



DATE: July 27, 2022

AGENDA ITEM #5

TO: Complete Streets Commission

FROM: Marisa Lee, Transportation Services Manager

SUBJECT: Cuesta Drive Traffic Calming Project

ATTACHMENTS: None

RECOMMENDATION:

Receive update on Cuesta Drive Traffic Calming Project, Provide Input

INTRODUCTION

At the May 2022 Complete Streets Commission Meeting, the Commission received an update on the Cuesta Drive Traffic Calming Project Redesign. The public and the commission provided feedback on the proposed design. The comment period has remained open since that meeting. Comments have been incorporated.

RECENT BACKGROUND

The Cuesta Drive traffic calming project was implemented in the Summer of 2020 following an extensive one-year community outreach process. The Santa Clara County Fire Department, who provides service to the City of Los Altos, has informed Staff that the constructed speed tables exceed their three-inch maximum height requirement, and City Staff and County Fire have been working together to find a replacement that will meet both the needs of the emergency vehicle response time as well as resident needs for calmer traffic on Cuesta Drive. The existing speed tables must be removed and replaced with tables that do not exceed County Fire's three-inch height requirement.

City Staff has been in ongoing communication with County Fire to determine the options for replacing the speed tables. Cuesta is a primary response route and evacuation route, and as such, the Fire Department has regulations that apply to Cuesta Drive, aimed at improving public safety and response time. Any treatment installed on Cuesta Drive will need to receive a permit from the Fire Department. The Fire department has stated they will approve the use of Offset "Lane Split" Speed Tables, where the vertical element in one travel lane is offset from that of the opposite travel lane. This treatment is common in several cities in California and Oregon.

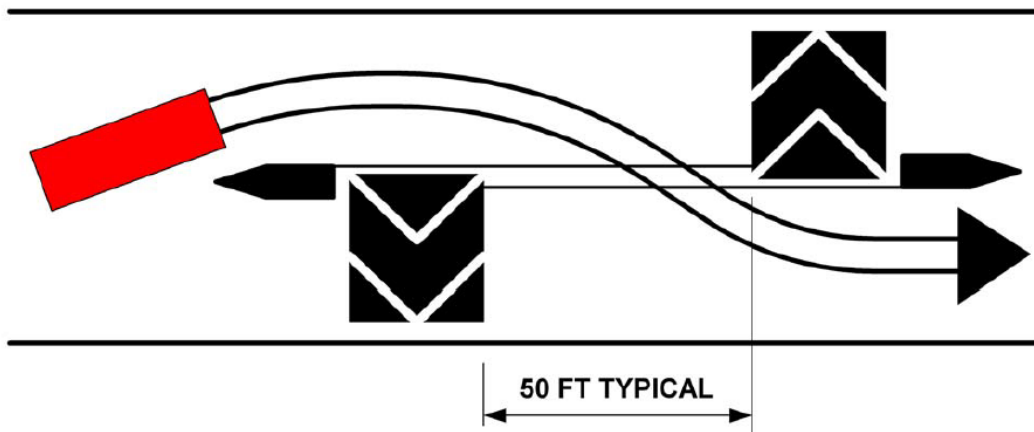
The Lane Split speed tables are a minimum of 120-FT apart to allow a fire truck to meander down the street to avoid the speed tables, as illustrated in Figure 1. Fire has also requested the use of rubber speed tables, to avoid any inconsistency in height and remove any chance

that the reconstructed tables could exceed the three-inch requirement. (If the existing speed tables are replaced with asphalt tables, inconsistency in manual construction methods will make it difficult to achieve a uniform height given the irregularity in the pavement cross-section along Cuesta Dr. The use of prefabricated rubber speed tables would address irregularities in manual construction methods.)

The Lane Split concept retains one speed table in the location of the existing speed tables and splits the other a minimum of 120-FT apart.

The switch to the Lane Split design also resulted in the removal of one existing speed table, previously located between El Monte Avenue and Arboleda Dr. Staff recommends a new All-Way STOP at the Cuesta Drive & Arboleda Drive intersection along with crosswalk treatments to support the Suggested Route to School connection to Covington Elementary.

Figure 1
Diagram of Offset Speed Table



Staff has been in contact with the vendor (TrafficLogix) regarding selection of the materials, and regarding the potential noise caused by cars driving over the rubber speed tables (noise was a concern raised at the October CSC meeting). The City plans to affix the rubber speed table with an adhesive as well as filling in the lip between rubber and asphalt with a caulking-like material in order to minimize noise impacts. Rubber speed tables also offer the advantage of embedded reflective striping to help improve visibility -- one of the concerns expressed by residents and commuters about the existing speed tables. Figure 2 illustrates the Traffic Logix brand rubber tables, the leading market unit.

