



TECH BRIEF 2014-4

PROPER POSTING OF SPEED LIMITS

What is speeding, and why is the posting of proper speed limit signs important?

Speeding, defined as exceeding the speed limit or driving too fast for conditions, is one of the most common factors in traffic crashes. Nationwide, in the decade from 2002 through 2011, speeding was a contributing factor in nearly one-third of all fatal crashes, claiming a total of 123,804 lives and resulting in an annual economic cost to society of approximately 40 billion dollars per year. In 2011 alone, 9,944 lives were lost in speeding-related crashes. (National Highway Traffic Safety Administration, 2013)

All speed limits on Connecticut public roads, whether owned by the state or town, must be approved by the Office of the State Traffic Administration (OSTA).

WHY ARE SPEED LIMITS ESTABLISHED?

Speed limits are established to move traffic in a uniform and safe manner. In Connecticut, the OSTA, in conjunction with the Legal Traffic Authorities (LTA) of the individual towns/cities, establishes speed limits for all public roads. In Connecticut, the legislature has established a statewide maximum speed limit of 65 mph.



Speed limits on all public roads are established for ideal driving conditions and must be approved by the OSTA. During inclement weather, motorists should adjust their operating speeds accordingly. In addition, no motorist should operate a motor vehicle at a rate of speed or in such a manner as to endanger the lives of vehicle occupants or any other person. Any

infringement of these common sense practices shall be considered a violation (Connecticut General State Statutes 14-218a Traveling Unreasonably Fast; 14-219 Speeding and 14-222 Reckless Driving).

The OSTA, in cooperation with town/city officials, also establishes speed limits on locally maintained roads. However, speed limits are not normally established on unimproved, dirt, or gravel roads because of variations in seasonal roadway surfaces. Roads of insufficient length (usually 500' or less) do not warrant or need a speed limit.

HOW DOES THE CT OSTA DETERMINE THE REGULATORY SPEED LIMITS?

The OSTA sets regulatory speed limits on state and local roads based on an engineering investigation. Principal factors considered are:

- road type and surface (curve, hill, etc.)
- location and type of access points (intersections, entrances, etc.)
- existing traffic control devices (signs, signals, etc.)
- accident history
- traffic volume
- sight distances
- test drive results
- radar observations



Radar speed observations are an important part of the traffic investigation. When choosing a speed, drivers take many roadway environment factors into consideration. Therefore, the speed that the majority of people consider prudent is an important value. Data is collected by performing radar checks at selected locations on the roadway under ideal driving conditions. A technical analysis is done on the results to determine the 85th percentile speed. This is the value indicating the speed under which most (85% of) drivers are travelling at or below. Experience has shown that a posted speed limit near this value is the safe and reasonable speed. However, there are exceptions (high accident frequency, volumes, etc.).

Engineering judgement is a very important tool. The traffic investigator must use knowledge of nationally accepted principles combined with experience to assign the safe speed.

What are the types of speed limits?

REGULATORY SPEED LIMIT

This black and white sign shows the maximum speed that a motorist may travel under ideal conditions. It must be authorized by the OSTA after consulting with the LTA of the town/city in which it is placed.



ADVISORY SPEEDS



Engineers erect advisory speed plates to advise drivers of the recommended speeds for specific roadway conditions, such as horizontal curves, exit ramps, or steep downgrades. The roadway condition warrants a lower speed than the general or posted speed limit, but rather than lowering the limit at each such location, traffic engineers post an advisory speed plate instead. Advisory speeds are not legally enforceable except under the basic speed law, which states that motorists must operate at speeds that are reasonable and prudent for conditions.

What are special types of speed zones?

SCHOOL SPEED LIMITS IN SCHOOL ZONES

These can be established on state roads after an investigation by the Division of Traffic Engineering and approval by the OSTA, or local roads after an investigation and approval by the OSTA. The school speed limit which is approved by the OSTA is in effect during school hours noted on a submounted sign or when the lights attached to the sign assembly are flashing. The school plate crown is black and fluorescent yello-green and the speed limit sign is black and white.

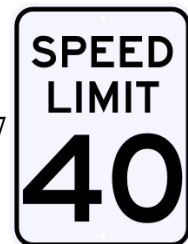


SPEED LIMITS IN WORK ZONES



Advisory speed limits are used to identify recommended speeds for a specific condition within a work zone. The signs are installed by the appropriate governing authority. These black and orange signs are used in advance of work areas.

Temporary construction zone speed limits are regulatory speed limits established for long term construction projects or detour routes. These black and white signs are used when a reduced speed is needed for driver safety. Valid 24 hours a day, 7 days a week, these signs are installed under the authority of the OSTA for any roadway.



Questions & Answers

Won't lowering the speed limit reduce speeds?

NO. Studies show that there is little change in the speed pattern after the posting of a speed limit. The driver is much more influenced by the roadway conditions.

Will lowering the speed limit reduce accident frequency?



NO. Although lowering the speed limit is often seen as a cure-all in preventing crashes, this is not the case. Crashes are most often the result of driver inattention and driver error. If a posted speed limit is unrealistically low, it creates a speed variance (i.e., some drivers follow the speed limit while most drive the reasonable speed). This speed variance can contribute to crashes.

Why do we even have speed limits?

A uniform speed of vehicles in a traffic flow results in the safest operation. The posted speed limits can keep the traffic flowing smoothly provided the majority of drivers find the speed limits reasonable. To do this, the limits must be consistent throughout the state. The speed limits also give the motorist an idea of a reasonable speed to drive in an unfamiliar location. The speed limits are used by police officials to identify excessive speeds and curb unreasonable behavior.

