



DATE: April 24, 2024

TO: Council Infrastructure and Airport Committee

FROM: Director of Public Works

SUBJECT: Updated Guidelines for Installation of Speed Humps – Discuss and Recommend to Council

RECOMMENDATION

That the Council Infrastructure and Airport Committee (CI&AC) recommends submitting the new Guidelines for Installation of Speed Humps to Council.

SUMMARY

Staff recommends updating criteria relevant to Hayward’s traffic conditions and street characteristics. The Guidelines for Installation of Speed Humps can be found in Attachment II.

BACKGROUND

First adopted by Council in December of 1995, the Guidelines for Installation of Speed Humps were proposed as a strategy to address concerns about speeding on public streets. The California State Traffic Control Devices Committee classifies speed humps as a “roadway design” feature, not a “traffic control” feature, which allows local jurisdictions to establish their own standards for their use. Hayward’s guidelines were developed to be similar to those of other nearby jurisdictions.

In 2001, Council asked staff to revisit the criteria for minimum block length and maximum turning radius. The Guidelines for Installation of Speed Humps was revisited again in 2002 to provide flexibility for the installation of speed humps along bus routes in appropriate circumstances.

On July 3, 2018, Council adopted the Neighborhood Traffic Calming Program (NTCP) to establish a guide for City staff, elected officials, and residents to implement proper and effective traffic calming solutions with community outreach and collaboration. Through the NTCP residents can apply for traffic calming treatments such as speed humps.

DISCUSSION

No major changes have been made to the Guidelines for Installation of Speed Humps since 2002. In that time, there have been at least two updates to Institute of Transportation Engineers' (ITE's) "Guide to Vertical Deflection Speed Reduction Techniques" with the most recent update in 2022. The ITE update focuses on current state-of-the-practice in the selection, design, and application of speed humps, speed tables, and other vertical deflection tools, based on data collected to evaluate traffic calming effectiveness over the past decade.

The proposed update to the City's guidelines addresses lessons learned over the last decade and improves the organization of the guidelines. The recommended guidelines are categorized into two sections:

- 1) Street Geometry and Physical Characteristics
- 2) Speed Hump Placement

Street Geometry and Physical Characteristics

Under Street Geometry and Physical Characteristics staff recommends six revisions. First, the current 85th percentile speed of traffic guideline requires that speed must be 32 mph or greater. ITE provides new safety-related speed metrics that can be used in place of the current 85th percentile guideline, which is a measure more of vehicle performance than neighborhood livability or safety. ITE states that a street may have a speeding problem if the 85th percentile speed is 5+ mph above the posted speed limit. Because speed humps are only allowed on 25 mph streets, staff is recommending reducing our current 32 mph guideline to 30 mph. The updated guidelines also permit data from tube counts, which provide sufficient detail and are easier to collect than radar speed surveys.

The second revision replaces "residential" streets with "local or collector" streets for consistency with more precisely defined roadway classification systems.

Third, staff recommends reducing the minimum uninterrupted block length from 750 feet to 300 feet, unless the block intersects an arterial, in which case the minimum is 500 feet. Speed humps can be an effective strategy to control speeds on shorter blocks than current policy allows, so the existing guideline needlessly restricts the streets on which speed humps can be placed. Further, it contradicts another guideline regarding the spacing of speed humps.

The fourth revision changes the language of the average daily traffic volume from "must" range from 500 to 4,000 vehicles per day to "should." This allows flexibility for streets that meet all other guidelines but have slightly higher or lower traffic volume.

While AC Transit has demonstrated openness to context-appropriate traffic calming, speed humps can in some circumstances impact bus routes and transit riders. The fifth recommended update is to include a guideline for staff to coordinate with AC Transit staff in these situations.

The last recommendation under this section replaces the 85th percentile speed requirement from “requests fronting schools” to “requests within a school zone as defined by the California Vehicle Code.” This provides consistency with other school traffic control measures and acknowledges that even streets that aren’t directly adjacent to schools can be important for school travel.

Speed Hump Placement

Under Speed Hump Placement, staff recommends four revisions. First, staff recommends shortening the minimum placement distance to local and collector street intersections from 250 feet to 150 feet and requiring 250 feet for all intersections with an arterial street. ITE recommends 100 feet away from a collector street and 250 feet from a traffic signal. This guideline is in place because arterial intersections can present challenges for the safe and effective deployment of speed humps due to the higher posted speeds. However not every arterial intersection is signalized, so expanding guideline to all arterial intersections is recommended.

Second, staff recommends making the distance to driveways flexible by changing the language from “must” be no closer than 10 feet to “should” and including “when possible” to allow the use of speed humps on streets that meet all other guidelines but have an abundance of driveways without the required distance between them.

Third, staff recommends adding the phrase “it is preferable to install two humps on the same block but where other requirements would preclude two humps, one is acceptable” to clarify that a street may qualify if it can only fit one hump but that more than one is more effective in reducing speeding.

The last update includes distance requirements to bus stops as suggested by AC Transit for safe bus operations on streets with speed humps.

Below is a summary of the proposed revisions:

Criteria	Existing	Proposed
2. 85 th percentile speed	32 mph	30 mph
3. Street classification	Residential	Local and collector
7. Uninterrupted block length	750 feet	300 feet
9. Average daily traffic volume	Must range from 500 to 4,000 vehicles	Should range from 500 to 4,000 vehicles
11. Transit route	Prohibited	Possible, but requires coordination with AC Transit
14. 85 th percentile guideline may be waived for schools	For streets fronting schools	For streets within school zones defined by California Vehicle Code
16. Placement distance to intersections	250 feet	150 feet. 250 feet from intersection with arterial
20. Distance to driveways	Must be no closer than 10 feet	Should be no closer than 10 feet

21. Number of speed humps	Spacing should allow at least two speed humps on each block	One speed hump is acceptable where other requirements preclude two
24. Placement with transit stops	N/A	No closer than 110 feet before and 30 feet after transit stop

ECONOMIC IMPACT

There will be no economic impact associated with this action.

FISCAL IMPACT

The expanded guidelines will result in more streets being eligible for speed humps. However, the existing Neighborhood Traffic Calming Program fund and Pavement Improvement Program fund are sufficient to accommodate this. Priority ranking of applications will be conducted if funding is not sufficient and staff will return to Committee and City Council if necessary.

STRATEGIC ROADMAP

This agenda item supports the Strategy Priority of Invest in Infrastructure. Specifically, this update relates to the following project:

Invest in Community-Centered Crime Response and Enforcement Models
 Project N1: Continue to implement major corridor traffic calming initiatives.

SUSTAINABILITY FEATURES

There are no sustainability features associated with this action.

PUBLIC CONTACT

This update to the Guidelines for Installation of Speed Humps will expand the range of qualifying applications for speed humps that the City receives through the Neighborhood Traffic Calming Program. Applications are submitted by residents and require signatures from 25 percent of the residents fronting that street segment. Once the application is approved, a petition for speed hump installation requires signatures from two-thirds of the residents on that street segment.

NEXT STEPS

If the CI&AC approves this update, staff will present it to Council for consideration.

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Recommended by: Alex Ameri, Director of Public Works

Approved by:

A handwritten signature in black ink, appearing to read 'Kelly McAdoo', with a long horizontal stroke extending to the right.

Kelly McAdoo, City Manager