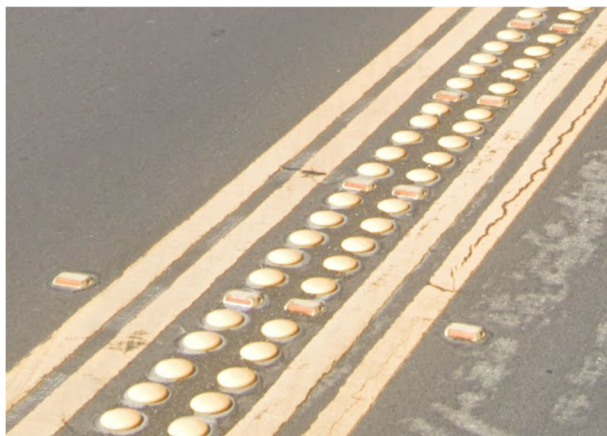
Figure 2
Traffic Logix Rubber Speed Table



Traffic Logix Product (with reflective quality)

Another concern raised is the chance that passenger vehicles may also weave to avoid the vertical element. Staff has coordinated with the Fire department, residents, and the Commission on a design solution for this concern, and recommends the use of a hardened centerline of bot's dots in advance of, and between, each speed table (see Figure 3). Residents requested use of large bot's dots, which is also recommended. Another planned element, after receiving support at the last meeting, is a flex post along the edge line of the roadway at the end of the speed table, to deter vehicles from swerving into the shoulder to avoid the vertical element, as residents and Commissioners were concerned about bicycle safety on the shoulder if drivers were to swerve to the right. Staff has coordinated with the Police Department and is planning monitoring and enforcement of this project for a period following installation. Swerving across the centerline is illegal for motorists.

Figure 3
Examples of Hardened Centerline



An additional request from residents was for the installation of vehicle feedback signs aimed at encouraging drivers to slow down. Staff recommends one sign in each direction at approximately the midpoint between S. Clark Ave and Springer Road.

This project, post construction, has been discussed at several Complete Streets Commission meetings and has been the subject of several modifications and studies, outlined below:

- April 28, 2021: Complete Streets Commission advised staff to implement additional signage & striping measures to help improve visibility of the speed tables.
- Summer of 2021: The following additional modifications were made to the Cuesta Drive speed tables following the Complete Streets Commission's April input and subsequent City Council input on July 13, 2021:
 - o 12" White Borders on each Cuesta Drive approach
 - o 2nd set of Chevron Pavement Arrows on each side of the Cuesta Dr Speed Tables
 - o 2nd set of "Speed Hump" and "15 MPH" signs on each side of the Cuesta Dr Speed Tables
- Fall of 2021: The City commissioned a land surveyor to survey each of the Cuesta Dr speed tables to accurately measure the height of each speed table. Additional vehicle speed and volume data on and along streets surrounding Cuesta Drive was collected to help measure the ongoing effectiveness of the Cuesta Dr speed tables and Arboleda Ave speed humps and any impacts to adjacent neighborhood streets.
- October 27, 2021: The Complete Streets Commission received an update on the topographic survey data as well as speed surveys conducted after the installation of the speed tables. At this meeting it had already been determined, due to Santa Clara County Fire Standards, that the existing speed tables must be removed and replaced with speed tables no more than three inches in height, and the Commission meeting facilitated a discussion with Commissioners and residents about options for the replacement tables.

The speed humps constructed on Arboleda Drive as a part of the same original project meet the three-inch maximum height and therefore are not being replaced, and are not a part of this discussion.