Whom do I contact?

EXPRESSWAYS

For regulatory and advisory speed limit information on the expressway system, you may contact the OSTA.

If you believe there is a safety concern or an inappropriate speed limit posted, the person to contact depends on the type of road. See below:

UNLIMITED ACCESS STATE HIGHWAYS AND LOCAL ROADWAYS

For these roadways, you may contact your LTA of the town in question who, if in agreement, will make a formal request to the OSTA.

FOR REGULATORY SPEED LIMITS.

The LTA can contact the OSTA requesting an investigation for speed limits on local roads. Based upon the results, the OSTA, if in agreement, may then authorize the municipality to post new speed limits.

FOR ADVISORY SPEED PLATES.

You may contact your LTA concerning local or state roads. The LTA will forward concerns regarding state roads to the Department's Division of Traffic Engineering if deemed warranted.

FOR SPEED LIMITS ON PRIVATE ROADS.

You may contact your LTA. These speed limits may be established without OSTA approval.

The telephone numbers to call for state or local assistance can be found under government listings. If you are unable to find the proper telephone number, you may call the Connecticut Department of Transportation Information Center:



1-860-594-2000 *General Information*

1-860-594-2788 *Division of Traffic Engineering*

1-860-594-3020 *Office of the State Traffic Administration*

A final safety note:

Remember to always use good judgement and drive at a safe and reasonable speed for the existing conditions. This is every driver's responsibility.

Also, please be mindful that there is a heightened concern about the risk of texting and talking while driving.

This information was supplied by the:
Conn. Department of Transportation
Division of Traffic Engineering
2800 Berlin Turnpike
Newington, CT 06131-7546

The Department of Transportation website provides a list of approved speed limits for town roads at the link below:

<http://www.ct.gov/dot/osta>

RELEVANT STATE STATUTES INCLUDE:

Sec. 14-218a. Traveling Unreasonably Fast. Establishment of speed limits. (a) No person shall operate a motor vehicle upon any public highway of the state, or road of any specially chartered municipal association or any district organized under the provisions of chapter 105, a purpose of which is the construction and maintenance of roads and sidewalks, or on any parking area as defined in section 14-212, or upon a private road on which a speed limit has been established in accordance with this subsection, or upon any school property, at a rate of speed greater than is reasonable, having regard to the width, traffic and use of highway, road or parking area, the intersection of streets and weather conditions.

The State Traffic Administration may determine speed limits which are reasonable and safe on any state highway, bridge or parkway built or maintained by the state, and differing limits may

be established for different types of vehicles, and may erect or cause to be erected signs indicating such speed limits. The traffic authority of any town, city or borough may establish speed limits on streets, highways and bridges or in any parking area for ten cars or more or on any private road wholly within the municipality under its jurisdiction; provided such limit on streets, highways, bridges and parking areas for ten cars or more shall become effective only after application for approval thereof has been submitted in writing to the State Traffic Administration and a certificate of such approval has been forwarded by the commission to the traffic authority; and provided such signs giving notice of such speed limits shall have been erected as the State Traffic Administration directs, provided the erection of such signs on any private road shall be at the expense of the owner of such road.



The presence of such signs adjacent to or on the highway or parking area for ten cars or more shall be prima facie evidence that they have been so placed under the direction of and with the approval of the State Traffic Administration. Approval of such speed limits may be revoked by the Office of the State Traffic Administration at any time if it deems such revocation to be in the interest of public safety and welfare, and thereupon such speed limits shall cease to be effective and any signs that have been erected shall be removed. Any speed in excess of such limits, other than speeding as provided for in section 14-219, shall be prima facie evidence that such speed is not reasonable, but the fact that the speed of a vehicle is lower than such limits shall not relieve the operator from the duty to decrease speed when a special hazard exists with respect to pedestrians or other traffic or by reason of weather or highway conditions.

(b) The Office of the State Traffic Administration shall establish a speed limit of sixty-five miles per hour on any multiple lane, limited access highways that are suitable for a speed limit of sixty-five miles per hour, taking into consideration relevant factors including design, population of area and traffic flow.

(c) Any person who operates a motor vehicle at a greater rate of speed than is reasonable, other than speeding, as provided for in section 14-219, shall commit the infraction of traveling unreasonable fast.

Excerpt of **Sec. 14-219. Speeding;** “(a) No person shall operate any motor vehicle (1) upon any highway, road or any parking area for ten cars or more, at such a rate of speed as to endanger the life of any occupant of such motor vehicle, but not the life of any other person than such an occupant; (2) at a rate of speed greater than fifty-five miles per hour upon any highway other than a highway specified in subsection (b) of section 14-218a, for which a speed limit has been

established in accordance with the provisions of said subsection; (3) at a rate of speed greater than sixty-five miles per hour upon any highway specified in subsection (b) of section 14-218a for which a speed limit has been established in accordance with the provisions of said subsection (a) of section 14-218a, at a rate of speed more than twenty miles per hour above such speed limit...”

INSTALLATION REQUIREMENTS

The Speed Limits Signs displayed shall be in multiples of 5 mph, and shall be placed at the points of change from one speed to another. Additional Speed Limit Signs shall be installed beyond major intersections and at other locations where it is necessary to remind road users of the speed limit that is applicable.

Source: Manual of Uniform Traffic Control Devices (MUTCD)

<http://mutcd.fhwa.dot.gov/>

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