

Traffic Calming Measures

Too much speed and too many vehicles are common complaints in many urban communities. To address these public concerns, many jurisdictions are tempted to adopt apparently easy solutions, such as lowering speed limits and/or installing Stop signs. However, without consistent and increased enforcement, speed limits lower than the 85th percentile are ineffective and not recommended. Installation of Stop signs without proper warrants is never recommended. Traffic calming offers an alternative solution.

Traffic calming is defined by the Institute of Traffic Engineers as “the combination of mainly physical measures to reduce the negative effects of motor vehicle use, alter driver behavior, and improve conditions for non-motorized street users.”

The concept of traffic calming involves physical alterations to a road or street, which cause or invite motorists to decrease driving speed and pay increased attention to the driving task. Some results include reduced speeds and volumes, reduced collision severity, reduced need for extraordinary law enforcement, improved safety for pedestrians and bicyclists, and improved access for all modes of traffic.

The cost of traffic calming measures can vary from a few thousand dollars for closures, speed humps, and bulb-outs to \$50,000 or more for extensive roundabout designs.

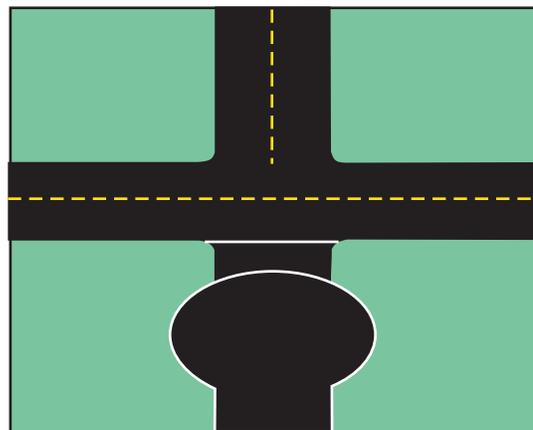
Parts 2 and 3 of the *MUTCD* include recommendations for the signing and marking of certain traffic calming measures. This resource should be consulted for appropriate traffic control. Chapter 2C contains description of new signs for traffic calming use, such as Speed Hump (W17-1) and Circular Intersection (W2-6).

When considering implementation of any traffic calming initiatives, it is recommended to seek appropriate public input and support. Temporary measures such as removable curbs and islands can be used to gauge public reaction and support for any permanent implementation under consideration.

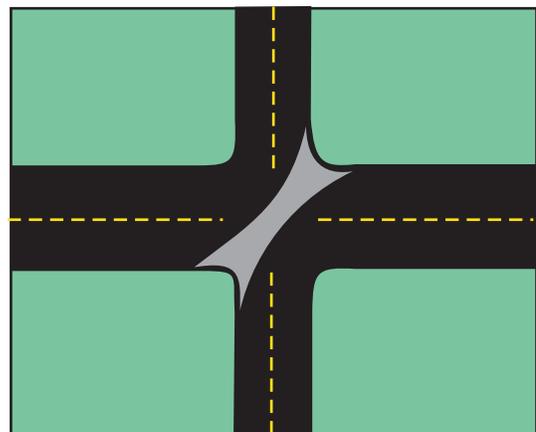
Common traffic calming measures include the following practices.

Closures, Diversions, and Semi-Diversions

These steps would have an obvious effect on reducing traffic volume on a given road or street, but effects to adjacent routes must also be considered.



Street closure (cul-de-sac)



