

NCDOT Traffic Safety Unit Programs



Safety Edge Implementation Study

NCDOT completed a study of the constructability and durability of resurfacing with safety edge. Safety edge has been placed on hundreds of miles of roadway in North Carolina since 2008.

Background

When applied correctly during resurfacing, safety edge provides a 30 degree pavement edge, rather than the standard pavement edge that is approximately 45-60 degrees with a non-shaped and non-formed edge that crumbles and breaks off leaving a potential 90 degree pavement edge. Because it minimizes the slope of the exposed pavement edge, safety edge may reduce crashes where the shoulder drop off was a contributing factor in the crash at no additional cost to paving projects.



SR 1611 in Burke County: Resurfacing With Safety Edge



SR 1611 in Burke County: Resurfacing Without Safety Edge

Results

The results show that safety edge is constructible, and seems to hold up well over time. Pilot locations in Johnston and Iredell Counties were observed for up to 3 years to monitor how well the pavement edge holds up over time. Below are photos of a successful application at varying periods post-installation.



SR 1007 in Johnston County (1) initially after the shoulders were pulled, and at (2) 13 months, (3) 19 months, and (4) 37 months after resurfacing.