SCDOT ● THE CONNECTOR ● SUMMER 2015

## Strategic Highway Safety Plan

## Comprehensive statewide plan focuses on 'four Es' to reduce highway death, injuries

By Dick Jenkins and Brett Harrelson

Strategic Highway Safety Plan (SHSP) is a statewide, data driven, comprehensive plan that provides a framework for reducing deaths and severe injuries on all public roads. The SHSP establishes statewide goals and identifies critical areas of emphasis. Federal, state and local safety stakeholders were involved in the development of the plan.

The centerpiece of the SHSP involves the "Four Es" of roadway safety: Engineering, Enforcement, Education and Emergency Response.

## **Education**

US-D O T Enforcement and the Federal Highway **Engineering** Administration (FHWA) require all states to have **Emergency** an SHSP as the foundation for how all roadway safety improvements are made and for safety policies that are adopted.

SCDOT and the SC Department of Public Safety (SCDPS) were the lead agencies in the collaborative processes with safety stakeholders. The plan must evaluated and updated on a regular basis to determine if the goals are being met. If any goals are falling short, then changes in emphasis are adjusted.

> The key to the success of the SHSP is the use of real collision data to determine which types

> > of crashes

are causing Response highest rates of death and serious injury. This data is the only way to get actual results and reduce the high fatalsuccessful.

The SCDOT Office of Traffic Safety within Traffic Engineering has been in the forefront of SC-DOT's efforts in developing the SHSP. The Traffic Safety staff has taken great pains to make sure the collision data was properly and precisely located. The staff used GPS coordinates, SCDOT mapping assets and road inventory data in this process.

The data gathered related to fatalities and serious injuries have revealed this list for the "emphasis areas" with the highest percentages listed first:

- Roadway Departure
- No Seatbelt Use
- Younger Drivers

- Speed Related
- · Vulnerable Roadway Users - Motorcyclists, Pedestrians, Moped and Bicyclists
  - Intersections
  - · Impaired Driving
  - Heavy Trucks

Proven, successful solutions for each of these areas are listed in the SHSP.

If these measures are applied, South Carolina's fatal and serious injury statistics will drop.

A complete copy of the SHSP can be found at this link: www.sctargetzeroplan.org. The website offers you an opportunity to take the pledge to make a positive difference in SC's fatal and serious injury rates.

## SCDOT awarded Federal Highway Administration grant for bridge inspections

ity and serious injury rates. There

is no other way for the plan to be

By Pete Poore

CDOT is one of six state Departments of Transportation to receive FHWA grants to fund demonstration programs for innovative road and bridge work that will foster better and safer infra-

SCDOT's \$787,104 grant will be invested in structural health monitoring (SHM) technology used to complement visual bridge inspections. The grant will allow SCDOT engineers to determine if SHM can effectively be used statewide.

Bridge Maintenance had already installed this technology on the Ravenel Bridge in Charleston County and two other bridges. The grant will permit the monitoring of an estimated 50 additional bridges using SHM.

The current limited use of SHM has already proven valuable. The technology has saved \$700,000 in repairs on one bridge and data resulting from SHM has allowed engineers to stop overweight activity on a few bridges.

SHM will assist in making decisions ranging from considering load restrictions, to rehabilitation and replacement. SCDOT will share the results of the demonstration project with other states interested in deploying this technology.

Lee Floyd of Bridge Maintenance installs a health monitor on the Ravenel Bridge in Charleston. The monitor will be used in conjunction with visual inspections.

