CITY OF LOS ANGELES
INTER-DEPARTMENTAL MEMORANDUM

Date: June 21, 2023

To: Honorable City Council
c/o City Clerk, Room 340
Attention: Honorable Heather Hutt, Chair, Transportation Committee

From: Connie Llanos, Interim General Manager
Department of Transportation

Subject: **EVALUATION OF SPEED TABLE PILOT**

SUMMARY

In response to Council File (CF) 23-0204, this report presents an initial evaluation of the Los Angeles Department of Transportation's (LADOT) previously installed pilot speed tables, including staffing resources expended, capital expenditures, and effectiveness.

RECOMMENDATION

That the City Council RECEIVE and FILE this report.

BACKGROUND

Speed tables are a traffic safety tool designed to slow down vehicles on arterial streets. Whereas traditional speed humps are designed for residential streets with speed limits of 25 miles per hour (MPH), speed tables are longer and have a flatter top designed for multi-lane streets with higher speeds. The Federal Highway Administration found that speed tables can reduce speeds by up to 11 MPH[1], with crash reduction of 36 to 64 percent[2].

In fall of 2017, LADOT installed the first sets of speed tables in the City of Los Angeles (City) as part of a suite of treatments on arterial streets in Playa del Rey. In January 2020, LADOT began piloting speed tables to improve safety across the City.

On March 21, 2023, the City Council (Council) instructed LADOT to provide an evaluation of the Department's speed table pilot locations, including staffing resources expended, capital expenditures, and effectiveness of the design treatment.

[1] "Engineering Speed Management Countermeasures: A Desktop Reference of Potential Effectiveness in Reducing Speed," Federal Highway Administration, July 2014, https://highways.dot.gov/safety/speed-management/engineering-speed-management-countermeasures

[2] "Engineering Speed Management Countermeasures: A Desktop Reference of Potential Effectiveness in Reducing Crashes," Federal Highway Administration, July 2014, https://highways.dot.gov/safety/speed-management/engineering-speed-management-countermeasures-desktop-reference-potential

DISCUSSION

Speed table pilot program

LADOT has installed limited speed tables on ten corridors (through 13 installations) as listed below. The first three locations were installed as pilot treatments on the City's High Injury Network (HIN) through the Vision Zero work program. LADOT also received funding from individual Council District (CD) offices for traffic calming treatments on higher speed roadways in their districts. These Council-led corridors were not on the HIN, but had significant constituent-reported speeding issues.

LADOT has not constructed speed tables on any corridors with a speed limit higher than 35 MPH, or with more than two travel lanes in each direction. Five of the corridors have at least one uncontrolled crosswalk where LADOT installed speed tables immediately ahead of the crosswalk to improve pedestrian safety.

Corridor	CD	# of Tables in Each Direction	Installed	Speed Limit	# Through Lanes	Vision Zero HIN	Vision Zero Priority Corridor	Council Motion
Temple St between Virgil Ave & La Fayette Park Pl	13	2	1/21/2020	35	4	Yes	Yes	N/A
Broadway St between 39th St & 37th St	9	1	5/8/2020	35	4	Yes	No	N/A
Pacific Ave between Rose Ave & Brooks St	11	4	5/15/2020	30	4	Yes	No	N/A
Bluff Creek Dr between Lincoln Blvd & Westlawn Ave	11	8	8/13/2021	30	4	No	No	19-0453
Riverside Dr between Glover Pl & Meadowvale Ave	13	1	9/23/2021	35	4	No	No	21-0258
Pacific Ave between Navy St & Rose Ave	11	1	11/25/2021	30	4	No	No	19-0453
Vanalden Ave between Braewood Dr & Gleneagles Dr	3	4	5/4/2022	35	2	No	No	22-0239
Vanalden Ave between Rosita St & Greenbriar Dr	3	5	6/29/2022	35	2	No	No	22-0239
6th St between La Brea Ave & Highland Ave	5	2	9/11/2022	35	4	No	No	22-0232
Riverside Dr between Cabot St & Altman St, and between Fernleaf St &	13	2	9/16/2022	35	4	No	No	22-0488

Duvall St								
Verdugo Rd between Shasta Cir & Delevan Dr	13	2	10/21/2022	35	4	No	No	22-0486
Tujunga Ave between Woodbridge St & Moorpark St	2	2	11/17/2022	35	2	No	No	22-0946
Wilmington between 105th St & 114th St	15	4	4/27/2023	35	2	Yes	Yes	N/A

A set of two speed tables typically cost between $25,000 to $40,000. These costs include construction of the speed tables using asphalt, pavement markings, striping removals/installation, signage, and traffic control. Certain cases may also require solar flashing warning beacons at an additional cost of approximately $4,000 to $6,000 per set. LADOT estimates that staff labor for plan preparation, coordination, construction, and evaluation ranges from an additional $5,000 to $7,000 per set of two speed tables.

One Senior Transportation Engineer has managed the coordination and installation of all speed tables to date. LADOT's Vision Zero Division provided design support for the four sets of speed humps installed on the HIN. Additional requests for speed tables without dedicated staff diverts staff time from other programs, such as the residential speed hump program and the Vision Zero program.

Program evaluation

Speed tables are designed to reduce vehicle speeds, which should reduce the frequency and severity of traffic crashes. Effective evaluation of any traffic safety treatment requires data collection before and at least one year after implementation. LADOT collected pre-data at each location before installing speed tables, but post-project data collection and evaluation were postponed during the pandemic due to staff reassignments and atypical travel patterns. As travel patterns have begun to normalize, and staff return to their standard responsibilities, the Department has resumed project evaluations.

To study outcomes of the speed table pilot, LADOT collected data on vehicle speeds, reported traffic collisions, and traffic volumes where speed tables were constructed on Broadway Street, Temple Street, Riverside Drive, Bluff Creek Drive, and Pacific Avenue. The speed tables in Playa del Rey were implemented as part of a suite of operational changes that prevent isolating the impact of the speed tables, so they are not included in this evaluation. The remaining locations cannot be evaluated until LADOT can collect at least one year of data.

LADOT found speed reductions at all locations except Broadway. The average driving speed across the five corridors decreased by 10 percent. The 85th percentile speed, or the speed at or below which 85 percent of the drivers travel, also decreased by approximately 4 MPH, or 13 percent on average. The Department separately studied speeds within a quarter (¼) mile and half (½) mile after the speed tables and found diminishing results outside of the treatment area. This implies that speed tables slow down drivers within the area of the treatment but does not change user behavior in other parts of a corridor. improving safety and lowering speeds. LADOT also observed through vehicle speed data collected immediately before uncontrolled crosswalks that speed tables are particularly effective adjacent to uncontrolled crosswalks.

Through a comparison of average crash data five years prior to and one year after installation, LADOT found a 67 to 100 percent reduction in total annual crashes, and a 75 to 100 percent reduction in crashes that LAPD reported were caused by unsafe speeds.

LADOT also assessed the volume of vehicles traveling on each corridor to better understand whether drivers are choosing to travel on adjacent parallel roads after the speed tables are installed. This was based on concerns expressed during the project planning and engagement phase of the first piloted locations. Across four corridors, vehicle volumes are within five percent of their pre-installation levels, which indicate that drivers are not significantly diverting to other streets. Volumes on Pacific Avenue declined by roughly a quarter, which the study team attributes to peak-hour parking changes that occurred in late 2019.

Overall, LADOT's preliminary analysis confirms speed tables effectively reduce crashes and lower driving speeds, with no measurable negative impact to adjacent streets.

FINANCIAL IMPACT

There is no financial impact associated with this report.

CL:tc/jg