## 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
RCE: 44791

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\text { RCE: } 44791
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\frac{3-4 /-2 /}{\text { Date }}
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### 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 $85^{\text {th }}$ 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 freeflow 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 $5-\mathrm{mph}$ 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, 50 th percentile speed, 10 -mile pace
- Percent and number of vehicles observed within the $10-\mathrm{mph}$ 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 $10-\mathrm{mph}$ 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 $10-\mathrm{mph}$ 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, 85 th percentile speed, average speed, speed range, $10-\mathrm{mph}$ pace speed, and the percent of vehicles observed within the $10-\mathrm{mph}$ 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 $85^{\text {th }}$ 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, $85^{\text {th }}$ 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 <br> Speed (mph) | Number <br> 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 |  |

## City of Capitola

List of Local Roads
Speed governed by CVC 40802(B) - Prima Facie Speed Limits

|  |  | Prima <br> Nocie <br> Speed |
| :--- | :--- | :---: |
|  | Street | (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 |
|  |  | 2 |

## City of Capitola

List of Local Roads
Speed governed by CVC 40802(B) - Prima Facie Speed Limits

|  |  | Prima <br> No. <br>  <br>  <br>  <br>  <br>  <br> Street <br> Speed <br> (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 |
|  |  | 2 |

## City of Capitola

List of Local Roads
Speed governed by CVC 40802(B) - Prima Facie Speed Limits

|  |  | Prima <br> Facie <br> Speed <br> $\mathbf{( m p h})$ |
| :--- | :--- | :---: |
| 75 | Street | Rosedale Court |
| 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 |
|  |  | 25 |


| Street: $38^{\text {th }}$ Ave <br> Limits: Between Brommer St \& City Limit <br> Direction: NB \& SB |  |  |
| :---: | :---: | :---: |
| Factors |  |  |
| A. Prevailing Speed Data <br> Location of Survey <br> Date of Survey <br> Posted Speed Limit (mph) <br> \# Speed Data Collected <br> $85^{\text {th }}$ Percentile (mph) <br> 10 mph Pace <br> Percent in Pace | $\begin{aligned} & 99938^{\text {th }} \text { Ave } \\ & 1-29-202025 \mathrm{mph} \\ & 135 \\ & 33 \mathrm{mph} \\ & 25-34 \\ & 81 \% \end{aligned}$ |  |
| B. Traffic Factors <br> Width: <br> Length of Segment (mi.) <br> Street Classification |  |  |
| C. Collision History Date Range Covered Total Accident | $\begin{aligned} & 1 / 1 / 2017-12 / 31 / 2019 \\ & 0 \end{aligned}$ |  |
| D. Roadway Conditions <br> Adjacent Land Use <br> Roadway Geometrics <br> Comments | It is a primarily residential home complexes access f <br> Two-lane roadways. Sidew side. <br> After evaluating current cri recommended that a $25-\mathrm{m}$ be in concurrence with sect $25-\mathrm{mph}$ speed limit was ob the critical speed of 35 mph points, A second 5 mph d presence of the railroad co crossings and bicycle traffic | obile <br> west <br> is <br> ined to <br> . The <br> tion of <br> cess <br> to the <br> destrian |
| Speed Limit Change? | No |  |
| Existing Speed Limit: 25 MPH | Recommended Speed |  |
| This survey conforms to section 627 a MUTCD and recommends a speed lim <br> Approved and Authorized for release <br> Signed: | California Vehicle Code se facilitate the safe and ord apitola Public Works: <br> City Engineer |  |

## City of Capitola

DATE: 1/29/2020 Location: 999 38th Ave
TIME: 11:00-12:00 Posted Speed: 25 MPH Clear/Dry Project \#: 20-8004-012

Northbound \& Southbound Spot Speeds


| Street: $38^{\text {th }}$ Ave <br> Limits: Between <br> Direction: NB \& SB <br> Fact  | Brommer St |  |
| :---: | :---: | :---: |
| Factors |  |  |
| A. Prevailing Speed Data <br> Location of Survey <br> Date of Survey <br> Posted Speed Limit (mph) <br> \# Speed Data Collected <br> $85^{\text {th }}$ Percentile (mph) <br> 10 mph Pace <br> Percent in Pace | $\begin{aligned} & 146538^{\text {th }} \text { Ave } \\ & 1 / 29 / 2020 \\ & \text { None } \\ & 144 \\ & 32 \mathrm{mph} \\ & 25-34 \\ & 88 \% \end{aligned}$ |  |
| B. Traffic Factors <br> Width: <br> Length of Segment (mi.) <br> Street Classification | $\begin{aligned} & 38 \\ & 0.22 \\ & \text { Major Collector } \end{aligned}$ |  |
| C. Collision History Date Range Covered Total Accidents | 1/1/2016-12/31/20 <br> Four total collisio |  |
| D. Roadway Conditions <br> Adjacent Land Use <br> Roadway Geometrics <br> Comments | It is a primarily substantial shopping area. <br> Two-lane roadway and west side of th <br> After evaluating cu recommended that to be in concurren The $25-\mathrm{mph}$ speed reduction of the crit of access points, section 515), and | ct with a xes in the <br> east <br> it is mented TCD. <br> number efined in |
| Speed Limit Change? | No |  |
| Existing Speed Limit: 25 MPH | Recommended |  |
| This survey conforms to section 627 and MUTCD and recommends a speed limit <br> Approved and Authorized for release by | California Vehicle facilitate the safe apitola Public Works: <br> City Engineer | ornia |

City of Capitola

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

| Speed mph | ALL Vehicles |
| :---: | :---: |
| <=10 |  |
| 11 |  |
| 12 |  |
| 13 |  |
| 14 |  |
| 15 |  |
| 16 |  |
| 17 |  |
| 18 |  |
| 19 |  |
| 20 | 1 |
| 21 | 1 |
| 22 | 3 |
| 23 | 3 |
| 24 | 1 |
| 25 | 14 |
| 26 | 7 |
| 27 | 11 |
| 28 | 23 |
| 29 | 23 |
| 30 | 11 |
| 31 | 15 |
| 32 | 11 |
| 33 | 4 |
| 34 | 7 |
| 35 | 4 |
| 36 | 1 |
| 37 | 2 |
| 38 | 2 |
| 39 |  |
| 40 |  |
| 41 |  |
| 42 |  |
| 43 |  |
| 44 |  |
| 45 |  |
| 46 |  |
| 47 |  |
| 48 |  |
| 49 |  |
| 50 |  |
| 51 |  |
| 52 |  |
| 53 |  |
| 54 |  |
| 55 |  |
| 56 |  |
| 57 |  |
| 58 |  |
| 59 |  |
| 60 |  |
| 61 |  |
| 62 |  |
| 63 |  |
| 64 |  |
| 65 |  |
| 66 |  |
| 67 |  |
| 68 |  |
| 69 |  |
| >=70 |  |






Number of Vehicles

| SPEED PARAMETERS |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class | Count | Range | 50th Percentile | 85th Percentile | $10 \mathrm{MPH}$ 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: $41^{\text {st }}$ Ave <br> Limits: Between <br> Direction: NB \& SB | oss Rd |  |
| :---: | :---: | :---: |
| Factors |  |  |
| A. Prevailing Speed Data <br> Location of Survey <br> Date of Survey <br> Posted Speed Limit (mph) <br> \# Speed Data Collected <br> $85^{\text {th }}$ Percentile (mph) <br> 10 mph Pace <br> Percent in Pace | 41 ${ }^{\text {st }}$ Ave $500^{\prime}$ N/O Gross Rd <br> 1/7/2020 <br> None <br> 238 <br> 30 mph <br> 21-30 <br> $79 \%$ |  |
| B. Traffic Factors <br> Width <br> Length of Segment (mi.) <br> Street Classification | $\begin{aligned} & 61^{\prime} \\ & 0.18 \\ & \text { Other Principal Arterial } \end{aligned}$ |  |
| C. Collision History Date Range Covered Total Accidents | 1/1/2017-12/31/2019 19 total collisions |  |
| D. Roadway Conditions <br> Adjacent Land Use <br> Roadway Geometrics <br> Comments | Adjacent land use is primarily a Highway 1. <br> Five-lane divided roadway with present on the east side and we Signalized intersection has turn <br> After evaluating current critical recommended that a $30-\mathrm{mph}$ sp to be in concurrence with sectio | State <br> are ay. alks. <br> is <br> ented <br> CD. |
| Speed Limit Change? | Yes |  |
| Existing Speed Limit: 35 MPH | Recommended Speed Li |  |
| This survey conforms to section 627 and MUTCD and recommends a speed lim <br> Approved and Authorized for release <br> Signed: | California Vehicle Code section facilitate the safe and orderly m <br> apitola Public Works: <br> City Engineer |  |

