**Speed Cushion**

**Description:**
- Two or more raised areas placed laterally across a roadway with gaps between raised areas
- Height and length similar to a speed hump; spacing of gaps allow emergency vehicles to pass through at higher speeds
- Often placed in a series (typically spaced 260 to 500 feet apart)
- Sometimes called speed lump, speed slot, and speed pillow

**Applications:**
- Appropriate on local and collector streets
- Appropriate at mid-block locations only
- Not appropriate on grades greater than 8 percent

(Source: James Barrera, Horrocks, New Mexico) (Source: Delaware Department of Transportation)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

**Design/Installation Issues:**
- Two or more cushions at each location
- Typically 12 to 14 feet in length and 7 feet in width
- Cushion heights range between 3 and 4 inches, with trend toward 3 - 3 ½ inches maximum
- Speed cushion shapes include parabolic, circular, and sinusoidal
- Material can be asphalt or rubber
- Often have associated signing (advance-warning sign before first cushion at each cushion)
- Typically have pavement markings (zigzag, shark's tooth, chevron, zebra)
- Some have speed advisories

**Potential Impacts:**
- Limited-to-no impact on non-emergency access
- Speeds determined by height and spacing; speed reductions between cushions have been observed averaging 20 and 25 percent
- Speeds typically increase by 0.5 mph midway between cushions for each 100 feet of separation
- Studies indicate that average traffic volumes have reduced by 20 percent depending on alternative routes available
- Average collision rates have been reduced by 13 percent on treated streets

**Emergency Response Issues:**
- Speed cushions have minimal impact on emergency response times, with less than a 1 second delay experienced by most emergency vehicles

**Typical Cost (2017 dollars):**
- Cost ranges between $3,000 and $4,000 for a set of rubber cushions