



City of Chula Vista

Staff Report

File#: 16-0312, **Item#:** 4

ORDINANCE NO. 3369 OF THE CITY OF CHULA VISTA INCREASING THE SPEED LIMIT ON BONITA ROAD BETWEEN WILLOW STREET AND EASTERLY CITY LIMIT FROM 35 MPH TO 40 MPH, AND AMENDING SCHEDULE X OF THE REGISTER MAINTAINED IN THE OFFICE OF THE CITY ENGINEER TO REFLECT THE REVISED SPEED LIMIT (SECOND READING AND ADOPTION)

Council adopt the ordinance.

SUMMARY

Staff completed an Engineering and Traffic Survey (E&TS) for a segment of Bonita Road in accordance with the California Vehicle Code. Based on the results of the E&TS, staff has determined that the speed limit on Bonita Road between Willow Street and Easterly City Limit should be increased from 35 mph to 40 mph.

ENVIRONMENTAL REVIEW

Environmental Notice

The Project qualifies for a Class 1 Categorical Exemption pursuant to Section 15301 (Existing Facilities) of the California Environmental Quality Act State Guidelines.

Environmental Determination

The Director of Development Services has reviewed the proposed project for compliance with the California Environmental Quality Act (CEQA) and has determined that the project qualifies for a Class 1 Categorical Exemption pursuant to Section 15301 (Existing Facilities) of the State CEQA Guidelines. Thus, no further environmental review is required.

BOARD/COMMISSION RECOMMENDATION

The Safety Commission, at their meeting on February 3, 2016, voted to concur with staff's recommendations to increase speed limit on Bonita Road between Willow Street and Easterly City Limit from 35 mph to 40 mph.

DISCUSSION

Background:

California Vehicle Code (CVC) indicates that the posting of the speed limit be determined by an Engineering and Traffic Survey (see Attachment 2). The roadway characteristics are used to help determine an appropriate speed limit. In addition, the Manual on Uniform Traffic Control Devices (MUTCD) states that the speed limit shall be established at the nearest 5 mph increment of the 85th

percentile speed.

On July 24, 2015, the Chula Vista Police Department (CVPD) notified the traffic engineering staff that this segment of Bonita Road has been determined to be a “speed trap” by the local Traffic Commissioner and recent citations for speeding have been dismissed. A new E&TS would be required to properly set the speed limit. Staff prepared the E&TS in August 2015.

On November 4, 2015, the Safety Commission held a public hearing for a recommendation to increase the existing speed limit on Bonita Road between Willow Street and Easterly City Limit from 35 mph to 40 mph. Several members of the public provided comments. Following public input and discussion, the Commission requested that staff further review the concerns raised by the public, reevaluate the recommendations and report back in a future meeting.

At the request of the Safety Commission, staff conducted another speed survey and revisited the E&TS elements as described below.

Engineering and Traffic Survey:

In accordance with CVC Section 627, an E&TS consists of engineering measurements of the prevailing free flow speeds in the proposed roadway segment, a review of the collision history, and a review of roadside conditions. Residential and business density as well as pedestrian and bicyclist safety should also be considered. The E&TS should document compliance with the conditions of CVC Section 627 and identify conditions not readily apparent to a motorist.

Physical Conditions and Roadway Characteristics

The following describes the existing conditions and roadway characteristics of this segment of Bonita Road:

Segment Limit	Bonita Road between Willow Street and Easterly City Limit.
Length/Width	4,384 feet (0.83 miles) long and 47’ to 89’ wide.
Classification	4-Lane Major.
ADT (Year)	31,302 (2015).
Exist. Speed Limit	Posted 35 mph.
85th% Speed	42 mph between Willow Street and Allen School Road. 38 mph between Allen School Road and Otay Lakes Road. 42 mph between Otay Lakes Road and Easterly City Limit.
Number of Lanes	4 total lanes on one part of the segment and 3 total lanes on the rest of the other segment.
Striping	4 lanes, two-way left turn lane, right-turn and left-turn pockets, crosswalks and limit lines.
Parking and Bike Lane	Parking restricted except along the north side of the road approximately 915’ west and 700’ east of Allen School Road. Bike lanes exist along both sides of the segment.
Land Use	Residential multi-family and commercial businesses.
Horizontal Alignment	A horizontal curve with a radius of 700 ft over a length of 538 ft is located near Allen School Road and produces a design speed of 45 mph.