## City of Capitola



Northbound \& Southbound Spot Speeds


| Street: $41^{\text {st }}$ Ave <br> Limits: Between <br> Direction: NB \& SB | lares St |  |
| :---: | :---: | :---: |
| Factors |  |  |
| A. Prevailing Speed Data <br> Location of Survey <br> Date of Survey <br> Posted Speed Limit (mph) <br> \# Speed Data Collected <br> $85^{\text {th }}$ Percentile (mph) <br> 10 mph Pace <br> Percent in Pace | $\begin{aligned} & 216041^{\text {st }} \text { Ave } \\ & 1 / 7 / 2020 \\ & 35 \mathrm{mph} \\ & 228 \\ & 31 \mathrm{mph} \\ & 24-33 \\ & 69 \% \end{aligned}$ |  |
| B. Traffic Factors Width Length of Segment (mi.) Street Classification | 43' NB and 46' SB <br> 0.20 <br> Other Principal Arterial |  |
| C. Collision History Date Range Covered Total Accidents | 1/1/2017-12/31/2019 <br> 29 total collisions, one injury |  |
| D. Roadway Conditions <br> Adjacent Land Use <br> Roadway Geometrics <br> Comments | Adjacent land use is primarily a <br> Six-lane divided roadway with ra lanes sidewalks are present on of the roadway. Signalized inters and crosswalks. <br> After evaluating current critical recommended that a $30-\mathrm{mph}$ sp to be in concurrence with section | bike st side kets |
| Speed Limit Change? | Yes |  |
| Existing Speed Limit: 35MPH | Recommended Speed Lim |  |
| This Survey conforms to section 627 MUTCD and recommends a speed lim <br> Approved and Authorized for release <br> Signed: | California Vehicle Code section facilitate the safe and orderly m apitola Public Works: <br> City Engineer |  |

City of Capitola

DATE: 1/7/2020
Location: 2160 41st Ave Posted Speed: 35 MPH Clear/Dry

Northbound \& Southbound Spot Speeds



City of Capitola

DATE: 1/7/2020
Location: 1855 41st Ave
TIME: 12:00-12:50 Posted Speed: 35 MPH Clear/Dry

Project \#: 19-8004-022

## Northbound \& Southbound Spot Speeds



| Street: $41^{\text {st }}$ Ave <br> Limits: Between <br> Direction: NB \& SB | Entrance \& Capitola Rd |  |
| :---: | :---: | :---: |
| Factors |  |  |
| A. Prevailing Speed Data <br> Location of Survey <br> Date of Survey <br> Posted Speed Limit (mph) <br> \# Speed Data Collected <br> $85^{\text {th }}$ Percentile (mph) <br> 10 mph Pace <br> Percent in Pace | $\begin{aligned} & 180541^{\text {st }} \text { Ave } \\ & 1 / 7 / 2020 \\ & 35 \mathrm{mph} \\ & 232 \\ & 31 \mathrm{mph} \\ & 22-31 \\ & 71 \% \end{aligned}$ |  |
| B. Traffic Factors <br> Width <br> Length of Segment (mi.) <br> Street Classification | ```37' NB and 36' SB 0 . 1 9 Other Principal Arterial``` |  |
| C. Collision History Date Range Covered Total Accidents | 1/1/2016-12/31/2019 Five total collisions |  |
| D. Roadway Conditions <br> Adjacent Land Use <br> Roadway Geometrics <br> Comments | Adjacent land use is gene Mall. <br> Six-to-five-lane divided ro bike lanes sidewalks are side of the roadway. Sign pockets and crosswalks. <br> After evaluating current recommended that a $30-\mathrm{m}$ to be in concurrence with | pitola <br> ns, and and west n is nented TCD. |
| Speed Limit Change? | Yes |  |
| Existing Speed Limit: 35 MPH | Recommended Speed |  |
| This Survey conforms to section 627 and MUTCD and recommends a speed lim <br> Approved and Authorized for release by <br> Signed: | California Vehicle Code facilitate the safe and ord apitola Public Works: <br> City Engineer | ornia |

City of Capitola

DATE: $1 / 7 / 2020 \quad$ Location: 1805 41st Ave
TIME: 13:10-14:10 Posted Speed: 35 MPH Clear/Dry Project \#: 19-8004-023
Northbound \& Southbound Spot Speeds

| Speed <br> mph | ALL Vehicles |
| :---: | :---: |
| $<=10$ |  |
| 11 |  |
| 12 |  |
| 13 |  |
| 14 |  |
| 15 | 1 |
| 16 | 2 |
| 17 | 2 |
| 18 | 3 |
| 19 | 8 |
| 20 | 12 |
| 21 | 9 |
| 22 | 14 |
| 23 | 13 |
| 24 | 11 |
| 25 | 12 |
| 26 | 19 |
| 27 | 22 |
| 28 | 21 |
| 29 | 24 |
| 30 | 18 |
| 31 | 11 |
| 32 | 12 |
| 33 | 7 |
| 34 | 8 |
| 35 | 1 |
| 36 | 1 |
| 37 | 1 |
| 38 |  |
| 39 |  |
| 40 |  |
| 41 |  |
| 42 |  |
| 4 |  |



| SPEED PARAMETERS |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class | Count | Range | 50th <br> Percentile | 85th <br> Percentile | 10 MPH <br> Pace | \# in Pace | Percent <br> in Pace | \%/\# Below Pace | \%/\# Above Pace |
| ALL | 232 | $15-37$ | 27 mph | 31 mph | $22-31$ | 165 | $71 \%$ | $15 \% / 37$ | $13 \% / 30$ |



City of Capitola

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

Northbound \& Southbound Spot Speeds

| Speed <br> mph | ALL Vehicles |
| :---: | :---: |
|  |  |
| < $=10$ |  |


|  |  |
| :---: | :---: |
| $<=10$ |  |
| 11 |  |
| 12 |  |
| 13 |  |
| 14 |  |




Number of Vehicles

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



## City of Capitola

DATE: 1/14/20
TIME: 09:00-10:2

Location: 1698 47th Ave
TIME: 09:00-10:25 Posted Speed: 25 MPH Clear/Dry Project \#: 20-8004-018

Northbound \& Southbound Spot Speeds


| SPEED PARAMETERS |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class | Count | Range | $\begin{gathered} \hline 50 \text { th } \\ \text { Percentile } \end{gathered}$ | $\begin{gathered} \text { 85th } \\ \text { Percentile } \end{gathered}$ | $10 \mathrm{MPH}$ 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 |



City of Capitola

DATE: 1/14/20
TIME: 10:30-11:30

Location: 16 47th Ave Posted Speed: 25 MPH Clear/Dry Project \#: 20-8004-019

Northbound \& Southbound Spot Speeds



| Street: 49th Ave <br> Limits: Between Capitola Rd \& Wharf Rd <br> Direction: NB \& SB |  |  |
| :---: | :---: | :---: |
| Factors |  |  |
| A. Prevailing Speed Data <br> Location of Survey <br> Date of Survey <br> Posted Speed Limit (mph) <br> \# Speed Data Collected $85^{\text {th }}$ Percentile (mph) <br> 10 mph Pace <br> Percent in Pace | $\begin{aligned} & 174549^{\text {th }} \text { Ave } \\ & 1 / 23 / 2020 \\ & 25 \mathrm{mph} \\ & 115 \\ & 31 \\ & 22-31 \\ & 78 \% \end{aligned}$ |  |
| B. Traffic Factors <br> Width: <br> Length of Segment (mi.) <br> Street Classification | $\begin{aligned} & 28 \\ & 0.13 \\ & \text { Minor Arterial } \end{aligned}$ |  |
| C. Collision History Date Range Covered Total Accidents | 1/1/2017-12/31/2019 <br> One total collision |  |
| D. Roadway Conditions <br> Adjacent Land Use <br> Roadway Geometrics <br> Comments | It is a primarily residentia <br> Two-lane roadways. Si the east side of the roa <br> After evaluating current recommended that a 25 to be in concurrence wit The 25 -mph speed limit reduction of the critical of access points, Resid section 515), and pede | king lot. <br> part of <br> is mented CD. <br> number ined in |
| Speed Limit Change? | No |  |
| Existing Speed Limit: 25 MPH | Recommended Sp |  |
| This Survey conforms to section 627 MUTCD and recommends a speed lim <br> Approved and Authorized for release <br> Signed: | e California Vehicle Cod o facilitate the safe and apitola Public Works: <br> City Engineer | rnia |

