



CITY *of* CALABASAS

TRAFFIC & TRANSPORTATION COMMISSION AGENDA REPORT

DATE: JULY 19, 2023

TO: TRAFFIC & TRANSPORTATION COMMISSION

FROM: TATIANA HOLDEN, P.E., DEPUTY PUBLIC WORKS DIRECTOR

SUBJECT: ADAMSVILLE AVENUE TRAFFIC CALMING

MEETING

DATE: JULY 25, 2023

BACKGROUND:

At the February 28, 2023 meeting, the Commission requested staff evaluate and present potential traffic calming measures for Adamsville Avenue.

Adamsville Avenue is a two-way winding road with one travel lane in each direction. On-street parking is allowed on both lanes and the existing posted speed limit is 25 miles per hour. The road segment runs primarily through residential neighborhoods. The existing striping includes a yellow centerline and right edge striping on each lane. Due to the steep grade of the road, there are reports of downhill speeding along Adamsville Avenue.

DISCUSSION:

At the July 22, 2021 Traffic and Transportation Commission Meeting, a Draft Neighborhood Traffic Calming Program Guidelines were presented to the commissioners. The Three Level process and traffic calming measures for each level were introduced:

- Level 1. Education and Enforcement
 - Police Enforcement

- Temporary Speed Trailer Placement
- Level 2. Signing and Striping
 - Posting of Speed Limit Signs
 - Installing a Permanent Speed Display Sign
 - Striping narrower vehicle lanes
 - Turning movement and/or commercial vehicle restrictions
- Level 3. Physical Changes
 - Medians
 - Curb Extensions
 - Neighborhood Roundabouts
 - Speed Cushions

Level 1 steps have been implemented and will continue to enforce speed limits and influence driver behavior.

In order for Level 2 measure to be implemented, certain criteria such as street designation, traffic volumes and speeds needed to be analysed.

Staff worked with a traffic engineering consultant, Kimley Horn and Associates, to assess existing conditions, review available and suitable (for the location) traffic calming options, and develop a list of recommendations. The complete description of Existing condition, Traffic Calming Measures and a Recommendations Overview is presented in Attachment A.

Several Level 2 traffic calming measures were analyzed by staff and the consultant:

- Speed Limit Pavement Markings;
- Optical Speed Bars;
- Chevron Signs; and
- Advance Curve Warning Signs.

Two out of these four measures are recommended for implementation:

1. Speed limit pavement markings are numerals applied in the traffic lane to remind drivers of the regulatory speed limit. On residential streets, speed limit pavement markings may be used alone without posting a regulatory speed limit sign.
2. Advance curve warning signs alert drivers of the impending change in the horizontal curvature of the roadway.

Staff also recommends to continue enforcement and to monitor effectiveness of the proposed measures by installing a portable speed feedback sign to collect speed data.

FISCAL IMPACT/SOURCE OF FUNDING

Installation of pavement markings and traffic signs will be paid for out of the existing Public Works budget – Striping, Signing & Marking account.

REQUESTED ACTION

It is requested that the Traffic & Transportation Commission provide input and comments.

ATTACHMENTS:

Attachment A: Existing condition, Traffic Calming Measures and Recommendations
Overview

Existing Conditions

Adamsville Avenue is a two-way winding road with one travel lane in each direction. On-street parking is allowed on both lanes and the existing posted speed limit is 25 miles per hour. The road segment runs primarily through residential neighborhoods. The existing striping includes a yellow centerline and right edge striping on each lane. Due to the steep grade of the road, there are reports of downhill speeding along Adamsville Avenue.

Best practices of Neighborhood Traffic Calming Program (NTCP) has a three-level process that goes from less restrictive measures like education and enforcement to more restrictive measures such as signing and striping changes to the most restrictive such as roundabouts and speed cushions. Levels are best described as:

Level 1: Category is less restrictive or impactful on the physical environment and can be relatively easily and quickly implemented. This level does not require initial public outreach or demonstrated community support.

Level 2: Category includes minor physical changes such as posting of speed limit signs, striping narrower vehicle lanes, turning moving restrictions, or commercial vehicle restrictions. The focus is on relatively easy implementable and cost-effective solutions.

Level 3: Category is most aggressive and includes more expensive and restrictive measures that changes to the physical driving environment to discourage higher speeds and/or volume. This level does require demonstrated neighborhood support and public outreach prior to the City considering installation.

