STAFF REPORT

DATE: March 21, 2023

TO: City Council

FROM: Dianna Jensen, Acting Director of Public Works - Engineering & Transportation/ City Engineer
Ryan D. Chapman, Assistant Director of Public Works Engineering & Transportation/Traffic Engineer

SUBJECT: Establishing a Traffic Calming Policy

Recommendation

Approve Resolution Adopting the Traffic Calming Policy and Finding Project Exempt From CEQA Pursuant to Sections 15061(B)(3) and 15301

Fiscal Impact

This policy outlines the process for streets to be considered and ranked for construction of speed humps or other speed reduction improvements, but does not change the funding allocated to the Traffic Calming program.

Annually the City allocates $100,000 to the Traffic Calming program CIP No. ET8783 for the construction of speed humps and speed tables.

Council Goal(s)

While this project does not address a specific Council task, it does support the City Council's Goal to Fund, Maintain and Improve Infrastructure.

Commission Input

The BTSSC reviewed this policy at their November 10, 2022 meeting and provided input. While no action was taken the commissioners were generally in favor the proposed changes.

During the meeting Councilmember Chapman inquired about the possibility of using mounted rubber speed tables as demonstration projects in some neighborhoods.

Background and Analysis

The 2022 Speed Hump and Speed Table Installation Project CIP No. 8783 recently completed construction of 13 speed humps and 2 speed tables for a combined construction and inspection cost of $181,720.00. Based on lessons learned during the development and construction of this project, staff is recommending that several changes be made to the existing Traffic Calming Procedure. The intent of these

changes is to provide more transparency to the public about the program, streamline the process, and reduce the time it takes to construct traffic calming measures.

Below is a brief summary of the existing steps to get a speed hump approved:

Step 1: The City receives a petition for traffic calming from a neighborhood. The petition needs to show that 50% of the households immediately adjacent to the road would like humps to be considered.

Step 2: An initial assessment is conducted to see if the road is eligible for humps, and it is scored based on the ranking in the speed hump policy.

Step 3: Once a year, the traffic calming requests will be presented to the BTSSC for consideration.

Step 4: Staff will prepare plans for the streets that were selected.

Step 5: A neighborhood survey is sent out via US Mail to the property owners and residents with the plan showing the final hump locations. This is for final concurrence with the proposed locations. At least 50% of the returned responses must be in support of the proposed project.

Step 6: Humps are installed.

Staff is recommending specific changes to the policy or our practices, including:

- Clarify that the requests received by a petition showing that over 50% of residents desire humps, these residents must have at least one property line adjacent to the road.
- Clarify the criteria used to determine what roads are eligible for speed humps. This includes things like speed limit, distance of straight travel with no curves, etc.
- Clarify that the Traffic Calming Program will focus on speed humps and speed tables.
- Clarify the locations that a hump can or cannot be placed, such as on top of a maintenance hole, in front of a driveway, etc.
- Clarify the process for neighborhood approval of the final plan.
- Clarifying that residents submit the initial petition.
- Clarifying that both residents and property owners both receive the final survey, and both can return it to be counted.
- Adding a time frame for streets to be reconsidered, if they are not successful.
- Add a procedure to remove humps.
- Establish roles for both the residents and property owners if a home is not owner occupied.
- Remove the minimum point threshold for a project to be eligible for hump placement.

- Change the number of speed hump construction contracts from two a year to one a year.

Additionally, past practice has been to allow a property owner or resident to veto the placement of a hump in front of their property. This has created scenarios where a hump has not been placed and there is no viable alternative location for placing it. Thus, making it so that the removal of one hump in the street reduces overall effectiveness of the traffic calming. A series of humps are usually placed on straight stretches of road and it's the combination that slows vehicles down for that stretch of the road. Staff recommends that this practice stop and the attached policy does not include the option for a single resident to reject a speed hump location.