DISCUSSION

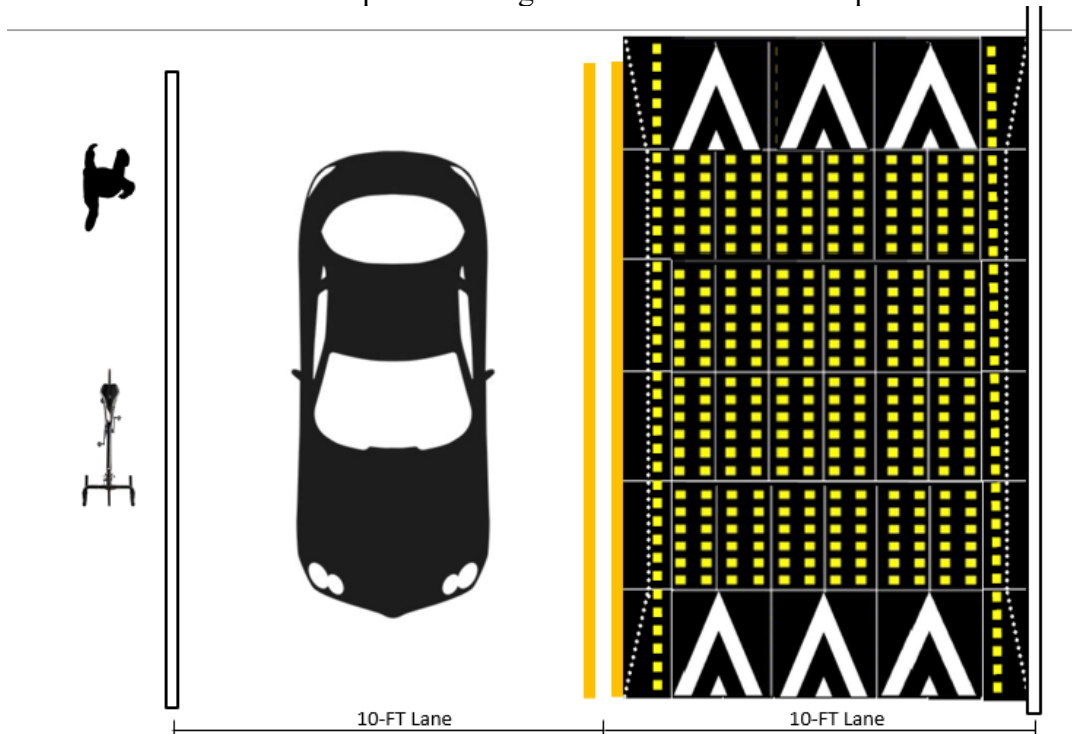
On May 25, 2022, the Commission and the public received a presentation on the proposed split-table configuration and provided input and feedback.

As a result of the feedback, the following changes have been made to the recommended project:

- Width of tables has been reduced so that they will not intrude into the shoulder / bike lane
- Recommended use of bot's dots along the centerline and consideration for larger bot's dots to be used

- Recommended use of a delineator on the right edgeline adjacent to the speed table to deter vehicles from veering to the right to avoid going over the table
- Installation of a Vehicle Speed Feedback Sign with Cloud Enabled Data Collection on Cuesta Drive, in each direction at approximately the midpoint between S. Clark Ave. and Springer Road

Figure 4
Proposed Configuration After Previous Input



RECOMMENDATIONS

Removal of existing speed tables is required and is scheduled for construction this Fall. In order to maintain continuous traffic calming on Cuesta Drive, any treatment decided upon in this meeting may be installed at the same time that the existing tables are removed, to avoid a gap between the removal of existing tables and installation of new tables.

Option A (Staff recommendation):

1. Removal of existing tables (Required)
2. Installation of Rubber Offset Split Lane Speed Tables (Fire Department has agreed to issue permit for this design)
 - a. Installation of bot's dots on the centerline
 - b. Installation of delineator on the edge line
3. Installation of additional STOP sign at Cuesta Drive and Arboleda Drive intersection
4. Installation of Speed Feedback Signs near midpoint of the corridor

Considerations:

- Would result in no gap between removal of old tables and installation of new tables
- Provides a thorough, multi-component approach to traffic calming
- Includes consideration for bikes/peds
- Requires commitment to offset tables at this time

Option B (same as Option A with features 3 and/or 4 optional):

1. Removal of existing tables (Required)
2. Installation of Rubber Offset Split Lane Speed Tables (Fire Department has agreed to issue permit for this design)
 - a. Installation of bot's dots on the centerline
 - b. Installation of delineator on the edge line
3. Optional addition of STOP sign at Cuesta Drive and Arboleda Drive intersection
4. Optional addition of Speed Feedback Signs near midpoint of the corridor

Considerations:

- Would result in no gap between removal of old tables and installation of new tables
- Includes consideration for bikes/peds
- Less thorough approach to traffic calming

Option C (Staff does not recommend this option):

1. Removal of existing tables (Required)
2. Do not replace speed tables at this time
3. Optional addition of STOP sign at Cuesta Drive and Arboleda Drive intersection
4. Optional installation of Speed Feedback Signs near midpoint of the corridor

Considerations:

- Does not require decision making at this time regarding type of speed table to be installed
- Least thorough approach to traffic calming of the options
- Will likely not result in substantial slowing of vehicles
- Possibility of requesting approval of a different treatment with Fire department in the future, but approval of a different treatment is not guaranteed
- Would result in a long gap between removal of old tables and installation of any potential new feature (if a new feature is possible)
- Would require significant Staff time and resources to renegotiate with Fire
- Would require resident and Commissioner time to revisit the item