City of Capitola Engineering and Traffic Study 2020



Data collected January 2020

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1.0 CERTIFICATION

I, Steven E. Jesberg, Public Works Director and City Engineer for the City of Capitola do hereby certify that this Engineering and Traffic Survey for the City of Capitola was performed under my supervision. I certify that I am experienced in performing a survey of this type and I am duly registered in the State of California as a Professional Civil Engineer.

Steven E. Jesberg Public Works Director

> No. 44791 Exp 3-31-23

RCE: 44791

3 - 4/- 2/ Date

2.0 INTRODUCTION

The California State Legislature sets in place the regulations for California speed limits, and the California Vehicle Code (CVC) places these regulations into the language used primarily for enforcement purposes. Various jurisdictions have responsibility for roadways throughout California, including the responsibility to set speed limits on these roadways according to the standards and procedures established by Caltrans. The guidelines from the 2014 California Manual for Setting Speed Limits published by Caltrans (May 9, 2014) are used in this study. These guidelines help in establishing speed limits that are uniform throughout the state and avoid influence from political pressure or emotional perceptions.

The purpose of this survey is to evaluate the posted speed limits for 47 segments of roadway/streets within the City of Capitola and recommend speed limits following the State of California regulations and guidelines. CVC Section 40802 requires that Engineering and Traffic Survey (E&TS) for speed limits should be conducted at least once every 5 years (40802(a)), 7 years (40802(c)), or 10 years (40802(c)) based on established criteria. State and local agencies are required to re-evaluate non-statutory speed limits on their street segments that have undergone a significant change in roadway characteristics or surrounding land uses since the speed limits were last reviewed.

Speed limits are established primarily for protecting the public from the behavior of reckless, unreliable, or dangerous drivers. Speed limits are generally established at or near the 85th percentile speed. The 85th percentile speed also referred to as the critical speed, is defined as the speed at or below which 85 percent of traffic is moving in free-flow conditions. Speed limits established on this basis conform to the consensus of those who drive on the roadways as to what speed is reasonable and safe under normal driving conditions. Many factors influence drivers and their perception of the safe speed at which to operate a vehicle. These factors should be considered as a whole because it is not practical to consider each individually. The design and physical characteristics of the roadway place limitations on the safe operating speed of vehicles. These characteristics include:

- Roadway geometrics, shoulder condition, grade, alignment, and sight distance
- Roadside development, zoning, and environment
- Parking practices, bicycle, and pedestrian activity
- Driveway density
- Signalized or stop-controlled intersections
- Rural, residential, or developed areas

This E&TS report presents the results based on data that was collected in January 2020 for 47 discrete street segments throughout the City of Capitola and includes radar speed surveys, accident summary, and analysis of roadway characteristics. The 47 survey segments included in the study are classified as below:

Thirty-four (33) roadway segments are designated as 'Arterial.'

- Fifteen (12) roadway segments are designated as 'Collector.'
- Two (2) roadway segments are designated as 'Local.'

2.1 RELEVANT CALIFORNIA VEHICLE CODE SECTIONS

Applicable California Vehicle Code (CVC) Code sections for conducting an E&TS are summarized below:

CVC SECTION 235 – BUSINESS DISTRICT: An area in which at least 50 percent of the properties are used for business for a minimum distance of 400 feet on one side or 300 feet on both sides of a highway.

CVC SECTION 515 – RESIDENCE DISTRICT: An area outside of the Business District along a highway that has a minimum of 13 separate dwelling units on one side, or 16 on both sides within a distance of a quarter-mile.

CVC SECTION 627 – ENGINEERING AND TRAFFIC SURVEY: A survey of highway and traffic conditions in accordance with methods determined by the California Department of Transportation (Caltrans) for use by state and local authorities, which shall include consideration of prevailing speeds as determined by traffic engineering measurements, accident records, and highway, traffic, and roadside conditions not readily apparent to the driver. Local authorities may also consider residential district density (as defined in Section 515) and pedestrian and bicyclist safety.

CVC SECTION 21400 – ROUNDING OF SPEED LIMITS: Allows for setting the speed limit at the 5-mph increment below the 85th percentile even if mathematical rounding would require the speed to be posted above the 85th percentile. If this option is used, then the additional 5 mph reduction cannot be used. In effect, this law allows an engineer to round down to the nearest increment of the 85th instead of up. The engineer cannot then take a further reduction.

CVC SECTION 22350 – BASIC SPEED LAW: Provides that no person shall drive a vehicle upon a highway at a speed greater than is reasonable or prudent having due regard for weather, visibility, the traffic on, and the surface and width of, the highway, and in no event at a speed which endangers the safety of persons or property. In other words, a driver violates the basic speed law if he or she is driving at unsafe speeds, even if that speed is lower than the posted regulatory speed limit sign.

CVC SECTION 22351 – SPEED LAW VIOLATIONS: States that the speed of any vehicle upon a highway not in excess of the limits specified in CVC Section 22352 or established as authorized in the CVC is lawful unless clearly proved to be in violation of the Basic Speed Law. This same section also states that the speed of any vehicle upon a highway in excess of the prima facie speed limits in CVC Section 22352 or established as authorized in the CVC is unlawful unless the defendant establishes by competent evidence that the speed in excess of said limits did not constitute a violation of the Basic Speed Law at the time, place and under the conditions then existing.

CVC SECTION 22352 – PRIMA FACIE SPEED LIMITS: Establishes prima facie speed limits for local roads and streets. The term "prima facie," as used in the CVC, is a speed limit that applies when no other specific Engineering & Traffic Surveys (E&TS) speed limit is posted. It is a Latin term meaning "at first face" or "at first appearance." It is also defined at "first view" and "before investigation." Prima facie evidence is evidence sufficient to establish fact or to raise presumption of fact, unless rebutted. These speed limits shall be applicable unless changed as authorized in the CVC and, if so changed, only when signs have been erected giving notice thereof. It sets two-speed limits covering six classes of location.

A speed limit of 15 MPH applies at railroad crossings, at uncontrolled highway intersections with obstructed view, and on alleys. A speed limit of 25 MPH applies on any highway other than State highways in any business or residence district, unless a different limit is established by procedures described in the CVC. The 25 MPH limit also applies in school zones.

CVC SECTION 22357 (INCREASE OF LOCAL SPEED LIMITS TO 65 MPH) AND CVC SECTION 22358 (DECREASE OF LOCAL SPEED LIMITS): Authorizes local authorities to establish prima facie speed limits on streets and roads under their jurisdiction, on the basis of an engineering and traffic survey.

CVC SECTION 22358.3 (DECREASE ON NARROW STREETS) AND CVC SECTION 22358.4 (DECREASE OF LOCAL LIMITS NEAR SCHOOLS OR SENIOR CENTERS): Authorizes local agencies to reduce prima facie speed limits to 20 or 15 mph on narrow streets (with roadway width less than 25 feet), school zones, or senior centers on the basis of engineering and traffic surveys.

CVC SECTION 22358.5 – DOWNWARD SPEED ZONING: Physical conditions such as width, curvature, grade, and surface conditions, or any other condition readily apparent to a driver, in the absence of other factors, would not require special downward speed zoning.

CVC SECTION 40802 (A)(2) – PRIMA FACIE SPEED LIMITS: Provides that prima facie speed limits established under CVC Sections 22352(b)(1), 22354, 22357, 22358, and 22358.3 may not be enforced by radar unless the speed limit has been justified by an engineering and traffic survey within the last five years. This CVC section does not apply to a local street, road or school zone.

CVC SECTION 40802 (B) – PRIMA FACIE SPEED LIMITS: For purposes of this section, a local street or road is one that is functionally classified as "local" on the "California Road System Maps," that are approved by the Federal Highway Administration and maintained by the Department of Transportation. When a street or road does not appear on the "California Road System Maps," it may be defined as a "local street or road" if it primarily provides access to abutting residential property and meets the following three conditions:

- Roadway width of not more than 40 feet.
- Not more than one-half of a mile of uninterrupted length. Interruptions shall include official traffic control signals as defined in CVC Section 445.
- Not more than one traffic lane in each direction.

3.0 DATA COLLECTION & ANALYSIS GUIDELINES

The basic purpose of this study was to evaluate selected arterial, collector, and local streets within the City of Capitola limits and to recommend appropriate speed limit revisions consistent with current laws and practices of California. The Capitola Department of Public Works lead the study effort. Data collection was completed by NDS who has 30 years of traffic date collection experience. The data collection procedure and speed survey analysis methodology are briefly discussed below:

3.1 RADAR SPEED SURVEYS & ANALYSIS

The speed surveys involve the use of radar guns to collect sample speeds on selected street segments. A key aspect for conducting the surveys is to ensure that street segments with unique characteristics are individually surveyed. The most crucial component of a speed zone survey is the selection of locations for the data collection task. The prevailing speed at the data collection point was selected to represent the entire speed zone area.

The project team worked with the City of Capitola staff and finalized the street segments to be analyzed in this E&TS. Radar speed surveys were conducted in January on days with fair weather, clear visibility, and dry pavement conditions. The survey locations were selected where the prevailing speeds were representative of the entire street segment and not too close to any traffic control device. The selected locations were situated beyond the influence of stops, dips, curves, parked vehicles, and any other condition that may affect the normal rate of travel. An effort was made to ensure that the presence of radar survey equipment did not affect the speed of the traffic being surveyed. The radar speed surveys for each roadway segment was conducted using calibrated radar equipment by certified technicians. Most sample sizes for a particular segment included 100-200 vehicles. In the case of low volume roadways, surveys were conducted for a minimum of a 90-minute period. A Speed Survey Form was used to collect and summarize the following attributes:

- Street surveyed
- Precise location
- Street direction

- Date/day of the survey
- Start time & end time of the survey
- Number of vehicles surveyed
- 85th percentile speed, 50th percentile speed, 10-mile pace
- Percent and number of vehicles observed within the 10-mph pace speed
- Percent and number of vehicles observed below the pace
- Percent and number of vehicles observed above the pace
- Range of speeds observed and standard deviation

A description of some of the attributes is provided below:

50TH PERCENTILE SPEED (MEDIAN SPEED): This is the speed at which 50 percent of the vehicles sampled are traveling at or below.

85TH PERCENTILE SPEED (CRITICAL SPEED): The 85th percentile speed is defined as "The speed at or below which 85 percent of all vehicles are observed to travel under free-flowing conditions past a monitored point."

10 MPH PACE SPEED: The 10-mph increment (range) of speeds containing the greatest number of vehicles. In most cases, the 85th percentile speed and the recommended speed lie within the range, frequently in the middle to upper range of the interval. The percent of vehicles that fall within the pace speed is an indicator of the bunching of vehicular speeds. The number of observed vehicles within the 10-mph pace is often between 40 and 80 percent of the entire sample.

AVERAGE SPEED: The average speed is simply the cumulative speed divided by the number of observed vehicles.

SPEED RANGE: The range of speed is simply the speed of the fastest and slowest vehicles observed. A large range of speeds (in excess of 30 mph, for example) indicates less favorable conditions than a smaller range. The greater the range, the more inconsistency in travel speeds with a greater likelihood of traffic Collisions. In general, uniform speeds result in the smooth progression of traffic.

The radar speed survey data was compiled and analyzed to determine the 50th percentile speed, 85th percentile speed, average speed, speed range, 10-mph pace speed, and the percent of vehicles observed within the 10-mph pace.

3.2 FIELD OBSERVATIONS

A final field check was conducted by driving each study segment while to determine the speed of traffic that is reasonable from the engineer's viewpoint. The appropriateness of the 85th percentile speed was evaluated in conjunction with the perspective of human judgment to set the appropriate speed limit. Factors such as roadside development, the number, and location of driveways, parked vehicles; emergency shoulder areas, schools and playgrounds, areas frequented by pedestrians, horizontal and vertical

alignment of the roadway, intersection spacing, visibility and control, landscaping, street fixtures, and other less tangible factors, all contribute to finalizing the recommended speed limits.

3.3 TRAFFIC COLLISION DATA

Collisions reported at study roadway segments were obtained from the City of Capitola Police Department for a period of three years from January 2017 to December 2019. Appendix A summarizes the type and the total number of collisions for all study segments. The summary table includes the total collisions within each street study segment. Both total and non-intersection collisions are summarized in this table.

4.0 SPEED LIMIT GUIDANCE

4.1 Allowable Speed Limit Modifications

The setting of speed limits requires a rational and defensible procedure to maintain the confidence of the public and legal systems. Speed limit determinations rely on the premise that a reasonable speed limit is one that conforms to the actual behavior of the majority of drivers; one will be able to select a speed limit that is both reasonable and effective by measuring drivers' speeds.

In 2004, in order to better conform to the standards established in the Federal Highway Administration's *Manual on Uniform Traffic Control Devices (MUTCD)*, the speed zoning section of the California MUTCD was changed to require rounding the 85th percentile to the nearest 5 mph increment rather than the lower 5 mph increment. This specific guideline revision resulted in raising certain street speed limits and had become a challenge to state and local jurisdictions.

In 2007, the California Traffic Control Devices Committee (CTCDC) ruled to approve a language change in the CA MUTCD to clarify how local speed limits should be set. Caltrans ultimately issued a *Traffic Operations Policy Directive (No. 09-04)*, effective July 1, 2009, which clearly defined these changes and incorporated new requirements into the CA MUTCD. The changes are summarized below:

- Posted speed limits will be set "rounded to the nearest" 5 mph increment of the 85th percentile speed.
- Jurisdictions can lower this speed by an additional 5 mph based on and justified by conditions and factors cited in the California Vehicle Code.
- Studies of the effects of establishing, raising, and lowering speed limits include Federal studies FHWA-RD-92-084 and FHWA-RD-98-154. These studies demonstrate that the most effective attribute in establishing the speed limit is to determine the 85th percentile speed and set the posted speed close to that value.

The empirical data in these studies demonstrate that setting the speed limit too high or too low can increase collisions. Speed limits that are set near the 85th percentile speed of free-flowing traffic are safer and produce less variance in vehicle speeds. Because of

this, the 85th percentile is used to establish the upper limit of operating speeds that are considered reasonable and prudent. In addition, setting the speed limit arbitrarily low often makes violators of a disproportionate number of drivers, does not facilitate the orderly movement of traffic, and requires constant enforcement to maintain compliance.

The 2014 Edition of the CA MUTCD requires as a standard that a speed limit shall be established at the nearest 5 mph increment of the 85th percentile speed, except that the posted speed may be reduced by 5 mph from the nearest 5 mph increment of the 85th percentile speed in compliance with CVC Sections 627 and CVC 22358.5. According to CVC 21400, for cases in which the nearest 5 mph increment of the 85th percentile speed would require rounding up, the speed limit may be rounded down to the nearest 5 mph increment below the 85th percentile speed if no further reduction is used. The following examples are provided to explain the application of these speed limit criteria:

- If the 85th percentile speed in a speed survey for a location were 37 mph, then the speed limit would be established at 35 mph since it is the closest five mph increment to the 37 mph speed. The 35 mph established speed limit can be reduced by 5 mph to 30 mph if the conditions and justification for using this lower speed limit are documented in the E&TS and approved by a registered Civil or Traffic Engineer.
- If the 85th percentile speed in a speed survey for a location were 33 mph, then the speed limit would be established at 35 mph since it is the closest 5 mph increment to the 33 mph speed. The 35 mph established speed limit can be reduced by 5 mph to 30 mph if the conditions and Engineering & Traffic Surveys (E&TS) justification for using this lower speed limit are documented in the E&TS and approved by a registered Civil or Traffic Engineer.

Section 2B.13 of the 2014 CA MUTCD further states that justification for reducing speed limits can be based on residential density, pedestrian/bicyclist safety, and other factors not readily apparent to drivers but essential to meet the traffic safety needs of the community. The following factors may be considered to adjust and determine the final speed limits:

- Road characteristics, shoulder condition, grade, alignment, and sight distance
- 10 mph pace speed (a 10-mile range in which the highest number of data is recorded)
- Roadside development and environment
- Parking practices and bicycle/pedestrian activity
- Reported crash experience for at least 12 months

The guidelines from the 2014 California Manual for Setting Speed Limits (May 9, 2014; updated March 9, 2018) published by Caltrans were followed in this study. The speed limit recommendations are proposed for the 47 roadway/street segments in the study based on the above-discussed guidelines and speed data analysis. The speed limit for each study segment was recommended after determining the average speed, 85th percentile speed, pace speed, and considering other significant factors such as existing land use, roadway design characteristics, and accident rates.

5.0-Street Lists

City of Capitola

List of Street Studied in this Survey

No	Street	Recommended Speed (mph)	Number of Sections
1	38th Avenue	25	2
2	41st Avenue	30	5
3	47th Avenue	25	2
4	49th Avenue	25	1
5	Bay Avenue	25	4
6	Brommer Street	25	1
7	Capitola Avenue	25	6
8	Capitola Road	25	5
9	Clares Street	25	3
10	Cliff Drive	25	1
11	Jade Street	25	1
12	Kennedy Drive	25	2
13	Monterey Avenue	25	5
14	Park Avenue (Monterey Avenue to Coronado Avenue)	25	1
15	Park Avenue (Coronado Avenue to Highway 1)	30	2
16	Stockton Avenue	25	1
17	Topaz Street	25	2
18	Wharf Road	25	3

47

List of Local Roads

Speed governed by CVC 40802(B) - Prima Facie Speed Limits

		Prima	
No.	Street	Facie	
10.	Succe	Speed	
		(mph)	
1	40th Avenue	25	
2	42nd Avenue	25	
3	43rd Avenue	25	
4	44th Avenue	25	
5	45th Avenue	25	
6	46th Avenue	25	
7	47th Avenue (Capitola Road to Grace Street)	25	
8	48th Avenue	25	
9	49th Avenue (Capitola Road to Prospect Avenue)	25	
10	Albert Lane	25	
11	Alma Lane	25	
12	Balboa Avenue	25	
13	Beulah Drive	25	
14	Beverley Avenue	25	
15	Blue Gum Avenue	25	
16	Burlingame Avenue	25	
17	Cabrillo Street	25	
18	California Avenue	25	
19	Carl Lane	25	
20	Center Street	25	
21	Central Avenue	25	
22	Cherry Avenue	25	
23	Childers lane	25	
24	Chittenden Lane	25	
25	Cliff Way	25	
26	Columbus Drive	25	
27	Coronado Street	25	
28	Cortez Street	25	
29	Crystal Street	25	
30	Deans Lane	25	
31	Del Monte Avenue	25	
32	Derby Avenue	25	
33	Diamond Street	25	
34	Edmund Lane	25	
35	El Camino Medio	25	
36	El Salto Drive	25	
37	Elinor Street	25	

List of Local Roads

Speed governed by CVC 40802(B) - Prima Facie Speed Limits

		Prima	
No.	Street	Facie	
NO.	Street	Speed	
		(mph)	
38	Emerald Street	25	
39	Escalona Avenue	25	
40	Esplanade	25	
41	Fairview Avenue	25	
42	Fanmar Way	25	
43	Francesco Circle	25	
44	Garnet Street	25	
45	Gilroy Drive	25	
46	Grace Street	25	
47	Grand Avenue	25	
48	Gross Road Extension	25	
49	Hill Street	25	
50	Hollister Avenue	25	
51	Jewel Street	25	
52	Junipero Court	25	
53	Kennedy Drive west of Monterey Avenue	25	
54	Laurence Avenue	25	
55	Lincoln Avenue	25	
56	Loma Avenue	25	
57	Magellan Street	25	
58	McCormick Avenue	25	
59	McCormick Court	25	
60	Melton Street	25	
61	Oak Street	25	
62	Oakland Avenue	25	
63	Opal Street	25	
64	Orchid Avenue	25	
65	Park Place	25	
66	Pilgrim Drive	25	
67	Pine Street	25	
68	Plum Street	25	
69	Preakness Avenue	25	
70	Prospect Avenue	25	
71	Reposa Avenue	25	
72	Riverview Avenue	25	
73	Riverview Drive	25	
74	Rosedale Avenue	25	

List of Local Roads

Speed governed by CVC 40802(B) - Prima Facie Speed Limits

		Prima		
No.	Street	Facie		
110.	Street	Speed		
		(mph)		
75	Rosedale Court	25		
76	Ruby Court	25		
77	Sacramento Avenue	25		
78	San Jose Avenue	25		
79	Saxon Avenue	25		
80	Sellar's Court	25		
81	Shirley Lane	25		
82	Sir Francis Avenue	25		
83	Sir Francis Court	25		
84	Sommerfeld Avenue	25		
85	Sunset Drive	25		
86	Terrace Way	25		
87	Trotter Street	25		
88	Virgil Lane	25		
89	Washburn Avenue	25		
90	Wesley Street	25		
91	Younger Avenue	25		

Street: 38th Ave

Limits: Between Brommer St & City Limit

Direction: NB & SB

Factors

A. Prevailing Speed Data

Location of Survey

Date of Survey 999 38th Ave Posted Speed Limit (mph) 1-29-202025 mph

Speed Data Collected 135 85th Percentile (mph) 33 mph 25-34

10 mph Pace 81%

Percent in Pace

B. Traffic Factors

Width: 34-feet Length of Segment (mi.) 0.27

Street Classification Other Principal Arterial

C. Collision History

Date Range Covered 1/1/2017-12/31/2019

Total Accident

D. Roadway Conditions

Adjacent Land Use It is a primarily residential district with substantial mobile

0

home complexes access from the street.

Roadway Geometrics

Two-lane roadways. Sidewalks are present on the west

side.

Comments After evaluating current critical and pace speeds, it is

recommended that a 25-mph speed limit be maintained to be in concurrence with section 2B.13 of the MUTCD. The 25-mph speed limit was obtained by a 5-mph reduction of the critical speed of 35mph due to the number of access points, A second 5 mph deduction was added due to the presence of the railroad corssing and amount of pedestrian

crossings and bicycle traffic.

Speed Limit Change? No

Existing Speed Limit: 25 MPH Recommended Speed Limit: 25 MPH

This survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic.