Speed hump demonstration project

Staff has investigated the possibility of using modular pre-formed rubber speed tables or humps to demonstrate the changes that adding traffic calming to a street could have. The costs of these devices are between $7,000 to $11,000 per device depending on the width of the road and three devices would typically be needed to effectively control vehicle speeds on a street. In addition, there are additional costs for their placement and removal. Staff is estimating that it would take three-person crew four hours to install or remove a single device.

Additionally, the rubber speed humps are bolted to the street and removing them damages the asphalt surface; resulting in increased pavement maintenance costs.

Since there are several locations in the city with speed humps or tables in place that concerned residents can visit to review their operation, staff is not recommending purchasing these or using them for demonstration purposes.

Environmental Review

This activity establishes a Traffic Calming Policy. There is no possibility that the adoption of this policy will have a significant effect on the environment. Therefore, the project is exempt from CEQA pursuant to CEQA Guidelines § 15061(b)(3). Additionally, if a speed hump were approved and installed on a particular street, the installation of the speed hump would be categorically exempt from CEQA pursuant to Guidelines § 15301 as a minor alteration of an existing facility.

Attachments

1. Resolution
2. Draft Public Works Engineering and Transportation Traffic Calming Policy
3. Current Traffic Calming Request Procedures

RESOLUTION NO. 23-XXX, SERIES 2023

RESOLUTION ADOPTING THE TRAFFIC CALMING POLICY AND FINDING PROJECT EXEMPT FROM CEQA PURSUANT TO SECTIONS 15061(B)(3) AND 15301

WHEREAS, the City of Davis wishes to manage residential speeds with a systemic approach for the entire City; and

WHEREAS, a speed hump is a traffic calming feature used on residential streets designed to slow motor vehicle traffic; and

WHEREAS, a speed hump discourages speeding, reduces vehicle speeds to the range of 15 to 20 miles per hour and can result in a 40 percent reduction in speeding to prevent speed related collisions; and

WHEREAS, a reduction in speed allows drivers more time to observe the roadway for conflicts and other roadway uses and allows pedestrians more crossing time; and

WHEREAS, the City of Davis has an established annual Traffic Calming Project (ET8783) dedicated to addressing speeding issues; and

WHEREAS, the City of Davis has determined that a Traffic Calming Policy would allow the project to be managed more efficiently; and

WHEREAS, the City of Davis has developed a new policy with to help manage the Traffic Calming Project.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Davis does hereby:

1. Adopt the Traffic Calming Policy attached hereto as exhibit A.

2. Find and determine there is no possibility that adoption of the policy will have a significant effect on the environment. Therefore it is exempt from CEQA pursuant to CEQA Guidelines § 15061(b)(3). Additionally, should a speed hump be approved and installed on a particular street, it would be categorically exempt from CEQA pursuant to Guidelines § 15301 as a minor alteration of an existing facility.

PASSED AND ADOPTED by the City Council of the City of Davis on this 21st day of March, 2023, by the following vote:

AYES:
NOES:

Will Arnold
Mayor

ATTEST:
Zoe S. Mirabile, CMC
City Clerk

Public Works Engineering and Transportation
Traffic Calming Policy

When traffic calming requests are received, they will be evaluated using the following process. To truly be effective, the program will determine eligibility based on clearly defined and easily measured parameters and focus on localized traffic issues on individual streets.

The program is anticipated to reduce the timeframe from a resident's request for speed control to actual construction. However, this timeframe is dependent on competing demand, project ranking and, available funding.

1. Request submitted: Residents submit a request to the City as a petition in a format determined by City staff. Signatures of a majority of neighborhood residences whose property line is immediately adjacent to the subject street must accompany the request to be considered. One vote per household is permitted.

   In some cases, staff might initiate a traffic calming request along a specific road. This will be most common when there is an opportunity to add traffic calming elements to another project.

