

Transportation Board

TO: TRANSPORTATION BOARD DATE: DECEMBER 3, 2025

FROM: PUBLIC WORKS DEPARTMENT WARD: 1

SUBJECT: REQUEST FOR SPEED HUMPS ON FIRST STREET BETWEEN MAIN STREET

AND MULBERRY STREET

ISSUE:

Consider implementation of speed humps along First Street between Main Street and Mulberry Street.

RECOMMENDATION:

That the Transportation Board deny the appeal requesting speed humps along First Street between Mulberry Street and Main Street; support staff's recommendation to request targeted police enforcement during excessive speeding based on data-driven observations.

BACKGROUND:

The Neighborhood Traffic Management Program (NTMP) was designed to provide general guidelines for the assessment of traffic issues on local, collector, and arterial roadways throughout the City as well as outline various traffic mitigation measures which may serve as suitable solutions to demonstrated traffic issues.

As part of the Neighborhood Traffic Management Program (NTMP), the city re-instated a formal Speed Hump Policy Guidelines and Procedure on May 7, 2024, to effectively address concerns related to speeding on residential streets. The goal of this policy is to enhance neighborhood safety by implementing traffic calming measures, such as speed humps, to reduce vehicle speeds on eligible residential streets. This policy aims to unite neighborhoods and identify appropriate measures to improve travel behavior for the benefit of affected communities. Speed humps are a potential secondary option for residential designated streets. A website outlining details of the Speed Hump Program has been developed – <u>Speed Hump Program | Public Works</u>

A speed hump is an elongated mound in the roadway pavement surface extending across the traveled way designed perpendicular to the traffic flow. The purpose of a speed hump is to regulate traffic speeds by providing minor vertical deflection while driving through it. Speed humps are still considered experimental roadway features; therefore, additions, alterations, or removals of all speed humps may occur at any time.

DISCUSSION:

The city received a petition from the residents on First Street requesting speed humps to be installed on their street. The petition and roadway conditions on First Street between Mulberry Street and Main Street (Attachment 1 – Location Map) were reviewed for consistency with the City's Speed Hump Program. The petition received indicates support by 17 of the 22 residents (77%) on First Street for speed humps, which meets the minimum requirement of 70% of the residents. There were no signatures from residents opposing the consideration of speed humps. Staff investigated speeds, volumes, and street geometrics and concluded that seven (7) out of eight (8) speed hump criteria were met. Based on the requirement to meet all criteria, First Street does not qualify for speed humps per the City approved policy. A summary of the findings is provided in Attachment 2 and staff have provided a summary of the findings to the First Street residents. However, a letter of appeal (Attachment 6) was submitted to city staff requesting for proposed speed humps to be reviewed by the Transportation Board.

Since First Street does not meet the established criteria for speed hump installation, which would come at the estimated cost of \$28,640, and because staff are not aware of mitigating circumstances that would merit overriding the established criteria, staff recommends denial of the appeal.

First Street is a two-way (one lane in each direction) residential street located between Mulberry Street to the east, and Main Street to the west. It is approximately 1,540 feet in length and 36 feet wide, which meets the minimum required length of ¼ mile (1,320) and does not exceed the maximum width of 40 feet. There are 22 homes on both sides of the street meeting the minimum requirement of sixteen (16) homes for a double-loaded street. Attachment 3 illustrates the potential speed hump locations along First Street. There are four (4) speed humps shown.

There were two speed surveys and traffic counts conducted on First Street as part of staff investigation. The radar surveys measured the 85th percentile speed in the range of 34 mph to 35 mph on First Street which does not meet the 37-mph minimum required by the city program. The corresponding 24-hour two-way volume counts indicated total daily volumes in the range of 1106 to 1137 vehicles per day, which is within the maximum threshold of 1999 vehicles per day. The estimated vertical grade is in the range of 1.0%-1.6% along First Street which is below the maximum eight (8) percent vertical grade threshold. Several photos of First Street are included in Attachment 7. Despite all the previously utilized speed management alternatives, vehicular speeding continues to persist with an 85th percentile speed in the range of 30MPH-31 MPH (5MPH-6 MPH over the prima facie speed limit of 25 MPH). While there were concerns about the placement of the traffic counting machines affecting the data, staff has confirmed the devices were installed on a street light pole on the south side of First Street between Lemon Street and Lime Street, which is 570 feet from the stop sign at First Street and Orange Street, which does not appear to impact the two traffic data sets conducted during typical weekdays.