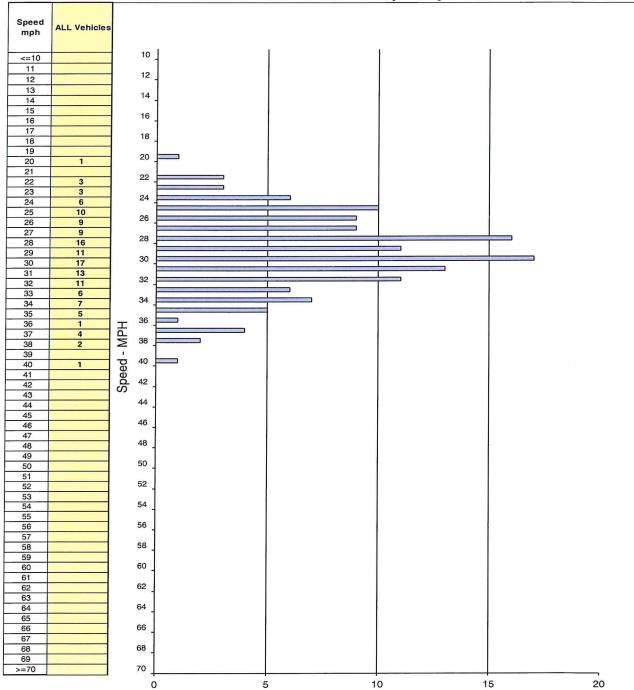
Approved and Authorized for release by the City of Capitola Public Works:

Signed: _____ Title: City Engineer

Steven E. Jesberg

DATE: 1/29/2020 Location: 999 38th Ave

Northbound & Southbound Spot Speeds



Number of Vehicles

				SP	EED PAI	RAMETERS	3		
			50th	85th	10 MPH		Percent		
Class	Count	Range	Percentile	Percentile	Pace	# in Pace	in Pace	%/# Below Pace	% / # Above Pace
ALL	135	20 - 40	29 mph	33 mph	25 - 34	109	81%	9% / 13	10% / 13

Signed:

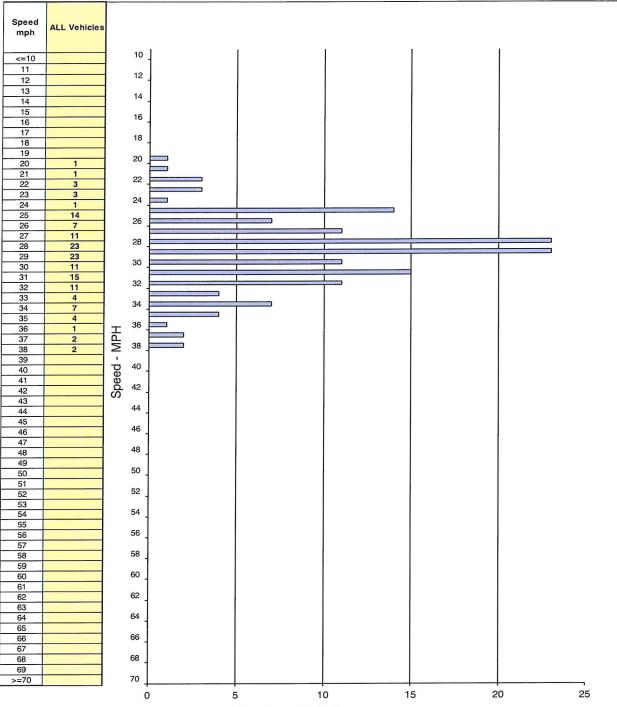
Street: 38th Ave Limits: Between Capitola Rd & Brommer St Direction: NB & SB **Factors** A. Prevailing Speed Data Location of Survey 1465 38th Ave Date of Survey 1/29/2020 Posted Speed Limit (mph) None # Speed Data Collected 144 85th Percentile (mph) 32 mph 10 mph Pace 25-34 Percent in Pace 88% **B.** Traffic Factors Width: 38 Length of Segment (mi.) 0.22 Street Classification Major Collector C. Collision History **Date Range Covered** 1/1/2016-12/31/2019 **Total Accidents** Four total collisions, one fatal injury D. Roadway Conditions It is a primarily residential and business district with a Adjacent Land Use substantial shopping center and apartment complexes in the area. Two-lane roadways. Sidewalks are present on the east Roadway Geometrics and west side of the roadway. After evaluating current critical and pace speeds, it is Comments recommended that a 25-mph speed limit be implemented to be in concurrence with section 2B.13 of the MUTCD. The 25-mph speed limit was obtained by a 5-mph reduction of the critical speed of 30 mph due to the number of access points, Residential district density (as defined in section 515), and pedestrian and bicyclist safety. Speed Limit Change? No **Existing Speed Limit: 25 MPH Recommended Speed Limit: 25 MPH** This survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic. Approved and Authorized for release by the City of Capitola Public Works:

Title: City Engineer

DATE: 1/29/2020 Location: 1465 38th Ave

TIME: 09:30-10:30 Posted Speed: None Clear/Dry Project #: 20-8004-011

Northbound & Southbound Spot Speeds



Number of Vehicles

SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	%/ # Below Pace	%/ # Above Pace
ALL	144	20 - 38	29 mph	32 mph	25 - 34	126	88%	6% / 9	7% / 9

Street: 41st Ave

Limits: Between Cory St & Gross Rd

Direction: NB & SB

Factors

A. <u>Prevailing Speed Data</u>
Location of Survey
41st Ave 500' N/O Gross Rd

Date of Survey
Posted Speed Limit (mph)
None
Speed Data Collected
238
85th Percentile (mph)
30 mph
10 mph Pace
21-30
Percent in Pace
79%

B. Traffic Factors

Width 61' Length of Segment (mi.) 0.18

Street Classification Other Principal Arterial

C. Collision History

Date Range Covered 1/1/2017-12/31/2019
Total Accidents 19 total collisions

D. Roadway Conditions

Adjacent Land Use Adjacent land use is primarily a business district and State

Highway 1.

Roadway Geometrics Five-lane divided roadway with bike lanes sidewalks are

present on the east side and west side of the roadway. Signalized intersection has turn pockets and crosswalks.

Comments After evaluating current critical and pace speeds, it is

recommended that a 30-mph speed limit be implemented to be in concurrence with section 2B.13 of the MUTCD.

Speed Limit Change? Yes

Existing Speed Limit: 35 MPH Recommended Speed Limit: 30 MPH

This survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic.

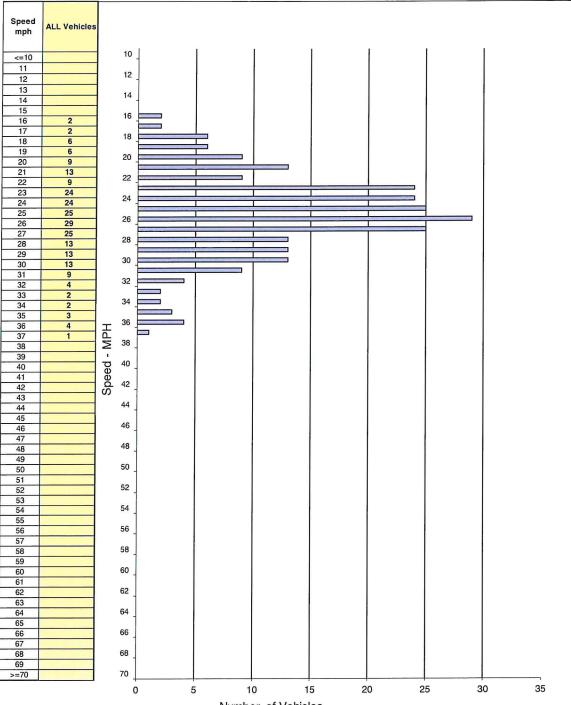
Approved and Authorized for release by the City of Capitola Public Works:

Signed: ______ Title: City Engineer

Steven E. Jesberg

DATE: 1/7/2020 Location: 41st Ave 500' N/O Gross Rd

Northbound & Southbound Spot Speeds



Number of Vehicles

				SP	EED PAI	RAMETERS	3		
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	%/# Below Pace	%/# Above Pace
ALL	238	16 - 37	25 mph	30 mph	21 - 30	188	79%	10% / 25	11% / 25

Street: 41st Ave

Between Gross Rd & Clares St Limits:

Direction: NB & SB

Factors

A. Prevailing Speed Data

2160 41st Ave Location of Survey Date of Survey 1/7/2020 Posted Speed Limit (mph) 35 mph # Speed Data Collected 228 85th Percentile (mph) 31 mph 10 mph Pace 24-33

B. Traffic Factors

Percent in Pace

Width 43' NB and 46' SB

Length of Segment (mi.) 0.20

Street Classification Other Principal Arterial

C. Collision History

Date Range Covered 1/1/2017-12/31/2019

Total Accidents 29 total collisions, one injury

D. Roadway Conditions

Adjacent Land Use Adjacent land use is primarily a business district.

Six-lane divided roadway with raised Medians, and bike Roadway Geometrics

69%

lanes sidewalks are present on the east side and west side of the roadway. Signalized intersection has turn pockets

and crosswalks.

After evaluating current critical and pace speeds, it is Comments

recommended that a 30-mph speed limit be implemented

to be in concurrence with section 2B.13 of the MUTCD.

Speed Limit Change? Yes

Recommended Speed Limit: 30 MPH **Existing Speed Limit: 35MPH**

This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic.

Approved and Authorized for release by the City of Capitola Public Works:

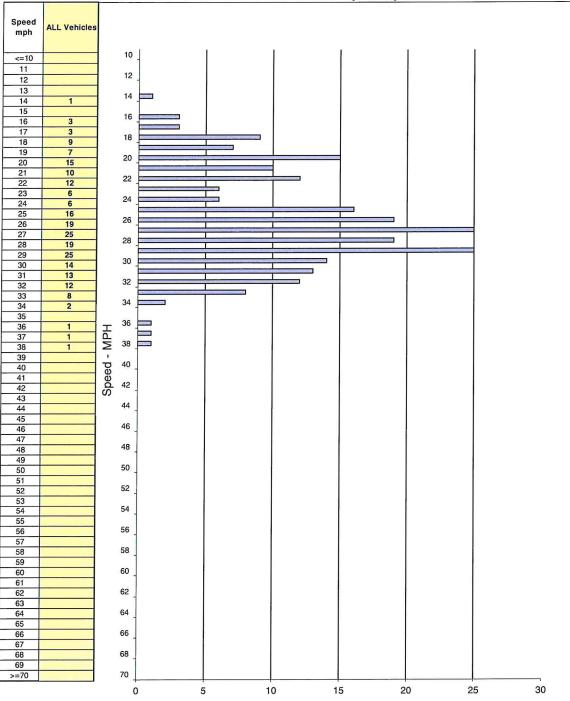
Title: City Engineer Signed:

Steven E. Jesper

 DATE: 1/7/2020
 Location: 2160 41st Ave

 TIME: 10:20-11:20
 Posted Speed: 35 MPH
 Clear/Dry
 Project #: 19-8004-021

Northbound & Southbound Spot Speeds



Number of Vehicles

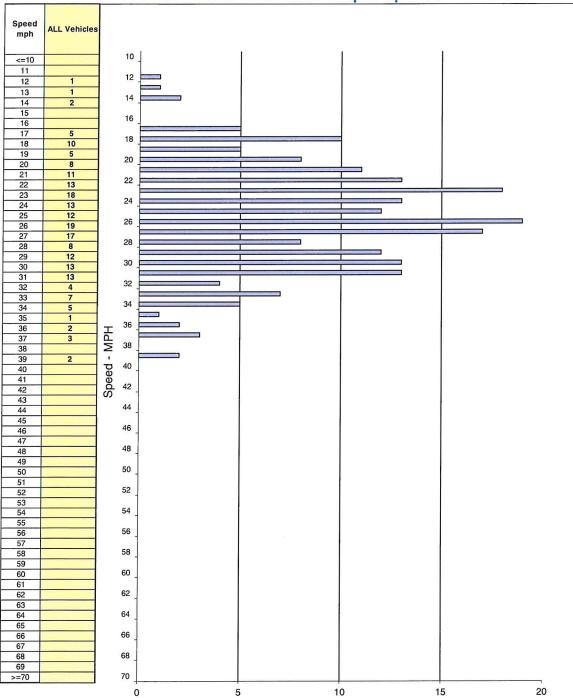
				SP	EED PAR	RAMETERS	3		
			50th	85th	10 MPH		Percent		
Class	Count	Range	Percentile	Percentile	Pace	# in Pace	in Pace	%/ # Below Pace	%/ # Above Pace
ALL	228	14 - 38	27 mph	31 mph	24 - 33	157	69%	28% / 66	3% / 5

Steven E. Jesberg

41st Ave Street: Between Clares St & 41st Mall Entrance Limits: Direction: NB & SB **Factors** A. Prevailing Speed Data 1855 41st Ave Location of Survey Date of Survey 1/7/2020 Posted Speed Limit (mph) 35 mph # Speed Data Collected 205 85th Percentile (mph) 31 mph 22-31 10 mph Pace Percent in Pace 67% **B.** Traffic Factors Width 37' NB and 36' SB Length of Segment (mi.) 0.14 Street Classification Other Principal Arterial C. Collision History 1/1/2017-12/31/2019 Date Range Covered **Total Accidents** Five total collisions D. Roadway Conditions Adjacent land use is primarily a business district with Adjacent Land Use Capitola Mall. A six-lane divided roadway with raised Medians and bike Roadway Geometrics lanes. Sidewalks are present on the east side and west side of the roadway. Signalized intersection has turn pockets and crosswalks. Comments After evaluating current critical and pace speeds, it is recommended that a 30-mph speed limit be implemented to be in concurrence with section 2B.13 of the MUTCD. Speed Limit Change? Yes **Existing Speed Limit: 35 MPH Recommended Speed Limit: 30 MPH** This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic. Approved and Authorized for release by the City of Capitola Public Works: Title: City Engineer Signed:

DATE: 1/7/2020 Location: 1855 41st Ave

Northbound & Southbound Spot Speeds



Number of Vehicles

· · · · · · · · · · · · · · · · · · ·				SP	EED PAR	RAMETERS	3		
			50th	85th	10 MPH		Percent		
Class	Count	Range	Percentile	Percentile	Pace	# in Pace	in Pace	%/ # Below Pace	%/ # Above Pace
ALL	205	12 - 39	26 mph	31 mph	22 - 31	138	67%	20% / 43	12% / 24

Street: 41st Ave

Limits: Between 41st Ave Mall Entrance & Capitola Rd

Direction: NB & SB



Factors A. Prevailing Speed Data

Location of Survey 1805 41st Ave Date of Survey 1/7/2020 Posted Speed Limit (mph) 35 mph # Speed Data Collected 232 85th Percentile (mph) 31 mph 10 mph Pace 22-31 Percent in Pace 71%

B. Traffic Factors

Width 37' NB and 36' SB

Length of Segment (mi.) 0.19

Street Classification Other Principal Arterial

C. Collision History

Date Range Covered 1/1/2016-12/31/2019 **Total Accidents** Five total collisions

D. Roadway Conditions

Adjacent land use is generally commercial with Capitola Adjacent Land Use

Mall.

Six-to-five-lane divided roadway with raised Medians, and Roadway Geometrics

bike lanes sidewalks are present on the east side and west

side of the roadway. Signalized intersection has turn

pockets and crosswalks.

Comments After evaluating current critical and pace speeds, it is

recommended that a 30-mph speed limit be implemented

to be in concurrence with section 2B.13 of the MUTCD.

Speed Limit Change? Yes

Existing Speed Limit: 35 MPH Recommended Speed Limit: 30 MPH

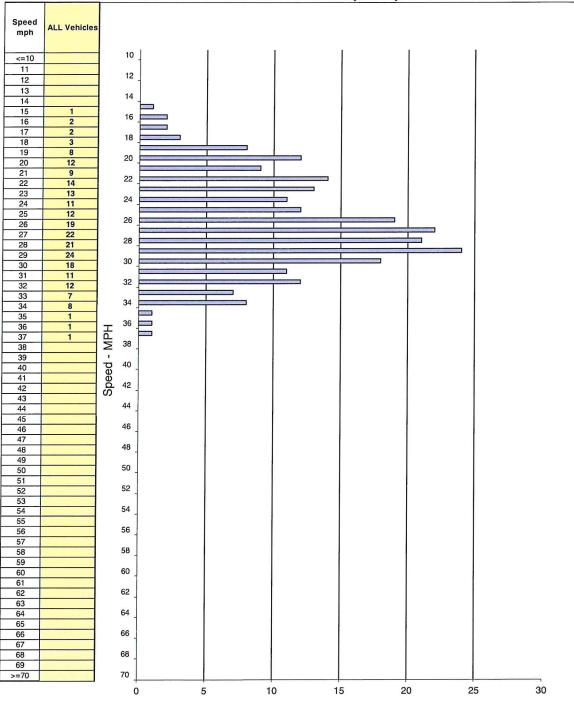
This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic.

Approved and Authorized for release by the City of Capitola Public Works:

Signed: Steven E. Jesberg Title: City Engineer

DATE: 1/7/2020 Location: 1805 41st Ave

Northbound & Southbound Spot Speeds



Number of Vehicles

				SP	EED PA	RAMETERS	3		
			50th	85th	10 MPH		Percent		
Class	Count	Range	Percentile	Percentile	Pace	# in Pace	in Pace	%/ # Below Pace	%/ # Above Pace
ALL	232	15 - 37	27 mph	31 mph	22 - 31	165	71%	15% / 37	13% / 30

41st Ave Street:

Limits: Between Capitola Rd & Jade St/ Brommer St

Direction: NB & SB

Factors A.

Prevailing Speed Data	
Location of Survey	1549 41st Ave
Date of Survey	1/7/2020
Posted Speed Limit (mph)	35 mph
# Speed Data Collected	227
85 th Percentile (mph)	30 mph
10 mph Pace	22-31
Percent in Pace	73%

B. Traffic Factors

Width 35' NB 34' SB

Length of Segment (mi.) 0.25

Street Classification Other Principal Arterial

C. Collision History

Date Range Covered 1/1/2017-12/31/2019

Total Accidents 11 total collisions, nine injury

D. Roadway Conditions

Adjacent land use is primarily a business district, with a Adjacent Land Use

substantial hotel in the area.

Five-to-four-lane divided roadway with raised Medians, and Roadway Geometrics

bike lanes sidewalks are present on the east side and west

side of the roadway. Signalized intersection has turn

pockets and crosswalks.

Comments After evaluating current critical and pace speeds, it is

recommended that a 30-mph speed limit be implemented

to be in concurrence with section 2B.13 of the MUTCD.

Speed Limit Change? Yes

Existing Speed Limit: 35 MPH Recommended Speed Limit: 30 MPH

This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic.

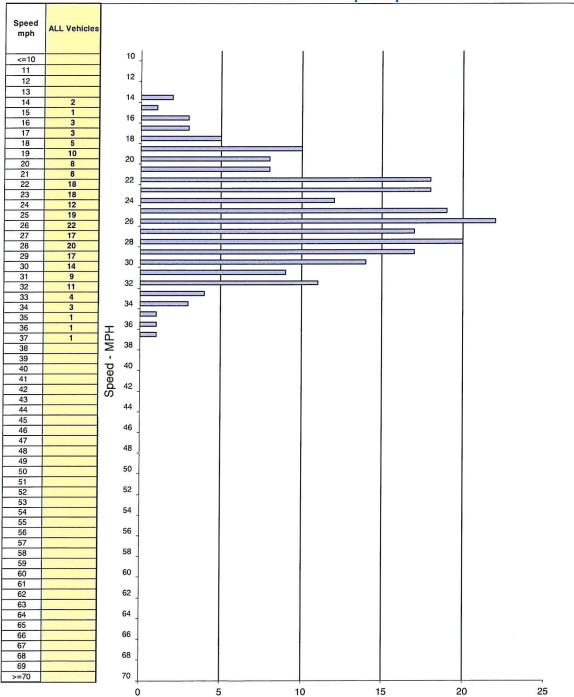
Approved and Authorized for release by the City of Capitola Public Works:

Title: City Engineer Signed:

Steven E. Jesberg

DATE: 1/7/2020 Location: 1549 41st Ave
TIME: 14:15-15:00 Posted Speed: 35 MPH Clear/Dry Project #: 19-8004-024

Northbound & Southbound Spot Speeds



Number of Vehicles

SPEED PARAMETERS										
			50th	85th	10 MPH		Percent			
Class	Count	Range	Percentile	Percentile	Pace	# in Pace	in Pace	%/ # Below Pace	%/ # Above Pace	
ALL	227	14 - 37	26 mph	30 mph	22 - 31	166	73%	17% / 40	10% / 21	

Signed:

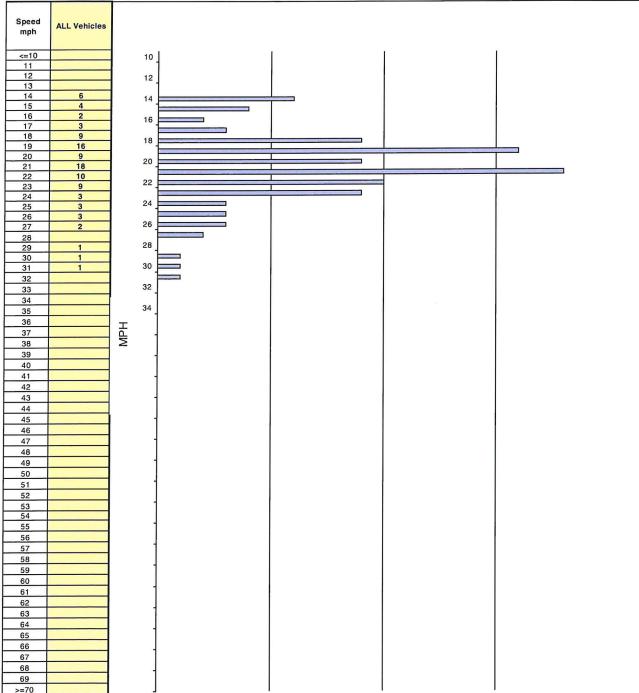
Street: 47th Ave Limits: Between Capitola Rd & Topaz St Direction: NB & SB **Factors** A. Prevailing Speed Data 1698 47th Ave Location of Survey Date of Survey 1/14/2020 Posted Speed Limit (mph) 25 mph # Speed Data Collected 100 85th Percentile (mph) 23 mph 10 mph Pace 15-24 Percent in Pace 89% **B. Traffic Factors** 30' Width Length of Segment (mi.) 0.22 Street Classification Major Collector C. Collision History 1/1/2017-12/31/2019 Date Range Covered **Total Accidents** Zero D. Roadway Conditions Adjacent Land Use It is a primarily residential district. Two-lane roadways. Sidewalks are present on some parts Roadway Geometrics of the east and west side of the roadway. Speed tables are present. Results of the attached engineering & traffic survey Comments information support maintaining the existing 25 mph speed limit. Speed Limit Change? No **Recommended Speed Limit: 25 MPH Existing Speed Limit: 25 MPH** This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic. Approved and Authorized for release by the City of Capitola Public Works:

