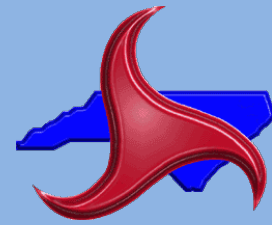


NCDOT Traffic Safety Unit Programs



Secondary Route Safety Program

NCDOT started a Secondary Route Safety Program (SRSP) in 2016. The long-term goal of the program is to provide speed limit ordinances for all rural, 2-lane roadways with statutory 55-mph speed limits in North Carolina. These are roadways outside of a municipality not accompanied with a signed speed limit, but where the default speed limit is 55-mph unless posted otherwise.



Every year the NCDOT Traffic Safety Unit creates a prioritized listing of routes with a statutory speed limit of 55-mph for review and investigation, with the goal of investigating at least 1,000 miles of roadway per year. The listing is scored based on the number of total, fatal and severe injury crashes, with the routes with more fatal and severe injury crashes on the top of the list. Site investigations are conducted to determine at what speed the ordinance should be set. There are many factors used to determine an appropriate speed limit, including crash rates, roadway and shoulder width, horizontal and vertical alignment, housing density, roadside development, and vulnerable road user activity.

Nearly 10,000 miles of the over 37,000 miles of NCDOT maintained roadways that use a 55-mph statutory speed limit have been reviewed through 2023. Roughly 3,800 miles, or 38% have received a speed limit ordinance less than 55-mph (ranging from 25-50-mph). The remaining 62% received a speed limit ordinance of 55-mph.

Before-After Safety Evaluation

Over 1,000 roadways with sufficient before-after crash data were studied in 2024. For sites to be included the roadway had to be at least 1-mile long, it did not overlap other known major safety treatments, and the ordinance effective date was prior to 2022. All sites where the new ordinance was less than 55-mph received new speed limit signs. Many locations ordinance at 55-mph did not receive speed limit signing following the change, although 2 Divisions did add new 55-mph signing. Study sites were grouped as follows:

- Overall Group (All Sites, given 25-55 mph ordinances) – 1,094 sites
- Sites given 45-mph ordinance – 311 sites
- Sites given 55-mph ordinance and new signs – 161 sites
- Sites given 55-mph ordinance without new signs (control group) – 481 sites

Results

Overall, the program seems to be having a positive effect on crashes:

- ✓ The overall group saw a 2% reduction in total crashes and a 14% reduction in fatal and injury crashes.
- ✓ Sites given a 45-mph ordinance saw a 6% reduction in total crashes and a 19% reduction in fatal and injury crashes.
- ✓ Sites given a 55-mph ordinance and new signs saw a 9% reduction in total crashes and a 19% reduction in fatal and injury crashes.
- ✓ Sites given a 55-mph ordinance without new signs (control group) saw a 2% increase in total crashes and a 9% reduction in fatal and injury crashes.
- ✓ Note that some sites may have received smaller safety treatments (curve or intersection signs, shoulder maintenance) along with the speed limit ordinance. Smaller improvements are hard to track but could have an impact on crash trends and may help explain the reductions in fatal-and-injury crashes in the control group.