



CAPE COD
COMMISSION

Traffic Calming Techniques

Cape Cod Commission

June 2011



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By request from the Town of Truro, the Cape Cod Commission has prepared this summary of Traffic Calming Techniques.

Traffic Calming is the combination of policies and measures that reduce the negative effects of motor vehicle use, alter driver behavior, and improve conditions for non-motorized street users. Goals include:

- increasing the quality of life
- incorporating the preferences of neighborhood residents
- creating safe and attractive streets
- helping to reduce the effects of motor vehicles on the environment
- promoting pedestrian, cycle, and transit use

Traffic calming goals can be accomplished through:

- encouraging motor vehicles to slow down
- reducing collision frequency and severity
- increasing safety for non-motorized users of the street
- enhancing the street environment (e.g., streetscaping)
- reducing cut-through motor vehicle traffic

The techniques summarized in this report and their estimated costs have been identified from actual installations throughout the United States. For more information including photographs and discussion of potential advantages and disadvantages of each technique, please see:

www.Trafficcalming.org

Traffic Calming Techniques

Source: Trafficcalming.org ---- Prepared June 2011

Speed Humps

Speed humps are rounded raised areas placed across the roadway. They are generally 10 to 14 feet long (in the direction of travel), making them distinct from the shorter "speed **bumps**" found in many parking lots, and are 3 to 4 inches high. The profile of a speed hump can be circular, parabolic, or sinusoidal. They are often tapered as they reach the curb on each end to allow unimpeded drainage.

Speed Humps are good for locations where very low speeds are desired and reasonable, and noise and fumes are not a major concern.



Cost Estimate(s):

- \$2,000-\$2,500 (Portland, OR)
 - \$2,000 (Sarasota, FL)
 - \$2,000 (Seattle, WA)
-

Speed Tables...(trapezoidal humps, speed platforms)

Speed tables are flat-topped speed humps often constructed with brick or other textured materials on the flat section. Speed tables are typically long enough for the entire wheelbase of a passenger car to rest on the flat section. Their long flat fields give speed tables higher design speeds than [Speed Humps](#). The brick or other textured materials improve the appearance of speed tables, draw attention to them, and may enhance safety and speed-reduction.



Speed tables are good for locations where low speeds are desired but a somewhat smooth ride is needed for larger vehicles.



Cost Estimate(s):

- \$2,000-\$2,500 (Portland, OR)
 - \$2,000 (Sarasota, FL)
 - \$2,000 (Seattle, WA)
-

Raised Crosswalks ...(raised crossings, sidewalk extensions)

Raised crosswalks are Speed Tables outfitted with crosswalk markings and signage to channelize pedestrian crossings, providing pedestrians with a level street crossing. Also, by raising the level of the crossing, pedestrians are more visible to approaching motorists.

Raised crosswalks are good for locations where pedestrian crossings occur at haphazard locations and vehicle speeds are excessive.



Cost Estimate(s):

- \$4,000
-

Raised Intersections ...(raised junctions, intersection humps, plateaus)

Raised intersections are flat raised areas covering an entire intersection, with ramps on all approaches and often with brick or other textured materials on the flat section. They usually raise to the level of the sidewalk, or slightly below to provide a "lip" that is detectable by the visually impaired. By modifying the level of the intersection, the crosswalks are more readily perceived by motorists to be "pedestrian territory".

Raised intersections are good for intersections with substantial pedestrian activity, and areas where other traffic calming measures would be unacceptable because they take away scarce parking spaces.



Cost Estimate(s):

- \$12,500 (Sarasota, FL)
-

Chicanes

Chicanes are curb extensions that alternate from one side of the street to the other, forming S-shaped curves. Chicanes can also be created by alternating on-street parking, either diagonal or parallel, between one side of the street and the other. Each parking bay can be created either by restriping the roadway or by installing raised, landscaping islands at the ends of each parking bay.

Good for locations where speeds are a problem but noise associated with Speed Humps and related measures would be unacceptable.



Cost Estimate(s):

- \$14,000 (Sarasota, FL)
-

Neckdowns... (nubs, bulbouts, knuckles, intersection narrowings, corner bulges, safe crosses)

Neckdowns are curb extensions at intersections that reduce the roadway width from curb to curb. They "pedestrianize" intersections by shortening crossing distances for pedestrians and drawing attention to pedestrians via raised peninsulas. They also tighten the curb radii at the corners, reducing the speeds of turning vehicles.

They are good for intersections with substantial pedestrian activity and areas where vertical traffic calming measures would be unacceptable because of noise considerations.



Cost Estimate(s):

- \$40,000 - 80,000 for four corners
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Center Island Narrowings... (midblock medians, median slowpoints, median chokers)

A center island narrowing is a raised island located along the centerline of a street that narrow the travel lanes at that location. Center island narrowings are often landscaped to provide a visual amenity. Placed at the entrance to a neighborhood, and often combined with textured pavement, they are often called "gateway islands." Fitted with a gap to allow pedestrians to walk through at a crosswalk, they are often called "pedestrian refuges."

Center Island Narrowings are good for entrances to residential areas, and wide streets where pedestrians need to cross.



Cost Estimate(s):

- \$8,000 - 15,000 (Portland, OR), \$5,000 (Sarasota, FL)
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Chokers... (pinch points, midblock narrowings, midblock yieldpoints, constrictions)

Chokers are curb extensions at midblock locations that narrow a street by widening the sidewalk or planting strip. If marked as crosswalks, they are also known as safe crosses. Two-lane chokers leave the street cross section with two lanes that are narrower than the normal cross section. One-lane chokers narrow the width to allow travel in only one direction at a time, operating similarly to one-lane bridges. They are good for areas with substantial speed problems and no on-street parking shortage.





Cost Estimate(s):

- \$7,000 - 10,000 (Portland, OR)
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Traffic Circles... (rotaries, intersection islands)

Traffic circles are raised islands, placed in intersections, around which traffic circulates. They are good for calming intersections, especially within neighborhoods, where large vehicle traffic is not a major concern but speeds, volumes, and safety are problems.



Cost Estimate(s):

- Varies by materials used and the amount of area covered