

## Typical Use

- **Speed Humps** - Speed humps are parabolic vertical speed control elements to be used on low volume, low speed roads with targets design speeds of 15 to 30 mph. A series of speed humps can be used to achieve a targeted speed reduction for the corridor
- **Speed Tables/Raised Crosswalks** - Speed tables are longer than speed humps and are typically used on roads with desired speeds between 25 and 45 mph. Speed tables can also be used as a raised midblock crossing.
- **Speed Cushions** - Speed cushions have a similar application to speed humps and speed tables, however, they allow large vehicles to pass unimpeded by providing wheel cutouts. These can be used on roads with bus routes and major emergency access routes. Speed cushions typically are used for targeted design speeds of 30 mph or less.

## Design Features

- **Speed Humps** - Speed humps are typically 3 to 4 inches high and 12 to 14 feet wide with ramp lengths of 3 to 6 feet. Ramp slopes should be 4% and 10%.
- **Speed Tables/Raised Crosswalks** - Speed tables are typically 3 to 4 inches high and 22 feet wide, including 6-foot approaches on each side and a 10-foot plateau. Speed tables can be marked with a crosswalk creating a raised crosswalk. Ramp slopes should be 4% and 10%.
- **Speed Cushions** - Speed cushions consist of two or more raised areas. Ramp slopes should be 4% and 10%.

## Further Considerations

### Advantages

- Reduces vehicle speeds.
- Speed cushions can accommodate emergency vehicles.
- Speed tables can be combined with curb bulb-outs to create a raised crosswalk.
- Cyclists are not typically affected by vertical speed control elements and are able to traverse speed humps/tables/cushions with minimal delay or discomfort

### Disadvantages

- Limited reduction in cut-through traffic.
- Speed humps are generally not advised for major emergency vehicle routes.
- Potential for increased noise.
- Hydraulic impacts may need to be evaluated for speed humps/tables/cushions that extend from curb to curb.

## Materials & Maintenance

Speed humps and cushions are typically constructed with asphalt. Speed tables and raised crosswalks can be constructed with pavers. Signage and pavement markings shall be designed per local standards.

# Vertical Speed Control Elements

Vertical speed control elements help to manage vehicular speeds by changing the height of the roadway surface. Speed humps, speed cushions, and speed tables are all examples of vertical deflection used to slow traffic speeds. These elements are designed to be traversed at the posted speed limit.