City of Capitola

## DATE: 1/23/20

TIME: 13:20-14:20
Location: 1745 49th Ave
Posted Speed: 25 MPH Clear/Dry
Project \#: 20-8004-026


| SPEED PARAMETERS |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class | Count | Range | 50th Percentile | 85th Percentile | $\begin{gathered} 10 \mathrm{MPH} \\ \text { Pace } \\ \hline \end{gathered}$ | \# 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 |



## City of Capitola

| DATE: 1/29/2020 Location: Bay Ave 100' S/O S Main St |  |  |
| :--- | :--- | :--- | :--- |
| TIME: 14:35-15:05 | Posted Speed: None $\quad$ Clear/Dry | Project \#: 20-8004-053 |

Northbound \& Southbound Spot Speeds


| Street: Bay Ave <br> Limits: Between <br> Direction: NB \& SB |  |
| :---: | :---: |
| Factors |  |
| A. Prevailing Speed Data <br> Location of Survey <br> Date of Survey <br> Posted Speed Limit (mph) <br> \# Speed Data Collected <br> $85^{\text {th }}$ Percentile (mph) <br> 10 mph Pace <br> Percent in Pace | 800 Bay Ave. <br> 01/15/2020 <br> 25 <br> 159 <br> 31 <br> 24-33 <br> 90\% |
| B. Traffic Factors <br> Width <br> Length of Segment (mi.) <br> Street Classification | $\begin{aligned} & 69^{\prime} \\ & 0.11 \\ & \text { Minor Arterial } \end{aligned}$ |
| C. Collision History Date Range Covered Total Accidents | 1/1/2017-12/31/2019 Seven total, two injury |
| D. Roadway Conditions <br> Adjacent Land Use <br> Roadway Geometrics <br> Comments | It is primarily a business district with a substantial shopping center, business center, and senior center border the roadway. <br> Four-lane roadways. Sidewalks are present on the east and west side of the roadway. Signalized intersection has turn pockets and crosswalks. <br> After evaluating current critical and pace speeds, it is recommended that a $25-\mathrm{mph}$ speed limit be implemented to be in concurrence with section 2B. 13 of the MUTCD. The $25-\mathrm{mph}$ speed limit was obtained by a $5-\mathrm{mph}$ 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 MUTCD and recommends a speed lim | California Vehicle Code section 2B. 13 of the California facilitate the safe and orderly movement of traffic. <br> pitola Public Works: <br> City Engineer |

## City of Capitola

DATE: 1/15/2020
TIME: 12:05-13:30
Location: $\mathbf{8 0 0}$ Bay Ave
Posted Speed: 25 MPH Clear/Dry
Project \#: 20-8004-051
Northbound \& Southbound Spot Speeds

| Speed <br> mph | ALL Vehicles |
| :---: | :---: |


|  |  |
| :---: | :--- |
| $<=10$ |  |
| 11 |  |
| 12 |  |



| 27 | 16 |
| :---: | :---: |
| 28 | 22 |
| 29 | 19 |
| 30 | 12 |
| 31 | 15 |
| 32 | 10 |



| 33 | 8 |
| :---: | :---: |
| 34 | $\mathbf{3}$ |
| 35 | $\mathbf{1}$ |
| 36 |  |
| 37 |  |



SPEED PARAMETERS

| SPEED PARAMETERS |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class | Count | Range | 50th Percentile | $\begin{gathered} \hline \text { 85th } \\ \text { Percentile } \end{gathered}$ | $10 \mathrm{MPH}$ 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 |



City of Capitola

DATE: 1/15/2020
Location: 831 Bay Ave
TIME: 14:15-15:30 Posted Speed: 25 MPH Clear/Dry

Project \#: 20-8004-052
Northbound \& Southbound Spot Speeds


| Street: Bay Ave <br> Limits: Between Monterey Ave \& Capitola Ave <br> Direction: NB \&SB |  |  |
| :---: | :---: | :---: |
| Factors |  |  |
| A. Prevailing Speed Data <br> Location of Survey <br> Date of Survey <br> Posted Speed Limit (mph) <br> \# Speed Data Collected <br> $85^{\text {th }}$ Percentile (mph) <br> 10 mph Pace <br> Percent in Pace | 380 Bay Ave. <br> 01/15/2020 <br> 25 <br> 138 <br> 31 <br> 23-32 <br> 80\% |  |
| B. Traffic Factors <br> Width: <br> Length of Segment (mi.) <br> Street Classification | $\begin{aligned} & 40^{\prime} \\ & 0.21 \\ & \text { Minor Arterial } \end{aligned}$ |  |
| C. Collision History Date Range Covered Total Accidents | 1/1/2017-12/31/2 <br> Five total collisio |  |
| D. Roadway Conditions <br> Adjacent Land Use <br> Roadway Geometrics <br> Comments | It is a primarily res <br> Two-lane roadway and west side of $t$ <br> After evaluating cur recommended tha to be in concurren The $25-\mathrm{mph}$ speed reduction of the cr of access points, section 515), and | ast <br> s <br> ented <br> CD. <br> number <br> ned in |
| Speed Limit Change? | No |  |
| Existing Speed Limit: 25 MPH | Recommended |  |
| This Survey conforms to section 627 MUTCD and recommends a speed lim <br> Approved and,Authorized for release <br> Signed: | California Vehicle facilitate the safe apitola Public Work <br> City Engineer |  |

## City of Capitola

```
DATE: 1/15/2020
```

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




| 31 | 3 |
| :--- | :--- |
| 32 | 5 |
| 33 | 3 |
| 34 | 2 |
| 35 |  |

30


City of Capitola

DATE: 1/13/20
Location: 3865 Brommer St
TIME: 12:15-12:55 Posted Speed: 25 MPH Clear/Dry Project \#: 20-8004-014

Eastbound \& Westbound Spot Speeds

| Speed mph | ALL Vehicles |
| :---: | :---: |
| <=10 |  |
| 11 |  |
| 12 |  |
| 13 |  |
| 14 | 1 |
| 15 | 1 |
| 16 | 1 |
| 17 | 3 |
| 18 | 8 |
| 19 | 14 |
| 20 | 19 |
| 21 | 16 |
| 22 | 25 |
| 23 | 15 |
| 24 | 24 |
| 25 | 28 |
| 26 | 23 |
| 27 | 15 |
| 28 | 10 |
| 29 | 6 |
| 30 | 5 |
| 31 | 3 |
| 32 | 2 |
| 33 |  |
| 34 |  |
| 35 |  |
| 36 |  |
| 37 |  |
| 38 |  |
| 39 |  |
| 40 |  |
| 41 |  |
| 42 |  |
| 43 |  |
| 44 |  |
| 45 |  |
| 46 |  |
| 47 |  |
| 48 |  |
| 49 |  |
| 50 |  |
| 51 |  |
| 52 |  |
| 53 |  |
| 54 |  |
| 55 |  |
| 56 |  |
| 57 |  |
| 58 |  |
| 59 |  |
| 60 |  |
| 61 |  |
| 62 |  |
| 63 |  |
| 64 |  |
| 65 |  |
| 66 |  |
| 67 |  |
| 68 |  |
| 69 |  |
| $>=70$ |  |



| SPEED PARAMETERS |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class | Count | Range | $\begin{gathered} 50 \text { th } \\ \text { Percentile } \\ \hline \end{gathered}$ | $\begin{gathered} \hline 85 \text { th } \\ \text { Percentile } \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 10 \mathrm{MPH} \\ & \text { Pace } \end{aligned}$ | \# 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 |



City of Capitola
DATE: $1 / 29 / 2020$
TIME: 14:30-15:30
Location: 2551 Capitola Ave
Posted Speed: 25 MPH Clear/Dry
Project \#: 20-8004-049