Traffic Calming Best Practices

Best practices and applicable measures on traffic calming measure for Adamsville Avenue are discussed below.

Level One

- Police Enforcement – LASD deploys traffic officers to perform radar enforcement on residential streets to deter unsafe behaviors at specified times and locations.

Advantages	Disadvantages
Visible enforcement would reduce speed	Benefits of speed reduction are not sustained over the long-term and regular periodic enforcement is needed
Driver awareness about speeding on residential streets and safety is increased	Police may have limited resources for traffic calming concerns

Level Two

- Speed Feedback Signs – A permanent device which displays approaching vehicle’s speed on an electronic sign that flashes when vehicle speeds exceed posted speed limit



Image source: Carmanah Technologies

Advantages	Disadvantages
Improves safety for vehicles and pedestrians	Only effective for one direction of travel
Effective in reducing vehicle speeds	May lose its effectiveness overtime with repeat drivers

Level Three

- Median- a physical barrier which can narrow the driving lanes, eliminate turning movements, and eliminate straight-through traffic depending on the specific design.

Advantages	Disadvantages
Provides location for aesthetic improvements	May get hit and requires a high level of maintenance
Acts as a travel way narrowing to slow speeds	May inconvenience residents who will be forced to drive longer, more circuitous paths to reach their destination
Reduces local street volumes	Potential loss of on-street parking

- Speed Cushion- Series of small parabolic pillows of raised paving material placed across a roadway for the purpose of causing motorist to reduce their operating speed while driving over the cushion.



Image source: City of Long Beach

Advantages	Disadvantages
Provides location for aesthetic improvements	May get hit and requires a high level of maintenance
Acts as a travel way narrowing to slow speeds	May inconvenience residents who will be forced to drive longer, more circuitous paths to reach their destination

Other Practices

Other practices and applicable measures on traffic calming measures were found through additional research for Adamsville Avenue are discussed below.

- Speed legends- a series of painted numerals on the roadway that indicates the legal speed limit in miles per hour to catch driver attention, influencing them to reduce vehicle speed and exercise caution.



Image source: Federal Highway Administration – Department of Transportation

Advantages	Disadvantages
Inexpensive to install	Requires periodic maintenance
Does not impact emergency vehicles	

- Optical Speed Bars- Transverse stripes spaced at gradually decreasing distances. The purpose for implementation is to increase drivers' perception of speed and cause them to reduce speed, especially on curved roads and horizontal curves.



Image source: Federal Highway Administration – Department of Transportation

Advantages	Disadvantages
Reduce speed	Long-term effects in residential area are unknown, the MUTCD considers this treatment as "experimental"
Inexpensive to install	Increases regular maintenance

- Install chevron signs on horizontal curves- Signs that emphasize and guide throughout a change in horizontal alignment.



Image source: Road Traffic Signs

Advantages	Disadvantages
Warn drivers of approaching curve	Excess signs may cause driver confusion
Provide tracking information and guidance to the driver	

- Install curve advance warning signs- Signs that provide guidance to unexpected conditions on or adjacent to a roadway.



Image source: Federal Highway Administration – Department of Transportation

Advantages	Disadvantages
Serves as an advance warning of an unexpected or sharp curve	Excess signs may cause driver confusion
Provides visual warning	

- Install delineators, reflectors and/or object markers- Retroreflective material parallel to traffic to guide and alert drivers of approaching curves.



Image source: Road Traffic Signs

Advantages	Disadvantages
Warn drivers of approaching curve	May require an increase of maintenance
Provide tracking information and guidance to the driver	

- Steep Grade Ahead Signage- Signs that warn drivers that the road ahead goes downhill or uphill.



Image source: Shutterstock

Advantages	Disadvantages
Reduce speeds	Excess signs may cause driver confusion
Provide regulations, warnings, and guidance information for road users.	

Recommendations

The City of Calabasas is looking for a cost-effective treatment, which requires minimal maintenance and does not strain existing staff resources. Based on the considerations presented above, and discussions with the City about current treatments on Adamsville Avenue, it is recommended that the City look into speed legends and optical speed bars. If necessary, this may be complemented by signage at strategic points such as chevron signs near horizontal curves and curve advance warning signs to warn drivers to slow for curvature in the road.