Title: City Engineer

DATE: 1/14/20 TIME: 09:00-10:25 Location: 1698 47th Ave Posted Speed: 25 MPH C

Clear/Dry Project #: 20-8004-018

Northbound & Southbound Spot Speeds



SPEED PARAMETERS										
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace	
ALL	100	14 - 31	21 mph	23 mph	15 - 24	89	89%	6% / 6	5% / 5	

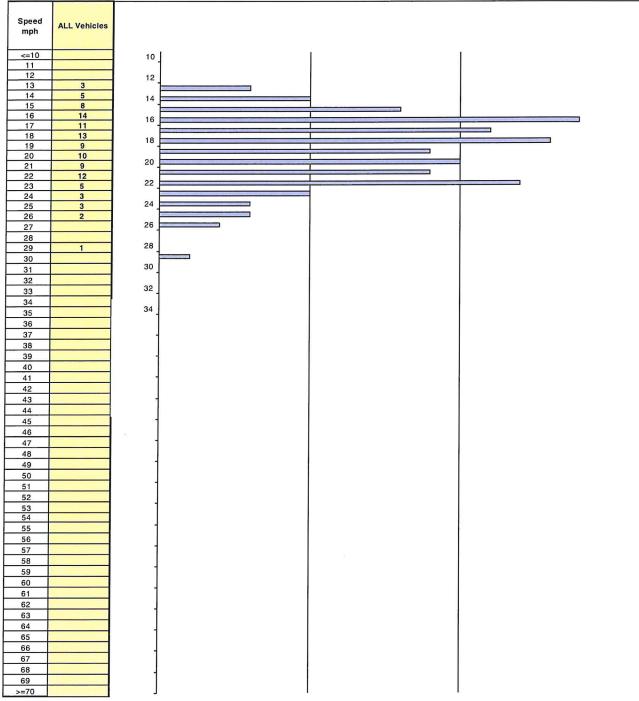
Steven E. Jesbe

47th Ave Street: Between Topaz St & Portola Dr Limits: Direction: NB & SB **Factors** A. Prevailing Speed Data 16 47th Ave Location of Survey Date of Survey 1/14/2020 Posted Speed Limit (mph) 25 mph # Speed Data Collected 108 85th Percentile (mph) 22 mph 10 mph Pace 15-24 Percent in Pace 92% **B.** Traffic Factors Average Daily Traffic (ADT) 36 Length of Segment (mi.) 0.12 Street Classification Major Collector C. Collision History **Date Range Covered** 1/1/2017-12/31/2019 **Total Accidents** Zero D. Roadway Conditions Adjacent Land Use It is a primarily residential district with a substantial park in the area. Two-lane roadways. Sidewalks are present on some parts Roadway Geometrics of the east and west side of the roadway. Speed tables are present. Results of the attached engineering & traffic survey Comments information support maintaining the existing 25 mph speed limit. Speed Limit Change? No **Recommended Speed Limit: 25 MPH Existing Speed Limit: 25 MPH** This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic. Approved and Authorized for release by the City of Capitola Public Works: Title: City Engineer Signed:

Location: 16 47th Ave

DATE: 1/14/20 TIME: 10:30-11:30 Posted Speed: 25 MPH Clear/Dry Project #: 20-8004-019

Northbound & Southbound Spot Speeds



	SPEED PARAMETERS										
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace		
ALL	108	13 - 29	18 mph	22 mph	15 - 24	99	92%	7% / 8	1% / 1		

Street: 49th Ave

Limits: Between Capitola Rd & Wharf Rd

Direction: NB & SB



Factors A. Prevailing Speed Data

Location of Survey
Date of Survey
Posted Speed Limit (mph)
Speed Data Collected
115
85th Percentile (mph)
10 mph Pace
Percent in Pace
1745 49th Ave
1/23/2020
25 mph
115
31
22-31
78%

B. Traffic Factors

Width: 28 Length of Segment (mi.) 0.13

Street Classification Minor Arterial

C. Collision History

Date Range Covered 1/1/2017-12/31/2019
Total Accidents One total collision

D. Roadway Conditions

Adjacent Land Use It is a primarily residential district and business parking lot.

Roadway Geometrics Two-lane roadways. Sidewalks are present on the part of

the east side of the roadway.

Comments

After evaluating current critical and pace speeds, it is

recommended that a 25-mph speed limit be implemented to be in concurrence with section 2B.13 of the MUTCD. The 25-mph speed limit was obtained by a 5-mph reduction of the critical speed of 30mph due to the number of access points, Residential district density (as defined in

section 515), and pedestrian and bicyclist safety.

Speed Limit Change? No

Existing Speed Limit: 25 MPH Recommended Speed Limit: 25 MPH

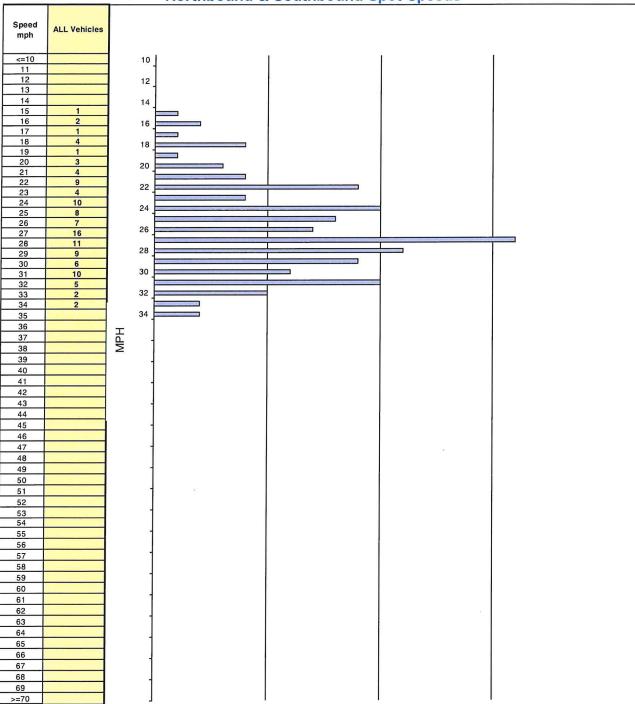
This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic.

Approved and Authorized for release by the City of Capitola Public Works:

Signed: ______ Title: City Engineer

Steven E. Jesberg

Northbound & Southbound Spot Speeds



	SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace	
ALL	115	15 - 34	27 mph	31 mph	22 - 31	90	78%	13% / 16	8% / 9	

Street: Bay Ave

Limits: Between SR 1 & S. Main St

Direction: NB & SB



Factors

A.	Prevailing Speed Data	
	Location of Survey	Bay Ave 100' S/O S Main St.

Date of Survey 01/29/2020

Posted Speed Limit (mph)
Speed Data Collected
103
85th Percentile (mph)
25
10 mph Pace
15-24
Percent in Pace
82%

B. Traffic Factors

Width: 89' Length of Segment (mi.) 0.06

Street Classification Minor Arterial

C. Collision History

Date Range Covered

Total Accidents

1/1/2017-12/31/2019

6

Six total, two injury

D. Roadway Conditions

Adjacent Land Use It is primarily a business district.

Roadway Geometrics Four-lane roadways. Sidewalks are present on the east

and west side of the roadway. Signalized intersection has

turn pockets and crosswalks.

Comments Results of the attached engineering & traffic survey

information support maintaining the existing 25 mph speed

limit.

Speed Limit Change?

Existing Speed Limit: 25 MPH Recommended Speed Limit: 25 MPH

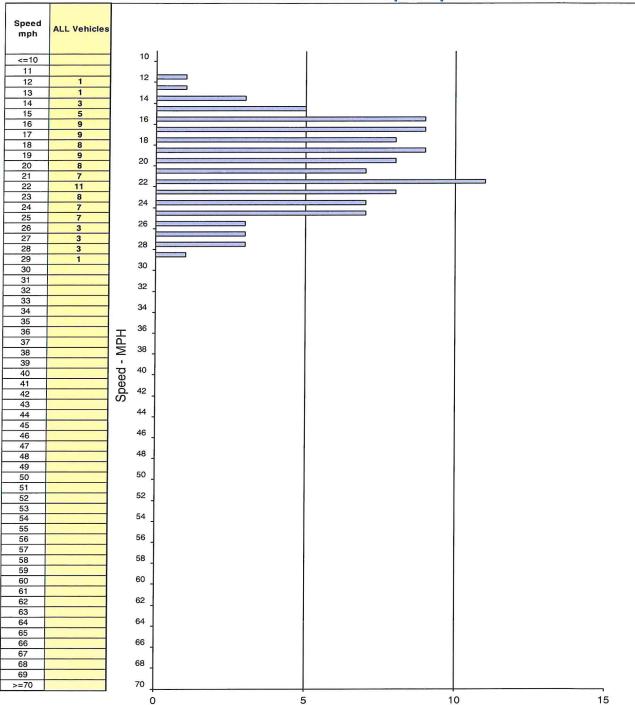
This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic.

Approved and Authorized for release by the City of Capitola Public Works:

Signed: ______ Title: City Engineer

DATE: 1/29/2020 Location: Bay Ave 100' S/O S Main St

Northbound & Southbound Spot Speeds



Number of Vehicles

SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	103	12 - 29	20 mph	25 mph	15 - 24	84	82%	4% / 5	14% / 14

Street: Bay Ave Limits: Between Hill St & SR1 Direction: NB & SB **Factors** A. Prevailing Speed Data Location of Survey 800 Bay Ave. 01/15/2020 Date of Survey Posted Speed Limit (mph) 25 # Speed Data Collected 159 85th Percentile (mph) 31 10 mph Pace 24-33 Percent in Pace 90% **B.** Traffic Factors 69' Width Length of Segment (mi.) 0.11 Street Classification Minor Arterial C. Collision History Date Range Covered 1/1/2017-12/31/2019 **Total Accidents** Seven total, two injury D. Roadway Conditions It is primarily a business district with a substantial shopping Adjacent Land Use center, business center, and senior center border the roadway. Roadway Geometrics Four-lane roadways. Sidewalks are present on the east and west side of the roadway. Signalized intersection has turn pockets and crosswalks.

Comments After evaluating current critical and pace speeds, it is recommended that a 25-mph speed limit be implemented to be in concurrence with section 2B.13 of the MUTCD.

The 25-mph speed limit was obtained by a 5-mph reduction of the critical speed of 30mph due to the number of access points, Residential district density (as defined in

section 515), and pedestrian and bicyclist safety.

Speed Limit Change? No

Recommended Speed Limit: 25 MPH **Existing Speed Limit: 25 MPH**

This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic.

Approved and Authorized/for release by the City of Capitola Public Works:

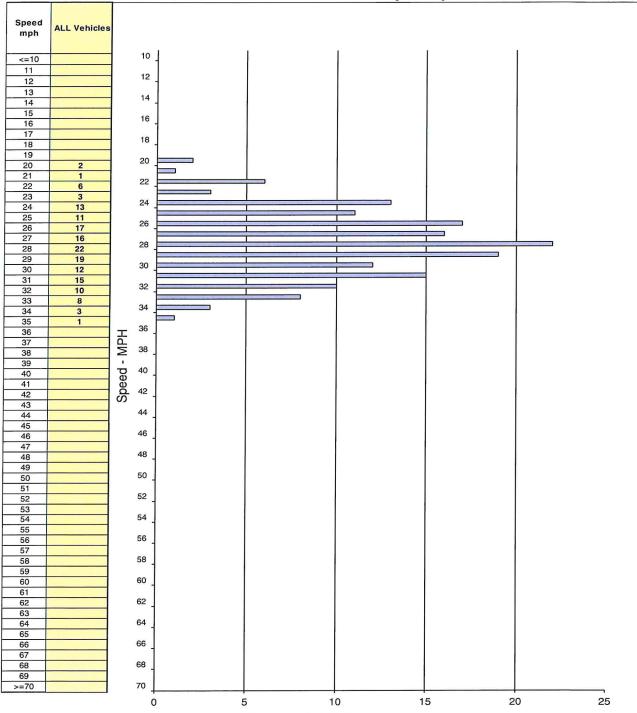
Signed: Title: City Engineer

Steven E. Jesberg

35

DATE: 1/15/2020 Location: 800 Bay Ave

Northbound & Southbound Spot Speeds



Number of Vehicles

				SP	EED PAI	RAMETERS	3		
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	%/# Below Pace	%/# Above Pace
ALL	159	20 - 35	28 mph	31 mph	24 - 33	143	90%	7% / 12	3% / 4

Street: Bay Ave Between Capitola Ave & Hill St Limits: Direction: NB & SB **Factors** A. Prevailing Speed Data Location of Survey 831 Bay Ave. Date of Survey 01/15/2020 Posted Speed Limit (mph) 25 # Speed Data Collected 180 85th Percentile (mph) 28 10 mph Pace 18-27 Percent in Pace 82% **B. Traffic Factors** Width: 53' 0.21 Length of Segment (mi.) Street Classification Minor Arterial C. Collision History Date Range Covered 1/1/2017-12/31/2019 **Total Accidents** Four total collisions, two Injury D. Roadway Conditions It is a primarily residential and business district, A Adjacent Land Use substantial senior center apartment complex, and a shopping center.

Roadway Geometrics

Four-lane roadways convert into a two-lane roadway with sidewalks present on the east and west side of the roadway. The segment features a steady incline.

rodundy. The deginent realists a clearly member

After evaluating current critical and pace speeds, it is recommended that a 25-mph speed limit be implemented to be in concurrence with section 2B.13 of the MUTCD. The 25-mph speed limit was obtained by a 5-mph reduction of the critical speed of 30mph due to the number of access points, Residential district density (as defined in

section 515), and pedestrian and bicyclist safety.

Speed Limit Change? No

Existing Speed Limit: 25 MPH Recommended Speed Limit: 25 MPH

This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic.

Approved and Authorized for release by the City of Capitola Public Works:

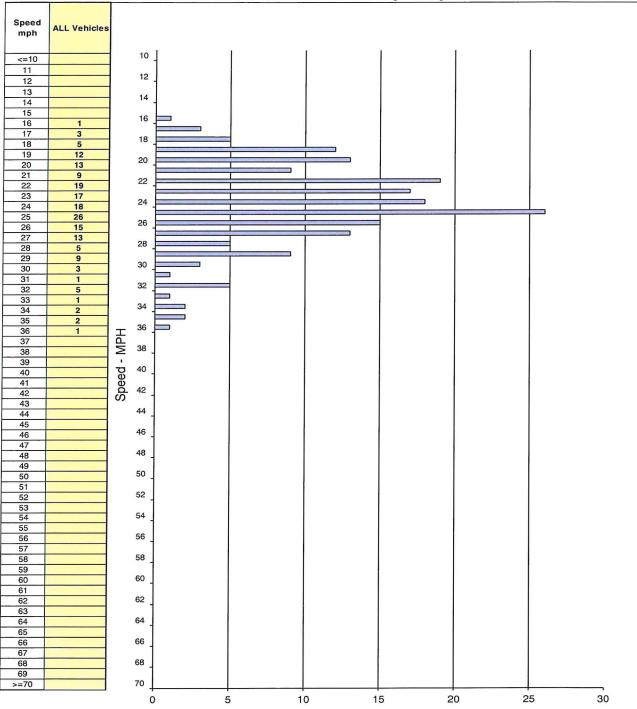
Signed: _____ Title: City Engineer

Steven E. Jesberg

Comments

DATE: 1/15/2020 Location: 831 Bay Ave

Northbound & Southbound Spot Speeds



Number of Vehicles

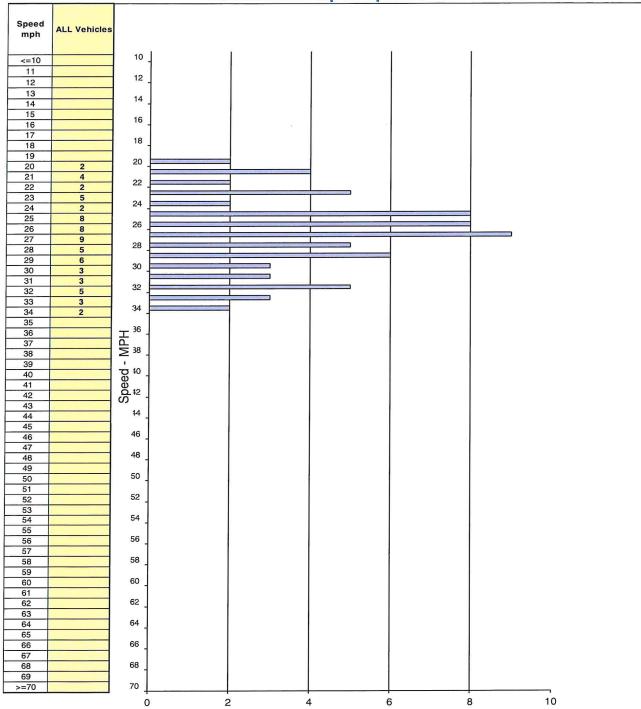
				SP	EED PAI	RAMETERS	3		
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	%/# Below Pace	%/# Above Pace
ALL	180	16 - 36	24 mph	28 mph	18 - 27	147	82%	2% / 4	17% / 29

	rey Ave & Capitola Ave
Direction: NB &SB	Wooding
Factors	
A. Prevailing Speed Data	
Location of Survey	380 Bay Ave.
Date of Survey	01/15/2020
Posted Speed Limit (mph)	25
# Speed Data Collected	138
85 th Percentile (mph)	31
10 mph Pace	23-32
Percent in Pace	80%
B. <u>Traffic Factors</u>	
Width:	40'
Length of Segment (mi.)	0.21
Street Classification	Minor Arterial
C. Collision History	
Date Range Covered	1/1/2017-12/31/2019
Total Accidents	Five total collisions, one Injury
D. Roadway Conditions	
Adjacent Land Use	It is a primarily residential and business district.
Roadway Geometrics	Two-lane roadways. Sidewalks are present on the east and west side of the roadway.
Comments	After evaluating current critical and pace speeds, it is recommended that a 25-mph speed limit be implemented to be in concurrence with section 2B.13 of the MUTCD. The 25-mph speed limit was obtained by a 5-mph reduction of the critical speed of 30mph due to the number of access points, Residential district density (as defined in section 515), and pedestrian and bicyclist safety.
Speed Limit Change?	No
Existing Speed Limit: 25 MPH	Recommended Speed Limit: 25 MPH
	22 of the California Vehicle Code section 2B.13 of the California oriate to facilitate the safe and orderly movement of traffic.
Approved and Authorized for release by the Ci	
Signed: Steven E. Jesberg	Title: City Engineer
V	

DATE: 1/15/2020 TIME: 10:30-11:40

Location: 380 Bay Ave
Posted Speed: 25 MPH Clear/Dry Project #: 20-8004-050

Northbound Spot Speeds



Number of Vehicles

	SPEED PARAMETERS								
			50th	85th	10 MPH		Percent		
Class	Count	Range	Percentile	Percentile	Pace	# in Pace	in Pace	%/ # Below Pace	% / # Above Pace
ALL	67	20 - 34	27 mph	31 mph	23 - 32	54	81%	11% / 8	8% / 5

Street: Brommer St

Limits: Between 38th Ave & 41th Ave

Direction: EB & WB



Factors A. Prevailing Speed Data

Location of Survey

Date of Survey

3865 Brommer St.
01/13/2020

Posted Speed Limit (mph) 25
Speed Data Collected 219
85th Percentile (mph) 27

10 mph Pace 19-28 Percent in Pace 86%

B. Traffic Factors

Width: 39' Length of Segment (mi.) 0.12

Street Classification Minor Arterial

C. Collision History

Date Range Covered 1/1/2017-12/31/2019
Total Accidents One total collision

D. Roadway Conditions

Adjacent Land Use It is a primarily residential and business district.

Roadway Geometrics Two-lane roadways. Sidewalks are present on the north

and south side of the roadway.

Comments Results of the attached engineering & traffic survey

information support maintaining the existing 25 mph speed

limit.

Speed Limit Change? No

Existing Speed Limit: 25 MPH Recommended Speed Limit: 25 MPH

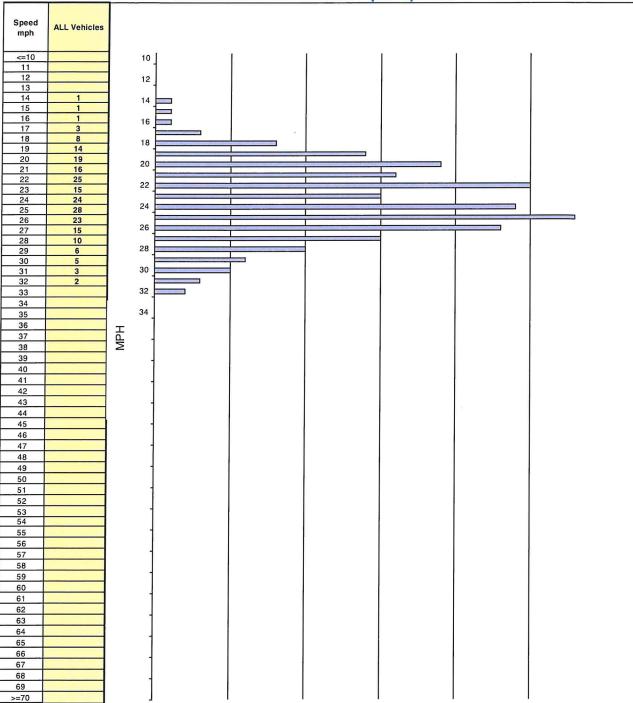
This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic.

