

School Zone Speed Safety Cameras in North Carolina

Initial Insights and Responses to Common Questions

October 1, 2025

Prepared by:

UNC-Chapel Hill Highway Safety Research Center

Prepared for:

North Carolina Department of Transportation

Contents

Overview	1
Basics of Speed and Transportation Safety in NC	2
Speed Safety Cameras	3
North Carolina's Speed Safety Legislation	4
Establishing Speed Safety Camera Programs	5
Speed Safety Camera Locations	7

Overview

Motor vehicle crashes are a leading cause of death in the United States, taking the lives of more than 110 people each day. In North Carolina, traffic fatalities statewide increased 18% from 2019 to 2024, and serious injuries grew by 7% during the same period. Speed is one of the most significant factors contributing to traffic deaths and severe injuries. Keeping speeds down in school zones is an important step to prevent serious injuries and fatalities.

In 2025, the State passed <u>Senate Bill 391</u>, which for the first time authorizes speed cameras and automated enforcement in school zones. North Carolina joins 25 other states (and more than 300 individual communities) with existing speed safety camera programs.¹

This creates a new opportunity for local governments to implement safety-focused strategies that reduce speeding in areas where children and families travel without relying solely on police presence. Starting October 1, 2025, communities in North Carolina can use speed safety cameras to enforce speed limits in school zones.

What is this document?

While the law provides a framework for these programs, questions remain about program design, technology, administration, and community engagement. With support from the North Carolina Department of Transportation, the UNC Highway Safety Research Center is working to develop resources and deliver technical assistance to help communities plan, develop, and monitor speed safety camera programs that can effectively prevent injuries and fatalities on NC roads.

The following pages contain answers to commonly asked questions about traffic safety and speed safety cameras. This resource will be updated regularly as new information and examples from across the State emerge. Please see https://www.hsrc.unc.edu/our-work/nc-speed-camera-enforcement-in-school-zones/ for updates, or share your information via the page's form to receive more information.

¹ Insurance Institute for Highway Safety (IIHS)

Basics of Speed and Transportation Safety in NC

How many people are impacted by traffic crashes in NC?

In 2024 alone, there were 674,061 people involved in 284,727 reported crashes on North Carolina roads. In these crashes, more than 7,000 people died or experienced life-altering severe injuries. In all 2024 crashes on all NC roads, more than 100,000 school aged children (age 5 to 19) were involved, with 801 experiencing severe or fatal injuries. Failure to reduce speed is the top contributing circumstance of all crashes in the State.²

The Centers for Disease Control and Prevention have estimated that North Carolina's traffic fatalities cost taxpayers more than \$2.26 billion a year in medical and work loss costs. NCDOT's <u>crash cost estimate data</u> indicates that the average cost of fatal crashes each year is more than ten times that, roughly \$20.65 billion a year. Those estimates do not account for the greater social and emotional toll that crashes have on families and the broader community.

What role does speed play in affecting health and safety of NC residents?

Speeding is a persistent safety challenge on North Carolina roads and is one of the leading contributors to serious and fatal crashes in the State. In 2024, speeding was involved in 22% of all fatal crashes statewide. That same year, 19% of fatal crashes involved people walking or biking, and North Carolina has experienced a 37% increase in pedestrian and bicyclist fatalities since 2019 (NC Vision Zero, 2025). These patterns are especially concerning in areas where children, youth, and families are walking, biking, or rolling to and from school and other destinations within their communities.

Higher vehicle speeds increase the chances of a crash and the severity of injuries, especially for people walking or biking. Children and youth are at greater risk because they are smaller, harder to see, and may behave unpredictably near traffic. School zones are busy areas where children and families are traveling, often during times when traffic is heaviest. Maintaining safe speeds in these areas is critical to prevent serious injuries.

Visit the <u>NC Vision Zero Speeding Dashboard</u> and <u>NCDOT's Traffic Safety Data and Engineering</u> resources page for interactive data, maps, and visuals of statewide, county-level, and city-level speeding information for North Carolina.

² https://ncvisionzero.org/data-analytics/visualizations/

³ https://cdctransportation.org/www.cdc.gov/transportationsafety/pdf/statecosts/2020/CDC-Cost-of-Crash-Deaths-Fact-Sheets NorthCarolina.pdf

Speed Safety Cameras

What is a speed safety camera?