## Northbound \& Southbound Spot Speeds



| Street: Capitola <br> Limits: Between <br> Direction: NB \& SB | ill St |  |
| :---: | :---: | :---: |
| Factors |  |  |
| A. Prevailing Speed Data <br> Location of Survey <br> Date of Survey <br> Posted Speed Limit (mph) <br> \# Speed Data Collected <br> $85^{\text {th }}$ Percentile (mph) <br> 10 mph Pace <br> Percent in Pace | 804 Capitola Ave 01/15/2020 <br> 25 <br> 136 <br> 31 <br> 22-31 <br> 82\% |  |
| B. Traffic Factors <br> Width: <br> Length of Segment (mi.) <br> Street Classification | $\begin{aligned} & 38 \\ & 0.20 \\ & \text { Minor Arterial } \end{aligned}$ |  |
| C. Collision History Date Range Covered Total Accidents | 1/1/2017-12/31/2019 <br> Five total accidents |  |
| D. Roadway Conditions <br> Adjacent Land Use <br> Roadway Geometrics <br> Comments | It is a primarily reside apartment complex and <br> Two-lane roadways. Si and west sides of the r steady incline between <br> After evaluating curren recommended that a 25 to be in concurrence w The $25-\mathrm{mph}$ speed limi reduction of the critical of access points, Resid section 515), and pede | with an <br> east <br> es a <br> is <br> ented <br> CD. <br> number <br> ned in |
| Speed Limit Change? | No |  |
| Existing Speed Limit: 25 MPH | Recommended Sp |  |
| This Survey conforms to section 627 and MUTCD and recommends a speed lim <br> Approved and Authorized for release <br> Signed: | California Vehicle Cod facilitate the safe and apitola Public Works: <br> City Engineer |  |

## City of Capitola

DATE: 1/15/2020
Location: 804 Capitola Ave
TIME: 09:00-10:15 Posted Speed: 25 MPH Clear/Dry

Project \#: 20-8004-048
Northbound \& Southbound Spot Speeds

| Speed <br> mph | ALL Vehicles |
| :---: | :---: |
| $<=10$ |  |

## es

| $<=10$ |  |
| :---: | :---: |
| 11 |  |
| 12 |  |
| 13 |  |
| 14 |  |
| 15 |  |
| 16 | 2 |



| 27 | 18 |
| :---: | :---: |
| 28 | 15 |
| 29 | 11 |
| 30 | 9 |
| 31 | 10 |
| 32 | 5 |
| 33 | 5 |
| 34 | 2 |
| 35 |  |
| 36 | 2 |
| 37 |  |
| 38 |  |



| 37 |  |
| :--- | :--- |
| 38 |  |
| 39 |  |
| 40 |  |
| 41 |  |
| 42 |  |
| 0 |  |
| 0 |  |
| 0 |  |



Number of Vehicles

| SPEED PARAMETERS |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class | Count | Range | 50th Percentile | 85th Percentile | $\begin{gathered} 10 \mathrm{MPH} \\ \text { Pace } \\ \hline \end{gathered}$ | \# in Pace | Percent in Pace | \%/ \# Below Pace | \%/ \# Above Pace |
| ALL | 136 | 16-36 | 27 mph | 31 mph | 22-31 | 111 | 82\% | 8\% / 11 | 11\% / 14 |



## City of Capitola

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


| Street: Capitola <br> Limits: Between <br> Direction: NB \& SB | \& Beverly Ave |  |
| :---: | :---: | :---: |
| Factors |  |  |
| A. Prevailing Speed Data <br> Location of Survey <br> Date of Survey <br> Posted Speed Limit (mph) <br> \# Speed Data Collected <br> $85^{\text {th }}$ Percentile (mph) <br> 10 mph Pace <br> Percent in Pace | 518 Capitola Ave. $01 / 14 / 2020$ 25 205 28 $20-29$ $84 \%$ |  |
| B. Traffic Factors Width: <br> Length of Segment (mi.) Street Classification | $\begin{aligned} & 42 \\ & 0.13 \\ & \text { Minor Arterial } \end{aligned}$ |  |
| C. Collision History Date Range Covered Total Accidents | 1/1/2017-12/31/2019 <br> Two total Collisions |  |
| D. Roadway Conditions <br> Adjacent Land Use <br> Roadway Geometrics <br> Comments | It is primarily a busines extensive shopping cen <br> Four-lane roadways. Si and west side of the road has turn pockets and cros <br> After evaluating current recommended that a 25 to be in concurrence with The $25-\mathrm{mph}$ speed limi reduction of the critical of access points, Resid section 515), and pede | otel, and <br> east <br> ction <br> is <br> ented <br> CD. <br> number <br> ined in |
| Speed Limit Change? | No |  |
| Existing speed Limit: 25 MPH | Recommended Sp |  |
| This Survey conforms to section 627 MUTCD and recommends a speed lim <br> Approved and Authorized for release <br> Signed: | California Vehicle Cod facilitate the safe and apitola Public Works: <br> City Engineer | rnia |

City of Capitola

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 | $\begin{gathered} 10 \mathrm{MPH} \\ \text { Pace } \\ \hline \end{gathered}$ | \# 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 |



City of Capitola

DATE: $1 / 29 / 20$
Location: 403 Capitola Ave
TIME: 12:10-13:10 Posted Speed: 25 MPH Clear/Dry

Project \#: 20-8004-045
Northbound \& Southbound Spot Speeds


| SPEED PARAMETERS |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class | Count | Range | 50th Percentile | 85th Percentile | $\begin{gathered} 10 \mathrm{MPH} \\ \text { Pace } \\ \hline \end{gathered}$ | \# 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 |



City of Capitola

| DATE: 1/29/20 | Location: 202 Capitola Ave |  |  |
| :---: | :---: | :---: | :---: |
| TIME: 13:15-14:15 | Posted Speed: 25 MPH | Clear/Dry | Project \#: 20-8004-044 |



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



City of Capitola

DATE: 1/6/2020
Location: Capitola Rd @ Shirley Ln
TIME: 11:30-12:10 Posted Speed: 25 MPH Clear/Dry
Eastbound \& Westbound Spot Speeds


Number of Vehicles

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



City of Capitola

DATE: 1/6/2020
TIME: 12:20-13:10 Location: 3780 Capitola Rd Posted Speed: $25 \mathrm{MPH} \quad$ Clear/Dry

Project \#: 20-8004-002

## Eastbound \& Westbound Spot Speeds




City of Capitola


Eastbound \& Westbound Spot Speeds


| SPEED PARAMETERS |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |



City of Capitola


Eastbound \& Westbound Spot Speeds



City of Capitola

DATE: 1/6/2020 Location: 4830 Capitola Rd
TIME: 15:15-16:00 Posted Speed: 25 MPH Clear/Dry Project \#: 20-8004-005
Eastbound \& Westbound Spot Speeds



## City of Capitola

DATE: 1/24/20 Location: Clares St 1200' N/O Capitola Rd
TIME: 10:30-11:25 Posted Speed: $25 \mathrm{MPH} \quad$ Clear/Dry $\quad$ Project \#: 20-8004-008
Eastbound \& Westbound Spot Speeds


| SPEED PARAMETERS |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class | Count | Range | 50th Percentile | 85th <br> Percentile | $\begin{gathered} 10 \mathrm{MPH} \\ \text { Pace } \\ \hline \end{gathered}$ | \# in Pace | Percent in $\qquad$ | \%/\# Below Pace | \%/\# Above Pace |
| ALL | 225 | 12-37 | 24 mph | 29 mph | 18-27 | 154 | 68\% | 12\% / 27 | 20\% / 44 |



City of Capitola

DATE: 1/23/20
Location: Clares St $125^{\prime}$ W/O 41st Ave
TIME: 09:40-10:40 Posted Speed: 25 MPH

Clear/Dry
Project \#: 20-8004-009
Eastbound \& Westbound Spot Speeds

| Speed mph | ALL Vehicles |
| :---: | :---: |
| < $=10$ |  |
| 11 | 1 |
| 12 | 6 |
| 13 | 4 |
| 14 | 9 |
| 15 | 19 |
| 16 | 19 |
| 17 | 15 |
| 18 | 20 |
| 19 | 19 |
| 20 | 16 |
| 21 | 13 |
| 22 | 9 |
| 23 | 5 |
| 24 | 3 |
| 25 | 4 |
| 26 | 3 |
| 27 | 2 |
| 28 |  |
| 29 |  |
| 30 |  |
| 31 |  |
| 32 |  |
| 33 |  |
| 34 |  |
| 35 |  |
| 36 |  |
| 37 |  |
| 38 |  |
| 39 |  |
| 40 |  |
| 41 |  |
| 42 |  |
| 43 |  |
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| 45 |  |
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| 47 |  |
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| 60 |  |
| 61 |  |
| 62 |  |
| 63 |  |
| 64 |  |
| 65 |  |
| 66 |  |
| 67 |  |
| 68 |  |
| 69 |  |
| $>=70$ |  |