Approved and Authorized for release by the City of Capitola Public Works:

Signed: ______ Title: City Engineer

 DATE: 1/13/20
 Location: 3865 Brommer St

 TIME: 12:15-12:55
 Posted Speed: 25 MPH
 Clear/Dry
 Project #: 20-8004-014



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	219	14 - 32	24 mph	27 mph	19 - 28	189	86%	6% / 14	8% / 16

Street: Capitola Ave Between Hill St & City Limit Limits: Direction: NB & SB **Factors** A. Prevailing Speed Data Location of Survey 2551 Capitola Ave. 01/29/2020 Date of Survey Posted Speed Limit (mph) 25 # Speed Data Collected 253 85th Percentile (mph) 32 10 mph Pace 25-34 Percent in Pace 89% **B.** Traffic Factors Width 36 Length of Segment (mi.) 0.38 Street Classification Minor Arterial C. Collision History 1/1/2017-12/31/2019 **Date Range Covered Total Accidents** Four total collisions, one injury D. Roadway Conditions It is s primarily residential district with substantial Apartment Adjacent Land Use complexes and a substantial mobile home complex. Two-lane roadways. Sidewalks are present on the east Roadway Geometrics and west sides of the roadway. The segment features a steady incline. Comments After evaluating current critical and pace speeds, it is recommended that a 25-mph speed limit be implemented to be in concurrence with section 2B.13 of the MUTCD. The 25-mph speed limit was obtained by a 5-mph reduction of the critical speed of 30 mph due to the number of access points, Residential district density (as defined in section 515), and pedestrian and bicyclist safety.

Speed Limit Change?

Existing Speed Limit: 25 MPH Recommended Speed Limit: 25 MPH

This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic.

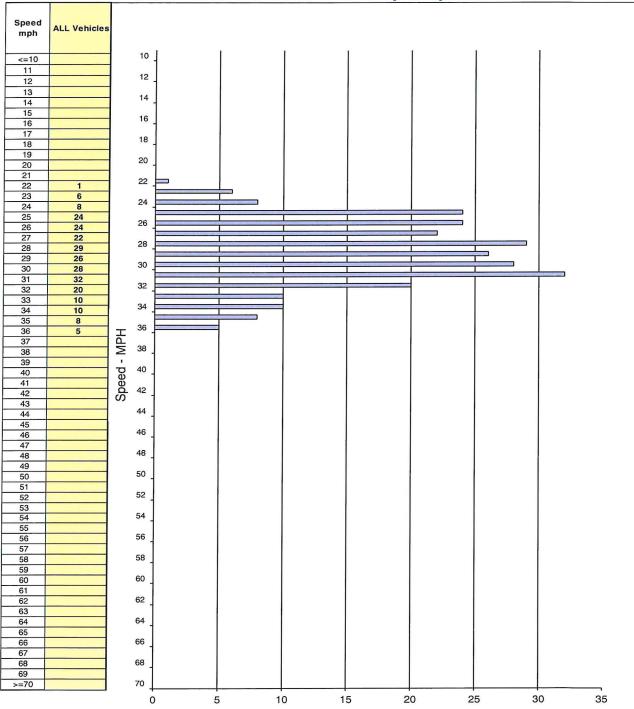
No

Approved and Authorized for release by the City of Capitola Public Works:

Signed: ______Title: City Engineer

DATE: 1/29/2020 Location: 2551 Capitola Ave

Northbound & Southbound Spot Speeds



Number of Vehicles

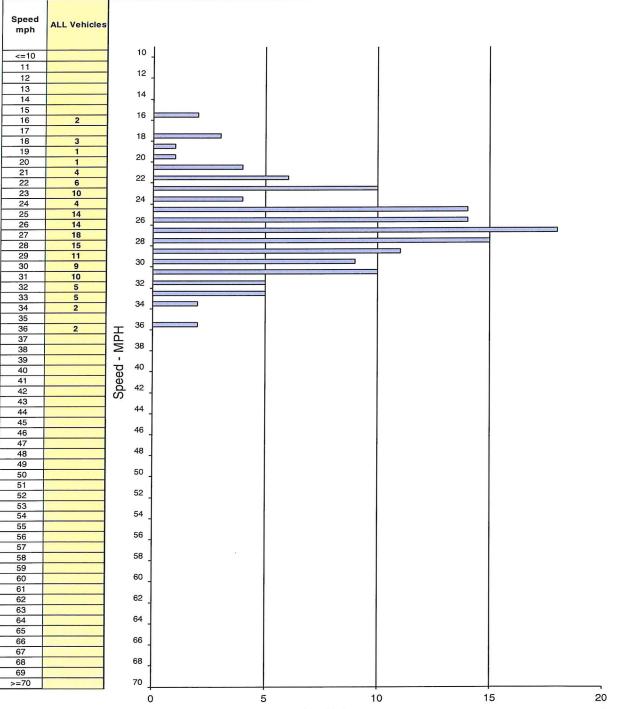
				SP	EED PAI	RAMETERS	3		
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	%/# Below Pace	% / # Above Pace
ALL	253	22 - 36	29 mph	32 mph	25 - 34	225	89%	5% / 15	6% / 13

Street: Capitola Ave Limits: Between Bay Ave & Hill St Direction: NB & SB **Factors** A. Prevailing Speed Data Location of Survey 804 Capitola Ave Date of Survey 01/15/2020 Posted Speed Limit (mph) 25 # Speed Data Collected 136 85th Percentile (mph) 31 10 mph Pace 22-31 Percent in Pace 82% **B.** Traffic Factors Width: 38' 0.20 Length of Segment (mi.) Street Classification Minor Arterial C. Collision History **Date Range Covered** 1/1/2017-12/31/2019 **Total Accidents** Five total accidents D. Roadway Conditions It is a primarily residential and business district, with an Adjacent Land Use apartment complex and a substantial business. Two-lane roadways. Sidewalks are present on the east Roadway Geometrics and west sides of the roadway. The segment features a steady incline between Pine St and Hill St. Comments After evaluating current critical and pace speeds, it is recommended that a 25-mph speed limit be implemented to be in concurrence with section 2B.13 of the MUTCD. The 25-mph speed limit was obtained by a 5-mph reduction of the critical speed of 30 mph due to the number of access points, Residential district density (as defined in section 515), and pedestrian and bicyclist safety. Speed Limit Change? No **Existing Speed Limit: 25 MPH Recommended Speed Limit: 25 MPH** This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic. Approved and Authorized for release by the City of Capitola Public Works: Signed: Title: City Engineer

. Jesberg

DATE: 1/15/2020 Location: 804 Capitola Ave

Northbound & Southbound Spot Speeds



Number of Vehicles

	SPEED PARAMETERS									
			50th	85th	10 MPH		Percent			
Class	Count	Range	Percentile	Percentile	Pace	# in Pace	in Pace	%/# Below Pace	%/ # Above Pace	
ALL	136	16 - 36	27 mph	31 mph	22 - 31	111	82%	8% / 11	11% / 14	

Street: Capitola Ave Limits: Between Bay Ave & Beverly Ave Direction: NB & SB **Factors** A. Prevailing Speed Data Location of Survey 607 Capitola Ave 01/14/2020 Date of Survey Posted Speed Limit (mph) 25 # Speed Data Collected 202 85th Percentile (mph) 27 10 mph Pace 18-27 Percent in Pace 84% **B.** Traffic Factors 43' Width: Length of Segment (mi.) 0.11 Street Classification Minor Arterial C. Collision History Date Range Covered 1/1/2017-12/31/2019 **Total Accidents** Five total accidents, two injury D. Roadway Conditions It is a primarily residential and business district. Adjacent Land Use Two-lane roadways. Sidewalks are present on the east Roadway Geometrics and west sides of the roadway. The segment features a steady incline. Results of the attached engineering & traffic survey Comments information support maintaining the existing 25 mph speed limit. Speed Limit Change? No **Recommended Speed Limit: 25 MPH Existing Speed Limit: 25 MPH** This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California

MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic.

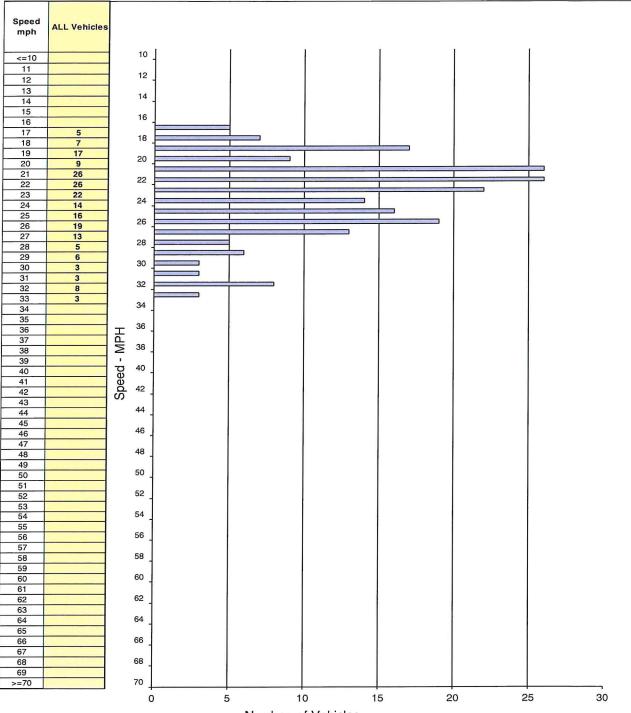
Approved and Authorized for release by the City of Capitola Public Works:

Title: City Engineer Signed:

DATE: 1/14/2020 Location: 607 Capitola Ave

TIME: 15:20-16:00 Posted Speed: 25 MPH Clear/Dry Project #: 20-8004-047

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	%/# Below Pace	%/ # Above Pace
ALL	202	17 - 33	23 mph	27 mph	18 - 27	169	84%	2% / 5	14% / 28

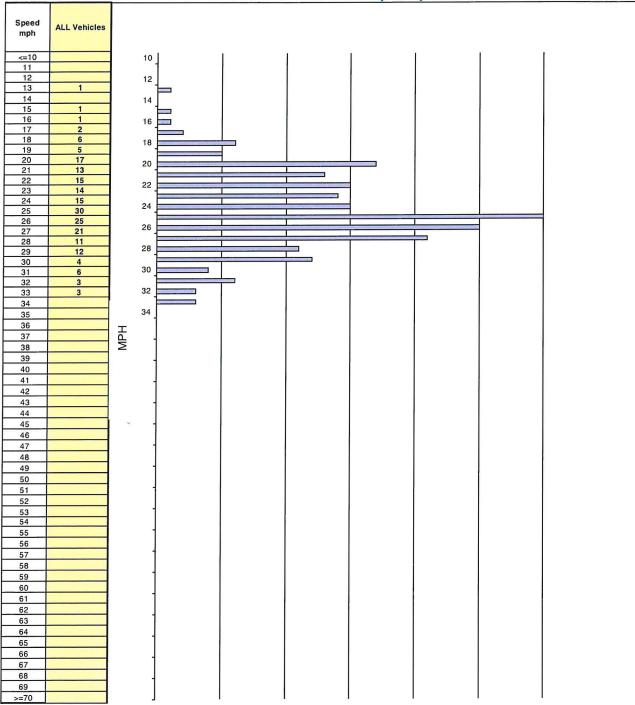
Street: Capitola Ave Limits: Between Riverview Dr & Beverly Ave Direction: NB & SB **Factors** A. Prevailing Speed Data Location of Survey 518 Capitola Ave. 01/14/2020 Date of Survey Posted Speed Limit (mph) 25 # Speed Data Collected 205 85th Percentile (mph) 28 10 mph Pace 20-29 Percent in Pace 84% **B.** Traffic Factors 42 Width: Length of Segment (mi.) 0.13 Street Classification Minor Arterial C. Collision History **Date Range Covered** 1/1/2017-12/31/2019 **Total Accidents** Two total Collisions D. Roadway Conditions It is primarily a business district. A senior center, hotel, and Adjacent Land Use extensive shopping center and business complexes Four-lane roadways. Sidewalks are present on the east Roadway Geometrics and west side of the roadway. A signalized intersection has turn pockets and crosswalks. Comments After evaluating current critical and pace speeds, it is recommended that a 25-mph speed limit be implemented to be in concurrence with section 2B.13 of the MUTCD. The 25-mph speed limit was obtained by a 5-mph reduction of the critical speed of 30 mph due to the number of access points. Residential district density (as defined in section 515), and pedestrian and bicyclist safety. Speed Limit Change? No **Existing speed Limit: 25 MPH Recommended Speed Limit: 25 MPH** This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic. Approved and Authorized for release by the City of Capitola Public Works:

Signed: ______ Title: City Engineer

 DATE: 1/14/20
 Location: 518 Capitola Ave

 TIME: 14:30-15:15
 Posted Speed: 25 MPH
 Clear/Dry
 Project #: 20-8004-046

Northbound & Southbound Spot Speeds



	SPEED PARAMETERS								
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	205	13 - 33	25 mph	28 mph	20 - 29	173	84%	7% / 16	8% / 16

Capitola Ave Street: Limits: Between Stockton Ave & Riverview Dr Direction: NB & SB **Factors** A. Prevailing Speed Data Location of Survey 403 Capitola Ave. Date of Survey 01/29/2020 Posted Speed Limit (mph) 25 # Speed Data Collected 136 85th Percentile (mph) 25 10 mph Pace 17-26 Percent in Pace 93% **B.** Traffic Factors 35 Width: 0.17 Length of Segment (mi.) Street Classification Minor Arterial C. Collision History **Date Range Covered** 1/1/2017-12/31/2019 **Total Accidents** Six total accidents, two injuries D. Roadway Conditions It is a primarily residential and business district. Adjacent Land Use Two-lane roadways. Sidewalks are present on the east Roadway Geometrics and west side of the roadway. Results of the attached engineering & traffic survey Comments information support maintaining the existing 25 mph speed limit. Speed Limit Change? No **Existing Speed Limit: 25 MPH** Recommended Speed Limit: 25 MPH This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic.

Approved and Authorized for release by the City of Capitola Public Works:

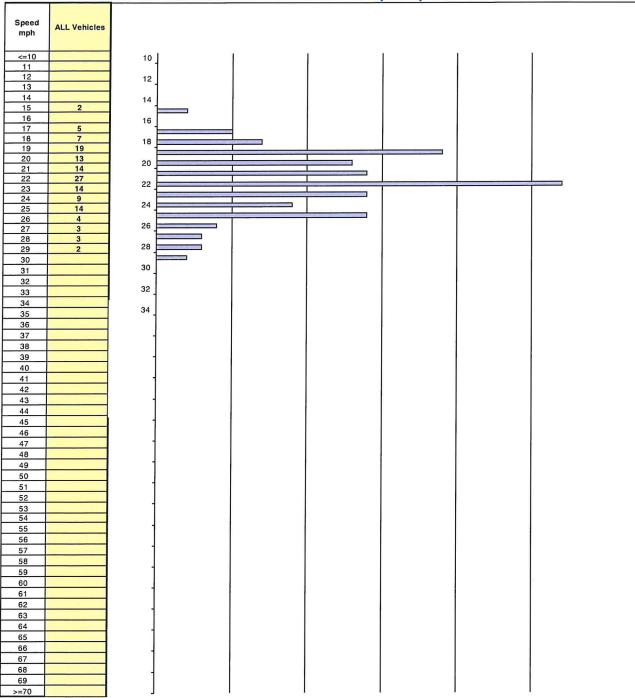
Signed: ______ Title: City Engineer Steven E. Jesberg

DATE: 1/29/20

Location: 403 Capitola Ave osted Speed: 25 MPH Clear/Dry

 Project #: 20-8004-045

Northbound & Southbound Spot Speeds



	SPEED PARAMETERS								
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	136	15 - 29	22 mph	25 mph	17 - 26	126	93%	1% / 2	6% / 8

Street: Capitola Ave Limits: Between Monterey Ave & Stockton Ave Direction: NB & SB **Factors** A. Prevailing Speed Data Location of Survey 202 Capitola Ave. 1/29/2020 Date of Survey Posted Speed Limit (mph) 25 # Speed Data Collected 148 85th Percentile (mph) 24 10 mph Pace 16-25 Percent in Pace 90% **B.** Traffic Factors 34' Width Length of Segment (mi.) 0.08 Street Classification Minor Arterial C. Collision History Date Range Covered 1/1/2017-12/31/2019 **Total Accidents** Two total accidents, one Injury D. Roadway Conditions It is a primarily residential and business district. Adjacent Land Use Two-lane roadways. Sidewalks are present on the east Roadway Geometrics and west side of the roadway. Results of the attached engineering & traffic survey Comments information support maintaining the existing 25 mph speed limit.

Speed Limit Change?	No

Existing Speed Limit: 25 MPH Recommended Speed Limit: 25 MPH

This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic.

Approved and Authorized for release by the City of Capitola Public Works:

Signed: ______ Title: City Engineer Steven E. Jesberg

Northbound & Southbound Spot Speeds

DATE: 1/29/20

Location: 202 Capitola Ave Posted Speed: 25 MPH Clea

TIME: 13:15-14:15

Clear/Dry

Project #: 20-8004-044

Speed **ALL Vehicles** mph 15 18 16 22 11 11 12 21 23 24 25 26 28 43 54

	SPEED PARAMETERS											
			50th	85th	10 MPH		Percent in					
Class	Count	Range	Percentile	Percentile	Pace	# in Pace	Pace	% / # Below Pace	% / # Above Pace			
ALL	148	14 - 29	21 mph	24 mph	16 - 25	133	90%	4% / 6	7% / 9			

Street: Capitola Road Limits: Between 30th and Clares Street Direction: EB & WB **Factors** A. Prevailing Speed Data Location of Survey Capitola Rd @ Shirley Ln Date of Survey 1/6/2020 Posted Speed Limit (mph) 25 # Speed Data Collected 201 85th Percentile (mph) 30 10 mph Pace 22-31 Percent in Pace 77% **B.** Traffic Factors 26' Width Length of Segment (mi.) 0.06 Street Classification Other Principal Arterial C. Collision History 1/1/2017-12/31/2019 **Date Range Covered** Five total collisions, two injury **Total Accidents** D. Roadway Conditions Adjacent land use is primarily residential with the Landing Adjacent Land Use Apartments and homes on Capitola Rd. Four-Lane divided roadways with raised medians and bike Roadway Geometrics lanes sidewalks are present on the north side and south side of the roadway. A signalized intersection has a turn pocket and a crosswalk.

Comments After evaluating current critical and pace speeds, it is recommended that a 25-mph speed limit be implemented

to be in concurrence with section 2B.13 of the MUTCD. The 25-mph speed limit was obtained by a 5-mph reduction of the critical speed of 30 mph due to the number

of access points, Residential district density (as defined in section 515), and pedestrian and bicyclist safety.

No Speed Limit Change?

Existing Speed Limit: 25 MPH Recommended Speed Limit: 25 MPH

This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic.

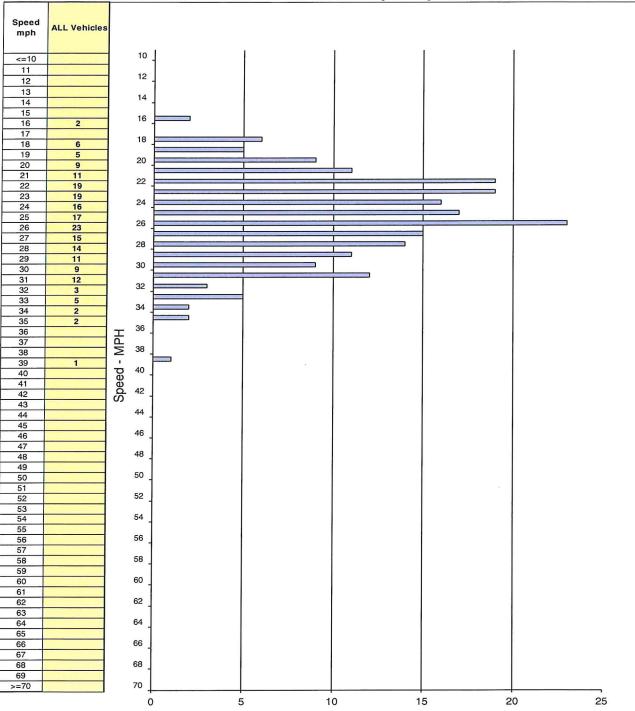
Approved and Authorized for release by the City of Capitola Public Works:

Signed: Title: City Engineer Steven E/Jesberg

DATE: 1/6/2020 Location: Capitola Rd @ Shirley Ln TIME: 11:30-12:10

Posted Speed: 25 MPH Clear/Dry Project #: 20-8004-001

Eastbound & Westbound Spot Speeds



Number of Vehicles

	SPEED PARAMETERS											
50th 85th 10 MPH Percent												
Class	Count	Range	Percentile	Percentile	Pace	# in Pace	in Pace	%/# Below Pace	% / # Above Pace			
ALL	201	16 - 39	25 mph	30 mph	22 - 31	155	77%	16% / 33	7% / 13			

Street: Capitola Road

Limits: Between Clares St. and 38th Ave

Direction: EB & WB

Factors

A. Prevailing Speed Data

Location of Survey 3780 Capitola Rd

Date of Survey 1/6/2020

Posted Speed Limit (mph)

Speed Data Collected

214

85th Percentile (mph)

10 mph Pace

Percent in Pace

66%

B. <u>Traffic Factors</u>

Width 26' EB 26 WB

Length of Segment (mi.) 0.13

Street Classification Other Principal Arterial

C. Collision History

Date Range Covered 1/1/2017-12/31/2019
Total Accidents Three total collisions

D. Roadway Conditions

Adjacent Land Use Adjacent land use is primarily a business district with

Capitola Mall.

Roadway Geometrics Four-lane divided roadway with raised medians and bike

lanes sidewalks are present on the north and south side of the roadway. Signalized intersection has turn pockets and

crosswalks.

Comments After evaluating current critical and pace speeds, it is

recommended that a 25-mph speed limit be implemented to be in concurrence with section 2B.13 of the MUTCD and

21400(b).

Speed Limit Change? No

Existing Speed Limit: 25 MPH Recommended Speed Limit: 25 MPH

This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic.

