>

## Level 2 – Setting Target Measures

### DATA REPORTS



Capital Region  
fatal alcohol data

Below SHSP goal for  
alcohol fatalities



# Level 3 – Addressing Identified Problems

Where and when are fatal and serious crashes occurring?

What are the characteristics of people dying and being seriously injured?

Create counter measures.

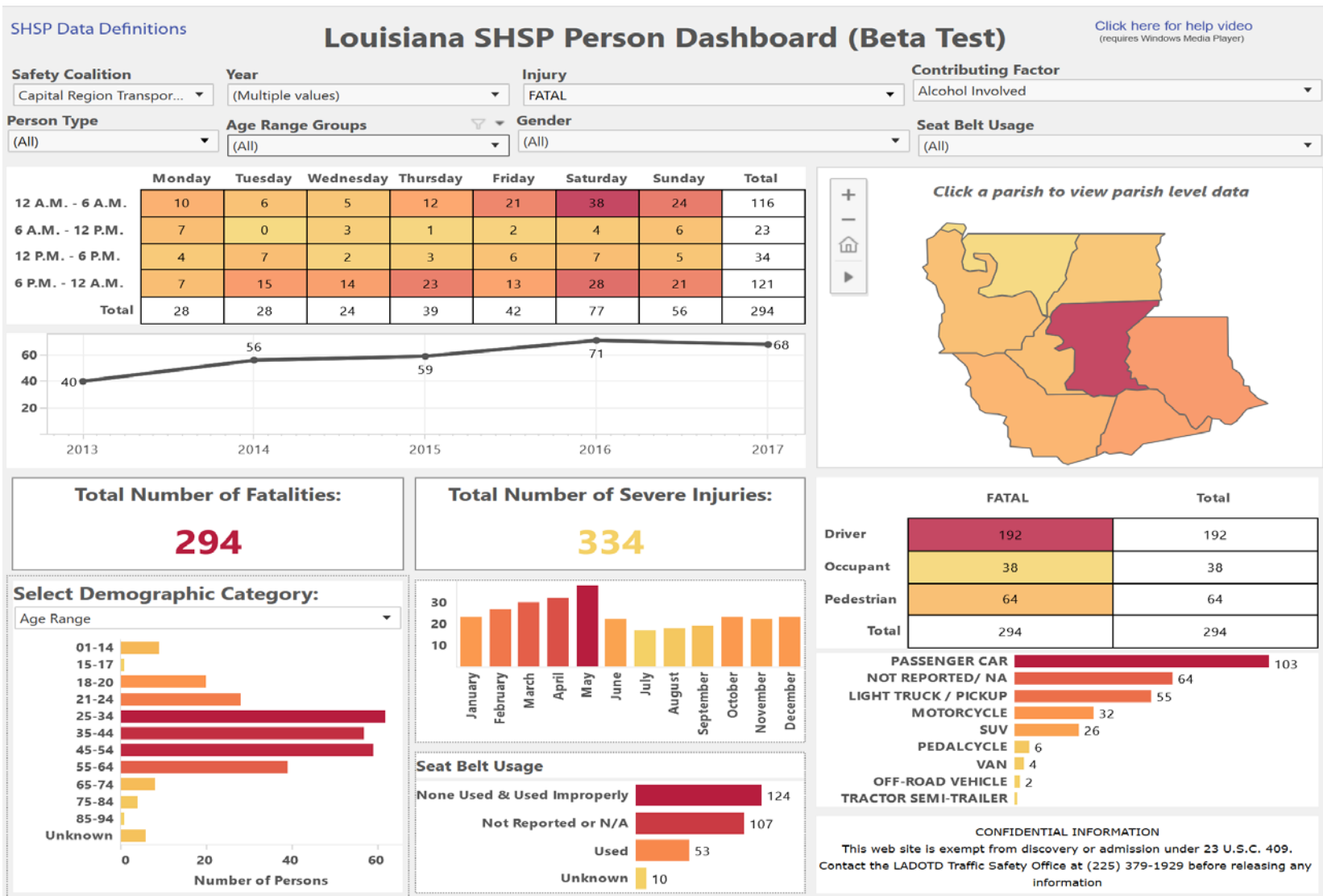
Track progress over time.

We used Tableau to build a

Crash dashboard <http://datareports.lsu.edu/SHSPCrash.aspx>

Person dashboard <http://datareports.lsu.edu/SHSPPerson.aspx>

## Level 3 – Person



Capital Region  
people killed in  
an alcohol  
crash

# Benefits of SHSP Dashboards

Data is easily accessible to end users

Data is displayed in a visually appealing manner versus traditional spreadsheets

Moving from layout/form lead to data/discovery lead

Dashboards are interactive

Decision makers can make more informed data driven decisions and implement effective counter measures

<http://crashdata.lsu.edu/SHSPCrash.aspx>

## Next Steps – Network Screening