A speed safety camera, otherwise known as a speed camera or automated speed enforcement, uses speed detection technology (such as radar and lidar) to measure the speeds of motor vehicles and take photos of vehicles traveling above a set speed threshold. The license plate of the speeding vehicle is photographed, and the owner of the vehicle is issued either a warning or a civil penalty by mail.

What is the purpose of speed safety cameras?

The purpose of speed safety cameras is to prevent traffic-related deaths and injuries by encouraging drivers to travel at safe speeds. As travel speeds increase, there is a higher chance of a crash occurring, and a higher likelihood that the crash will result in a severe injury or death. Speed safety cameras have been shown to be effective in slowing speeds and reducing crashes, injuries, and deaths.

How effective are speed safety cameras in reducing deaths and injuries?

Because of their demonstrated effectiveness, speed safety cameras are identified by both the <u>National Highway Traffic Safety Administration</u> and the <u>Federal Highway Administration</u> as effective ways to reduce deaths and injuries.

Research evaluating speed safety camera programs has routinely shown that they are effective in reducing motor vehicle speeds and decreasing the risk of death and severe injury. Oregon DOT recently did a <u>comprehensive review</u> of state and international speed camera studies and found them very effective in reducing average speed and overall speeding behavior. Speed safety cameras also reduce the occurrence of total crashes, as well as those resulting in severe injuries and deaths. Many studies also suggest that these safety benefits are experienced beyond the sites where the cameras are installed, otherwise known as a "halo effect," suggesting that communitywide safety can be improved even when cameras are only installed in specific locations.

Where else do speed safety camera programs exist?

With this new legislation, North Carolina joins 25 other states (and more than 300 individual communities) with existing speed safety camera programs, according to data compiled by the Insurance Institute for Highway Safety (IIHS). Twelve states, including North Carolina, specifically allow the use of speed safety cameras in school zones. Reflecting a surge of interest in the use of speed safety programs to reduce the risk of death and injury, the Federal Highway Administration and individual states (such as

<u>Washington</u> and <u>Oregon</u>) have developed comprehensive guidance for the planning and operation of these programs.

North Carolina's Speed Safety Legislation

What does NC law say about the use of speed safety cameras in school zones?

Starting October 1, 2025, North Carolina state law will allow local governments to adopt ordinances for using automated speed camera systems to enforce speed limits in school zones. The new law, passed as part of Senate Bill 391, also designates state authorities to set approval and calibration standards for camera systems and establishes requirements for how citations are issued and enforced. Collectively, these measures aim to reduce speeding and improve safety for children and youth traveling to and from school, as well as improve safety throughout the community.

Who has the authority to establish an ordinance for using speed camera systems?

Municipalities and counties may establish ordinances for automated speed camera systems in school zones. This authority is granted under N.C. Gen. Stat. 160A-300.4 for municipalities and N.C. Gen. Stat. 153A-246.1 for counties.

Who oversees equipment approval and testing standards?

The law designates the North Carolina Criminal Justice Education and Training Standards Commission and the Secretary of Public Safety to approve systems and establish standards for system calibration and accuracy. Local governments must comply with these standards.

How are citations issued, and what do they contain?

Law enforcement must review each violation documented by a speed safety camera and submit written confirmation of this process. Citations must include a photo of the vehicle, time and location, vehicle registration, recorded speed, written statement from the officer confirming a violation occurred, and information on how to either pay or contest the fine. Citations must be sent within 60 days of the violation.

Citations are issued to the address of the registered vehicle owner. If the owner was not the operator of the vehicle at the time of the violation, they have 30 days to submit an affidavit, either:

(1) Identifying the name and address of the person who had permission to operate the vehicle, who may then be issued the citation.

(2) Stating that the person operating the vehicle did not have permission to lease, rent, borrow, or otherwise utilize the vehicle.

Are the penalties civil or criminal? How much is a ticket?

As specified in the law, violations are considered noncriminal and carry a civil penalty of \$250 to the owner of the vehicle. No points are assigned to the driver's license of either the driver or the owner of the vehicle when violations are issued by speed safety camera systems. If unpaid after 30 days, a \$50 late fee applies, and the DMV may block registration renewal.

Who collects the revenue generated by speed safety camera citations?

The NC Constitution requires fines and penalties from citations go the local school district in which the fines originated. However, the law allows a portion of funds to pay for implementing, managing, and maintaining the program. No funds are used to boost operating revenue of local law enforcement agencies. The law allows local governments, boards of education, and law enforcement agencies to enter into local agreements around revenue, such as cost-sharing and reimbursement protocols.