Approved and Authorized for release by the City of Capitola Public Works:

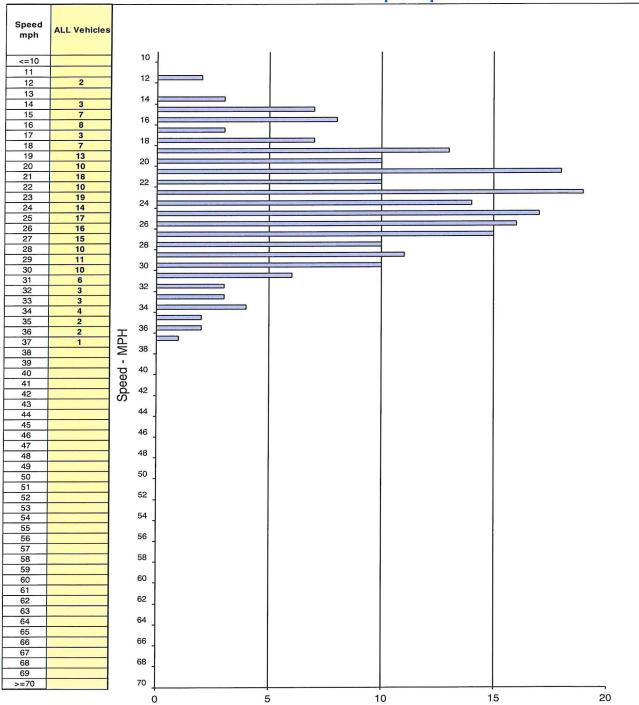
Signed: _____ Title: City Engineer

Steven E. Jesberg

 DATE: 1/6/2020
 Location: 3780 Capitola Rd

 TIME: 12:20-13:10
 Posted Speed: 25 MPH
 Clear/Dry
 Project #: 20-8004-002

Eastbound & Westbound Spot Speeds

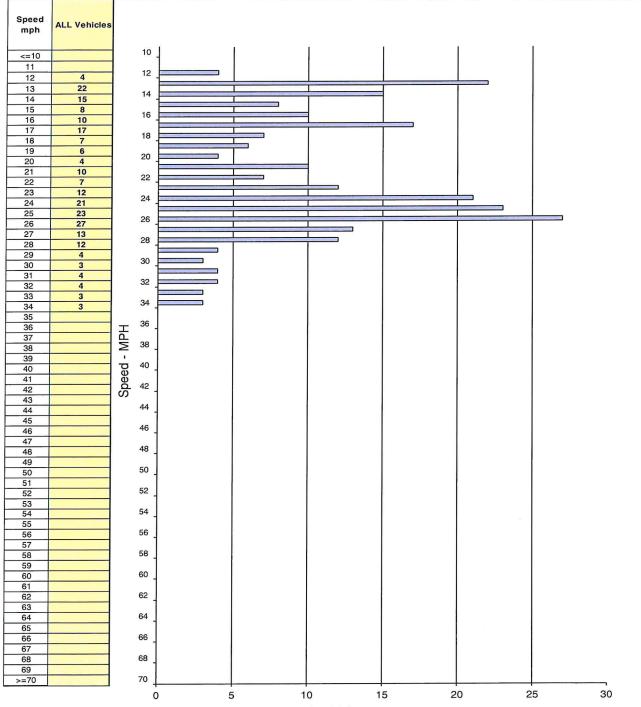


Number of Vehicles

	SPEED PARAMETERS											
Class	Class Count Range Percentile Percentile Pace # in Pace in Pace % / # Below Pace % / # Above Pace											
ALL	214	12 - 37	24 mph	29 mph	19 - 28	142	66%	14% / 30	20% / 42			

Street: Capitola Road Between 38th Ave and 41st Ave Limits: Direction: EB & WB **Factors** A. Prevailing Speed Data Location of Survey 3908 Capitola Rd Date of Survey 1/6/2020 Posted Speed Limit (mph) 25 mph # Speed Data Collected 239 85th Percentile (mph) 27 mph 10 mph Pace 19-28 Percent in Pace 56% **B.** Traffic Factors 26' Width 0.14 Length of Segment (mi.) Street Classification Other Principal Arterial C. Collision History 1/1/2017-12/31/2019 Date Range Covered **Total Accidents** Five total collisions, one injury D. Roadway Conditions Adjacent land use is primarily a business district with Adjacent Land Use Capitola Mall. Four-lane divided roadway with raised medians and bike Roadway Geometrics lanes sidewalks are present on the north and south side of the roadway. Signalized intersection has turn pockets and crosswalks. Results of the attached engineering & traffic survey Comments information support maintaining the existing 25 mph speed limit. Speed Limit Change? No **Existing Speed Limit: 25 MPH Recommended Speed Limit: 25 MPH** This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic. Approved and Authorized for release by the City of Capitola Public Works: Title: City Engineer Signed:

DATE: 1/6/2020 Location: 3908 Capitola Rd

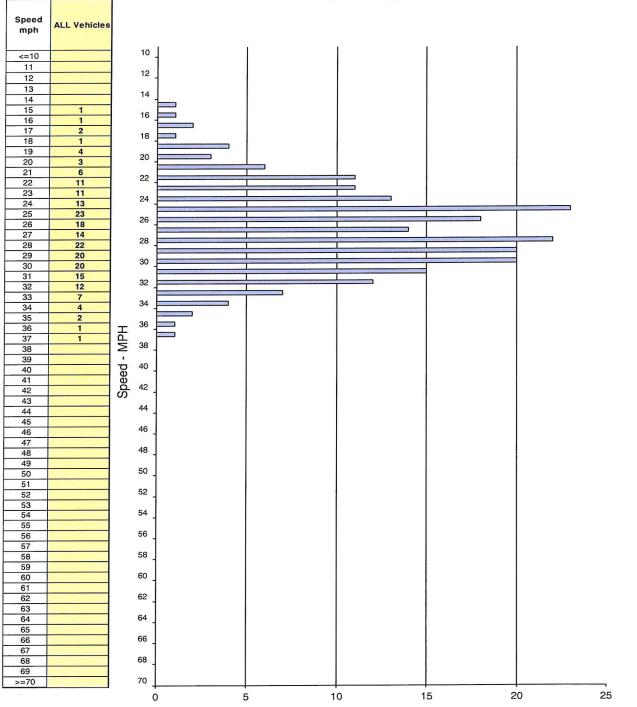


Number of	f Vehicles
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				SP	EED PAI	RAMETERS	3		
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	%/# Above Pace
ALL	239	12 - 34	23 mph	27 mph	19 - 28	135	56%	34% / 83	9% / 21

Street: Capitola Road Between 41st Ave and 45th Ave Limits: Direction: EB & WB **Factors** A. Prevailing Speed Data Location of Survey 4245 Capitola Rd 1/6/2020 Date of Survey Posted Speed Limit (mph) 25 mph # Speed Data Collected 212 85th Percentile (mph) 31 mph 10 mph Pace 23-32 Percent in Pace 79% **B.** Traffic Factors Average Daily Traffic (ADT) 33' EB 36' WB Length of Segment (mi.) 0.28 Street Classification Other Principal Arterial C. Collision History Date Range Covered 1/1/2017-12/31/2019 **Total Accidents** 12 total collisions, three injury D. Roadway Conditions Adjacent land use is primarily a business district with some Adjacent Land Use residential. Four-lane divided roadway with raised medians and bike Roadway Geometrics lanes sidewalks are present on the north and south side of the roadway. Signalized intersection has turn pockets and crosswalks. After evaluating current critical and pace speeds, it is Comments recommended that a 25-mph speed limit be implemented to be in concurrence with section 2B.13 of the MUTCD and 21400(b) due to the presence of two crosswalks across Capitola Road that are only protected by flashing beacons. Speed Limit Change? No **Existing Speed Limit: 25 MPH Recommended Speed Limit: 25 MPH** This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic. Approved and Authorized for release by the City of Capitola Public Works: Title: City Engineer Signed: Steven E. Jesberg

DATE: 1/6/2020 Location: 4245 Capitola Rd

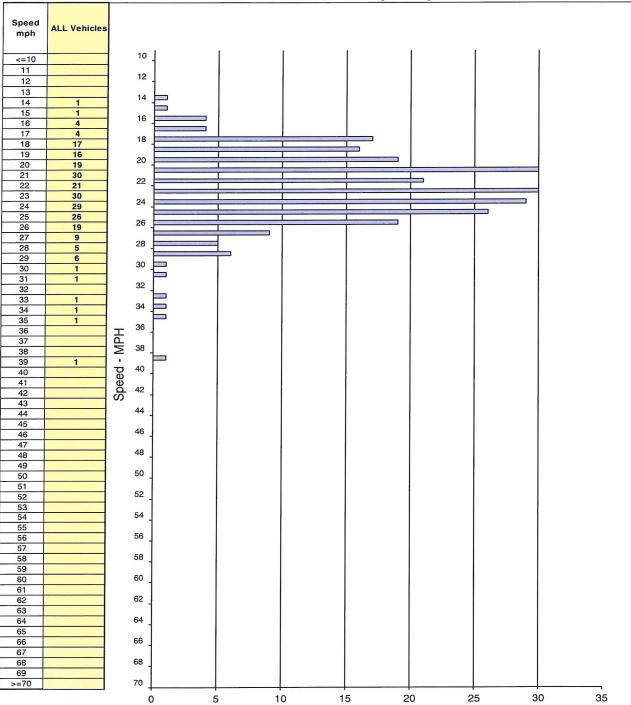


Number of Vehicles

	SPEED PARAMETERS											
Class	Class Count Range Percentile Percentile Pace # in Pace in Pace % / # Below Pace % / # Above Pace											
All	Count 212	Range 15 - 37	27 mph	31 mph	23 - 32	168	79%	13% / 29	8% / 15			

Street: Capitola Road Between 45th Ave and 49th Ave Limits: Direction: EB & WB **Factors** A. Prevailing Speed Data Location of Survey 4830 Capitola Rd Date of Survey 1/6/2020 Posted Speed Limit (mph) 25 mph # Speed Data Collected 243 85th Percentile (mph) 26 mph 10 mph Pace 18-27 Percent in Pace 89% **B.** Traffic Factors 38' Width 0.19 Length of Segment (mi.) Street Classification Other Principal Arterial C. Collision History Date Range Covered 1/1/2017-12/31/2019 **Total Accidents** Twelve total collisions, four injuries D. Roadway Conditions Adjacent Land Use Adjacent land use is a primarily residential district. Two-lane roadway with bike lanes sidewalks is present on Roadway Geometrics the north and south side of the roadway. Signed intersections have turn pockets and crosswalks. Results of the attached engineering & traffic survey Comments information support maintaining the existing 25 mph speed limit. Speed Limit Change? No **Existing Speed Limit: 25 MPH Recommended Speed Limit: 25 MPH** This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic. Approved and Authorized for release by the City of Capitola Public Works: Signed: Title: City Engineer

DATE: 1/6/2020 Location: 4830 Capitola Rd



Number of Vehicles

				SP	EED PAI	RAMETERS	3		
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	%/# Below Pace	% / # Above Pace
ALL	243	14 - 39	23 mph	26 mph	18 - 27	216	89%	4% / 10	7% / 17

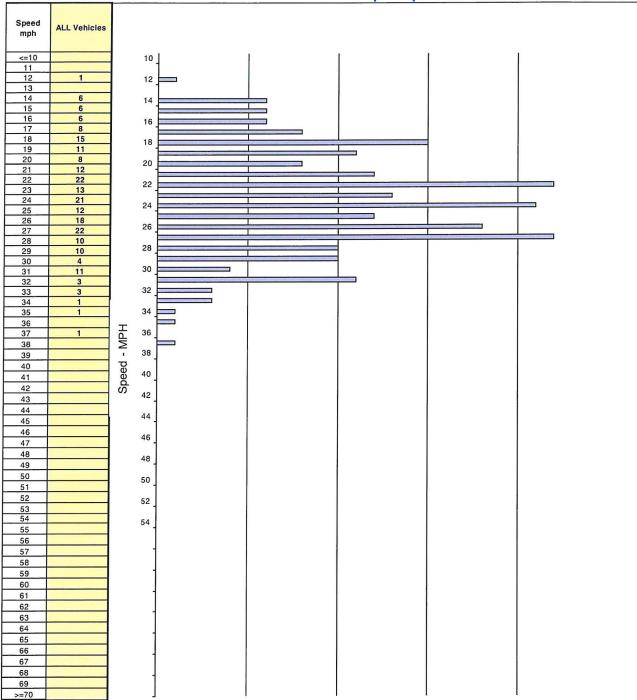
Street: Clares Street Between Capitola Rd Ave & 40th Ave Limits: Direction: EB & WB **Factors** A. Prevailing Speed Data Location of Survey Clares St 1200' N/O Capitola Rd Date of Survey 1/24/2020 Posted Speed Limit (mph) 25 mph # Speed Data Collected 225 85th Percentile (mph) 29 mph 10 mph Pace 18-27 Percent in Pace 68% **B.** Traffic Factors Width 46 0.48 Length of Segment (mi.) Street Classification Major Collector C. Collision History Date Range Covered 1/1/2017-12/31/2019 **Total Accidents** 11 total collisions, one injury D. Roadway Conditions Adjacent land use is generally commercial with Capitola Adjacent Land Use Mall, Browns Ranch Complex, and a residential district with one substantial Assisted living complex. Roadway Geometrics Two-lane divided roadway with raised Medians and bike lanes. Sidewalks are present on the North and South of the roadway. Signalized intersection has turn pockets and crosswalks. After evaluating current critical and pace speeds, it is Comments recommended that a 25-mph speed limit be implemented to be in concurrence with section 2B.13 of the MUTCD. The 25-mph speed limit was obtained by a 5-mph reduction of the critical speed of 30 mph due to the number of access points, collisions data, and pedestrian and bicyclist safety and the presence of multiple driveways and a horizontal curve that restricts sight distances. Speed Limit Change? No **Recommended Speed Limit: 25 MPH Existing Speed Limit: 25 MPH** This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California

MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic.

Approved and Authorized for release by the City of Capitola Public Works:

Title: City Engineer Signed: Steven E Jesberg

DATE: 1/24/20 Location: Clares St 1200' N/O Capitola Rd



				S	PEED PAR	RAMETERS			
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	225	12 - 37	24 mph	29 mph	18 - 27	154	68%	12% / 27	20% / 44

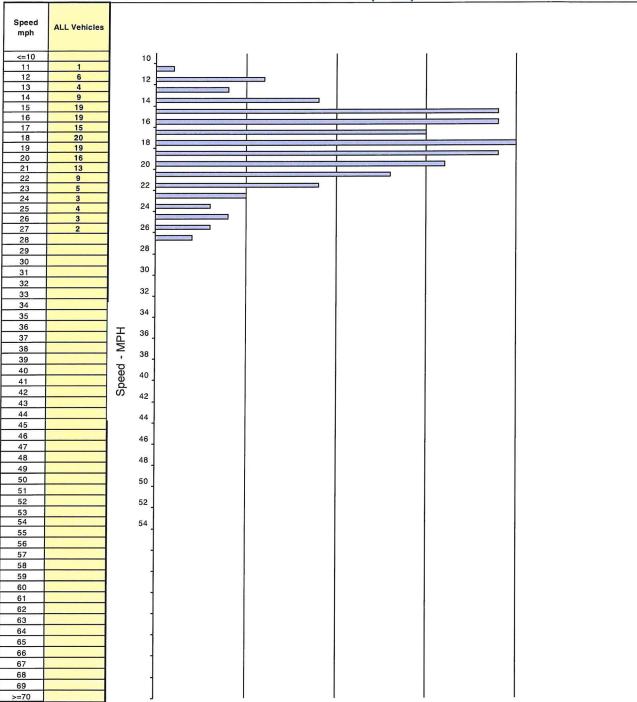
Signed:

Clares Street Street: Limits: Between 40th Ave & 41st Ave EB & WB Direction: **Factors** A. Prevailing Speed Data Clares St 125' W/O 41st Ave Location of Survey Date of Survey 1/23/2020 Posted Speed Limit (mph) 25 mph # Speed Data Collected 167 85th Percentile (mph) 22 mph 10 mph Pace 15-24 Percent in Pace 88% **B.** Traffic Factors 54' Width Length of Segment (mi.) 0.05 Street Classification Major Collector C. Collision History Date Range Covered 1/1/2017-12/31/2019 **Total Accidents** Nine total collisions, one injury D. Roadway Conditions Adjacent land use is generally commercial with Capitola Adjacent Land Use Mall, Browns Ranch Complex. Two-to-five lane divided roadway with no bike lanes and Roadway Geometrics sidewalks are present on the north and south of the roadway. Signalized intersection has turn pockets and crosswalks. Results of the attached engineering & traffic survey Comments information support maintaining the existing 25 mph speed limit. Speed Limit Change? No **Recommended Speed Limit: 25 MPH Existing Speed Limit: 25 MPH** This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic. Approved and Authorized for release by the City of Capitola Public Works:

Title: City Engineer

 DATE: 1/23/20
 Location: Clares St 125' W/O 41st Ave

 TIME: 09:40-10:40
 Posted Speed: 25 MPH
 Clear/Dry
 Project #: 20-8004-009



	SPEED PARAMETERS												
Class	Class Count Range Percentile Percentile Pace # in Pace Pace % / # Below Pace % / # Above Pace												
ALL	167	11 - 27	18 mph	22 mph	15 - 24	147	88%	11% / 20	0% / 0				

Street: Clares Street

Limits: Between 41st Ave & Wharf Rd

Direction: EB & WB



Factor	'S
Α.	Prevailing Speed Data

Location of Survey

Date of Survey

Posted Speed Limit (mph)

Speed Data Collected

85th Percentile (mph)

10 mph Pace

Percent in Pace

4194 Clares St

1/23/2020

25 mph

138

31 mph

22-31

78%

B. Traffic Factors

Width 50' Length of Segment (mi.) 0.39

Street Classification Major Collector

C. Collision History

Date Range Covered 1/1/2017-12/31/2019
Total Accidents Four total collisions

D. Roadway Conditions

Adjacent Land Use Adjacent land use is generally commercial with Capitola

Mall, a residential district with substantial Apartments complexes, and a substantial Senior Mobile home park.

Roadway Geometrics Two-lane divided roadway with bike lanes and sidewalks

are present on the north and south of the roadway. Signalized intersection has turn pockets and crosswalks. The segment features a steady incline at either end.

Comments After evaluating current critical and pace speeds, it is

recommended that a 25-mph speed limit be implemented to be in concurrence with section 2B.13 of the MUTCD. The 25-mph speed limit was obtained by a 5-mph reduction of the critical speed of 30 mph due to the number of access points, Residential district density (as defined in section 515), pedestrian and bicyclist safety and road geometry that includes a vertical curve that restricts sight

distance.

Speed Limit Change?

Existing Speed Limit: 25 MPH Recommended Speed Limit: 25 MPH

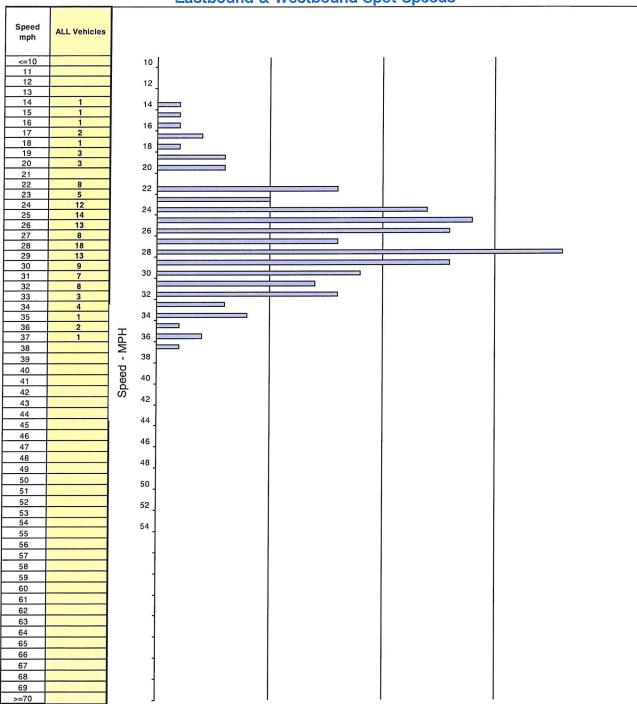
This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic.

Approved and Authorized/for release by the City of Capitola Public Works:

Signed: ______ Title: City Engineer Steven E. Jesberg

 DATE: 1/23/20
 Location: 4194 Clares St

 TIME: 11:00-12:00
 Posted Speed: 25 MPH
 Clear/Dry
 Project #: 20-8004-010



	SPEED PARAMETERS											
			50th	85th	10 MPH		Percent in					
Class	Count	Range	Percentile	Percentile	Pace	# in Pace	Pace	% / # Below Pace	% / # Above Pace			
ALL	138	14 - 37	27 mph	31 mph	22 - 31	107	78%	8% / 12	14% / 19			

Street: Cliff Dr

Limits: Between Opal Cliff & Wharf Rd

Direction: EB & WB

Factors

A. Prevailing Speed Data

Location of Survey Cliff Dr 800' W/O Wharf Rd

Date of Survey 1/14/2020
Posted Speed Limit (mph) 25 mph
Speed Data Collected 203
85th Percentile (mph) 34 mph
10 mph Pace 24-33
Percent in Pace 86%

B. Traffic Factors

Width 33 Length of Segment (mi.) 0.32

Street Classification Minor Arterial

C. Collision History

Date Range Covered 1/1/2017-12/31/2019

Total Accidents Six total collisions, One injury

D. Roadway Conditions

Adjacent Land Use It is a primarily residential and business district with a

substantial hotel in the area.

Roadway Geometrics Two-lane roadways. Limited sidewalks are present on the

part of south the roadway. A pedestrian crosswalk is in the middle of the segment. The segment features a steady

incline.

Comments After evaluating current critical and pace speeds, it is

recommended that a 25-mph speed limit be implemented to be in concurrence with section 2B.13 of the MUTCD.

The 25-mph speed limit was obtained by a 5-mph reduction of the critical speed of 35 mph due to the number of access points and residential district density (as defined in section 515). A second 5-mph deductin was applied due

the presence of head in street parking that requires backing into the travel land and the presence of a high volume of pedestrian and bicyclist traffic going to the

nearby Capitola Beach and Village.

