

# ***Needham Traffic Management Advisory Committee Commonly Asked Questions Concerning Traffic and Safety***

## ***What is a Warrant?***

A warrant is a set of conditions, listed in the Manual of Uniform Traffic Control Devices, which must be met in order to post traffic signs or signals.

## ***Can the Town put up speed limit signs on local roads?***

The design and usage of all traffic control devices such as signs, signals and markings are governed by the Manual of Uniform Traffic Control Devices (MUTCD). This manual has been prepared by the Federal Highway Administration, with additional amendments adopted by the Commonwealth of Massachusetts. It applies to all streets, roads and highways, regardless of the governmental agency having jurisdiction over them. Speed limit signs, in particular, require a permit from the Massachusetts Highway Department and can only be installed after a traffic study is completed which justifies a new speed limit.

## ***How are speed limits set?***

Needham has 130 miles of roadway. Most Needham streets are considered "thickly settled" and have a 30 mph speed limit as established by state law. In non-thickly settled areas, where the buildings on a street are more than 200 feet apart from one another, the state law speed limit is 40 mph. The State's speed limit can only be changed if justified by an engineering traffic study. The new speed limit established by law would be set at the 85th percentile speed of free flowing traffic.

## ***What effect do posted speed limits have on actual speeds?***

Before and after studies on new speed limit signs consistently demonstrate that there are no significant changes in traffic speed following the posting of new speed limit signs. Tests done by the TMAC and the Police Department show that the vast majority of Needham motorists drive at 30 mph or less, and that observer tend to overestimate the speed of passing cars.

## ***Won't stop signs reduce speeds, deter cut through traffic, and make streets safer to walk, bike and play on?***

When implemented for the wrong reasons, stop signs create more problems than they solve. When stop signs are placed on one street, speeds tend to increase on the intersecting street. In these instances, motorists assume they no longer have to drive as cautiously through the intersection, because the other car is required to stop.

## ***Under what conditions are stop signs beneficial?***

The MUTCD lists the situations and conditions, or "warrants," where stop signs may be appropriate. In general, they should be used where traffic volumes, restricted sightlines or the assignment of right-of-way is required.

## ***When are new crosswalks installed?***

In order to justify the installation of a new crosswalk, a pedestrian volume study must be conducted. That study must show conclusively that there is heavy pedestrian volume and crossing at the requested site, and that there is no other crosswalk in the vicinity that

could accommodate this pedestrian volume. Additionally, there must be ample sight lines for drivers on the approach to the proposed crosswalk location, in both directions. State laws mandate that crosswalks have granite curbing and ramps on both sides, and signs in both directions, for a cost to the town of approximately \$10,000.

### ***When is a traffic signal installed?***

Traffic signals are a tremendous investment for the Town. Design and installation costs routinely exceed \$250,000 for intersections where signals are installed. Therefore, the Town must carefully prioritize where and when traffic signals will be installed. When determining whether or not a traffic signal is necessary at a specific location, the Engineering Division evaluates "traffic signal warrants" used by traffic engineers throughout the United States to help determine appropriate signal locations.

### ***Speeding is a terrible problem on my street. Can I get speed bumps installed in front of my house?***

Speed bumps result in an increased risk of personal injury to unsuspecting motorists and bicyclists. They would also become damaged or removed entirely by snow plows. Traffic studies show that speed bumps only lower the speed of traffic directly adjacent to the bump. The average speed on streets where speed bumps are installed remains unchanged. Speed bumps are not recommended for use on any public street.

### ***Why isn't there more Police enforcement of traffic laws?***

Needham Police do enforce traffic laws in addition to their other law enforcement and investigative responsibilities. A new Mobile Speed Detection Unit has been purchased by the town which is helping to educate drivers about speed limits, as well as to collect speed and traffic data.

### ***What can be done to improve the traffic situation on Needham streets?***

The solution to traffic is not to obstruct the flow by pushing traffic into different neighborhoods. The real solution is to upgrade and improve the traffic handling capabilities of the main thoroughfares, or "through" streets. This means implementing physical improvements of the roads and synchronizing traffic controls to accommodate actual vehicle speeds. If main streets provide convenient access between home, work and shopping destinations, motorists will use them instead of using alternate routes through residential neighborhoods.

### ***Where can I get more information?***

Town of Needham: [www.town.needham.ma.us](http://www.town.needham.ma.us)

Massachusetts Highway Division: [www.mass.gov/mhd](http://www.mass.gov/mhd)

Manual on Uniform Traffic Control Devices: [www.mutcd.fhwa.dot.gov](http://www.mutcd.fhwa.dot.gov)

Town of Gilbert, AZ traffic website: [www.ci.gilbert.az.us](http://www.ci.gilbert.az.us)

U.S. Department of Transportation, Federal Highway Administration, "Effects of Raising and Lowering Speed Limits on Selected Roadway Sections," Report No. FHWA-RD-92-084, June 1996