

GUIDELINES FOR THE ESTABLISHMENT OF
RESTRICTIVE SPEED LIMITS
May 15, 1995

Introduction

G. S. 136-18 gives the Board of Transportation broad control over the State Highway System. G. S. 20-141, commonly referred to as the "Speed Limit Law," sets out the statutory speed limits in the State as well as how the Board of Transportation and local authorities in their respective jurisdictions may modify the statutory speed limits. G. S. 143A-98.1 gives the Board of Transportation the authority to control traffic on its highways by duly authorized ordinances. G. S. 143A-98.1 further authorizes the Board of Transportation to delegate the responsibility for ordinances to the Secretary or to others as it may deem fit. The Board has authorized the Secretary of Transportation to enact highway traffic ordinances in its behalf. The Secretary, in turn, has further delegated the authority to enact highway traffic ordinances to the State Traffic Engineer.

Statutory speed limits need not be ordinated. If found to be appropriate they shall be posted.

Rural Speed Limits

Speed limits outside of municipal corporate limits are the sole responsibility of the Board of Transportation. Speed limit investigations shall be made by the Division Traffic Engineer or members of the Traffic Engineering Branch. If a speed limit, other than statutory, is found to be appropriate, an ordinance for its enactment will be prepared and presented to the State Traffic Engineer for approval. Once the ordinance has the approval of the State Traffic Engineer, the new speed limit becomes effective as soon as it is posted by appropriate signs.

Engineering and Traffic Investigations

In the determination of proper numerical speed limits to be posted on any section of roadway it is the policy to consider several topographic and traffic characteristics with their relation to probable effect on safe and reasonable speeds. Among these characteristics are:

- a. The 85th percentile speed of prevailing traffic in the area under study.
- b. Condition and type of roadway surface.
- c. Roadway type, width, and number of traffic lanes.
- d. Shoulder width, condition and type.
- e. Horizontal and vertical alignment of the roadway.
- f. Roadside development: amount, type, and proximity to the travel way.
- g. Composition of the traffic using the roadway.
- h. Numbers and types of intersections, including private driveways and roads.

All the above factors, when considered together, should enable the investigator to arrive at a sound decision as to what speed limit is proper for the particular area.

PROCEDURES AND GUIDELINES FOR THE ESTABLISHMENT OF RESTRICTIVE SPEED LIMITS

1. 35 MPH or lower:

35 MPH or lower speed limits should be considered when the overall amount of roadside development is or exceeds 75% for a given roadway length of 0.25 mile. This development may be residential and/or commercial. Generally a developed roadside lot is one which has 100 feet of roadway frontage with driveway access. A roadway which is 100% developed on only one side with 0% development on the other side is 50% developed overall.

The amount of roadside development alone is not the controlling factor and is to be considered with all other topographic and traffic characteristics.

Speed limits of less than 20 MPH should not normally be enacted.

2. Restrictive speed limits above 35 MPH:

Restrictive 40, 45, or 50 MPH speed limits should be considered when the overall amount of roadside development is less than 75% for a given roadway length of 0.25 mile.

Roadside development requirements are the same as those for 35 MPH or lower speed limits. And again the amount of roadside development is not the controlling factor and is to be considered with all other topographic and traffic characteristics.

3. Loop and dead end roads 0.5 mile or less in length should not generally be speed zoned because of the local traffic characteristics.

4. Soil or gravel roads should not generally be speed zoned because of the unstable conditions affecting vehicular speed on roads of this type. Special hazards requiring speed reductions should be marked with warning signs and, if necessary, advisory speed plates. Under certain conditions with a high percentage of roadside development, restrictive speed limits may be established, not to exceed 35 MPH.

5. When posting restrictive speed zones on arterial and major collector streets, restrictive speed limit signs should be posted so that the motorist has at least one speed limit sign in view at all times. Inside municipal limits of an incorporated Town or City where the statutory limit is 35 MPH and the beginning point of the zone is properly marked, it is not necessary to retain a 35 MPH sign in view at all times.

6. In view of the National maximum mandatory speed limit of 55 MPH and the North Carolina statutory maximum rural speed limit of 55 MPH, the use of the 55 MPH speed limit sign can be significantly reduced.

55 MPH speed limit signs shall be posted at the State line. If necessary, 55 MPH signs may be posted along rural highways where the design speed for the highway exceeds 60 MPH. These signs, if posted, should be erected at staggered intervals not to exceed 2.5 miles.

7. The speed limit along any controlled access highway within the limits of a municipality shall be set by the Division of Highways without any concurrence from the municipality.
8. At the end of the section to which a speed limit applies, a Speed Limit sign showing the next speed limit shall be erected. (Section 2B-13 MUTCD) All existing "Resume Safe Speed" signs should be replaced with the proper speed limit sign.
9. A "Reduce Speed Ahead" sign shall be posted 600 feet minimum in advance of the point where a speed zone restriction begins when such restriction imposes any lower speed limit. The "Begin XX 1000 Feet Ahead" sign shall be used when the speed reduction is 15 MPH or more. The "Reduce Speed Ahead" sign should be erected 500 feet in advance of the "Begin XX 1000 Feet Ahead" sign.
10. For traffic entering an incorporated Town or City over 5,000 population, there shall be erected at or near the corporate limit a sign indicating "Citywide Speed Limit 35 MPH Unless Otherwise Posted." This sign shall not be erected on controlled access highways.
11. School zone speed limits shall be established in conformance with the "Guidelines Governing School Zone Speed Limits on State Highways."

GUIDELINES GOVERNING SCHOOL ZONE SPEED LIMITS ON STATE HIGHWAYS

1. The Division of Highways may, upon the basis of an engineering and traffic investigation, reduce the speed limit on State highways to establish school speed zones for public or private elementary or secondary schools.
2. Highways designated as part of the Interstate System or other controlled access highways shall not have school speed zones posted.
3. Effective January 1, 1975, within municipalities, concurring school speed zone ordinances will be required by the Division of Highways and the municipal governing body.

4. Restrictive school speed limits should not normally be established along highways without abutting school property.
5. The restrictive school speed limit should not normally extend along any highway, for a distance more than five hundred (500) feet on either side of such school property lines.
6. The speed limit so established should normally be effective for thirty (30) minutes prior to and thirty (30) minutes following the time of each beginning and each ending schedule.
7. The speed limit so established should not be ordinated less than 10 MPH below the 85th percentile speed of prevailing traffic in the area or the posted non-school speed limit. In no case shall the school speed limit be less than 25 MPH.