Speed Limit Change? Yes

Existing Speed Limit: 25 MPH Recommended Speed Limit: 25 MPH

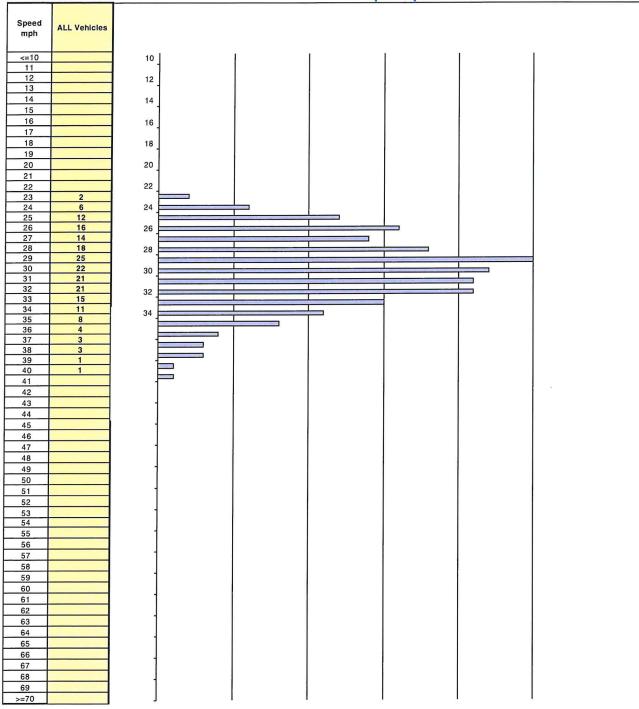
This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic.

Approved and Authorized for release by the City of Capitola Public Works:

Signed: ______Title: City Engineer

Steven E. Jesberg

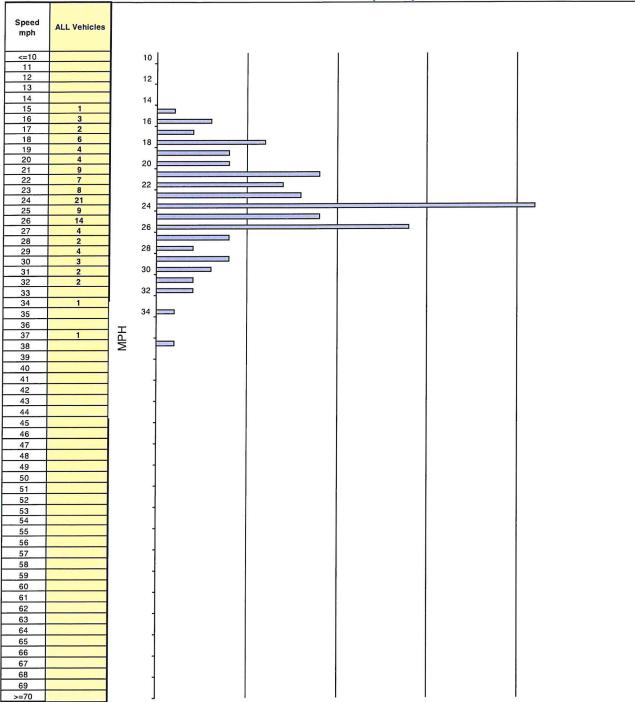
DATE: 1/14/20 Location: Cliff Dr 800' W/O Wharf Rd



				s	PEED PAF	RAMETERS			
			50th	85th	10 MPH		Percent in		
Class	Count	Range	Percentile	Percentile	Pace	# in Pace	Pace	% / # Below Pace	% / # Above Pace
ALL	203	23 - 40	30 mph	34 mph	25 - 34	175	86%	3% /8	10% / 20

Street: Jade St Between 41st Ave & 45th Ave Limits: Direction: EB & WB **Factors** A. Prevailing Speed Data Location of Survey 4425 Jade St. Date of Survey 01/13/2020 Posted Speed Limit (mph) 25 # Speed Data Collected 107 85th Percentile (mph) 27 10 mph Pace 18-27 Percent in Pace 80% **B. Traffic Factors** Width 39' Length of Segment (mi.) 0.27 Street Classification Major Collector C. Collision History Date Range Covered 1/1/2017-12/31/2019 **Total Accidents** Four total collisions, one injury D. Roadway Conditions Adjacent Land Use It is a primarily residential and business district with a substantial senior mobile home complex and a park in the Two-lane roadways. Sidewalks are present on the north Roadway Geometrics side of the roadway. Two-speed tables on the roadway Results of the attached engineering & traffic survey Comments information support maintaining the existing 25 mph speed limit. Speed Limit Change? No **Existing Speed Limit: 25 MPH Recommended Speed Limit: 25 MPH** This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic. Approved and Authorized for release by the City of Capitola Public Works: Title: City Engineer Signed:

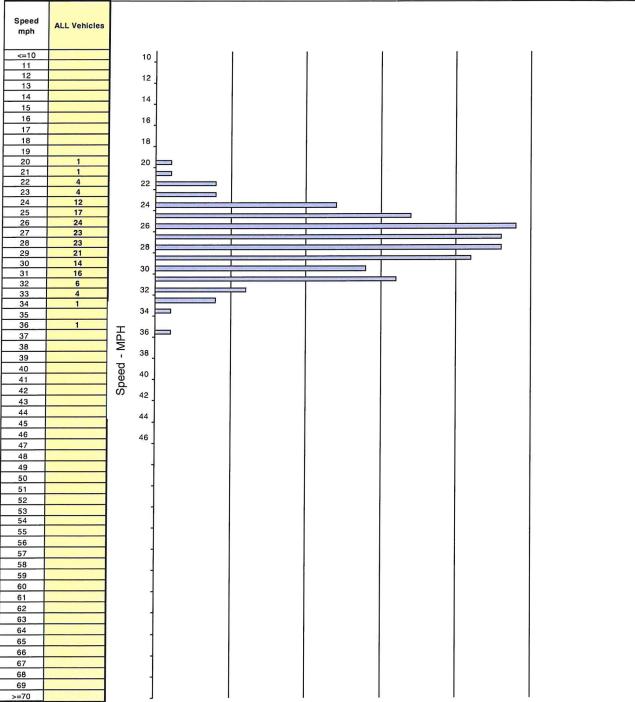
DATE: 1/13/20 Location: 4425 Jade St



	SPEED PARAMETERS										
	50th 85th 10 MPH Percent in Class Count Bance Percentile Percentile Page # in Page Page %/# Below Page %/# Above Page										
Class	Count	Range	Percentile	Percentile	Pace	# in Pace	Pace	% / # Below Pace	76 / # ADOVE Pace		
ALL	107	15 - 37	24 mph	27 mph	18 - 27	86	80%	5% / 6	15% / 15		

Street: Kennedy Dr Limits: Between Sir Francis Ave & Park Ave Direction: EB &WB **Factors** A. Prevailing Speed Data Location of Survey Kennedy Dr. 300' E/O Si Francis Ave. Date of Survey 01/15/2020 Posted Speed Limit (mph) 25 # Speed Data Collected 172 85th Percentile (mph) 31 10 mph Pace 23-32 Percent in Pace 93% **B.** Traffic Factors 40 Width Length of Segment (mi.) 0.10 Street Classification Major Collector C. Collision History 1/1/2017-12/31/2019 **Date Range Covered Total Accidents** Three total collision D. Roadway Conditions Adjacent land use is Primarily Residential. Adjacent Land Use Two-lane divided roadway with no bike lanes and Roadway Geometrics sidewalks are not present. Stop sign intersection no turn pockets with crosswalks. The segment features a steady incline. Comments After evaluating current critical and pace speeds, it is recommended that a 25-mph speed limit be implemented to be in concurrence with section 2B.13 of the MUTCD. The 25-mph speed limit was obtained by a 5-mph reduction of the critical speed of 30 mph due to the number of access points. Residential district density (as defined in section 515), and pedestrian and bicyclist safety. Speed Limit Change? No **Existing Speed Limit: 25 MPH Recommended Speed Limit: 25 MPH** This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic. Approved and Authorized for release by the City of Capitola Public Works: Signed: Title: City Engineer

DATE: 1/15/20 Location: Kennedy Dr 300' E/O Sir Francis Ave



				s	PEED PAR	RAMETERS			
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	172	20 - 36	27 mph	31 mph	23 - 32	160	93%	3% / 6	4% / 6

Street: Kennedy Dr

Limits: Between Monterey Ave & Sir Francis Ave

Direction: EB & WB

THE PORTURAL TO

Factors A. Prevailing Speed Data

Location of Survey Kennedy Dr 150' W/O Callas Ln.

Date of Survey 01/15/2020

Posted Speed Limit (mph) 25
Speed Data Collected 147
85th Percentile (mph) 31
10 mph Pace 23-32
Percent in Pace 90%

B. Traffic Factors

Width 44' Length of Segment (mi.) 0.17

Street Classification Major Collector

C. Collision History

Date Range Covered 1/1/2017-12/31/2019
Total Accidents One total collision

D. Roadway Conditions

Adjacent Land Use Adjacent land use is Primarily Residential.

Roadway Geometrics

Two-lane divided roadway with no bike lanes with

sidewalks are not present. Stop sign intersection no turn

pockets with crosswalks.

Comments After evaluating current critical and pace speeds, it is

recommended that a 25-mph speed limit be implemented to be in concurrence with section 2B.13 of the MUTCD. The 25-mph speed limit was obtained by a 5-mph reduction of the critical speed of 30 mph due to the number

of access points, Residential district density (as defined in section 515), and pedestrian and bicyclist safety.

Speed Limit Change? No

Existing Speed Limit: 25 MPH Recommended Speed Limit: 25 MPH

This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic.

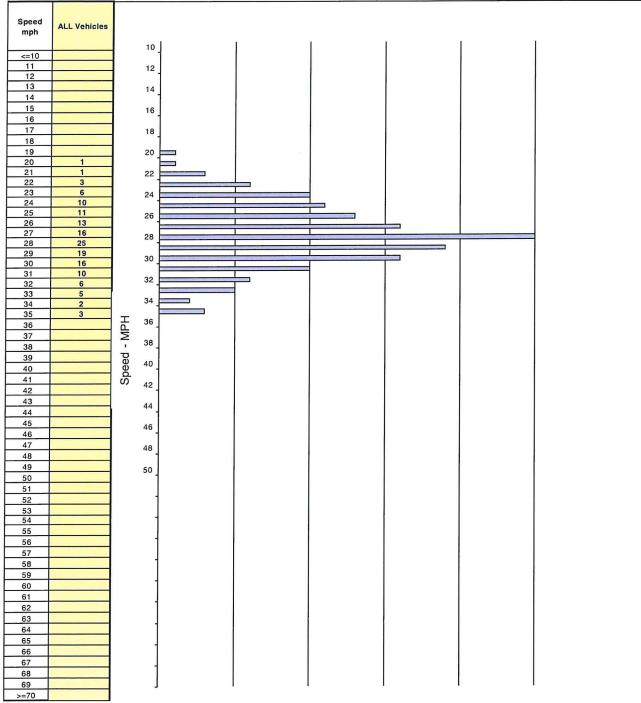
Approved and Authorized for release by the City of Capitola Public Works:

Signed: Title: City Engineer

Steven E. Jesberg

 DATE: 1/15/20
 Location: Kennedy Dr 150' W/O Callas Ln

 TIME: 11:00-12:00
 Posted Speed: 25 MPH
 Clear/Dry
 Project #: 20-8004-038



	SPEED PARAMETERS										
			50th	85th	10 MPH		Percent in				
Class	Count	Range	Percentile	Percentile	Pace	# in Pace	Pace	% / # Below Pace	% / # Above Pace		
ALL	147	20 - 35	28 mph	31 mph	23 - 32	132	90%	3% / 5	7% / 10		

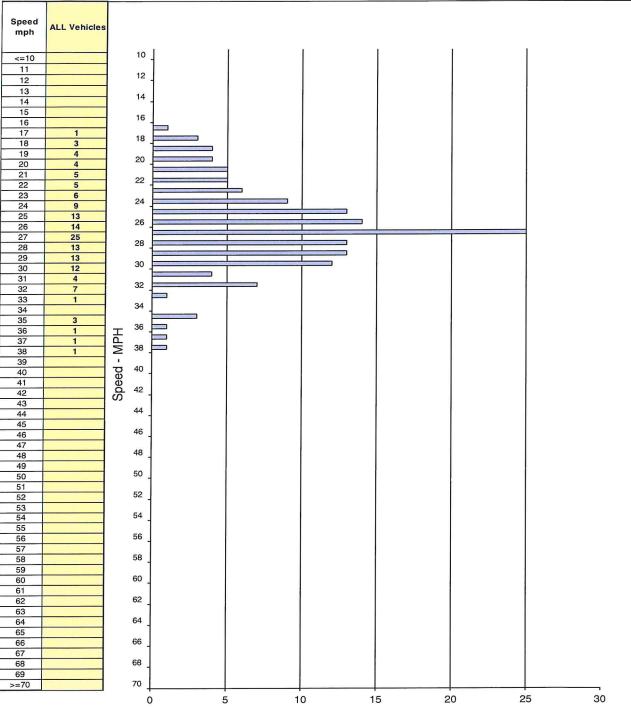
Signed:

Street: Monterey Ave Limits: Between Washburn Ave & Kennedy Dr Direction: EB & WB **Factors** A. Prevailing Speed Data Location of Survey 729 Monterey Ave Date of Survey 1/14/2020 Posted Speed Limit (mph) 25 # Speed Data Collected 145 85th Percentile (mph) 30 10 mph Pace 23-32 Percent in Pace 80% **B.** Traffic Factors Width 41' Length of Segment (mi.) 0.41 Street Classification Major Collector C. Collision History Date Range Covered 1/1/2017-12/31/2019 **Total Accidents** One total collision D. Roadway Conditions Adjacent land use is primarily residential, with a Park, New Adjacent Land Use Brighton Middle school, and Substantial Church. Roadway Geometrics Two-lane roadway with bike lanes, sidewalks are present on the north side and south side of the roadway. Stop sign intersection has crosswalks. Comments After evaluating current critical and pace speeds, it is recommended that a 25-mph speed limit be implemented to be in concurrence with section 2B.13 of the MUTCD. The 25-mph speed limit was obtained by a 5-mph reduction of the critical speed of 30 mph due to the number of access points, Residential district density (as defined in section 515), pedestrian and bicyclist safety and the presence of New Brighton Middle School. Speed Limit Change? No **Existing speed Limit: 25 MPH Recommended Speed Limit: 25 MPH** This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic. Approved and Authorized for release by the City of Capitola Public Works:

Title: City Engineer

DATE: 1/14/2020 Location: 729 Monterey Ave

TIME: 14:00-15:10 Posted Speed: 25 MPH Clear/Dry Project #: 20-8004-037



	-		
Numbe	r of	Vehic	es

	SPEED PARAMETERS											
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	%/ # Above Pace			
ALL	145	17 - 38	27 mph	30 mph	23 - 32	116	80%	15% / 22	5% / 7			

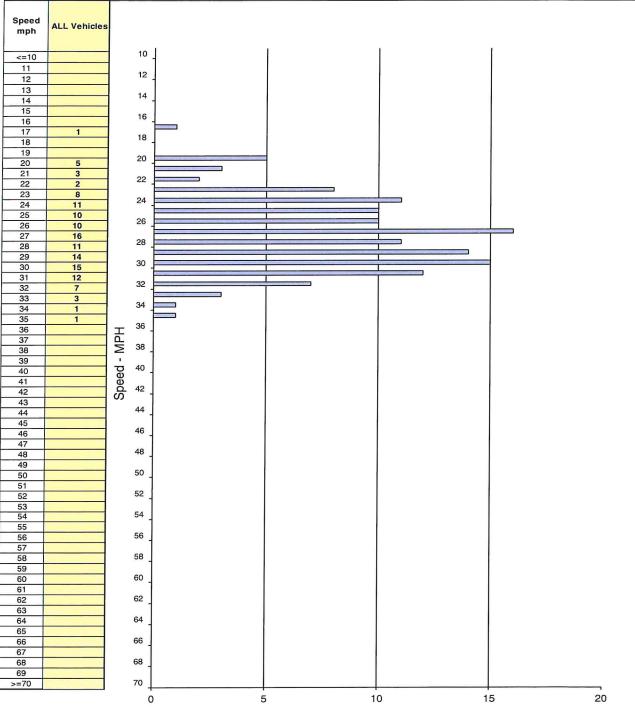
Street: Monterey Ave Limits: Between Bay Ave / Washburn Ave Direction: EB & WB **Factors** A. Prevailing Speed Data Location of Survey Monterey Ave 75' E/O Younger Date of Survey 1/14/2020 Posted Speed Limit (mph) 25 mph # Speed Data Collected 130 85th Percentile (mph) 31 mph 10 mph Pace 23-32 Percent in Pace 88% **B.** Traffic Factors Width 29.9" Length of Segment (mi.) 0.16 Street Classification Major Collector C. Collision History Date Range Covered 1/1/2017-12/31/2019 **Total Accidents** Three total collisions D. Roadway Conditions Adjacent Land Use Adjacent land use is primarily residential, with a Park, New Brighton Middle school, and Substantial Church. Two-lane roadway with bike lanes, sidewalks are present Roadway Geometrics on the north side and south side of the roadway. Stop sign intersection has crosswalks. After evaluating current critical and pace speeds, it is Comments recommended that a 25-mph speed limit be implemented to be in concurrence with section 2B.13 of the MUTCD. The 25-mph speed limit was obtained by a 5-mph reduction of the critical speed of 30 mph due to the number of access points and pedestrian and bicyclist safety. Speed Limit Change? No **Recommended Speed Limit: 25 MPH Existing Speed Limit: 25 MPH** This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California

MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic.

Approved and Authorized for release by the City of Capitola Public Works:

Signed: Title: City Engineer Steven E. Jesberg

DATE: 1/14/2020 Location: Monterey Ave 75' E/O Younger Ave



Number of Vehicles

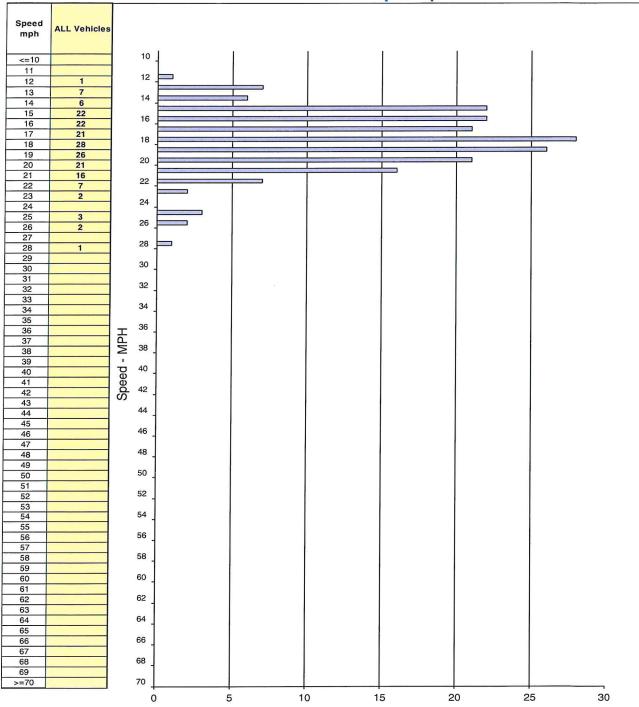
	SPEED PARAMETERS										
			50th	85th	10 MPH		Percent				
Class	Count	Range	Percentile	Percentile	Pace	# in Pace	in Pace	%/# Below Pace	% / # Above Pace		
ALL	130	17 - 35	27 mph	31 mph	23 - 32	114	88%	8% / 11	4% / 5		

Signed:

Street: Monterey Ave Limits: Between Park Ave & Bay Ave Direction: EB & WB **Factors** A. Prevailing Speed Data Location of Survey Monterey Ave 125' N/O Park Ave Date of Survey 1/14/2020 Posted Speed Limit (mph) 25 mph # Speed Data Collected 185 85th Percentile (mph) 21 mph 10 mph Pace 13-22 Percent in Pace 95% **B.** Traffic Factors Width 32' Length of Segment (mi.) 0.05 Street Classification Minor Arterial C. Collision History Date Range Covered 1/1/2017-12/31/2019 **Total Accidents** Three total collisions, one injury D. Roadway Conditions Adjacent Land Use Adjacent land use is primarily residential, with a substantial parking complex. Roadway Geometrics Two-lane roadway with bike lanes, sidewalks are present on the east side of the roadway. Stop sign intersection has crosswalks. The segment features a steady incline. Comments Results of the attached engineering & traffic survey information support maintaining the existing 25 mph speed limit. Speed Limit Change? No **Existing Speed Limit: 25 MPH Recommended Speed Limit: 25 MPH** This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic. Approved and Authorized for release by the City of Capitola Public Works:

Title: City Engineer

DATE: 1/14/2020 Location: Monterey Ave 125' N/O Park Ave



Number of Vehicles

	SPEED PARAMETERS										
			50th	85th	10 MPH		Percent				
Class	Count	Range	Percentile	Percentile	Pace	# in Pace	in Pace	%/ # Below Pace	%/ # Above Pace		
ALL	185	12 - 28	18 mph	21 mph	13 - 22	176	95%	0% / 1	5% / 8		

Street: Monterey Ave

Limits: Between Capitola Ave & Park Ave

Direction: NB & SB

Factors

A. Prevailing Speed Data
Location of Survey

Location of Survey

Date of Survey

Posted Speed Limit (mph)

Speed Data Collected

85th Percentile (mph)

10 mph Pace

Monterey Ave 100' S/O Fanmar Way
1/15/2020

25 mph
207
27 mph
19-28

Percent in Pace 89%

B. Traffic Factors

Width 29 Length of Segment (mi.) 0.19

Street Classification Other Principal Arterial

C. Collision History

Date Range Covered 1/1/2017-12/31/2019

Total Accidents Two total collisions, two injury

D. Roadway Conditions

Adjacent Land Use Adjacent land use is primarily residential.

Roadway Geometrics

Two-lane roadway with a bike lane on the east side of the

roadway, sidewalks are present on the west side of the roadway. Stop sign intersection has turn pockets and crosswalks. The segment features a steady incline.

Comments Results of the attached engineering & traffic survey

information support maintaining the existing 25 mph speed

limit.

Speed Limit Change? No

Existing Speed Limit: 25 MPH Recommended Speed Limit: 25 MPH

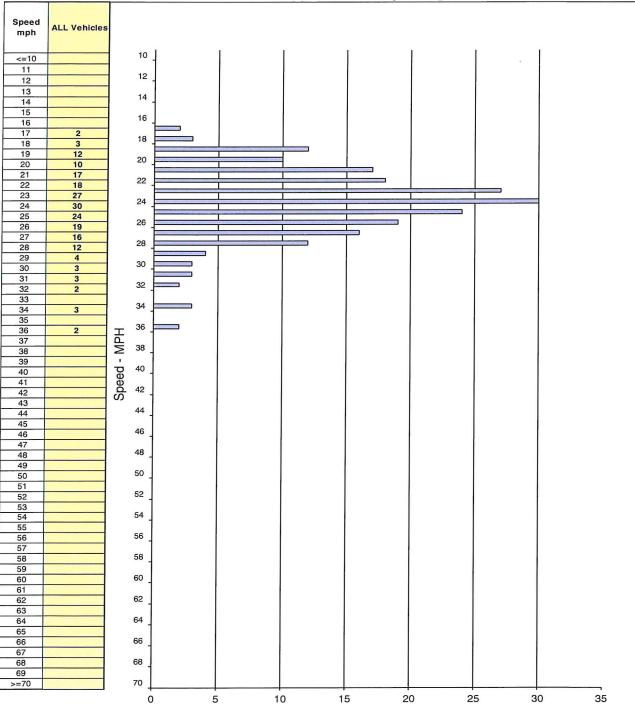
This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic.