2. Initial Assessment: Requests are reviewed and screened to determine if the locations are eligible for the Traffic Calming Program. In order for a location to be eligible it must meet the following criteria:
   - The street must have a posted speed limit of 25 MPH or qualify as a residential street based on the criteria set in the California Vehicle Code. Arterials are prohibited from having speed humps installed.
   - The street must have a minimum length of 500 feet between curves.
   - The street can only be two vehicular travel lanes wide.
   - City staff can determine that the benefits of the hump request does not pose a safety risk to roadway users or a reduction of emergency vehicle response times.
   - The street must have a minimum score of 35 points from the project ranking recommendations (attached).

   Once a determination is made, staff will inform the residents whether their street is eligible or not for traffic calming by letter or e-mail.

3. Project Prioritization: Annually, staff will review and score the projects as described in the Traffic Calming Project Ranking below, and then rank the requests based on

the score they received. Ranked projects are then brought to the BTSSC for a determination of what streets to proceed with as part of the annual traffic calming project. This will include an evaluation of available funding and if sufficient funding is not available for all of the eligible streets then the locations that were not selected will be delayed until funding becomes available.

4. Project Design: This program is designed to install speed humps and tables as the typical treatment. Speed humps and tables are low cost tools that reduce speeds in a neighborhood and can be installed quicker that other alternatives due to the minimum design effort required prior to their installation. In some cases, alternative treatments might be considered for the program if there are circumstances on the street that make speed humps undesirable or another treatment more effective.

   If a project is selected to move forward, and in consultation with relevant City of Davis advisory committees/commissions, City Departments, and other governmental agencies as appropriate, City staff will develop a project proposal showing the locations of the humps for review by the residents and property owners in the survey area. Speed humps or tables cannot be located at the following locations:
   - In front of a driveway
   - Over a manhole or other survey or utility cover
   - Within 50 feet of an uncontrolled intersection approach
   - Within 150 feet from a stop-controlled intersection approach

   Additionally, devices should be located near street lights to enhance nighttime visibility.

5. Neighborhood Approval: Based on the project proposal above, The City will survey both the residents and property owners to gauge support for the proposed solution with surveys being sent to both the street address and mailing address for the property. If a residence is owner occupied then the property owner would be eligible to submit two survey responses. In order for the hump installation to move forward, at least 50% of the surveys must be returned and over 50% of returned surveys must support installation of the humps. Once the survey is complete, a letter and/or e-mail will be sent to the residents/property owners informing them of the survey results.

   If a survey is not successful then the street cannot be resurveyed for at least 2 years.

6. Implementation: If approved, the project will be included as part of the annual speed hump contract. If sufficient funding is not available for all of the approved hump locations then the locations with the lowest scores will be delayed until funding becomes available.

7. Removal of humps: If there is a desire by the residents to remove a hump it must have been installed for at least 2 years and the city needs to receive a request to remove the hump accompanied by a petition showing that over 50% of the residents in the original survey area want to have the hump removed. Once the petition is received Staff will survey the property owners and if at least 50% of surveys are returned and over 50% of returned surveys support removal of the humps the humps will be scheduled for removal.

   If at any time the Traffic Engineer determines that an installed hump presents a safety risk to the residents or users of the street then the hump will be removed by the City. The residents along the street will be notified by mail why the hump was removed.

   Example of time line for process

Step	Description	Cut-Off
1	Request submitted	March 1st
2	Initial Assessment	March – May
3	Project Prioritization	July
4	Project Design	July - August
5	Neighborhood approval	September
6	Implementation	October- November
7	Contract out to bid	January
8	Construction	March or April start depending on weather

Traffic Calming Project Ranking

Criteria

1. Vehicle Speeds (20 point maximum):
   - prevailing speed 3-5 mph over speed limit 10 points
   - 5.1-7 mph over speed limit 15 points
   - 7.1 mph or more than speed limit 20 points