Establishing Speed Safety Camera Programs

What is the role of a municipality or county in establishing a speed safety camera program?

According to the NC legislation, municipal or county governments must create an ordinance, select safety camera sites, determine a revenue sharing model, collect and disburse citation fines and fees, and report unpaid citations to the Department of Motor Vehicles.

The local ordinance is required to include several key elements, including:

- Procedures for issuing citations to vehicle owners within 60 days of the violation and receiving disputes from drivers within 30 days of the violation;
- Specifying the amount (\$250) and the type (noncriminal) of penalty; it is common for jurisdictions to specify a specific speed threshold above which citations will be issued (e.g. drivers traveling 1 mph over the speed limit may not be cited, but those traveling 6 mph over the limit will receive violations).
- Details captured in the citation, which must include a recorded image of the vehicle speeding; the vehicle's registration number and state of issuance; the date, time and location of the violation; the recorded speed; a copy of the certificate sworn or

affirmed by a law enforcement officer of the violation; and the process for paying the penalty.

- Procedures for a nonjudicial hearing process to review contested penalties; and
- A mechanism for the municipality to coordinate with and provide notice to the state
 Division of Motor Vehicles about vehicle owners who fail to pay their citations.

More detail about the requirements for local ordinances can be found in § 160A-300.4 (d).

Speed safety camera programs require local government efforts to plan, purchase, maintain, and manage the program and coordinate with other traffic safety improvement efforts. Because a speed safety camera program will impact numerous agencies, organizations and community members, numerous partners should be involved in collaborative discussions around whether, and how, to establish speed safety programs in school zones.

Establishing a steering committee involving multiple committed partners is often the first task. This group can help think through the need for involvement of other partners, how to engage with the public, how to determine key locations in need of safety improvement, and they can contribute to the development of plans to identify and select appropriate vendors, establish camera technologies and operations, stand up practices to review violation data, monitor and report activities and safety outcomes. Typical committee members include:

- City/Town council and other elected officials;
- Municipal lawyer;
- School board staff;
- Public works or engineering department staff;
- Finance department staff;
- District court representative; and
- Law enforcement staff.

Engagement with multiple partners through such a committee can help demonstrate broad support for the program, create transparency, and ensure that speed safety cameras are integrated into more holistic traffic safety efforts.

Municipalities and counties should also be prepared for questions from the public and establish clear lines of communication with partners to convey the impact of speeding, purpose of the cameras, and how they work.

Additional resources to help communities plan and implement speed safety camera programs is forthcoming.

What is the role of NCDOT in speed safety camera programs?

The NC legislation largely allows local governments to design and implement their speed safety camera programs independent of the NC Department of Transportation. NCDOT does not have any dedicated funding source for local governments to use to purchase or operate speed safety camera programs. NCDOT may have a role in engaging with local governments when encroachment agreements are needed and providing guidance for placement of signage or markings within NCDOT right of way.

Speed Safety Camera Locations

Where can speed safety cameras legally be installed?

According to NC's law, speed safety cameras may only be installed in established school zones after the local government approves their use through a local ordinance. After a municipality or county passes their ordinance, they must work with NCDOT to place cameras on any State-owned roadways.

A posted sign is required to alert road users that a speed camera system is being used to issue citations for school zone speed violations. Placement of sign can be no more than 1,000 feet from the speed camera system. Signs are subject to pre-existing sign guidelines under N.C. Gen. Stat. 136-30.

How is a school zone defined in North Carolina?

A school zone is a segment of road next to a school where the speed limit is lowered during set hours to protect students, families, and others traveling near the school. In North Carolina:

- School zones are established by State or local ordinance.
- Signs (or flashing beacons) must clearly mark the zone, post the reduced speed, and show when it is in effect.
- The reduced speed cannot be lower than 20 mph.
- Enforcement of reduced speed only applies on days and hours when school is in session.

For more information, see:

- Defining a school zone: State law General Statute 20-141.1
- Establishing speeds on State-owned roads: <u>Standard Practice for Establishing a</u> <u>School Speed Zone on a State System Street or Highway in North Carolina (S-14)</u>
- Signage requirements: Manual on Uniform Traffic Control Devices

Does roadway ownership affect where cameras can go?

Yes. On local roads, municipalities or counties can establish school zones and place cameras through their own ordinances. On State-owned roads, local governments must coordinate with NCDOT and follow the State's process for creating or marking school zones before cameras can be installed.