

RESOLUTION NO. 234-22

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ARCATA
APPROVING AN UPDATE TO THE EXISTING POLICY FOR INSTALLING SPEED TABLES, HUMPS
AND LUMPS FOR RESIDENTIAL AND LOCAL STREETS IN THE CITY OF ARCATA**

WHEREAS, in February 2007, the City Council adopted an initial policy for installing speed tables, humps and lumps for residential and local streets; and,

WHEREAS, residents regularly report speeding along their blocks and have expressed a desire to update the policy with the objective to re-evaluate and relax the criteria for traffic calming installation; and

WHEREAS, motor vehicle speeds is a major factor in traffic collision deaths and injuries, and according to the National Highway Traffic Safety Administration 2021 was the third consecutive year with an increase in speeding-related deaths in the United States; and

WHEREAS, The City Council of the City of Arcata supports traffic calming throughout the City of Arcata to make a safer environment for pedestrians, bicyclists and automobiles; and,

WHEREAS, this Resolution will allow for the regulated and uniform installation of traffic calming speed tables, humps and lumps within residential neighborhoods and on local roads.

NOW, THEREFORE, BE IT RESOLVED, that the City Council of the City of Arcata, California, accepts and approves an Update to the City's Existing Policy for Installation of Speed Tables, Humps and Lumps for Residential and Local Streets contained in Exhibit A.

DATED: December 20, 2023

ATTEST:

APPROVED:



City Clerk, City of Arcata



Mayor, City of Arcata

CLERK'S CERTIFICATE

I hereby certify that the foregoing is a true and correct copy of Resolution No. 234-22, passed and adopted at a regular meeting of the City Council of the City of Arcata, County of Humboldt, State of California, held on the 20th day of December, 2023, by the following vote:

AYES: MATTHEWS, STILLMAN, SCHAEFER, WHITE

NOES: NONE

ABSENT: ATKINS-SALAZAR

ABSTENTIONS: NONE



City Clerk, City of Arcata

Exhibit A

CITY OF ARCATA ENGINEERING DEPARTMENT

A POLICY REGARDING INSTALLATION OF SPEED TABLES, HUMPS AND LUMPS

FOR RESIDENTIAL AND LOCAL STREETS

INTRODUCTION TO SPEED TABLES, HUMPS AND LUMPS

The purpose of speed humps (and other similar devices) is to reduce the speed of vehicles on residential streets and local streets where excessive speeding occurs. Speed humps are one of many different types of traffic calming devices and have been used in many jurisdictions around the world. This Speed Hump Policy focuses primarily on the use of speed humps and other similar devices for traffic calming; however, many other options exist and should be considered before (or in conjunction with) the installation of speed humps. Additional traffic calming measures may include, but are not limited to, bulb-outs, enhanced visibility crosswalks, radar speed feedback signs, roadway striping, chicanes, temporary enforcement and more. Although this policy is intended to provide guidance and direction on the process required for device installation, Engineering analysis may recommend against installation or even suggest another traffic calming measure altogether.

This document is intended for guidance and consistency however, this is not a substitute for Engineering Judgment. There may be cases where the application meets the requirement for installation but ultimately, the Engineering Department denies the application. Similarly, there may be cases where the application does not meet the requirement for installation, but the Engineering Department approves the installation. In either case, justification for the decision will be documented and filed with the application.

The City of Arcata utilizes three reference standards when designing and installing speed humps, lumps and tables: the National Association of City Transportation Officials' (NACTO) Design Guidance; the California Manual on Uniform Traffic Control Devices (MUTCD); and the American Association of State Highway and Transportation Officials (AASHTO). For more information, please contact the City of Arcata Engineering Department.

Definitions

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

Major Collectors – typically flow through higher density residential, commercial, and industrial areas, span distances greater than three-quarters of a mile, and tend to have higher speeds.

Minor Collectors – typically flow through lower density residential, commercial, and industrial areas,

span distances less than three-quarters of a mile, and operate under lower speeds with fewer signalized intersections.

Minor Arterials – provide interconnection for Principal Arterials, Major Collectors, and Minor Collectors. Minor Arterials serve a significant volume of traffic flow that's less than Principal Arterials, but typically provide further access to high density activity areas.

Principal Arterials – serve major activity areas, tend to have the highest traffic volume, and provide an integrated network of continuous routes without terminating ("dead-ends").

Residential Road – a road which serves primarily for accessing residential properties.

Speed Bump – A small, parabolic hump of asphaltic concrete designed to slow traffic to speeds of 10 mph or less. Speed bumps are generally found in shopping centers, apartment complexes and private roads and are not used on public streets.