| SPEED PARAMETERS |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class | Count | Range | 50th Percentile | 85th Percentile | $10 \mathrm{MPH}$ Pace | \# in Pace | $\begin{gathered} \text { Percent in } \\ \text { Pace } \end{gathered}$ | \%/\# Below Pace | \%/\# Above Pace |
| ALL | 167 | 11-27 | 18 mph | 22 mph | 15-24 | 147 | 88\% | 11\% / 20 | 0\% 10 |


| Street: Clares Street <br> Limits: Between 41st Ave \& Wharf Rd <br> Direction: EB \& WB |  |  |
| :---: | :---: | :---: |
| Factors |  |  |
| A. Prevailing Speed Data <br> Location of Survey <br> Date of Survey <br> Posted Speed Limit (mph) <br> \# Speed Data Collected <br> $85^{\text {th }}$ Percentile (mph) <br> 10 mph Pace <br> Percent in Pace | 4194 Clares St $1 / 23 / 2020$ 25 mph 138 31 mph $22-31$ $78 \%$ |  |
| B. Traffic Factors <br> Width <br> Length of Segment (mi.) <br> Street Classification | $\begin{aligned} & 50^{\prime} \\ & 0.39 \\ & \text { Major Collector } \end{aligned}$ |  |
| C. Collision History Date Range Covered Total Accidents | 1/1/2017-12/31/2019 <br> Four total collisions |  |
| D. Roadway Conditions <br> Adjacent Land Use <br> Roadway Geometrics <br> Comments | Adjacent land use is gen Mall, a residential distric complexes, and a subst <br> Two-lane divided roadw are present on the north Signalized intersection The segment features a <br> After evaluating current recommended that a 25 to be in concurrence with The $25-\mathrm{mph}$ speed limit reduction of the critical of access points, Reside section 515 ), pedestrian geometry that includes a distance. | apitola <br> ents <br> park. <br> ewalks <br> swalks. <br> d. <br> it is <br> mented <br> TCD. <br> e number <br> efined in <br> road <br> ts sight |
| Speed Limit Change? | No |  |
| Existing Speed Limit: 25 MPH | Recommended Sp |  |
| This Survey conforms to section 627 and MUTCD and recommends a speed lim <br> Approved and Authorizedfor release by | e California Vehicle Code o facilitate the safe and ord apitola Public Works: <br> City Engineer | fornia |

## City of Capitola

DATE: 1/23/20
TIME: 11:00-12:00

Location: 4194 Clares St Posted Speed: 25 MPH Clear/Dry

| Speed <br> mph | ALL Vehicles |
| :---: | :---: |

Eastbound \& Westbound Spot Speeds


|  |  |
| :---: | :---: |
| $<=10$ |  |
| 11 |  |
| 12 |  |
| 13 |  |
| 14 |  |



| 32 | 8 |
| :---: | :---: |
| 33 | 3 |
| 34 | 4 |
| 35 | 1 |
| 36 | 2 |
| 37 | 1 |
| 38 |  |
| 39 |  |
| 40 |  |
| 41 |  |
| 42 |  |



| 42 |  |
| :--- | :--- |
| 43 |  |
| 44 |  |
| 45 |  |
| © |  |


| 45 |
| ---: |
| 46 |
| 47 |
| 48 |


| 48 |  |
| :--- | :--- |
| 49 |  |
| 50 |  |
| 51 |  |
| 52 |  |

42
44

| 52 |  |
| :---: | :---: |
| 53 |  |
| 54 |  |
| 55 |  |


|  |
| :--- |
|  |


| 57 |
| :--- |
| 58 |
| 59 |


| 60 |
| ---: |
| 61 |


| 62 |  |
| :---: | :---: |
| 63 |  |
| 64 |  |
| 65 |  |
| 66 |  |
| 67 |  |
| 68 |  |
| 69 |  |
| $>=70$ |  |


| Street: Cliff Dr <br> Limits: Between <br> Direction: EB \& WB | Wharf Rd |
| :---: | :---: |
| Factors |  |
| A. Prevailing Speed Data <br> Location of Survey <br> Date of Survey <br> Posted Speed Limit (mph) <br> \# Speed Data Collected <br> $85^{\text {th }}$ Percentile (mph) <br> 10 mph Pace <br> Percent in Pace | ```Cliff Dr 800' W/O Wharf Rd 1/14/2020 25 mph 203 34 mph 24-33 86%``` |
| B. Traffic Factors <br> Width <br> Length of Segment (mi.) <br> Street Classification | $\begin{aligned} & 33 \\ & 0.32 \\ & \text { Minor Arterial } \end{aligned}$ |
| C. Collision History Date Range Covered Total Accidents | 1/1/2017-12/31/2019 <br> Six total collisions, One injury |
| D. Roadway Conditions <br> Adjacent Land Use <br> Roadway Geometrics <br> Comments | It is a primarily residential and business district with substantial hotel in the area. <br> 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. <br> After evaluating current critical and pace speeds, it is recommended that a $25-\mathrm{mph}$ speed limit be implemented to be in concurrence with section 2B. 13 of the MUTCD. The $25-\mathrm{mph}$ speed limit was obtained by a $5-\mathrm{mph}$ 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 MUTCD and recommends a speed lim | California Vehicle Code section 2B. 13 of the California facilitate the safe and orderly movement of traffic. <br> apitola Public Works: <br> City Engineer |

## City of Capitola

| DATE: 1/14/20 | Location: Cliff Dr 800' W/O Wharf Rd |  |  |
| :--- | :--- | :--- | :--- |
| TIME: 09:00-10:35 | Posted Speed: 25 MPH | Clear/Dry | Project \#: 20-8004-030 |

Eastbound \& Westbound Spot Speeds


| SPEED PARAMETERS |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class | Count | Range | 50th Percentile | $\begin{gathered} \text { 85th } \\ \text { Percentile } \\ \hline \end{gathered}$ | 10 MPH Pace | \# in Pace | $\begin{gathered} \text { Percent in } \\ \text { Pace } \end{gathered}$ | \%/\# Below Pace | \%/\# Above Pace |
| ALL | 203 | 23-40 | 30 mph | 34 mph | 25-34 | 175 | 86\% | 3\% / 8 | 10\% / 20 |



City of Capitola

DATE: 1/13/20
Location: 4425 Jade St
TIME: 12:55-14:00 Posted Speed: 25 MPH Clear/Dry Project \#: 20-8004-015

Eastbound \& Westbound Spot Speeds

| Speed mph | ALL Vehicles |
| :---: | :---: |
| < $=10$ |  |
| 11 |  |
| 12 |  |
| 13 |  |
| 14 |  |
| 15 | 1 |
| 16 | 3 |
| 17 | 2 |
| 18 | 6 |
| 19 | 4 |
| 20 | 4 |
| 21 | 9 |
| 22 | 7 |
| 23 | 8 |
| 24 | 21 |
| 25 | 9 |
| 26 | 14 |
| 27 | 4 |
| 28 | 2 |
| 29 | 4 |
| 30 | 3 |
| 31 | 2 |
| 32 | 2 |
| 33 |  |
| 34 | 1 |
| 35 |  |
| 36 |  |
| 37 | 1 |
| 38 |  |
| 39 |  |
| 40 |  |
| 41 |  |
| 42 |  |
| 43 |  |
| 44 |  |
| 45 |  |
| 46 |  |
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| 60 |  |
| 61 |  |
| 62 |  |
| 63 |  |
| 64 |  |
| 65 |  |
| 66 |  |
| 67 |  |
| 68 |  |
| 69 |  |
| $>=70$ |  |



| SPEED PARAMETERS |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class | Count | Range | 50th Percentile | 85th <br> Percentile | $\begin{gathered} 10 \mathrm{MPH} \\ \text { Pace } \end{gathered}$ | \# in Pace | Percent in Pace | \%/\# Below Pace | \%/\# Above Pace |
| ALL | 107 | 15-37 | 24 mph | 27 mph | 18-27 | 86 | 80\% | 5\%/6 | 15\%/15 |



City of Capitola

DATE: 1/15/20
Location: Kennedy Dr 300' E/O Sir Francis Ave
TIME: 12:05-13:05 Posted Speed: 25 MPH Clear/Dry

Project \#: 20-8004-039
Eastbound \& Westbound Spot Speeds


| SPEED PARAMETERS |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class | Count | Range | 50th Percentile | 85th Percentile | 10 MPH Pace | $\#$ in Pace | $\begin{array}{\|c\|} \hline \text { Percent in } \\ \text { Pace } \\ \hline \end{array}$ | \%/\# 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 |
| Fact |  |

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 |
| $85^{\text {th }}$ Percentile (mph) | 31 |
| 10 mph Pace | 23-32 |
| Percent in Pace | 90\% |

B. Traffic Factors

Width
Length of Segment (mi.)
Street Classification
C. Collision History

Date Range Covered
Total Accidents

## D. Roadway Conditions

Adjacent Land Use
Roadway Geometrics

Comments

Adjacent land use is Primarily Residential.
Two-lane divided roadway with no bike lanes with sidewalks are not present. Stop sign intersection no turn pockets with crosswalks.

