

SAFETY COMMISSION AGENDA STATEMENT

Item 1
Meeting Date 11/04/2020

ITEM TITLE: RESOLUTION OF THE SAFETY COMMISSION OF THE CITY OF CHULA VISTA RECOMMENDING THAT THE CHULA VISTA CITY COUNCIL ESTABLISH THE SPEED LIMIT ON BONITA GLEN DRIVE BETWEEN BONITA ROAD AND THE CHULA VISTA CITY LIMIT AS 25 MPH AND THAT SCHEDULE X OF THE REGISTER MAINTAINED IN THE OFFICE OF THE CITY ENGINEER BE AMENDED TO REFLECT THIS SPEED LIMIT

SUBMITTED BY: Principal Traffic Engineer

Staff completed an Engineering and Traffic Survey (E&TS) on Bonita Glen Drive between Bonita Road and Chula Vista City Limits (the "Segment") in accordance with the California Vehicle Code (CVC) and California Manual on Uniform Traffic Control Devices (CAMUTCD), which indicate that the posting of speed limits that are not the maximum or standard prima facie speed limits defined by the CVC be determined by an E&TS for each street with a posted speed limit within the City. Based on the results of the E&TS, staff has determined that the speed limit on Bonita Glen Drive between Bonita Road and Chula Vista City Limits be established at 25 mph (see Attachment 1, Location Plat).

RECOMMENDATION: That the Safety Commission adopt the resolution.

DISCUSSION:

The CVC establishes minimum and maximum prima facie speed limits for all streets in the State. The minimum prima facie speed limit is 25 mph for specific roadway conditions and the maximum speed limit is 65 mph (55 mph for undivided roads) and an Engineering and Traffic Survey (E&TS) is required to change the prima facie speed limit from these preset limits for any City roadway that do not meet those conditions.

The CVC requires that local agencies review changes in local speed limits every five to ten years to determine if the existing street segment speed limits require updating due to the age of the E&TS or changes in roadway and traffic conditions. In October 2020, staff completed an E&TS for the segment of Bonita Glen Drive between Bonita Road and Chula Vista City Limits in accordance with the California Vehicle Code.

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.

Physical Conditions

The following information describes the existing conditions along the subject Segment on Bonita Glen Drive:

- Two-lane Class III Collector
- Length/Width – 0.23 miles long and 40' wide
- Average Daily Traffic: 2,726 (2020)
- Number of Lanes: 2 lanes (1 per direction)
- Existing Speed Limit – None
- 85% Percentile Speed: 31 mph
- Striping – Two lanes of traffic
- Parking – Parking is allowed along entire segment
- Horizontal Alignment – Horizontal Curve with a radius of 300' over a length of 170.7' yields a design speed of 24 mph.
- Vertical Alignment – Sag Vertical Curve with a 2.9% change over 50' yields a design speed of 34 mph.
- Accident Rate History – The accident rate at this segment is 2.91 accidents per million vehicle miles, which is higher than the rate of 1.3 for similar roadways in the State of California (2016).

Traffic Calming

The proposed speed limit of 25 mph is the lowest speed limit that an agency can set on a roadway that does not have unique fronting uses with sensitive visitors such as a school, playground, or senior facility.

Speed Enforceability

If the proposed speed increase is not approved, the following are the only means of enforcing speed on the Segment:

- Basic Speed Law: police car matches speed of vehicle and determines that speed is unsafe for current conditions. Infeasible due to insufficient police availability and the segment is too short.
- Maximum Speed Law: use RADAR/LiDAR methods to enforce speed limit of 65 mph.

If the proposed speed limit is approved, police can use RADAR/LiDAR to enforce the approved posted speed limit.

CONCLUSION:

Based on the 85th percentile speed of the roadway, as well as a higher than average collision rate outlined in the E&TS and roadway geometry, staff is recommending establishing the speed limit at 25 mph.

Should the City Council establish the proposed 25 mph speed limit, Schedule X of the register maintained in the Office of the City Engineer be amended to reflect the speed limit:

- Bonita Glen Drive, between Bonita Road and Chula Vista City Limits, proposed Speed Limit Established at 25 mph.

FISCAL IMPACT:

The establishing of the speed limit would require the posting of new speed limit signs and speed limit legends. This work will be funded by an existing Traffic Engineering Capital Improvement Project, TRF0332, Signing and Striping Program.

Attachments:

1. Location Plat
2. Speed Survey



LOCATION MAP



CITY OF CHULA VISTA - VEHICLE SPEED SURVEY

SEGMENT UNDER STUDY: Bonita Glen Dr (Bonita Rd - CVCL)

DATE: 8/27/2020 SURVEY SITE: _____ POSTED SPEED: N/A

TIME START: 3:03 PM TIME END: 3:47 PM WEATHER: Sunny

MPH	DIRECTION: <u>NB</u> = O <u>SB</u> = /																TOTAL	%	CUM %
	5				10				15				20						
45																	0	0%	100%
44																	0	0%	100%
43																	0	0%	100%
42																	0	0%	100%
41																	0	0%	100%
40																	0	0%	100%
39	/																1	1%	100%
38	/																1	1%	99%
37																	0	0%	98%
36	/																1	1%	98%
35	O																1	1%	97%
34	O																1	1%	96%
33	/	/	O	O	/												5	5%	95%
32	O	/	O	O	/	/											6	6%	91%
31	/	/	O	/	O												5	5%	85%
30	O	O	/	/	O	O	O	O	/	O							10	9%	81%
29	O	/	/	O	/	/	/	O	O	O							10	9%	71%
28	O	O	O	O	O	/	O	/	/	/							10	9%	62%
27	/	O	/	/	O	/	/	/	/	O	O	O	/				13	12%	53%
26	O	O	O	/	/	/	/	O	O	O							10	9%	41%
25	/	O	/	O	O	/	/	O	/	O	/	O	O				13	12%	31%
24	O	/	O	O	/	O											6	6%	19%
23	/	/	O	/	/	/	/	O									8	7%	14%
22	O	/	/	/	/												5	5%	6%
21																	0	0%	2%
20	O																1	1%	2%
19	O																1	1%	1%
18																	0	0%	0%
17																	0	0%	0%
16																	0	0%	0%
15																	0	0%	0%
14																	0	0%	0%
13																	0	0%	0%
12																	0	0%	0%
11																	0	0%	0%
10																	0	0%	0%
9																	0	0%	0%
8																	0	0%	0%
7																	0	0%	0%
6																	0	0%	0%
RECORDER: Nancy Chen											TOTAL NUMBER OF VEHICLES: 108								

85th Percentile Speed: 31 mph