The Riverside Fire Department has provided a general comment regarding proposed speed humps in consideration of potential impacts to emergency response times, if any. The RFD has requested the city to consider installing a Speed Bump (Type II) of Standard Plan 257 for new speed hump installations. The Type II Speed Bump has gaps in the middle to allow emergency vehicles to bypass speed humps on the roadway during an urgent emergency call. Maude Street between Lincoln Avenue and Marguerita Avenue currently has Type II Speed Bumps installed and there have not been any concerns with its utilization.

Staff has prepared an exhibit showing potential locations for the installation of speed humps. The

locations are selected based on having adequate spacing between curves and intersections and adequate sight distance to allow for proper signing on each approach. Utility covers and driveways in the street are also avoided. Staff selected locations where signs may be placed on existing poles or streetlights to minimize the impacts of the signs on the neighborhood. A total of four (4) potential locations were found for speed humps. Each speed hump installed would potentially add an additional delay of 10 (ten) seconds to emergency vehicles. However, the usage of the Type II Speed Bumps would significantly minimize if not eliminate delays for emergency vehicles.

A review of our traffic accident records for the past three years on First Street from 2020 through 2025 shows twelve reported traffic collisions. There was one unsafe speed related collision.

The City's Speed Hump Policies, Guidelines, and Procedures are included in Attachment 5, and it illustrates the City's Standard Plan Detail No. 251 – Speed Bump (Type II).

The Institute of Transportation Engineers (ITE) has also published some Guidelines for the Design and Application of Speed Humps. One of the guidelines worth mentioning from the ITE guidelines is the spacing for speed humps (see Attachment 5). The exhibit displays a properly designed speed hump spacing in the range of 150–500-foot space on each side prior to the speed hump.

The Federal Highway Administration (FHWA) Engineering Speed Management Countermeasures offers an excellent resource for speed humps studies and resulting speed reduction effectiveness (Attachment 7). As documented, speed humps can be effective at reducing speeds in the range of 5-13 mph.

Conclusion:

First Street meets only seven (7) of the eight (8) mandatory criteria of the City's adopted policy for speed humps. The observed 85th percentile speed was in the range of 30-31 mph not meeting the minimum speed of 37 mph. Based on the requirement to meet all 8 criteria, First Street does not qualify for speed humps per the City approved policy. A summary of the findings is provided via Attachment 2 and staff have provided staff findings to the residents along First Street. However, a letter of appeal (Attachment 6) was submitted to city staff requesting for proposed speed humps to be reviewed by the Transportation Board. If speeds humps are approved, then there is a potential to add four (4) speed humps as shown in Attachment 3. If speed humps are not approved, then alternate traffic calming measures can be considered such as installation of posted speed limit signs, stop ahead signage & striping, centerline striping, and / or spot police enforcement.

FISCAL IMPACT:

If the proposed speed humps are recommended for approval to City Council, then the fiscal impact of this action for the cost of installation of speed humps, signage and pavement markings is estimated at \$28,640. Funding is available in the Public Works Department, Traffic Engineering budget, Speed Hump Traffic Calming account number 9927230-440313, to cover this cost, pending outcomes of other speed hump requests.

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Certified as to

availability of funds: Kristie Thomas, Finance Director/Assistant Chief Financial Officer

Approved by: Kris Martinez, Assistant City Manager

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Attachments:

- 1. Location Map
- 2. Speed Hump Criteria Checklist
- 3. Potential Speed Hump Locations
- 4. Traffic Count Data
- 5. Speed Hump Program Policies, Procedures, and Guidelines
- 6. Appeal Letter
- 7. Presentation