After evaluating current critical and pace speeds, it is recommended that a $25-\mathrm{mph}$ speed limit be implemented to be in concurrence with section 2B. 13 of the MUTCD. The $25-\mathrm{mph}$ speed limit was obtained by a $5-\mathrm{mph}$ 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: $\mathbf{2 5}$ MPH | Recommended Speed Limit: $\mathbf{2 5}$ 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:


City of Capitola

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
Eastbound \& Westbound Spot Speeds

| Speed mph | ALL Vehicles |
| :---: | :---: |
| < $=10$ |  |
| 11 |  |
| 12 |  |
| 13 |  |
| 14 |  |
| 15 |  |
| 16 |  |
| 17 |  |
| 18 |  |
| 19 |  |
| 20 | 1 |
| 21 | 1 |
| 22 | 3 |
| 23 | 6 |
| 24 | 10 |
| 25 | 11 |
| 26 | 13 |
| 27 | 16 |
| 28 | 25 |
| 29 | 19 |
| 30 | 16 |
| 31 | 10 |
| 32 | 6 |
| 33 | 5 |
| 34 | 2 |
| 35 | 3 |
| 36 |  |
| 37 |  |
| 38 |  |
| 39 |  |
| 40 |  |
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| 62 |  |
| 63 |  |
| 64 |  |
| 65 |  |
| 66 |  |
| 67 |  |
| 68 |  |
| 69 |  |
| $>=70$ |  |



| SPEED PARAMETERS |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class | Count | Range | 50th Percentile | 85th Percentile | $\begin{gathered} 10 \mathrm{MPH} \\ \text { Pace } \\ \hline \end{gathered}$ | \# in Pace | Percent in Pace | \%/\# Below Pace | \%/\# Above Pace |
| ALL | 147 | 20-35 | 28 mph | 31 mph | 23-32 | 132 | 90\% | 3\% / 5 | 7\%/10 |


| Street: Monterey Ave <br> Limits: Between Washburn Ave \& Kennedy Dr <br> Direction: EB \& WB |  |  |
| :---: | :---: | :---: |
| Factors |  |  |
| A. Prevailing Speed Data <br> Location of Survey <br> Date of Survey <br> Posted Speed Limit (mph) <br> \# Speed Data Collected <br> $85^{\text {th }}$ Percentile (mph) <br> 10 mph Pace <br> Percent in Pace | 729 Monterey Ave <br> 1/14/2020 <br> 25 <br> 145 <br> 30 <br> 23-32 <br> 80\% |  |
| B. Traffic Factors <br> Width <br> Length of Segment (mi.) <br> Street Classification | $\begin{aligned} & 41^{\prime} \\ & 0.41 \\ & \text { Major Collector } \end{aligned}$ |  |
| C. Collision History Date Range Covered Total Accidents | 1/1/2017-12/31/2019 One total collision |  |
| D. Roadway Conditions <br> Adjacent Land Use <br> Roadway Geometrics <br> Comments | Adjacent land use is prim Brighton Middle school, <br> Two-lane roadway with on the north side and s intersection has crossw <br> After evaluating current recommended that a 25 to be in concurrence wis The $25-\mathrm{mph}$ speed limit reduction of the critical of access points, Resid section 515 ), pedestrian presence of New Bright | , New <br> esent <br> p sign <br> ented <br> D. <br> number <br> ned in |
| Speed Limit Change? | No |  |
| Existing speed Limit: 25 MPH | Recommended Sp |  |
| This Survey conforms to section 627 and MUTCD and recommends a speed lim <br> Approved and Authorized for release'by <br> Signed: | California Vehicle Cod facilitate the safe and apitola Public Works: <br> City Engineer |  |

City of Capitola

DATE: 1/14/2020
TIME: 14:00-15:10
Location: 729 Monterey Ave
Posted Speed: 25 MPH Clear/Dry
Project \#: 20-8004-037
Eastbound \& Westbound Spot Speeds


| Street: Monterey Ave <br> Limits: Between Bay Ave / Washburn Ave <br> Direction: EB \& WB |  |  |
| :---: | :---: | :---: |
| Factors |  |  |
| A. Prevailing Speed Data <br> Location of Survey <br> Date of Survey <br> Posted Speed Limit (mph) <br> \# Speed Data Collected <br> $85^{\text {th }}$ Percentile (mph) <br> 10 mph Pace <br> Percent in Pace | Monterey <br> 1/14/2020 <br> 25 mph <br> 130 <br> 31 mph <br> 23-32 <br> 88\% |  |
| B. Traffic Factors <br> Width <br> Length of Segment (mi.) <br> Street Classification | $\begin{aligned} & 29.9^{\prime \prime} \\ & 0.16 \\ & \text { Major Colle } \end{aligned}$ |  |
| C. Collision History Date Range Covered Total Accidents | 1/1/2017-1 <br> Three tota |  |
| D. Roadway Conditions <br> Adjacent Land Use <br> Roadway Geometrics <br> Comments | Adjacent land Brighton Mid <br> Two-lane road on the north intersection <br> After evalua recommend to be in con The $25-\mathrm{mph}$ reduction of of access p | k, New <br> esent op sign <br> is ented D. <br> number |
| Speed Limit Change? | No |  |
| Existing Speed Limit: 25 MPH | Recomm |  |
| This Survey conforms to section 627 MUTCD and recommends a speed lim <br> Approved and Authorized for release <br> Signed: | California facilitate the apitola Public <br> City Enginee |  |

## City of Capitola

TIME: 12:40-13:50

DATE: 1/14/2020 Location: Monterey Ave 75' E/O Younger Ave Posted Speed: 25 MPH Clear/Dry

Project \#: 20-8004-036

Eastbound \& Westbound Spot Speeds



City of Capitola

| DATE: $1 / 14 / 2020$ | Location: Monterey Ave 125' N/O Park Ave |  |  |
| :--- | :--- | :--- | :--- |
| TIME: 11:35-12:35 | Posted Speed: 25 MPH | Clear/Dry | Project \#: 20-8004-035 |

Eastbound \& Westbound Spot Speeds



SPEED PARAMETERS

| SPEED PARAMETERS |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class | Count | Range | 50th <br> Percentile | 85th <br> Percentile | 10 MPH <br> Pace | \# in Pace | Percent <br> in Pace | \%/\# Below Pace | \%/\# Above Pace |
| ALL | 185 | $12-28$ | 18 mph | 21 mph | $13-22$ | 176 | $95 \%$ | $0 \% / 1$ |  |



City of Capitola
DATE: $1 / 15 / 2020$
TIME: 10:05-10:40
Location: Monterey Ave 100' S/O Fanmar Way Posted Speed: $25 \mathrm{MPH} \quad$ Clear/Dry

Project \#: 20-8004-034
Northbound \& Southbound Spot Speeds

| Speed <br> mph | ALL Vehicles |
| :---: | :---: |
| $<=10$ |  |
| 11 |  |
| 12 |  |
| 13 |  |
| 14 |  |
| 15 |  |
| 16 | 2 |
| 17 | 2 |
| 18 | 3 |
| 19 | 12 |
| 20 | 10 |
| 21 | 17 |
| 22 | 18 |
| 23 | 27 |
| 24 | 30 |
| 25 | 24 |
| 26 | 19 |
| 27 | 16 |
| 28 | 12 |
| 29 | 4 |
| 30 | 3 |
| 31 | 3 |
| 32 | 2 |
| 33 |  |
| 34 | 3 |
| 35 |  |
| 36 | 2 |
| 37 |  |
| 38 |  |
| 39 |  |
| 40 |  |
| 41 |  |
| 42 |  |



