

TRAFFIC CALMING MEASURES



Raised pedestrian walkways (Speed Tables) near Amherst College

What are the objectives of traffic calming?

To improve neighborhood livability and pedestrian safety through the reduction of average travel speeds on residential roads.

Why are traffic calming measures needed?

Traffic calming relies on the installation of physical features to slow vehicle speed and enhances safety on local streets. Already used effectively in Europe for decades, traffic calming techniques are now being instituted in communities throughout North America. Reconfiguring the physical design a roadway is the most effective way to reduce speeding on residential streets, avoid traffic accidents and prevent fatalities. Cities with

successful traffic calming programs have neighborhoods that are safer, more livable, and more enjoyable. Small, inexpensive retrofits of a roadway can result in speed and traffic volume levels that promote more livable communities.

How do traffic calming measures work?

Rather than relying on stop signs, speed limits and legal penalties (the regulatory approach) to reducing average vehicle speeds and promote safe neighborhoods, traffic calming has been introduced to change the driving conditions on roadways in such a way that traffic speeds and driver behavior are self-enforced. This is accomplished through incorporating design elements into the roadway--such as raised crosswalks, traffic roundabouts and traffic circles—that lead a driver to choose to travel at a reduced speed. This reduces the possibility of severe collisions between motorists, increases safety for bicyclists and pedestrians, reduces erratic or aggressive driving behavior, and enhances the livability of neighborhoods and business districts through attractive street design.

DID YOU KNOW...

That there are **three** general types of traffic calming measures:

1. Narrowing the Real or Apparent Width of a Street: through pavement cross-section features, placement of street treatments and pavement edge treatments
2. Deflecting the vehicle path: such as chicanes, lane offsets, crossing islands and site-specific traffic circles; Introducing roundabouts, traffic circles, curb extensions
3. Altering the vertical profile of the vehicle path: such as speed humps and speed tables, raised crosswalks, and textured pavement

(Massachusetts Highway Department Project Development and Design Guide)

EXAMPLES FROM THE PIONEER VALLEY

Amherst College and the Town of Amherst

In 2002, Amherst College identified pedestrian safety as a major point of concern for its student population; this was due, in large part, to the presence of Route 9 and Route 116 on the college's main pedestrian access points. To reduce the risk of pedestrian and automobile collisions, Amherst College began working with the Town of Amherst in 2003 to finance and design the first test Speed Table on Seelye Street (a minor collector off of Route 9). The successful application of a Speed Table at Seelye Street led to the installation of four major Speed Tables along College Street (Route 9) in 2004. Raised Speed Tables were installed at the crossings of Boltwood Avenue, Webster Circle, and Dickinson Street, and a pedestrian-activated system of flashing lights was also embedded within the Speed Tables to enhance night time visibility.

Amherst College performed an assessment of the section of College Street that the crosswalks were installed on to determine the effectiveness of this project. The findings from the assessment indicated that the average travel speed that existed before the installation of the Speed Tables, 47 miles an hour, was reduced to the posted speed limit of 35 miles per hour. This project relied on the third approach to achieving traffic calming (see inset), and successfully altered the vertical profile of the vehicle path.

This project has been a success with both residents and college students, and the Town of Amherst and Amherst College are proceeding with the installation of four crosswalks along South Pleasant Street (Route 116) to replicate the success of the College Street project. In addition to Speed Tables, the South Pleasant Street crosswalk project will install new curbing and add vegetated traffic islands to the roadway. These design features will accomplish the goals of redesigning the roadway to reduce travel speeds, enhancing pedestrian safety, and improving street design and neighborhood quality.

EXAMPLES FROM OUTSIDE THE PIONEER VALLEY

City of Cambridge, Massachusetts

The City of Cambridge has been extremely active in implementing traffic calming designs into their existing roads system. Please visit the city's Office of Community Development [traffic calming webpage](#) for more information on funded projects and resources on traffic calming.

Seattle, Washington: Neighborhood Traffic Circle Program

Please visit the [Neighborhood Traffic Circle Program](#) webpage for more details on this nationally recognized traffic calming program.

ADDITIONAL RESOURCES

[Chapter 16: Traffic Calming and Traffic Management](#), Massachusetts Highway Department, Project Development and Design Guide, January 2006.