Speed hump – Similar to a speed bump, speed humps are parabolic humps of asphaltic concrete but are much wider and generally not as tall. The design speed of most speed humps is approximately 15 to 20 mph.

Speed Lump – A speed lump is a variation of a speed hump except that two (2) wheel cut-outs are added and designed to allow large vehicles, such as emergency vehicles and buses to pass with minimal slowing. Speed lumps have a similar reduction in speeds when compared to speed humps.

Speed table - An elevated, flat top "table" of asphaltic concrete designed to slow traffic to speeds of 25 to 30 mph. Although primarily intended to reduce speeds, they are also commonly used as elevated crosswalks.

CONDITIONS FOR CONSIDERATION

Street Geometry and Physical Characteristics

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

For Residential Areas and other Local Roads

- The location must be a residential area and/or on a local road. *Note: Other locations that are not within residential areas and not on roads that are functionally classified as "Local", may be considered. These situations require a higher level of planning and engineering analysis, and must show a significant need for its application. For this reason, these requests will not necessarily follow the procedures outlined in this policy.*

- The posted speed limit on the street must be 25 miles per hour or less.
- A City of Arcata speed radar survey should demonstrate that at least 50% of vehicular traffic is flowing in excess of the speed limit. *Note: Separate or additional speed studies may need to be conducted in School Zones, "when children are present", to determine vehicular speeds with respect to the reduced speed limits during those times.*
- The street should:
 - have a paved width of 60 feet or less,
 - be at least 1,000' in length, and
 - have no more than 2 lanes of traffic.
- The average daily traffic volume for both directions should range from 500 to 4,000 vehicles per day on average weekdays.
- 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 District and Arcata Police Department shall be contacted and provided an opportunity to review and comment.
- The street grade should be less than 5% and the centerline radius should be greater than 300 feet.

Additional consideration will be given for roads that provide direct access to City property, recreational opportunities, open space and/or other locations that are known to have high volumes of non-vehicular traffic.

Placement criteria

- Devices should be at least 200 feet apart.
- Devices should be placed at least 50 feet away from nearest street intersection unless pedestrian crossings are to be incorporated.
- Devices shall not be placed over manholes, drainage structures, water meters, or other utility access points and shall not be installed in a manner that causes (or has the potential to worsen existing) drainage problems.
- Where possible, devices should be placed near existing street lighting.
- Devices should be installed no closer than 10 feet to the nearest driveway where possible and 15 feet to the nearest fire hydrant.
- 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 1,500' in length and the end of one series should not be placed within 1,500' of another series of humps.
- Spacing should allow at least two devices on each block.
- Devices shall be located so that they are clearly visible for at least 200 feet from each approach.
- Devices should be positioned between residences where possible. Placement in front of

residences should be avoided, especially those with a direct window view to the street.

- When devices are proposed within 1,000 feet of a school where bus routes and young bicyclists may be impacted, the appropriate school district shall be contacted and provided an opportunity to review and comment.

PROCESS REQUIREMENTS FOR INSTALLATION

When requests are initiated by residents

When requests are initiated by residents, the process is as follows:

Step 1: Initiation

Applicant contacts the City of Arcata Engineering Department and inquires about the feasibility of a speed hump along a particular street or street segment.

Step 2: Preliminary Review

The Engineering Department will review the request, identify the extents of the street or street segment where the device is proposed, and confirm that the street geometry and physical characteristics are consistent with this policy. If they are not, the request will be denied and the applicant will be notified. If the street geometry and physical characteristics are consistent with this policy, the City will develop a preliminary site map indicating the proposed devices and approximate locations (based on the placement criteria identified in this policy). The applicant will be issued a copy of the site map and a Resident Petition Request form.

Step 3: Neighborhood Petition

The applicant is then required to obtain a number of signatures from residents adjacent to the street or segment of concern. Only one signature per parcel will be accepted. After at least 2/3 of the residents have signed, the petition shall be returned to the Engineering Department. *Note: Petitions returned with less than the required number of signatures will be denied. Denied petition requests will remain on file for up to 2 years, in the event that the site location is petitioned again in the future.*

Step 4: Engineering Analysis

Once the petition has been returned with the required number of signatures, an Engineering Analysis will begin. The Engineering Department will start by conducting a speed radar survey along the street or segment of concern. A preliminary design analysis will compare the street or segment geometry with the placement criteria identified in this policy. If the speed radar survey results indicate that less than 50% of the vehicular traffic speeds do not exceed the speed limit and/or the placement criteria are not met, the application may be denied. If the criteria are met, the request will be placed on the priority list and ranked and compared to any other in the list in order to help determine which location(s) should be prioritized first if requests exceed available funding.

Note: Fully funded requests (e.g., by petitioners, developer, etc.) may skip step 5 (prioritization) and move directly to installation.

