

NEIGHBORHOOD TRAFFIC CALMING PROGRAM VERTICAL MEASURES

SPEED HUMP

Speed humps are rounded raised areas placed across the road. They are generally 12 feet long in the direction of travel, 3¼ to 3¾ inches high, and parabolic in shape, and have a design speed of 15 to 20 mph. They are usually constructed with asphalt concrete and have a taper on each side to allow unimpeded drainage between the hump and curb. When placed on a street with rolled curbs, warning signs may be placed at the ends of the speed hump to discourage vehicles from veering outside of the travel lane to avoid the device. Speed humps are not installed on emergency response or bus routes.



Advantages

- Relatively inexpensive
- Relatively easy for bicyclists to cross if taper is designed appropriately
- No loss of on-street parking
- Very effective in slowing travel speeds

Disadvantages

- Causes a "rough ride" for all drivers, and can cause severe pain for people with certain skeletal disabilities
- Emergency vehicles forced to travel at slower speeds
- Increased noise to adjacent residences
- Aesthetics

SPEED CUSHION

The speed cushion is a variation on the speed hump and with wheel cut-outs to accommodate the wheelbase of fire trucks and buses so they can pass through without slowing. For standard size vehicles to pass, at least one set of wheels must travel over the cushion. Each speed cushion is typically 6.5 feet wide, 6.67 feet long in the direction of travel, and 3 inches high. Typically, a set of three or four cushions are installed depending on the width of the street. The design speed is 15 to 20 mph. They are usually constructed of asphalt concrete and have a taper on each side to allow unimpeded drainage between the cushion and curb. When placed on a street with rolled curbs, warning signs may be placed at the ends of the speed cushion to discourage vehicles from veering outside of the travel lane to avoid the device. Speed cushions are installed on emergency response and bus routes.



Advantages

- Relatively inexpensive
- No loss of on-street parking
- Very effective in slowing travel speeds

Disadvantages

- Large (non-standard) vehicles can avoid the cushion by passing through the cut-outs
- Causes a "rough ride" for all drivers, and can cause severe pain for people with certain skeletal disabilities
- Increased noise to adjacent residences
- Aesthetics

SPEED LUMPS

Speed lumps are similar to speed cushions with the exception that the center segment or “lump” is only 5 and ½ feet in width thus allowing most standard size vehicles to easily pass through without slowing. The speed cushion is the preferred measure to prevent motorists from driving across the center segment.

SPEED TABLES

Speed Tables are flat-topped speed humps typically elongated to 22 feet in the direction of travel and 3 ¼ to 3 ¾ inches high. Speed Tables are more gently sloped than speed humps, thus less jarring, providing a smoother ride at slightly higher design speeds than speed humps. Speed Tables are used at locations where low speeds are desired, but a somewhat smooth ride is needed for larger vehicles such as fire trucks.

Potential Impacts:

- no effect on access
- speeds are reduced, but usually to a higher crossing speed than at speed humps (typically between 25 and 27 miles per hour)
- traffic volumes have been reduced on average by 12 percent depending on alternative routes available
- collisions have been reduced on average by 45 percent on treated streets (not adjusted for traffic diversion)
- reported to increase pedestrian visibility and likelihood that driver yields to pedestrian (if table is raised crosswalk)

Emergency Response Issues:

- typically preferred by fire departments over 12 to 14-foot speed humps
- generally less than 3 seconds of delay per hump for fire trucks



Advantages

- Effective in reducing vehicle speed
- Smoother on large vehicles (such as fire trucks) than speed humps
- Can be used on higher volume/speed roads.

Disadvantages

- More expensive than speed humps
- Aesthetics
- May increase noise and air pollution