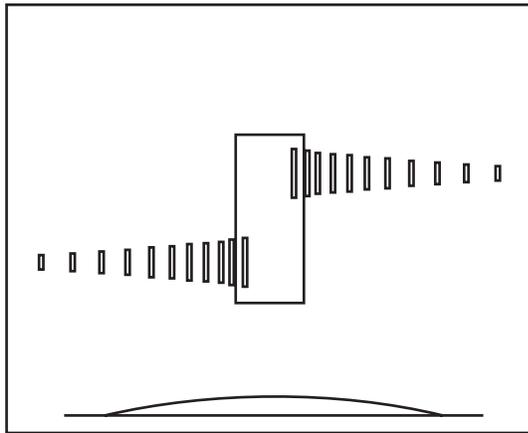
Traffic diverter

Medians and Islands

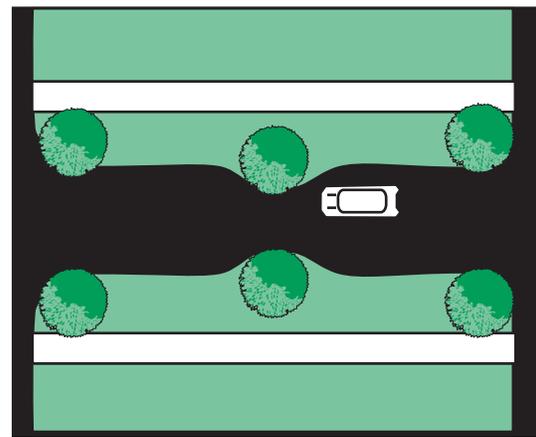
These installations can separate opposing traffic, prevent undesirable turns, and reduce road or street width.

Speed Bumps, Humps, Tables, and Rumble Strips

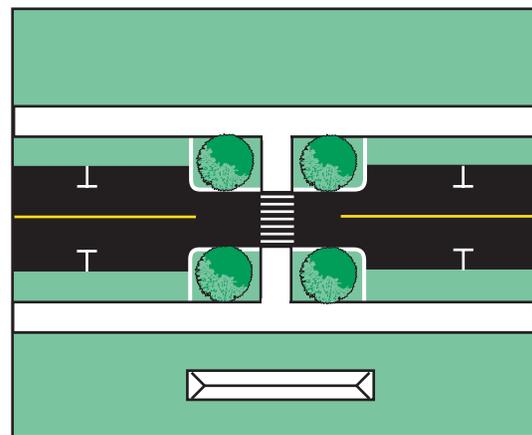
These devices usually vary from 12 to 20 feet in length and consist of a vertical displacement in pavement surface or, with rumble strips, an audible and physical sensation to gain motorist attention.



Speed humps



Choker



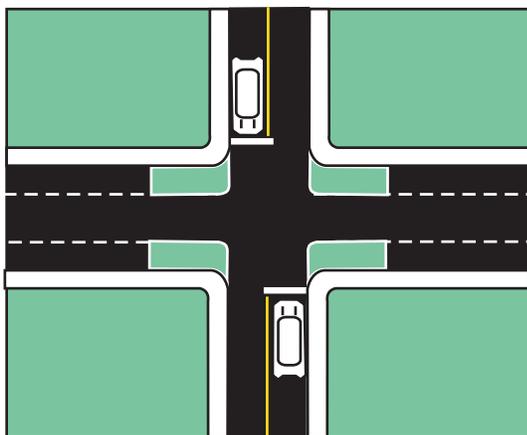
Midblock bulb-out with speed hump

Chokers and Bulb-Outs

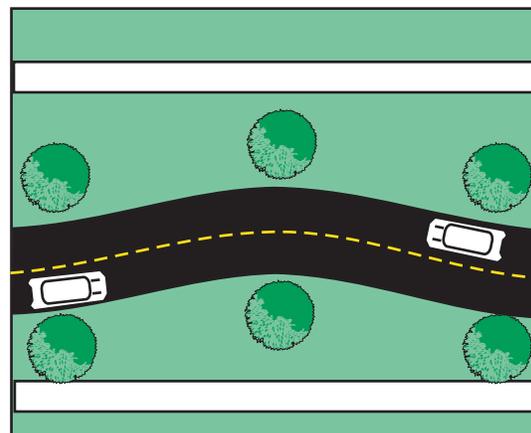
These measures involve semicircular or longer extensions of curb or roadside landscaping to invite drivers to slow down. Narrowing of the street to permit easier pedestrian usage is also a potential benefit.

Chicanes

Chicanes are short, horizontal displacements in alignment that encourage slower speeds.