Vertical Alignment Less than 2% grade.

Accident Rate The accident rate at this segment is 0.39 (accidents per million vehicle miles) and is lower than the rate of 1.70 for similar roadways in the State of California (2012).

The County of San Diego segments of Bonita Road at both ends of the City segment have a posted speed of 45 and 50 mph (Attachment # 2).

As described in the California Vehicle Code, the survey shall include:

- (1) Prevailing speeds as determined by traffic engineering measurements;
- (2) Accident records;
- (3) Traffic/roadside conditions not readily apparent to the driver.

Prevailing Speeds:

The California Vehicle Code requires speed limits to be set at the 85th percentile speed. Speed limits established on the basis of the 85th percentile speed conform to the consensus of those who drive the street as to what speed is reasonable and safe, and are not dependent on the judgment of one or a few individuals. Speed limits posted higher than the 85th percentile speed are not considered reasonable and safe, while speed limits posted below the 85th percentile typically do not facilitate the orderly movement of traffic.

After the November 4, 2015, Safety Commission meeting, staff requested that the Police Department install the portable speed feedback unit on Bonita Road to raise driver's awareness of the 35 mph posted speed limit and their actual speed. The speed feedback unit was deployed in mid-November.

City staff conducted Speed Survey in late November after the speed feedback unit had been removed. The 85th percentile speeds ranged from 38 to 42 mph. Also, in March 2016, for added visibility, the City installed larger 35 mph speed limit signs along Bonita Road to inform the motorists of the posted speed limit. On April 21, 2016, City staff conducted another Speed Survey. Again, the 85th percentile speeds ranged from 38 to 42 mph. Per speed limit establishment protocol, this was measured during the off-peak hours under normal free flow driving conditions.

Accident records

The accident rate at Bonita Road between Willow Street and Easterly City Limit is 0.39 (accidents per million vehicle miles). This rate is lower than the average statewide rate of 1.70 for similar roadways in California. Federal Highway Administration Research and Development studies (FHWA-RD-92-084 and FHWA-RD-98-154) show that establishing a speed limit at less than the 85th percentile generally results in an increase in collision rates.

Traffic/Roadside Conditions

Bonita Road has a horizontal reverse curve east of Allen School Road. The public provided comments regarding potential sight visibility issues for a few commercial driveways located along the south side of the street. The stopping sight distance study for these driveways was reevaluated. It was confirmed that there are no physical obstructions (landscaping) and all the driveway locations met the stopping sight distance requirements for a speed limit of 40 mph. Also, a letter was sent to the owners at this location requesting them to continue to maintain the landscaping along the frontage at maximum height of three feet or less to ensure proper sight distance visibility. Based on staff's records, between the years of 2010 and 2012, there are no reported collisions documented at these driveways. Restricting left turn movements at these driveways could be considered but does not appear to be warranted.

The traffic signal timing on Bonita Road was reviewed, updated and minor changes were made to enhance and improve the functionality of traffic signals at intersections.

Additionally, a local Traffic Commissioner with Superior Court of California, South County Division, (Case No.: Y483914), stated the following:

“ The Court finds that there are not conditions which justify reducing the speed limit to 35 MPH. The conditions that exist are apparent to drivers, and the accident rate is less than half of the accident rate for similar roadways. The design speed of the roadway is 45 MPH. The 85th percentile is 42 MPH. The statistical data attached shows that 58% of drivers travel faster than 35 MPH on that segment of roadway.

For any and all the above reasons, the Court finds the Defendant,... not guilty of speeding. “

This finding of a “speed trap” severely impacts CVPD ability to conduct effective speed enforcement.