Step 5: Prioritization

Once the request has been placed on the list, the Engineering Department will rank the request based on scores associated with several different criteria. The total score is calculated based on the total

combined points for each of the following criteria:

- 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, parks, health care or facilities serving seniors or people with disabilities.
- D. 1 point for each percentage point of households approving speed humps.
- E. 5 points for each documented speed-related collision on the street (not including DUI).
- F. 1 point annually for each full year a project has been on the priority list

The requests with the highest total scores, rank highest and are prioritized over the other requests with lower scores.

Step 6: Implementation Planning

Each year after City Council has adopted the annual budget (generally around the start of the new fiscal year which is July), the City's Transportation Safety Committee (TSC) will review the priority list and provide recommendation for installation. Nearby residents and property owners will be contacted and invited to attend the 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. Staff and TSC recommendations will be brought to the City Council for final determination.

The number of devices installed in any given year may depend upon available funding. The timing of installation may also be contingent upon schedule and/or conflicts with reasonably foreseeable upcoming projects (generally within a five year period). For example, if underground utility work is planned within a portion of the street where the device will be located, installation of the device may be postponed to prevent additional costs associated with the removal and reinstallation of the device.

When requests are initiated by the City

The process differs slightly when the requests are made by the City. These situations generally include a higher level of internal analysis and/or planning and consider criteria that are not necessarily applicable to what would be expected for a residential neighborhood. Examples include streets that provide direct access to a wildlife or recreational open space and/or other areas that are known to have high volumes of non-vehicular traffic. Other examples include locations which are part of a larger project and typically involve more public outreach and/or involvement. For this reason, the process has been modified as follows:

Step 1: Initiation

Same process as when requests are initiated by residents.

Step 2: Preliminary Review

Same process as when requests are initiated by residents (but modified slightly). The Engineering Department will review the request, identify the extents of the street or street segment where the device is proposed, and confirm that the street geometry and physical characteristics are consistent with this policy.

Step 3: Neighborhood Petition

Not Applicable

Step 4: Engineering Analysis

Same process as when requests are initiated by residents (but modified slightly). Once the Engineering Department has confirmed that the street geometry and physical characteristics are consistent with this policy, an Engineering Analysis will begin. The Engineering Department will start by conducting a speed radar survey along the street or segment of concern. A preliminary design analysis will compare the street or segment geometry with the placement criteria identified in this policy. If the speed radar survey results indicate that less than 50% of the vehicular traffic speeds do not exceed the speed limit and/or the placement criteria are not met, the application may be denied. If the criteria are met, and the request is not part of a project or fully funded, the request will be placed on the priority list and ranked and compared to any other in the list in order to help determine which location(s) should be prioritized if requests exceed available funding.

Note: Fully funded requests (e.g., those which are part of a larger project, set aside paving funds, etc.) may skip step 5 (prioritization) and move directly to installation.

Step 5: Prioritization

Same process as when requests are initiated by residents.

Step 6: Implementation Planning

Same process as when requests are initiated by residents.

PROCESS REQUIREMENTS FOR REMOVAL

When requests are initiated by residents

Requests for removal will not be considered within the first five years of installation. When requests are initiated by residents, the process is as follows:

Step 1: Initiation

Applicant contacts the City of Arcata Engineering Department and inquires about the removal of a speed hump along a particular street or street segment. The City will ensure that the installation occurred more than five years prior to the request. If not, the request will be denied. If so, the City will provide the applicant with a Resident Petition Request form.

Step 2: Neighborhood Petition

The applicant is then required to obtain a number of signatures from residents adjacent to the street or segment of concern. Only one signature per parcel will be accepted. After at least 2/3 of the residents have signed, the petition shall be returned to the Engineering Department.

Step 3: Implementation Planning

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.

When requests are initiated by the City

The process is exempt when the requests are made by the City.

STANDARDS

Design

1. 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 Standard Detail ST-104).
2. 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 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 but are generally spaced approximately 5.5' apart. (see Standard Detail ST-104).
3. Speed Tables shall extend 22' feet in the direction of travel, reaching a maximum height of 3.0"-4.0" at midpoint along the table top (see Standard Detail ST-103).
4. When possible, devices should provide openings along the outer edges to allow bicycle traffic to pass without having to travel over the device. 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, a channel drain or drop ramp will be installed in the adjacent sidewalk.

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 (see Standard Detail ST-105).
4. Each hump shall be marked with 12" wide, white "chevron" type markings (see Standard Detail ST-105). Raised pavement markers shall be placed on the centerline, positioned on the crest and in front of the hump from both approaches.

Note: Signage and striping shall be in conformance with the California Manual on Uniform Traffic Control Devices, current edition.