Bulb-out intersection



Chicane

Roundabouts and Traffic Circles

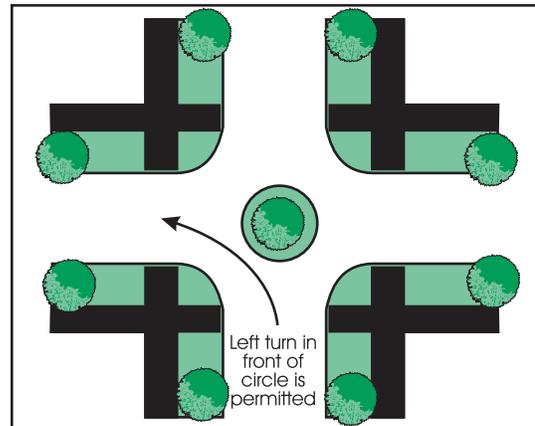
While generally not considered a traffic calming measure, roundabouts involve an intersection design that can often improve operation, reduce crashes, and eliminate signal need. Extensive design recommendations are available for roundabouts in particular. Traffic circles are small islands placed in intersections. They are meant to reduce traffic speeds by requiring through vehicles to navigate around the circle.

Still other measures such as landscaping, fencing, pedestrian crossings, and lighting can have beneficial effects in slowing traffic and providing a safer environment for all roadway users.

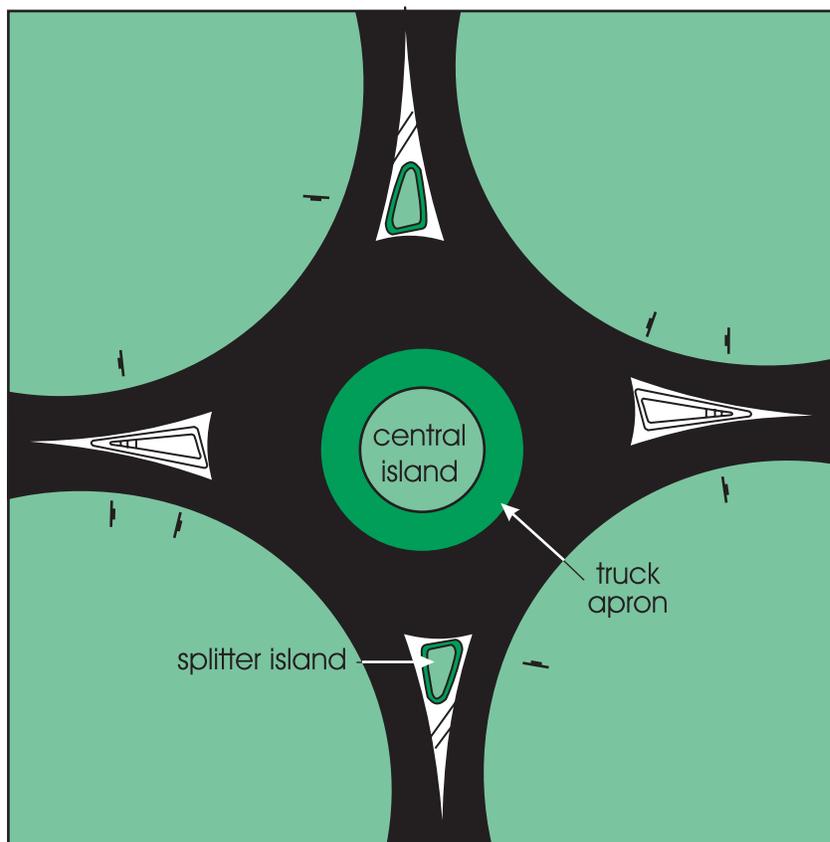
Traffic calming measures may also have negative impacts on snow removal, bus and commercial traffic, and emergency response, etc., which should be considered. Effects on surrounding routes should also be considered by viewing potential traffic calming projects as part of the

entire roadway network. Advice from the Iowa Department of Transportation, ITE publications, and other jurisdictions with traffic calming experience is also advisable.

Refer to Parts 2 and 3 of the *MUTCD* and “Pavement Markings” (D1) in this manual for advice on signing and marking for certain traffic calming measures.



Mini traffic circle



Roundabout