Approved and Authorized for release by the City of Capitola Public Works:

Signed: _____ Title: City Engineer

DATE: 1/15/2020 Location: Monterey Ave 100' S/O Fanmar Way

Northbound & Southbound Spot Speeds



Number of Vehicles

	SPEED PARAMETERS										
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	%/# Above Pace		
ALL	207	17 - 36	24 mph	27 mph	19 - 28	185	89%	2% / 5	9% / 17		

Street:

Limits: Between Esplanade & Capitola Ave

Direction: NB



Factors

Α.	Prevail	ing S	peed	Data

Location of Survey Monterey Ave 75' S/O Capitola Ave

Date of Survey 1/15/2020 Posted Speed Limit (mph) None

Monterey Ave

Speed Data Collected 74
85th Percentile (mph) 19 mph
10 mph Pace 12-21
Percent in Pace 96%

B. Traffic Factors

Average Daily Traffic (ADT) 49' Length of Segment (mi.) 0.05

Street Classification Other Principal Arterial

C. Collision History

Date Range Covered 1/1/2017-12/31/2019
Total Accidents Five total collisions

D. Roadway Conditions

Adjacent Land Use It is a primarily residential and business district, with a

substantial beach and a park.

Roadway Geometrics One-way roadways. Sidewalks are present on the north

and south side of the roadway.

Comments It is recommended that the prima facia speed of 25 mph be

maintained on this street section.

Speed Limit Change? No

Existing Speed Limit: 25 MPH Recommended Speed Limit: 25 MPH

This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic.

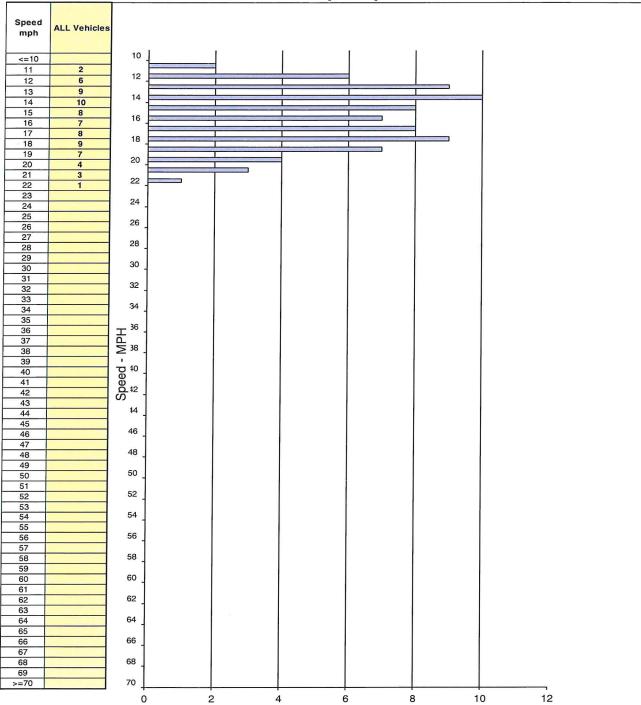
Approved and Authorized for release by the City of Capitola Public Works:

Signed: ______ Title: City Engineer

Steven E. Jesberg

DATE: 1/15/2020 Location: Monterey Ave 75' S/O Capitola Ave

Northbound Spot Speeds



Number of Vehicles

	SPEED PARAMETERS										
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	%/# Below Pace	%/# Above Pace		
ALL	74	11 - 22	16 mph	19 mph	12 - 21	71	96%	2% / 2	2% / 1		

Street: Park Ave

Limits: Between Monterey Ave & Coronado St

Direction: EB & WB

Factors

A. Prevailing Speed Data
Location of Survey

Date of Survey 01/29/2020
Posted Speed Limit (mph) 25 and 35
Speed Data Collected 201
85th Percentile (mph) 31

85th Percentile (mph) 31 10 mph Pace 22-31 Percent in Pace 84%

B. Traffic Factors

Width 39' Length of Segment (mi.) 0.68

Street Classification Other Principal Arterial

C. Collision History

Date Range Covered 1/1/2017-12/31/2019
Total Accidents Nine collisions, four injury

D. Roadway Conditions

Adjacent Land Use It is primarily residential with substantial apartment

complexes in the area.

Roadway Geometrics

Two-lane roadways. Sidewalks are present on parts of

north and south of the roadway. A pedestrian crosswalk is in the middle of the segment. The segment features

horizontal curves and multiple steady inclines.

Park Ave. 200' W/O Coronado St.

Comments After evaluating current critical and pace speeds, it is

recommended that a 25-mph speed limit be implemented to be in concurrence with section 2B.13 of the MUTCD.

The 25-mph speed limit was obtained by a 5-mph

reduction of the critical speed of 30 mph due to the number of access points, Residential district density (as defined in section 515), and pedestrian and bicyclist safety. This section has an existing splti speed limit and it is

reommended that the speed be equal in both sections to

prevent confusion to drivers.

Speed Limit Change? No

Existing Speed Limit: 25 and 35 MPH Recommended Speed Limit: 25 MPH

This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic.

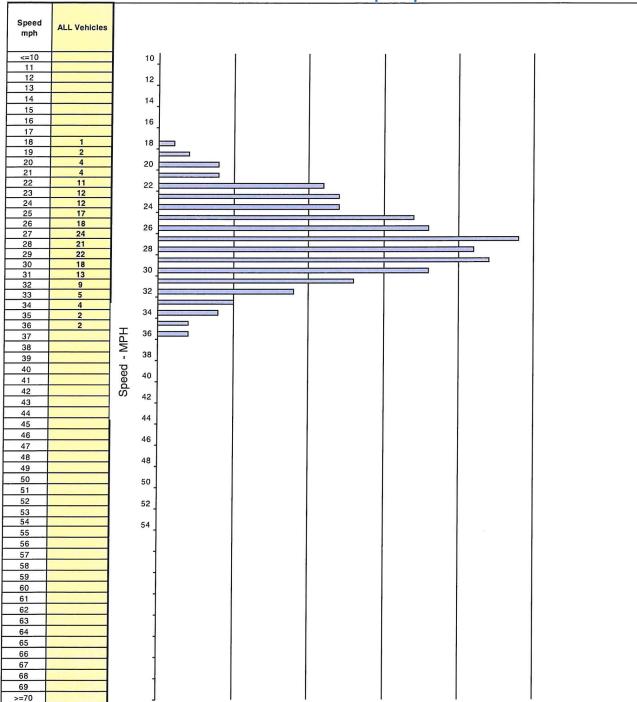
Approved and Authorized for release by the City of Capitola Public Works:

Signed: _____ Title: City Engineer

Steven E. Nesberg

DATE: 1/29/20 Location: Park Ave 200' W/O Coronado St

TIME: 12:20-13:10 Posted Speed: 25 MPH Clear/Dry Project #: 20-8004-040



	SPEED PARAMETERS										
			50th	85th	10 MPH		Percent in				
Class	Count	Range	Percentile	Percentile	Pace	# in Pace	Pace	% / # Below Pace	% / # Above Pace		
ALL	201	18 - 36	27 mph	31 mph	22 - 31	168	84%	5% / 11	11% / 22		

Street: Park Ave

Limits: Between Coronado St & Kennedy Ave/ McGregor Dr

Direction: EB & WB

THO MACHANIA

Factors

A.	Prevailing Speed Data	
	Location of Survey	Park Ave. 200' S/O Kennedy Dr.

Date of Survey 01/29/2020

Posted Speed Limit (mph) 35
Speed Data Collected 164
85th Percentile (mph) 37
10 mph Pace 28-37
Percent in Pace 84%

B. Traffic Factors

Width 32 Length of Segment (mi.) 0.21

Street Classification Other Principal Arterial

C. Collision History

Date Range Covered 1/1/2017-12/31/2019

Total Accidents One Collision

D. Roadway Conditions

Adjacent Land Use It is primarily residential with substantial apartment

complexes in the area.

Roadway Geometrics

Two-lane roadways. No sidewalks are present. The

segment features horizontal curves and steady incline.

Comments The critical speed was measured at 37 mph which will be

rounded down to 35-mph speed limit. A 5-mph reduction of the critical speed will be applied due to the precessor of a bike lane in each direction and a horizontal curve which limits sight distance, resulting in a recommended speed of

30 mph.

Speed Limit Change? No

Existing Speed Limit: 35 MPH Recommended Speed Limit: 30 MPH

This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic.

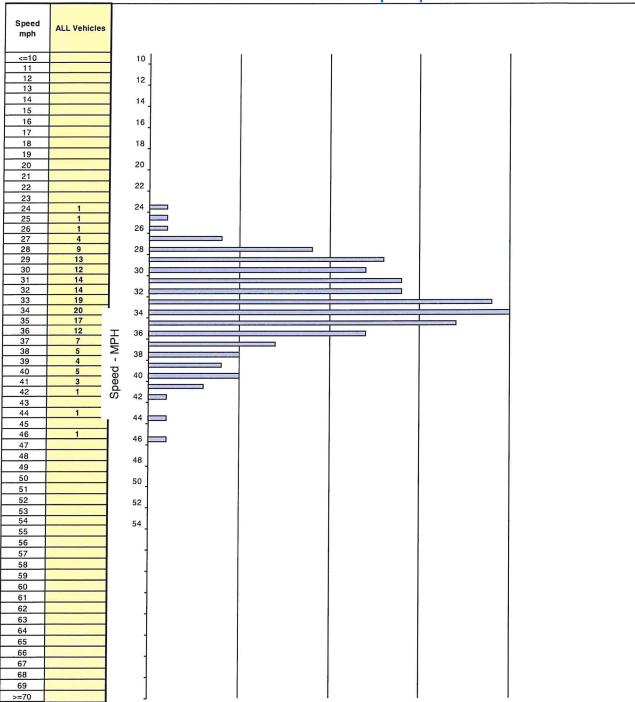
Approved and Authorized for release by the City of Capitola Public Works:

Signed: ______ Title: City Engineer

Steven E. Jesberd

DATE: 1/29/20 Location: Park Ave 200' S/O Kennedy Dr

Northbound & Southbound Spot Speeds



	SPEED PARAMETERS												
	50th 85th 10 MPH Percent in												
Class	Count	Range	Percentile	Percentile	Pace	# in Pace	Pace	% / # Below Pace	% / # Above Pace				
ALL	164	24 - 46	33 mph	37 mph	28 - 37	137	84%	4% / 7	13% / 20				

Street: Park Ave

Between Kennedy Dr/ McGregor Dr & SR 1 Limits:

Direction: EB & WB



A. Prevailing Speed Data

Park Ave 200' N/O Kennedy Dr/McGregor Dr Location of Survey

Date of Survey 01/29/2020

Posted Speed Limit (mph) 35 # Speed Data Collected 126 85th Percentile (mph) 34 10 mph Pace 26-35 Percent in Pace 82%

B. Traffic Factors

Width 49' Length of Segment (mi.) 0.15

Street Classification Other Principal Arterial

C. Collision History

Date Range Covered 1/1/2017-12/31/2019

Total Accidents Two collisions

D. Roadway Conditions

Adjacent Land Use It is primarily residential.

Two-lane roadways. Sidewalks are present on the east Roadway Geometrics

side of the roadway.

The critical speed was measured at 34 mph which will be Comments

> rounded up to 35-mph. This street section includes on and off ramps to Highway 1, bike lanes which braid through the section and sidewalks on both sides of the street. A 5-mph reduction of the critical speed will be applied due to the precesnce of a bike lanes, resulting in a recommended

speed of 30 mph.

Speed Limit Change? No

Existing Speed Limit: 35 MPH Recommended Speed Limit: 30 MPH

This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic.

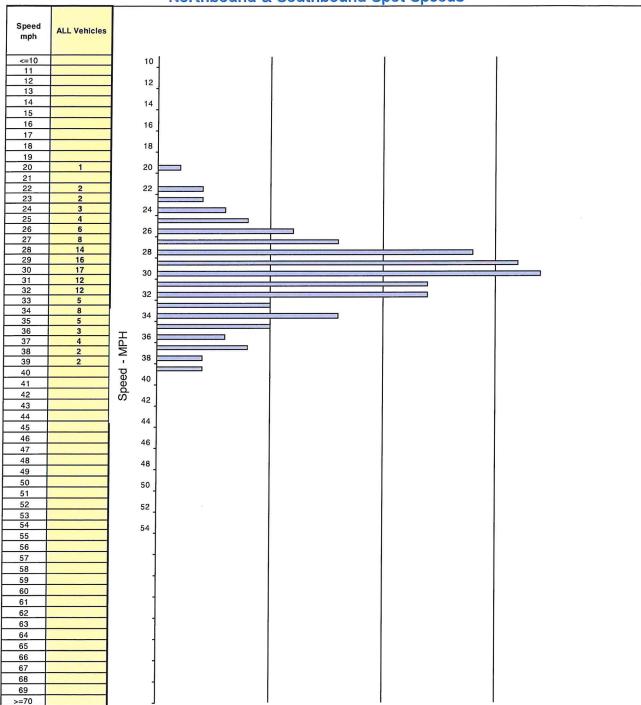
Approved and Authorized for release by the City of Capitola Public Works:

Signed: Title: City Engineer

Steven E. Je

DATE: 1/29/20 Location: Park Ave 200' N/O Kennedy Dr/McGregor Dr

Northbound & Southbound Spot Speeds



SPEED PARAMETERS												
	50th 85th 10 MPH Percent in											
Class	Count	Range	Percentile	Percentile	Pace	# in Pace	Pace	% / # Below Pace	% / # Above Pace			
ALL	126	20 - 39	30 mph	34 mph	26 - 35	103	82%	9% / 12	9% / 11			

Street: Stockton Ave

Limits: Between Wharf Rd & Capitola Ave

Direction: WB & EB



Factors A. Prevailing Speed Data

Location of Survey	Stockton Ave 200' E/O Wharf Rd

Date of Survey
Posted Speed Limit (mph)
None
Speed Data Collected
100
85th Percentile (mph)
24 mph
10 mph Pace
Percent in Pace
93%

B. Traffic Factors

Width 31' Length of Segment (mi.) 0.09

Street Classification Other Principal Arterial

C. Collision History

Date Range Covered 1/1/2017-12/31/2019
Total Accidents Two total collisions

D. Roadway Conditions

Adjacent Land Use It is a primarily residential and business district.

Roadway Geometrics Two-lane roadways. Sidewalks are present on the north

and south side of the roadway.

Comments Results of the attached engineering & traffic survey

information support maintaining the existing 25 mph speed

limit.

Speed Limit Change?

Existing Speed Limit: 25 MPH Recommended Speed Limit: 25 MPH

This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic.

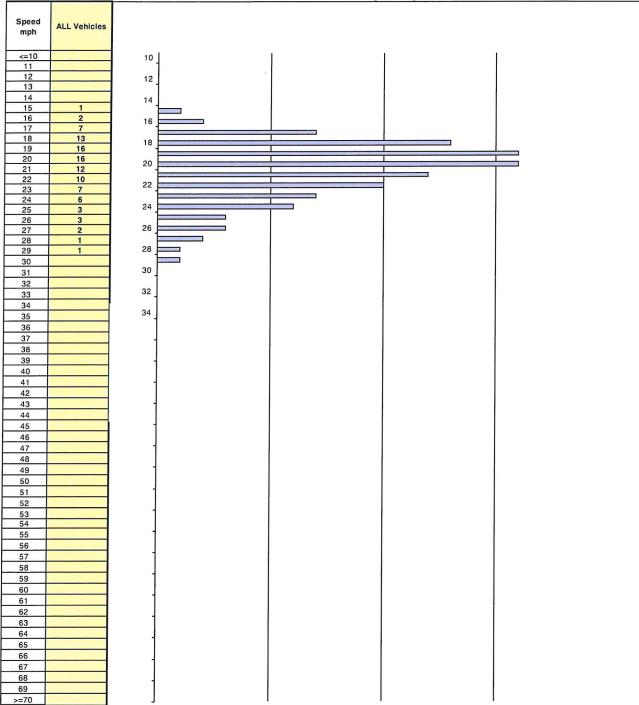
Approved and Authorized for release by the City of Capitola Public Works:

Signed: _______Title: City Engineer

Steven E. Jesberg

DATE: 1/14/20 Location: Stockton Ave 200' E/O Wharf Rd

TIME: 14:05-15:20 Posted Speed: None Clear/Dry Project #: 20-8004-031



	SPEED PARAMETERS												
	50th 85th 10 MPH Percent in												
Class	Count	Range	Percentile	Percentile	Pace	# in Pace	Pace	% / # Below Pace	% / # Above Pace				
ALL	100	15 - 29	20 mph	24 mph	17 - 26	93	93%	3% / 3	4% / 4				

Signed:

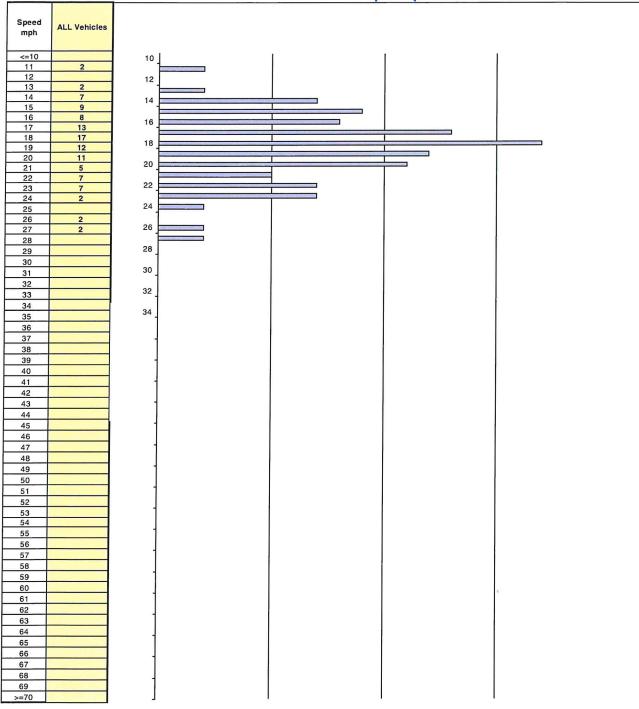
Steven E. Jesberg

Street: Topaz St Between 45th Ave & 47th Ave Limits: Direction: EB & WB **Factors** A. Prevailing Speed Data Location of Survey 4595 Topaz St Date of Survey 1/13/2020 Posted Speed Limit (mph) 25 mph # Speed Data Collected 106 85th Percentile (mph) 22 mph 10 mph Pace 15-24 Percent in Pace 92% **B.** Traffic Factors Width 30' Length of Segment (mi.) 0.08 Street Classification Major Collector C. Collision History Date Range Covered 1/1/2017-12/31/2019 **Total Accidents** Six total collisions D. Roadway Conditions Adjacent Land Use It is a primarily residential district. Roadway Geometrics Two-lane unmarked roadways. No sidewalks are present on the roadway. It is recommended that the prima facia speed of 25 mph be Comments maintained on this street section. Yes Speed Limit Change? **Recommended Speed Limit: 25 MPH Existing Speed Limit: 25 MPH** This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic. Approved and Authorized for release by the City of Capitola Public Works:

Title: City Engineer

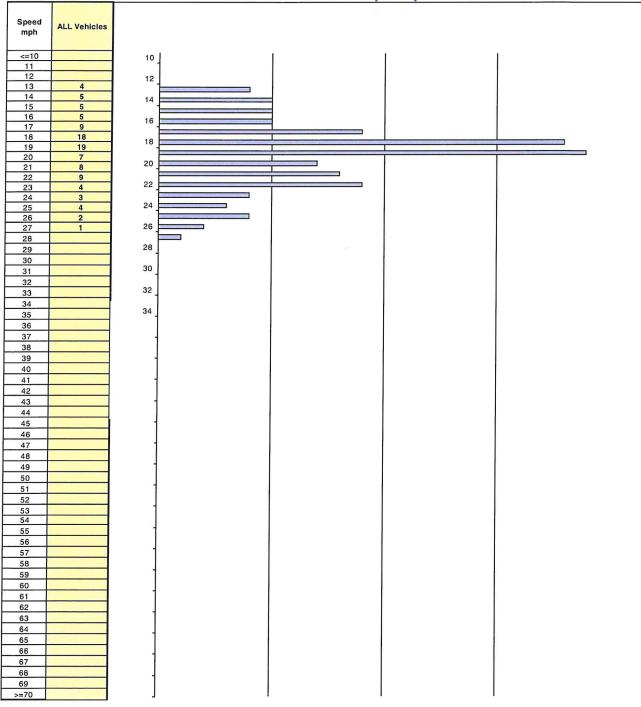
DATE: 1/13/20 Location: 4595 Topaz St

TIME: 14:00-15:00 Posted Speed: 25 MPH Clear/Dry Project #: 20-8004-016



SPEED PARAMETERS													
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace				
ALL	106	11 - 27	18 mph	22 mph	15 - 24	98	92%	10% / 11	-3% / -3				

Street: Topaz St Limits: Between 47th Ave & 49th Ave Direction: EB & WB **Factors** A. Prevailing Speed Data Location of Survey 4795 Topaz St Date of Survey 1/13/2020 Posted Speed Limit (mph) 25 mph # Speed Data Collected 103 85th Percentile (mph) 22 mph 10 mph Pace 15-24 Percent in Pace 89% **B. Traffic Factors** 30' Width Length of Segment (mi.) 0.09 Street Classification Major Collector C. Collision History Date Range Covered 1/1/2017-12/31/2019 **Total Accidents** Two total collisions D. Roadway Conditions Adjacent Land Use It is a primarily residential district. Two-lane unmarked roadways. No sidewalks are present Roadway Geometrics on the roadway. It is recommended that the prima facia speed of 25 mph be Comments maintained on this street section. Speed Limit Change? Yes **Existing Speed Limit: 25 MPH Recommended Speed Limit: 25 MPH** This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic. Approved and Authorized for release by the City of Capitola Public Works: Signed: Title: City Engineer Steven E. Jesberg



