Speed Humps...(road Humps, undulations)

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.

Advantages:

- Speed Humps are relatively inexpensive
- They are relatively easy for bicycles to cross if designed appropriately
- They are very effective in slowing travel speeds.

Disadvantages:

- They cause a "rough ride" for all drivers, and can cause severe pain for people with certain skeletal disabilities
- They force large vehicles, such as emergency vehicles and those with rigid suspensions, to travel at slower speeds
- They may increase noise and air pollution
- They have questionable aesthetics.

Effectiveness:

- For a 12-foot hump:
  - Average of 22% decrease in the 85th percentile travel speeds, or from an average of 35.0 to 27.4 miles per hour; (from a sample of 179 sites).
  - Average of 11% decrease in accidents, or from an average of 2.7 to 2.4 accidents per year (from a sample of 49 sites).
- For a 14-foot hump:
  - Average of 23% decrease in the 85th percentile travel speeds, or from an average of 33.3 to 25.6 miles per hour (from a sample of 15 sites).
  - Average of 41% decrease in accidents, or from an average of 4.4 to 2.6 accidents per year (from a sample of 5 sites).

Similar Measures:

- By lengthening the hump with a flat section in the middle, you have a Speed Table.
- By turning an entire crosswalk into a speed hump, you have a Raised Crosswalk
- By raising the level of an entire intersection, you have a Raised Intersection.

Cost Estimate(s):

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

Portland, OR - This 14-foot speed hump uses a chevron marking pattern.

West Palm Beach, FL - This 12-foot hump is combined with Textured Pavement to enhance its visibility and speed-reducing effect.

Ft. Lauderdale, FL - A 22-foot speed hump with zig-zag markings.

Sacramento, CA - This "speed lump" includes wheel cut-outs that allow buses and emergency vehicles to pass without slowing. The cut-outs are spaced too far apart for passenger vehicles to pass without at least one set of wheels being affected by the hump.

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