

**CITY OF ARCATA  
DEPARTMENT OF PUBLIC WORKS**

**A POLICY REGARDING INSTALLATION OF SPEED TABLES, HUMPS AND LUMPS  
FOR RESIDENTIAL AND LOCAL STREETS.**

Speed tables and speed humps have been effectively used to reduce average speeds of traffic in many jurisdictions around the world. Non-residential and local streets require more complicated engineering analysis. Please contact the City of Arcata Public Works Department for additional information.

**Definitions:**

Speed table - an elevated table of asphaltic concrete with a total width of 22' with a height of 3.5" to 4.0". Speed tables are designed to reduce traffic speeds and can be used as elevated crosswalks.

Speed hump - a parabolic hump of asphaltic concrete with a total width of 12' and a height of 3.5" to 4.0". Humps are designed to reduce traffic speeds and are often used as the initial device in a series of lumps and humps.

Speed lump - an parabolic lump of asphaltic concrete with a total width of 12', height of 3.5" to 4.0". Speed lumps have two wheel cut outs straddling the centerline of the roadway for code 3 emergency vehicle use to reduce response times.

Local Road - a street primarily used for access to residence, business, or other abutting property.

**Street Geometry and Physical Characteristics:**

The installation of speed tables, speed humps, and speed lumps on streets within the City of Arcata will be considered only if found warranted by the Department of Public Works Engineering division. The following criteria shall be considered to determine whether these devices would enhance safety and calm traffic along a given street segment:

1. The street must be either a residential street or a local street.
2. The posted speed limit on the street must be 25 miles per hour or less.
3. A City of Arcata speed radar survey must demonstrate that 10% or more of the traffic travels at 30 mph or greater.
4. The street should be a through street (no cul-de-sacs or alleys), have a paved width of 60 feet or less, be bounded by standard curb and gutter, be at least 1000' in length, and have no more than 2 lanes of traffic.
5. The average daily traffic volume for both directions must range from 500 to 4,000 vehicles per day on average weekdays.

6. On streets in an industrial area, along established truck routes, on public transit routes, or along established/preferred emergency vehicle routes, both the Arcata Fire Department and Arcata Police Department must provide approval of placement in writing.
7. The street grade is less than 5% and the centerline radius is greater than 300 feet.

**Speed Table/Hump/Lump Placement:**

1. Devices must be at least 200 feet apart.
2. Devices should be placed at least 50 feet away from nearest street intersection unless pedestrian crossings are to be incorporated.
3. Devices shall not be placed over manholes, drainage structures, water meters, or other utility access points and shall not adversely impact existing drainage conditions.
4. Where possible, devices should be placed near existing street lighting.
5. Devices shall be installed no closer than 10 feet to the nearest driveway where possible and 15 feet to the nearest fire hydrant.
6. A series of two or more devices is usually more effective than a single device installation. Any one series of humps should generally not be greater than 1500' in length and the end of one series should not be placed within 1500' of another series of humps.
7. Spacing should allow at least two devices on each block.
8. Devices shall be located so that they are clearly visible for at least 200 feet from each approach.
9. Devices should be positioned on property lines where possible. Placement in front of residences should be avoided, especially those with a direct window view to the street.
10. Proposed installations near schools which may impact school bus routes or young bicyclists and pedestrians should be submitted to the appropriate school district for review and comment.

**Design:**

1. Speed Tables shall extend 22' feet in the direction of travel, reaching a maximum height of 3.5" - 4.0" at midpoint along the table top (see typical detail).

2. Speed Humps shall be 12' in the direction of travel, reaching a maximum height of 3.5"-4.0" at midpoint along the generally curvaceous profile (see typical detail).
3. Speed Lumps shall be 12' in the direction of travel, reaching a maximum height of 3.5"-4.0" at midpoint along the generally curvaceous profile (see typical detail) with two wheel cut outs straddling the centerline of the roadway for code 3 emergency vehicle use only to reduce response times. The wheel cuts width shall be designed to the appropriate emergency vehicle wheelbase.
4. All devices shall begin to taper 12" from, and finish flush to, the gutter lip. If the location has curb with no gutter, the taper shall begin 24" from the curb. If a speed table is used as a pedestrian crossing install a channel drain or drop ramp in adjacent sidewalk.
5. All devices shall be placed perpendicular to the direction of travel and extend to each gutter lip.

### **Signing and Striping:**

1. "Speed Hump" (30" x 30") warning signs shall be placed approximately 250 feet in advance of the first hump from each approach.
2. "Speed Hump" (30" x 30") warning signs with "15 mph" advisory speed limits shall be placed within 10 feet of each hump.
3. White transverse pavement markings 100' feet in advance of the first hump in each series shall be installed.
4. Each hump shall be marked with 12" wide, white "chevron" type markings as shown in the specifications. Raised pavement markers shall be placed on the centerline, positioned on the crest and in front of the hump from both approaches.

Note: Signage shall be in conformance with the Manual of Uniform Traffic Control Devices.

### **Device installation**

1. The City will identify potential sites for installation of traffic calming devices based upon engineered studies or public requests (as described below) and discuss them at the City's Transportation Safety Committee (TSC) meetings. Residents and owners will be contacted and invited to attend a TSC meeting if a device is proposed to be installed in front of their property or within their street segment. The TSC will listen to any public comments and offer recommendations to Staff as necessary regarding the installation.

### **Priority List:**

1. After receipt of a completed petition and project meets qualification, the project will then be placed on a priority list. Each request for each hump/lump/table will be analyzed as staff time permits. Full funding from a non-city source (e.g., petitioners,

developer, etc.) precludes the location's inclusion on the priority list and may expedite installation. Ranking on the priority list will be based on scores calculated as follows:

- a. 1 point for each percentage point of vehicles exceeding the speed limit.
  - b. 1 point for every 100 vehicles over 500 Average Daily Traffic volume.
  - c. 5 points for locations within one block of schools or parks.
  - d. 1 point for each percentage point of households approving speed humps.
  - e. 5 points for each speed related accident on the street (not including DUI).
  - f. 1 point annually for each full year a project has been on the priority list
2. The priority list shall be reviewed every two years. The number of devices installed in any given year will depend upon available funding.

**Citizen petition request for devices:**

1. A written petition supplied to the City shall be submitted containing the signatures of greater than 2/3 of the residents along a street or street segment. Each of the property owners immediately adjacent to each proposed device location. Only one signature per address will be accepted. A street segment will be defined by the Department of Public Works.
2. Petitions shall be submitted to the Public Works Department for consideration.

**Device Removal:**

1. Petitions for speed hump removal will not be considered within the first two years of installation.
2. In order to be considered for removal, a petition containing the signatures of 2/3 of the property owners or residents along the street segment must be submitted to the Public Works Department Engineering Division. Only one signature per parcel will be accepted.
3. The cost of removal of speed humps shall be borne by those parties signing the petition for removal. Actual removal of existing humps will not take place until an amount equal to the estimated cost for removal is received by the City from those signing the petition.