Traffic Calming

Traffic calming is a method for slowing speeding traffic on streets. Physical and nonphysical treatments (such as enforcement) are used to alter a motorist's behavior and improve conditions for people living, walking and bicycling in a neighborhood. Devices such as speed humps, raised intersections and crosswalks, residential traffic circles, and chokers and neckdowns have proven to be effective in cities throughout the country for calming and slowing speeding traffic on streets. Unfortunately, these types of physical treatment are not suitable or warranted for this segment of Bonita Road. There are no readily apparent issues or problems that would justify such calming measures. Bonita Road is a major road with high volume of over 31,000 ADT and the collision rate on this segment of Bonita Road is significantly less than the statewide average.

The most appropriate traffic calming measure would be to set the appropriate speed limit (85th percentile) which would allow defensible police enforcement. Police enforcement, as a traffic calming, entails the presence of police to monitor speeds and other inappropriate driving behavior

and issue citations when necessary. This will encourage motorists to drive at the posted speeds and follow the rules of the road. This approach is only effective when the proper speed limits established and posted.

Unfortunately, the declaration from the local Traffic Commissioner stated that this segment of roadway was a “speed trap”, effectively eliminating the CVPD ability to conduct radar enforcement along this segment of Bonita Road.

Road Diet

Road diets are often conversions of four-lane undivided roads into fewer lanes. Lane reductions on Bonita Road are not recommended due to the high Average Daily Traffic count.

CONCLUSION:

On February 3, 2016 the Safety Commission concurred with staff’s recommendations and voted to increase the speed limit on Bonita Road between Willow Street and Easterly City Limit to 40 mph.

Based on the 85th percentile speed of the roadway, a very low collision rate that is less than 1/4th of the statewide average for similar roadways and no unapparent conditions for the drivers, staff has determined that the speed limit on Bonita Road between Willow Street and Easterly City Limit still should be increased from 35 mph to 40 mph. There are no conditions that can be applied, per the California Vehicle Code, to justify a further reduction to the recommended speed limit.

Additionally, the Chula Vista Police Department will be able to effectively enforce the speed limit.

Should the City Council establish the proposed 40 mph speed limit, Schedule X of the register maintained in the office of the City Engineer would be amended to reflect the revised speed limit as follows:

10.48.020 Schedule X - Established Speed Limits in Certain Zones - Designated

Name of Street: Bonita Road
Beginning At: Willow Street
Ending At: Easterly City Limit
Proposed Speed Limit: 40 mph

DECISION-MAKER CONFLICT

Staff has reviewed the property holdings of the City Council and has found that, John McCann, Council Member has real property holdings within 500 feet of the boundaries of the property which is the subject of this action. Consequently, pursuant to California Code of Regulations Title 2, sections 18700 and 18702.2(a)(11), this item presents a disqualifying real property-related financial conflict of interest under the Political Reform Act (Cal. Gov’t Code § 87100, et seq.) for the above-identified member.

Staff is not independently aware, and has not been informed by any City Council member, of any

other fact that may constitute a basis for a decision maker conflict of interest in this matter.

LINK TO STRATEGIC GOALS

The City's Strategic Plan has five major goals: Operational Excellence, Economic Vitality, Healthy Community, Strong and Secure Neighborhoods and a Connected Community. The goal of this action item is to support the Strong and Secure Neighborhood strategy identified in the City's Strategic Plan by providing safer roadways.

CURRENT YEAR FISCAL IMPACT

The proposed speed limit modification would require the replacement and posting of new speed limit signs and marking of new pavement speed limit legends. The cost to install these improvements is approximately \$2,100. The required work will be funded by TransNet associated with Capital Improvement Project, TF-332 - Signing and Striping Program. Sufficient TransNet funds are available to cover program costs associated with TF-332.

ONGOING FISCAL IMPACT

The improvements will require only routine City maintenance.

Attachments:

1. Location Plat
2. Existing Speed Limits
3. Speed Survey
4. AAA Publication "Effective Speed Zoning Why and How" - Dated 2012

Staff Contact: Muna Cuthbert, Senior Civil Engineer