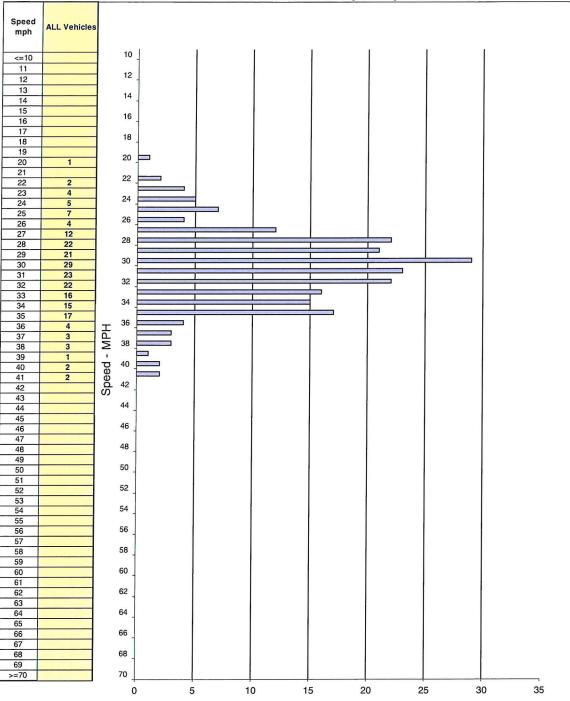
	SPEED PARAMETERS												
	50th 85th 10 MPH Percent in												
Class	Count	Range	Percentile	Percentile	Pace	# in Pace	Pace	% / # Below Pace	% / # Above Pace				
ALL	ALL 103 13 - 27 19 mph 22 mph 15 - 24 92 89% 8% / 9 2% / 2												

Steven E. Jesberg

Street: Wharf Rd Limits: Between Clares St & Robertson St Direction: NB **Factors** A. Prevailing Speed Data Location of Survey Wharf Rd 170' N/O Woolsey Cir Date of Survey 1/23/2020 Posted Speed Limit (mph) 25 mph # Speed Data Collected 215 85th Percentile (mph) 34 mph 10 mph Pace 26-35 Percent in Pace 84% **B.** Traffic Factors Width 30 Length of Segment (mi.) 0.34 Street Classification Minor Arterial C. Collision History Date Range Covered 1/1/2017-12/31/2019 **Total Accidents** Seven total collisions and three injuries D. Roadway Conditions It is primarily residential. Adjacent Land Use Two-lane roadways. Sidewalks are present on the east Roadway Geometrics side of the roadway, and a pedestrian crosswalk in the middle of the segment. The segment features horizontal curves and steady incline. Comments After evaluating current critical and pace speeds, it is recommended that a 25-mph speed limit be implemented to be in concurrence with section 2B.13 of the MUTCD. The 25-mph speed limit was obtained by a 5-mph reduction of the critical speed of 35 mph due to the number of access points, residential district density (as defined in section 515). A second 5 mph deduction is made due to a seres of horizontal curves which restrict sight distance and for pedestrian and bicyclist safety. Speed Limit Change? Yes **Recommended Speed Limit: 25 MPH Existing Speed Limit: 25 MPH** This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic. Approved and Authorized for release by the City of Capitola Public Works: Signed: Title: City Engineer

DATE: 1/23/2020 Location: Wharf Rd 170' N/O Woolsey Cir

Northbound & Southbound Spot Speeds



Number	Ωf	V/a	hic	عما

SPEED PARAMETERS												
50th 85th 10 MPH Percent												
Class	Count	Range	Percentile	Percentile	Pace	# in Pace	in Pace	%/ # Below Pace	%/ # Above Pace			
ALL	215	20 - 41	31 mph	34 mph	26 - 35	181	84%	8% / 19	7% / 15			

Signed:

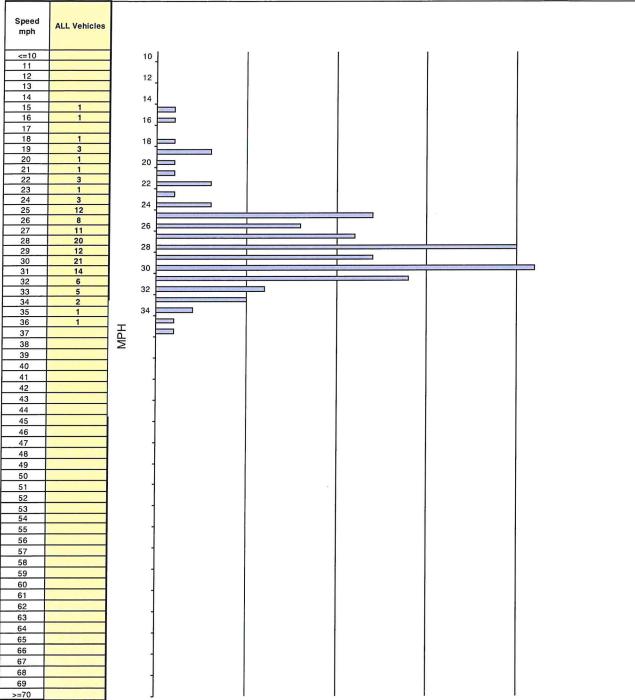
Steven E. Jesbe

Street: Wharf Rd Between 49th Ave / Clares St Limits: Direction: NB **Factors** A. Prevailing Speed Data Location of Survey Wharf Rd 225' N/O Grace St Date of Survey 1/23/2020 Posted Speed Limit (mph) None # Speed Data Collected 128 85th Percentile (mph) 31 mph 10 mph Pace 24-33 Percent in Pace 88% **B.** Traffic Factors Width: 32 Length of Segment (mi.) 0.1 Street Classification Minor Arterial C. Collision History Date Range Covered 1/1/2017-12/31/2019 **Total Accidents** Five total collisions, one injury D. Roadway Conditions It is a primarily residential district with substantial apartment Adjacent Land Use complexes and an elder care facility. Two-lane roadways. Sidewalks are present on the east Roadway Geometrics side of the roadway, and a pedestrian crosswalk in the middle of the segment. The segment features horizontal curves and steady incline. After evaluating current critical and pace speeds, it is recommended that a 25-mph speed limit be implemented Comments to be in concurrence with section 2B.13 of the MUTCD. The 25-mph speed limit was obtained by a 5-mph reduction of the critical speed of 30 mph due to the number of access points, Residential district density (as defined in section 515), and pedestrian and bicyclist safety. Speed Limit Change? No **Existing Speed Limit: 25 MPH** Recommended Speed Limit: 25 MPH This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic. Approved and Authorized for release by the City of Capitola Public Works:

Title: City Engineer

DATE: 1/23/20 Location: Wharf Rd 225' N/O Grace St

Northbound & Southbound Spot Speeds



	SPEED PARAMETERS												
	50th 85th 10 MPH Percent in												
Class	Count	Range	Percentile	Percentile	Pace	# in Pace	Pace	% / # Below Pace	% / # Above Pace				
ALL	128	15 - 36	28 mph	31 mph	24 - 33	112	88%	9% / 12	4% / 4				

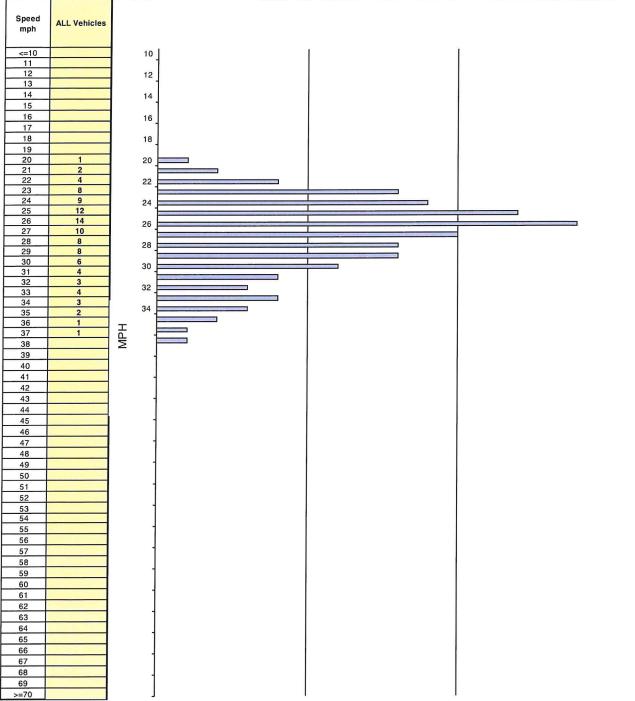
Steven E. Jesberg

Street: Wharf Rd Limits: Between Cliff/ Stockton & 49th Ave Direction: NB & SB **Factors** A. Prevailing Speed Data Location of Survey Wharf Rd 100' S/O Lincoln Ave Date of Survey 1/13/2020 Posted Speed Limit (mph) 25 mph # Speed Data Collected 100 85th Percentile (mph) 31 mph 10 mph Pace 22-31 Percent in Pace 83% **B.** Traffic Factors 32 Width Length of Segment (mi.) 0.15 Street Classification Other Principal Arterial C. Collision History Date Range Covered 1/1/2017-12/31/2019 **Total Accidents** Four total collisions D. Roadway Conditions Adjacent Land Use It is a primarily residential and business district. Two-lane roadways. Sidewalks are present on the part of Roadway Geometrics the east side of the roadway, and no bicycle lanes. After evaluating current critical and pace speeds, it is Comments recommended that a 25-mph speed limit be implemented to be in concurrence with section 2B.13 of the MUTCD. The 25-mph speed limit was obtained by a 5-mph reduction of the critical speed of 30 mph due to the number of access points, pedestrian and bicyclist safety. Speed Limit Change? No **Recommended Speed Limit: 25 MPH Existing Speed Limit: 25 MPH** This Survey conforms to section 627 and 40802 of the California Vehicle Code section 2B.13 of the California MUTCD and recommends a speed limit appropriate to facilitate the safe and orderly movement of traffic. Approved and Authorized for release by the City of Capitola Public Works: Title: City Engineer Signed:

DATE: 1/13/20 Location: Wharf Rd 100' S/O Lincoln Ave

TIME: 14:00-15:20 Posted Speed: 25 MPH Clear/Dry Project #: 20-8004-027

Northbound & Southbound Spot Speeds



				s	PEED PAR	RAMETERS			
			Percent in						
Class	Count	Range	Percentile	Percentile	Pace	# in Pace	Pace	% / # Below Pace	% / # Above Pace
ALL	100	20 - 37	26 mph	31 mph	22 - 31	83	83%	3% / 3	14% / 14

FIGURE 1

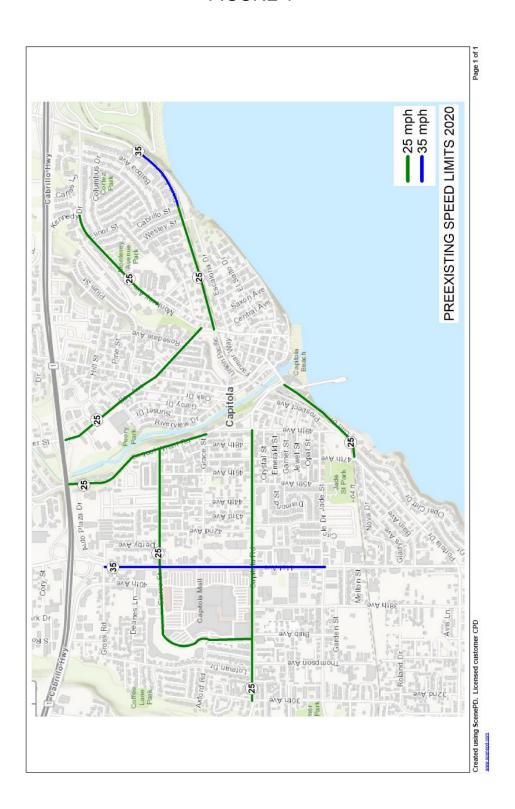


FIGURE 2

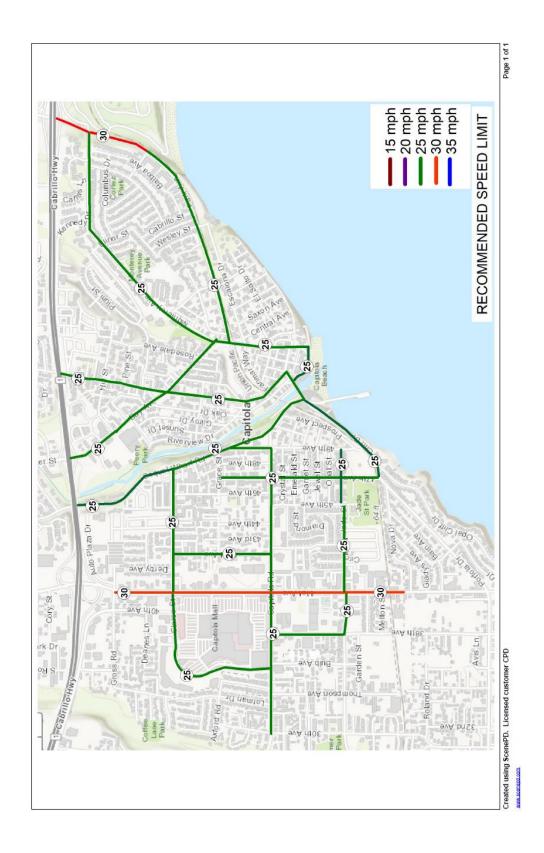
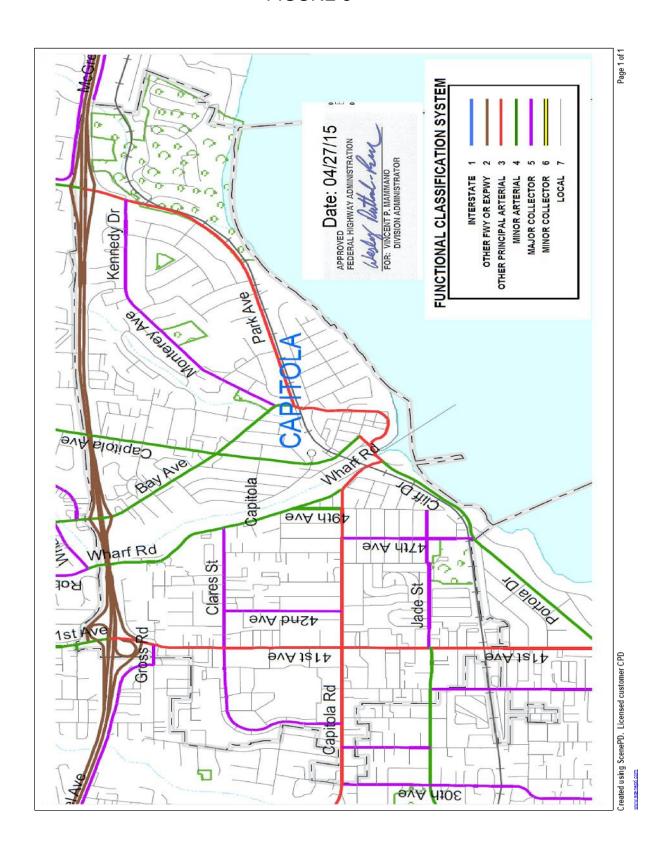


FIGURE 3



Appendix A Collision Data

	20	17	20	18	20)19	
	Injury	Non- Injury	Injury	Non- Injury	Injury	Non- Injury	Total
38th Ave (NB/SB), Between Brommer St & Portal Dr							0
38th Ave (NB/SB), Between Capitola Rd & Brommer St		2		1	1		4
41st Ave (NB/SB), Between Jade St/Brommer St & Portola Dr	1	2				1	4
41st Ave (NB/SB), Between 41st Ave Main Mall Entrance & Capitola Road		2				3	5
41st Ave (NB/SB), Between Capitola Rd & Jade St/Brommer St	2	6		1		2	11
41st Ave (NB/SB), Between Gross Rd & Clares St	1	15		1		12	29
41st Ave (NB/SB), Between Clares St & 41st Main Mall Entrance		2				3	5
41st Ave (NB/SB), Cory St & Gross Rd		11				8	19
42nd Ave (NB/SB), Between Clares St & Capitola Rd (A. North Of Grace St)				1			1
42nd Ave (NB/SB), Between Clares St & Capitola Rd (B. South of Grace St)							0
47th Ave (NB/SB), Between Capitola Rd & Topaz St							0
47th Ave (NB/SB), Between Topaz St & Portola Dr							0
49th Ave (NB/SB), Between Capitola Rd & Wharf Rd		1					1
Bay Ave (NB/SB), Between Capitola Ave & Hill St	1				1	2	4
Bay Ave (NB/SB), Between Hill St & Sr 1	2	3				2	7

	2017		2018		2019		
	Injury	Non- Injury	Injury	Non- Injury	Injury	Non- Injury	Total
Bay Ave (NB/SB), Between Monterey Ave & Capitola Ave	1	4					5
Bay Ave (NB/SB), Between Sr 1 & S. Main Street	1	2	1			2	6
Brommer St (EB/WB), Between 38th Ave & 41st Ave						1	1
Capitola Ave (NB/SB), Between Bay Ave & Hill St		1		4			5
Capitola Ave (NB/SB), Between Beverly Ave & Bay Ave			2	1		2	5
Capitola Ave (NB/SB), Between Hill St & Soquel Dr	1	1		1		1	4
Capitola Ave (NB/SB), Between Monterey Ave & Stockton Ave	1	1					2
Capitola Ave (NB/SB), Between Riverview Dr & Beverly Ave				2			2
Capitola Ave (NB/SB), Between Stockton Ave & Riverview Dr	2	4					6
Capitola Rd (EB/WB) Between 45th Ave & 49th Ave	2	1	2	6		1	12
Capitola Rd (EB/WB), Between 30th Ave & Clares St		3			2		5
Capitola Rd (EB/WB), Between 38th Ave & 41st Ave		3	1	1			5
Capitola Rd (EB/WB), Between 41st Ave & 45th Ave	1	2	2	5		2	12
Capitola Rd (EB/WB), Between Clares St & 38th Ave						3	3
Clares St (EB/WB), Between 40th Ave & 41st Ave	1			8			9
Clares St (EB/WB), Between 41st Ave & Wharf Rd		1				3	4

	2017		2018		2019		
	Injury	Non- Injury	Injury	Non- Injury	Injury	Non- Injury	Total
Clares St (EB/WB), Between Capitola Rd & 40th Ave		1		6	1	3	11
Cliff Dr (EB/WB), Between Opal Cliff Dr & Wharf Rd		1		3	1	1	6
Esplanade (EB/WB), Between Stockton Ave & Monterey Ave		2		1		2	5
Jade St (EB/WB), Between 41st Ave & 45th Ave			1	2		1	4
Kenedy Dr (EB/WB), Between Sir Francis Ave & Park Ave		2		1			3
Kennedy Dr (EB/WB), Between Monterey Ave & Sir Francis Ave	1						1
Monterey Ave (EB/WB), Between Capitola Ave & Park Ave			1	3	1		5
Monterey Ave (EB/WB), Between Esplanade & Capitola Ave		1		3		1	5
Monterey Ave (EB/WB), Between Park Ave & Bay Ave		1	1	1			3
Monterey Ave (EB/WB), Between Washburn Ave & Kennedy Dr						1	1
Monterey Ave (EB/WB), Between Bay Ave & Washburn Ave		1		2			3
Park Ave (EB/WB), Between Coronado St & Kennedy Ave/Mcgregor Dr	1						1
Park Ave (EBWB), Between Kennedy Dr/Mcgregor Dr & Sr 1		1				1	2
Park Ave (EB/WB), Between Monterey Ave & Coronado St	1	4		1	3		9
Stockton Ave (EB/WB), Between Wharf Road & Capitola Ave		1				1	2
Topaz St (EB/WB), Between 45th Ave & 47th Ave		2		3		1	6

	2017		2018		2019		
	Injury	Non- Injury	Injury	Non- Injury	Injury	Non- Injury	Total
Topaz St (EB/WB), Between 47th Ave & 49th Ave				1		1	2
Wharf Rd (NB/SB), Between 49th Ave & Clares St		1	1	3			5
Wharf Rd (NB/SB), Between Clares St & Robertson St	2	4	1				7
Wharf Rd (NB/SB), Between Cliff Dr/Stockton Ave & 49th Ave		2		1		1	4
Total	22	91	13	63	10	62	261

Appendix B NDS Radar Gun Speed Survey Methodology



Radar Gun Speed Zone Surveys —We have certified staff in radar gun use. Equipment is only as good as the personnel using it. By properly training our staff, including certification by CHP, we get higher quality data. Additionally, we regularly tune our guns and test them prior to each use.

Methodology for Radar Speed Survey:

- Locations are given to the Field Manager for review and collection planning.
- Data collectors meet with Field Manager minimum one (1) day before count to review requirements, machine locations, and safety issues.
- Radar Speed Surveys are conducted in accordance with the Department of Motor Vehicle Regulations and the Manual on Uniform Traffic Control Devices (MUTCD)
- Radar Units will be certified and calibrated prior to use. Employees conducting the speed surveys will be certified radar specialists.
- A site check is made to access the optimum count location, paying careful attention to concealing the counter so as not to influence the behavior of drivers.
- Surveys will not be conducted during inclement weather or when roadway is wet. Surveys will
 not be conducted during atypical conditions such as road construction, detours, or traffic
 accidents.
- A sample of passing cars will be randomly selected with careful attention to ensure that the sample represents the entire traffic stream.
- In platoon flow, only the first vehicle in the platoon will be selected. All vehicles traveling at less than 40 mph and within 200 feet of the lead vehicle or more than 40 MPH and less than 350 from the lead vehicle is considered to be in platoon.
- Unmarked vehicles will be used and nor the surveyor or the equipment will affect the traffic speeds.
- At the conclusion of the radar survey, a letter certifying that "The radar used to
 measure the speeds for the survey meets or exceeds the minimum operational
 standards of the National Highway Safety Administration and has been calibrated
 within three (3) years of the date the radar survey was conducted" shall be
 provided to the County on company.
 letterhead. As well, copies of the latest calibration certification and license shall be
 provided.