Number of Vehicles

| SPEED PARAMETERS |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class | Count | Range | 50th Percentile | $\begin{gathered} \text { 85th } \\ \text { Percentile } \end{gathered}$ | $\begin{gathered} 10 \mathrm{MPH} \\ \text { Pace } \end{gathered}$ | \# 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: Monterey Ave <br> Limits: Between Esplanade \& Capitola Ave <br> Direction: NB |  |  |
| :---: | :---: | :---: |
| Factors |  |  |
| A. Prevailing Speed Data <br> Location of Survey <br> Date of Survey <br> Posted Speed Limit (mph) <br> \# Speed Data Collected <br> $85^{\text {th }}$ Percentile (mph) <br> 10 mph Pace <br> Percent in Pace | Monterey A <br> 1/15/2020 <br> None <br> 74 <br> 19 mph <br> 12-21 <br> 96\% |  |
| B. Traffic Factors <br> Average Daily Traffic (ADT) <br> Length of Segment (mi.) <br> Street Classification | $\begin{aligned} & 49 \\ & 0.05 \\ & \text { Other Princ } \end{aligned}$ |  |
| C. Collision History Date Range Covered Total Accidents | 1/1/2017-12/ <br> Five total c |  |
| D. Roadway Conditions <br> Adjacent Land Use <br> Roadway Geometrics <br> Comments | It is a prim substantial b <br> One-way roa and south sid <br> It is recomm maintained | with orth mph |
| Speed Limit Change? | No |  |
| Existing Speed Limit: 25 MPH | Recomme |  |
| This Survey conforms to section 627 and MUTCD and recommends a speed lim | California V facilitate the apitola Public <br> City Engineer |  |

## City of Capitola

DATE: $1 / 15 / 2020 \quad$ Location: Monterey Ave 75' S/O Capitola Ave TIME: 09:00-10:00 Posted Speed: 25 MPH Clear/Dry Project \#: 20-8004-033

Northbound Spot Speeds

| Speed <br> mph | ALL Vehicles |
| :---: | :---: |
| $<=10$ |  |
| 11 | 2 |



| 15 | 8 |
| :---: | :---: |
| 16 | 7 |
| 17 | 8 |
| 18 | 9 |
| 19 | 7 |
| 20 | 4 |
| 21 | 3 |
| 22 | 1 |
| 23 |  |
| 24 |  |
| 25 |  |
| 26 |  |
| 27 |  |
| 28 |  |
| 29 |  |
| 30 |  |
| 31 |  |


| 32 |  |
| :--- | :--- |
| 33 |  |
| 34 |  |
| 35 |  |
| 36 |  |



| 37 |  |
| :--- | :--- |
| 38 |  |
| 39 |  |
| 40 |  |
| 41 |  |

22
2

| Street: Park Ave <br> Limits: Between Monterey Ave \& Coronado St <br> Direction: EB \& WB |  |  |
| :---: | :---: | :---: |
| Factors |  |  |
| A. Prevailing Speed Data Location of Survey Date of Survey Posted Speed Limit (mph) \# Speed Data Collected $85^{\text {th }}$ Percentile (mph) 10 mph Pace Percent in Pace | Park Ave. 200' W <br> 01/29/2020 <br> 25 and 35 <br> 201 <br> 31 <br> 22-31 <br> 84\% |  |
| B. Traffic Factors <br> Width <br> Length of Segment (mi.) <br> Street Classification | $\begin{aligned} & 39^{\prime} \\ & 0.68 \\ & \text { Other Principal } \end{aligned}$ |  |
| C. Collision History Date Range Covered Total Accidents | 1/1/2017-12/31/2 <br> Nine collisions, |  |
| D. Roadway Conditions <br> Adjacent Land Use <br> Roadway Geometrics <br> Comments | It is primarily complexes in the a <br> Two-lane roadway north and south of in the middle of the horizontal curves a <br> After evaluating cu recommended tha to be in concurren The $25-\mathrm{mph}$ speed reduction of the cri of access points, R section 515), and section has an exis reommended that the prevent confusion | partment <br> of swalk is s <br> is <br> nented <br> TD. <br> number <br> fined in This <br> ons to |
| Speed Limit Change? | No |  |
| Existing Speed Limit: 25 and 35 MPH | Recommended |  |
| This Survey conforms to section 627 and 40802 MUTCD and recommends a speed limit approp <br> Approved and Authorized for release by the City | California Vehicle facilitate the safe apitola Public Works: <br> City Engineer | ornia |

## City of Capitola

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
Eastbound \& Westbound Spot Speeds


| SPEED PARAMETERS |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class | Count | Range | 50th Percentile | $\begin{gathered} \hline \text { 85th } \\ \text { Percentile } \end{gathered}$ | 10 MPH Pace | \# in Pace | $\begin{gathered} \text { Percent in } \\ \text { Pace } \end{gathered}$ | \%/\# Below Pace | \% / \# Above Pace |
| ALL | 201 | 18-36 | 27 mph | 31 mph | 22-31 | 168 | 84\% | 5\% / 11 | 11\% / 22 |



## City of Capitola

| DATE: $1 / 29 / 20$ | Location: Park Ave 200' S/O Kennedy Dr |  |  |
| :--- | :--- | :--- | :--- |
| TIME: 11:05-12:05 | Posted Speed: 35 MPH | Clear/Dry | Project \#: 20-8004-041 |

Northbound \& Southbound Spot Speeds


| SPEED PARAMETERS |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class | Count | Range | $\begin{gathered} 50 \text { th } \\ \text { Percentile } \\ \hline \end{gathered}$ | $\begin{gathered} \hline 85 \mathrm{th} \\ \text { Percentile } \\ \hline \end{gathered}$ | 10 MPH Pace | \# in Pace | Percent in Pace | \%/\# Below Pace | \%/\# Above Pace |
| ALL | 164 | 24-46 | 33 mph | 37 mph | 28-37 | 137 | 84\% | 4\% / 7 | 13\% / 20 |


| Street: Park Ave <br> Limits: Between <br> Direction: EB \& WB | McGregor Dr \& SR 1 |
| :---: | :---: |
| Factors |  |
| A. Prevailing Speed Data <br> Location of Survey <br> Date of Survey <br> Posted Speed Limit (mph) <br> \# Speed Data Collected $85^{\text {th }}$ Percentile (mph) <br> 10 mph Pace <br> Percent in Pace | Park Ave 200' N/O Kennedy Dr/McGregor Dr 01/29/2020 <br> 35 <br> 126 <br> 34 <br> 26-35 <br> 82\% |
| B. Traffic Factors <br> Width <br> Length of Segment (mi.) <br> Street Classification | $\begin{aligned} & 49^{\prime} \\ & 0.15 \\ & \text { Other Principal Arterial } \end{aligned}$ |
| C. Collision History Date Range Covered Total Accidents | 1/1/2017-12/31/2019 <br> Two collisions |
| D. Roadway Conditions <br> Adjacent Land Use <br> Roadway Geometrics <br> Comments | It is primarily residential. <br> Two-lane roadways. Sidewalks are present on the east side of the roadway. <br> The critical speed was measured at 34 mph which will be rounded up to $35-\mathrm{mph}$. 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 MUTCD and recommends a speed limit <br> Approved and Authorized for release by <br> Signed: | California Vehicle Code section 2B. 13 of the California o facilitate the safe and orderly movement of traffic. <br> apitola Public Works: <br> City Engineer |

## City of Capitola

| DATE: $1 / 29 / 20$ | Location: Park Ave 200' N/O Kennedy Dr/McGregor Dr |  |
| :--- | :--- | :--- |
| TIME: 10:00-11:00 | Posted Speed: 35 MPH | Clear/Dry |

Northbound \& Southbound Spot Speeds

| Speed <br> mph | ALL Vehicles |
| :---: | :---: |

$\square$

|  |  |
| :---: | :---: |
| $\langle=10$ |  |
| 11 |  |
| 12 |  |
| 13 |  |
| 14 |  |
| 15 |  |
| 16 |  |
| 17 |  |
| 18 |  |
| 19 |  |
| 20 | 1 |
| 21 |  |
| 22 | 2 |
| 23 | 2 |
| 24 | 3 |
| 25 | 4 |
| 26 | 6 |
| 27 | 8 |
| 28 | 14 |
| 29 | 16 |
| 30 | 17 |
| 31 | 12 |
| 32 | 12 |
| 33 | 5 |
| 34 | 8 |
| 35 | 5 |
| 36 | 3 |
| 37 | 4 |
| 38 | 2 |
| 39 | 2 |
| 40 |  |
| 41 |  |
| 42 |  |
| 43 |  |



| SPEED PARAMETERS |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class | Count | Range | 50th Percentile | $\begin{gathered} \hline 85 \mathrm{th} \\ \text { Percentile } \\ \hline \end{gathered}$ | $10 \mathrm{MPH}$ Pace | \# in Pace | $\begin{array}{\|c} \text { Percent in } \\ \text { Pace } \end{array}$ | \%/\# Below Pace | \%/\# Above Pace |
| ALL | 126 | 20-39 | 30 mph | 34 mph | 26-35 | 103 | 82\% | 9\%/12 | 9\% / 11 |



