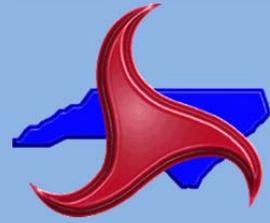


# NCDOT Traffic Safety Unit Programs



## Wider Edge Lines Evaluation

NCDOT is in the process of completing a study on the safety effectiveness of wider edge lines and edge lines with highly reflective elements on rural, two-lane roadways. Through this project, over 500 miles of roadway will be restriped and studied from 2014 to 2016. The routes are located in 11 Divisions across North Carolina.

## Background

Four variations of center line and edge line pavement markings are being studied:

- Standard Width (4" Wide) with Highly Reflective Elements
- Standard Width (4" Wide) with Standard Beads
- Wider Width (5"–6" Wide) with Highly Reflective Elements
- Wider Width (5"–6" Wide) with Standard Beads



6" Wide Markings with Standard Beads  
SR 1004/ Island Creek Rd in Jones County



6" Wide Markings with Highly Reflective Elements  
SR 1306/Beautancus Rd in Duplin County

We expect the wider width lines and the lines with highly reflective elements will be more visible and will improve delineation of the roadway. The intent of the study is to test whether these changes produce a significant improvement in safety.

## Study Measures of Effectiveness

Once all treatment sites have been installed for at least three years, the evaluation will analyze the before and after crash data to determine whether there are significant changes in Total Crashes, Injury Crashes and Lane Departure Crashes for each type of edge line.

We are currently in the process of obtaining before and after vehicle speed data from a sample of roadways included in the project to determine whether vehicle speeds change after each type of edge line is installed. Also, retro-reflectivity readings are being measured on a yearly basis to compare performance, and to potentially correlate with the crash data.