2. Collision History (15 point maximum) Number of reported collisions that are speed related over last 5 years.
   - 1-2 collisions 5 points
     3-4 collisions 10 points
   - 5 collisions or more 15 points

3. Segment is on a Suggested Route To School or a suggested route to school crosses the street at an uncontrolled crossing (10 points).
   Link: https://www.cityofdavis.org/city-hall/public-works-engineering-and-transportation/bike-pedestrian-program/bike-map-and-suggested-routes-to-school-maps

4. Class I-III bicycle facility or buffered bike lane on the street, marked pedestrian or trail crossing within segment (5 points)

5. Park, Hospital/Clinic, Senior Facility, Neighborhood Shopping Centers and Community Center within study area (5 points)

6. Daily Vehicle and Bicycle Volume (5 points maximum)
   - 301-500 1 point
   - 501-700 2 points
   - 701-900 3 points
   - 901-1100 4 points
   - > 1100 5 points

7. Other Considerations as determined by the Traffic Engineer. (5 points)
   - Sight line obstructions
   - Street width
   - Intersection size

Current
Traffic Calming Request Procedures

1. Request submitted: Residents submit a request to the City in a format determined by City staff (e.g. application, petition, email, etc.). Signatures of a majority of neighborhood residents adjacent to the subject street segment(s) must accompany request to be considered. One vote per household is permitted.

2. Initial Assessment, Data Collection, Outreach: Requests are reviewed and screened based on predetermined cut-off dates (see Table below) to determine if the locations are potentially eligible for the Traffic Calming Program.

   If the location is eligible for the Traffic Calming Program, staff will conduct outreach to the neighborhood residents, compile historical data, survey location, and collect data. Neighborhood residents or other citizens may volunteer for data collection such as traffic counts, interviews, radar speed gun data collection etc. Staff reviews then presents outcome to the BTSSC for recommendation.

3. Location Prioritization: Based on results of the survey, and in consultation with relevant City of Davis advisory committees/commissions, City Departments, and other governmental agencies as appropriate, City staff will determine which locations shall proceed through the Traffic Calming Program process by the use of the Street Calming Project Prioritization.

4. Project Proposal: Based on the project priority status, City staff will meet and work with the neighborhood to determine a menu of potential solutions to the problem(s).

5. Neighborhood Approval: Based on the project proposal above, neighborhood residents will vote on the proposed solution(s).

6. Implementation: If approved, the project will be initiated per the installation schedule as determined by the City of Davis (example schedule shown below).

Table: City of Davis Traffic Calming Program Process Overview and Schedule

Step	Description	1st Cut-Off	2nd Cut-Off
1	Request submitted	September 1st	March 1st
2	Initial Assessment, Data Collection, Outreach:	September – November	March – May
4	Location Prioritization	January	July
5	Project proposal	January - February	July - August
6	Neighborhood approval	March	September
7	City approval	April / May	October- November
8	Implementation	Within one year after City approval	Within one year after City approval

Traffic Calming Project Ranking Recommendations

Criteria

1. Vehicle Speeds (20 point maximum):
   - Critical speed 3-5 mph over speed limit 10 points
   - 5.1-7 mph over speed limit 15 points
   - 7.1 mph or more than speed limit 20 points

2. Collision History (15 point maximum)
   - # reported collisions auto-auto, auto-bicycle, auto- pedestrian last 5 years
   - Collision rate

3. Segment On Safe Routes To School (10 points)

4. Mass Transit Route (5 points)

5. Cycle lane, pedestrian crossing within segment (5 points)

6. Park, School, Hospital/Clinic, Senior Facility, Neighborhood Shopping Centers and Community Center within 500ft (5 points)

7. Daily Vehicle and Bicycle Volume (5 point maximum)
   - 301-500 1 point
   - 501-700 2 points
   - 701-900 3 points
   - 901-1100 4 points
   - > 1100 5 points

8. Other Safety Considerations (5 points)
   - Sight line obstructions
   - Street width
   - Intersection size