## City of Capitola

| DATE: $1 / 14 / 20$ | Location: Stockton Ave 200' E/O Wharf Rd |  |  |
| :--- | :--- | :--- | :--- |
| TIME: | 14:05-15:20 | Posted Speed: None | Clear/Dry |

Eastbound \& Westbound Spot Speeds


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



## City of Capitola

| LATE: $1 / 13 / 20$ | Location: 4595 Topaz St |  |  |
| :--- | :--- | :--- | :--- |
| TIME: 14:00-15:00 | Posted Speed: 25 MPH | Clear/Dry | Project \#: 20-8004-016 |

Eastbound \& Westbound Spot Speeds


| SPEED PARAMETERS |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class | Count | Range | 50th Percentile | 85th Percentile | 10 MPH <br> Pace | \# in Pace | $\begin{gathered} \text { Percent in } \\ \text { Pace } \end{gathered}$ | \% / \# Below Pace | \%/\# Above Pace |
| ALL | 106 | 11-27 | 18 mph | 22 mph | 15-24 | 98 | 92\% | 10\% / 11 | -3\% / -3 |


| Street: Topaz St <br> Limits: Between 47th Ave \& 49 <br> Dir Ave  <br> Direction: EB \& WB |  |  |
| :---: | :---: | :---: |
| Factors |  |  |
| A. Prevailing Speed Data Location of Survey Date of Survey Posted Speed Limit (mph) \# Speed Data Collected $85^{\text {th }}$ Percentile (mph) 10 mph Pace Percent in Pace | $\begin{aligned} & 4795 \text { Topaz St } \\ & 1 / 13 / 2020 \\ & 25 \mathrm{mph} \\ & 103 \\ & 22 \mathrm{mph} \\ & 15-24 \\ & 89 \% \end{aligned}$ |  |
| B. Traffic Factors <br> Width <br> Length of Segment (mi.) <br> Street Classification | $\begin{aligned} & 30^{\prime} \\ & 0.09 \\ & \text { Major Collector } \end{aligned}$ |  |
| C. Collision History Date Range Covered Total Accidents | 1/1/2017-12/31 <br> Two total collisi |  |
| D. Roadway Conditions <br> Adjacent Land Use <br> Roadway Geometrics <br> Comments | It is a primarily re Two-lane unmark on the roadway. <br> It is recommende maintained on th | esent <br> mph |
| Speed Limit Change? | Yes |  |
| Existing Speed Limit: 25 MPH | Recommende |  |
| This Survey conforms to section 627 and MUTCD and recommends a speed limit | California Vehicl facilitate the safe apitola Public Wor <br> City Engineer |  |

City of Capitola
DATE: 1/13/20
TIME: 15:00-16:00
Location: 4795 Topaz St
Posted Speed: 25 MPH Clear/Dry
Project \#: 20-8004-017
Eastbound \& Westbound Spot Speeds


| SPEED PARAMETERS |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class | Count | Range | 50th Percentile | 85th Percentile | $\begin{gathered} 10 \mathrm{MPH} \\ \text { Pace } \end{gathered}$ | \# in Pace | Percent in Pace | \%/\# Below Pace | \%/\# Above Pace |
| ALL | 103 | 13-27 | 19 mph | 22 mph | 15-24 | 92 | 89\% | 8\%/9 | 2\% / 2 |



## City of Capitola

DATE: 1/23/2020 Location: Wharf Rd 170' N/O Woolsey Cir
TIME: 14:25-14:55 Posted Speed: 25 MPH Clear/Dry

Project \#: 20-8004-029
Northbound \& Southbound Spot Speeds


Number of Vehicles

| SPEED PARAMETERS |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class | Count | Range | $50 t h$ <br> Percentile | $85 t h$ <br> Percentile | 10 MPH <br> Pace | \# in Pace | Percent <br> in Pace | \%/ \# Below Pace | \%/ \# Above Pace |  |
| ALL | 215 | $20-41$ | 31 mph | 34 mph | $26-35$ | 181 | $84 \%$ | $8 \% / 19$ | $7 \% / 15$ |  |


| Street: Wharf Rd <br> Limits: Between <br> Direction: NB | ares St |
| :---: | :---: |
| Factors |  |
| A. Prevailing Speed Data <br> Location of Survey <br> Date of Survey <br> Posted Speed Limit (mph) <br> \# Speed Data Collected <br> $85^{\text {th }}$ Percentile (mph) <br> 10 mph Pace <br> Percent in Pace | Wharf Rd 225' N/O Grace St 1/23/2020 <br> None <br> 128 <br> 31 mph <br> 24-33 <br> 88\% |
| B. Traffic Factors <br> Width: <br> Length of Segment (mi.) <br> Street Classification | $\begin{aligned} & 32 \\ & 0.1 \\ & \text { Minor Arterial } \end{aligned}$ |
| C. Collision History Date Range Covered Total Accidents | 1/1/2017-12/31/2019 <br> Five total collisions, one injury |
| D. Roadway Conditions <br> Adjacent Land Use <br> Roadway Geometrics <br> Comments | It is a primarily residential district with substantial apartment complexes and an elder care facility. <br> Two-lane roadways. Sidewalks are present on the east side of the roadway, and a pedestrian crosswalk in the middle of the segment. The segment features horizontal curves and steady incline. <br> After evaluating current critical and pace speeds, it is recommended that a $25-\mathrm{mph}$ speed limit be implemented to be in concurrence with section 2B. 13 of the MUTCD. The $25-\mathrm{mph}$ speed limit was obtained by a $5-\mathrm{mph}$ 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 MUTCD and recommends a speed limit | e California Vehicle Code section 2B. 13 of the California o facilitate the safe and orderly movement of traffic. <br> apitola Public Works: <br> City Engineer |

## City of Capitola

| DATE: $1 / 23 / 20$ | Location: Wharf Rd 225' N/O Grace St |  |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| TIME: |  |  |  |

Northbound \& Southbound Spot Speeds

| Speed <br> mph | ALL Vehicles |
| :---: | :---: |



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



## City of Capitola

| 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 |



| SPEED PARAMETERS |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class | Count | Range | 50th Percentile | 85th <br> Percentile | $\begin{aligned} & 10 \mathrm{MPH} \\ & \text { Pace } \end{aligned}$ | $\#$ in Pace | $\begin{array}{\|c\|} \hline \text { Percent in } \\ \text { Pace } \\ \hline \end{array}$ | \%/\# 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|  | 2017 |  | 2018 |  | 2019 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Injury | NonInjury | Injury | NonInjury | Injury | NonInjury | 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 | NonInjury | Injury | NonInjury | Injury | Non- <br> 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 | NonInjury | Injury | NonInjury | Injury | NonInjury | Total |
| Clares St (EB/WB), Between Capitola Rd \& 40th Ave |  | 1 |  | 6 | 1 | 3 | 11 |
| Cliff $\operatorname{Dr}(E B / W B)$, Between Opal Cliff $\operatorname{Dr}$ \& 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- <br> Injury | Injury | Non- <br> Injury | Injury | Non- <br> Injury | Total |
| Topaz St (EB/WB), Between 47th Ave \& 49th <br> Ave |  |  |  | 1 |  | 1 | $\mathbf{2}$ |
| Wharf Rd (NB/SB), Between 49th Ave \& Clares <br> St |  | 1 | 1 | 3 |  |  | $\mathbf{5}$ |
|  <br> Robertson St | 2 | 4 | 1 |  |  |  | $\mathbf{7}$ |
| Wharf Rd (NB/SB), Between Cliff Dr/Stockton <br> Ave \& 49th Ave |  | 2 |  | 1 |  | 1 | $\mathbf{4}$ |
| Total | $\mathbf{2 2}$ | $\mathbf{9 1}$ | $\mathbf{1 3}$ | $\mathbf{6 3}$ | $\mathbf{1 0}$ | $\mathbf{6 2}$ | $\mathbf{2 6 1}$ |

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 withthe 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 trafficstream.
- In platoon flow, only the first vehicle in the platoon will be selected. All vehicles traveling atless than 40 mph and within 200 feet of the lead vehicle or morethan 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.
- Attheconclusion ofthe radar survey, a letter certifying that "The radar used to measure the speeds for the survey meets or exceeds the minimum operational standards ofthe National Highway Safety Administration and has been calibrated within three (3) years of the datethe radar survey was conducted" shall be provided tothe County on company.
letterhead. As well, copies of the latest calibration certification and license shall be provided.

