



**CITY OF ESCONDIDO**  
**TRANSPORTATION and**  
**COMMUNITY SAFETY COMMISSION**

**Commission Report of: April 11, 2024**

**Item No.: F1**

**Location: Various locations Citywide**

**Initiated By: City Staff**

**Request:** Recommend approval of the Engineering & Traffic Surveys (E&TS) for posted speeds on various street segments Citywide and to forward recommendations to City Council to retain speed limits on six segments.

**Background & Survey Methodology:**

To satisfy the requirements of Section 40802 of the California Vehicle Code (CVC), Engineering and Traffic Surveys are required by the State of California to establish speed limits and to enforce those limits using radar or other speed measuring devices. These surveys must be updated periodically (every 5, 7, or 14 years, depending upon specific criteria) to ensure the speed limits reflect current conditions as dictated by the 2022 CVC. The surveys must be conducted in accordance with applicable provisions of Section 627 “Engineering and Traffic Survey” of the CVC.

A brief description of the procedure is presented below.

**1. Measurement of Actual Prevailing Speeds**

The actual speed of at least 100 vehicles on each street segment was measured using a calibrated radar meter. Both directions of travel were surveyed. From this data, the prevailing or 85<sup>th</sup> percentile speed (the speed at or below which 85 percent of the vehicles sampled were traveling), ten miles per hour pace speed (increment of ten miles per hour containing the greatest number of measurements), and percent of vehicles in the pace were determined.

**2. Accident Records**

From the accident reports, the number of accidents for each segment was used to calculate the accident rate, which is defined as the number of accidents per million vehicle miles (acc/mvm) of travel on that segment. The accident rate for each segment was then compared to the most recent statewide average for similar types of roads. This information is shown on the survey summary sheets.

**3. Traffic and Roadside Conditions**

Each route was driven, and a notation made of its features, especially those not readily apparent to reasonable drivers, as well as those that might be combined with other factors to justify downward or upward speed zoning. These features are listed in the Engineering and Traffic Survey (E&TS) for each segment.

**4. Residential Density**

Information regarding the adjacent land use was noted and included in the Engineering and Traffic Survey.

#### 5. Pedestrian and Bicyclist Safety

Segment accident records were used to evaluate the pedestrian and bicyclist safety of the roadway segments.

#### 6. School Zones

Proximity to schools and school speed limit zones were noted and included in the Engineering and Traffic Survey.

### Methodology:

In accordance with CVC Section 22358.6, the California Manual on Uniform Traffic Control Devices (CA-MUTCD) is to be revised to require a local authority to round speed limits to the nearest five miles per hour of the 85th percentile of the free-flowing traffic. Where the speed limit needs to be rounded up to the nearest five miles per hour increment of the 85th-percentile speed, a local authority may decide to instead round down the speed limit to the lower five miles per hour increment. A local authority may additionally lower the speed limit as provided in Sections 22358.7 and 22358.8. CVC Section 22358.7 is not eligible for use to additionally lower a speed limit until June 30, 2024 or until the Judicial Council has developed an online tool for adjudicating infraction violations statewide.

The California Department of Transportation updated the CA-MUTCD, effective March 10, 2023 to be consistent with the CVC.

### Discussion & Purpose:

Per CVC Section 22354, for a posted speed limit to be legally enforceable by the Police Department using radar detection, it must meet all the following:

- 1) Between 15 mph and 65 mph,
- 2) Supported by an Engineering and Traffic Survey, and

The CVC was revised effective January 1, 2022 by the passing of Assembly Bill 43. Per CVC Section 22358.6, the CA-MUTCD requires local authorities to round speed limits to the nearest five miles per hour of the 85th percentile of the free-flowing traffic. In cases in which the speed limit needs to be rounded up to the nearest five miles per hour increment of the 85th-percentile speed, a local authority **may** decide to instead round down the speed limit to the lower five miles per hour increment.

The 85<sup>th</sup>-percentile speed (the speed at which 85 percent of drivers drive at or below) is often referred to as the critical speed; it is the primary speed that determines what drivers believe to be safe and reasonable.

### Recommendation:

As part of the City of Escondido's speed survey program, staff has performed speed surveys at 6 segment locations, with data being collected for each segment.

Staff recommends approval of the speed limit per **Table 1** below.

Based on the above guidelines, all the segments were evaluated in accordance with the CVC. The overview of the Speed Surveys is presented in **Table 1**; the last column shows the recommended speed limits on all study segments.

- For segments 1 and 3, the recommended speed limit is set based on the 85<sup>th</sup>-percentile speed of the new speed survey and remains unchanged.

- For segments 2,4 and 5 the recommended speed limit reflects a rounding down from the 85<sup>th</sup>-percentile speed in accordance with CVC Section 22358.6, as discussed above, and will remain unchanged.
- For segment 6, the rounding of the 85<sup>th</sup>-percentile speed would result in the speed limit increasing by 5 MPH. In accordance with CVC Section 22358.8, the local authority may, by ordinance, retain the current speed limit if that speed limit was established with an engineering and traffic survey and if a registered engineer has evaluated the section of highway and determined that no additional general-purpose lanes have been added to the roadway since completion of the traffic survey that established the prior speed limit. Therefore, the speed limits for these surveys will remain unchanged and will be forwarded to City Council to approve by ordinance.

**Table 1:** Overview of Speed Surveys

Segment No.	Street Name (Zone)	Segment		Date of Previous Speed Survey	Existing Posted Speed Limit (MPH)	Classification	85 <sup>th</sup> Percentile Speed (MPH)	Rounded Speed (MPH)	Recommended Posted Speed Limit (MPH)
1	La Terraza Blvd	9 <sup>th</sup> Ave	Valley Pkwy	11/30/2016	40	LC	42	40	40
2	Bear Valley Pkwy	Boyle Ave	Oak Hill Dr	11/15/2016	45 (25 WCAP*)	M	50	45~	45 (25 WCAP*)
3	Bear Valley Pkwy	Oak Hill Dr	Citrus Ave	11/16/2016	45 (25 WCAP*)	M	47	45	45 (25 WCAP*)
4	Bear Valley Pkwy	Citrus Ave	Valley Pkwy	11/29/2016	45	M	49	45~	45
5	Valley Pkwy	Rose St	Midway Dr	02/01/2017	35 (25 WCAP*)	M	38	35~	35 (25 WCAP*)
6	Valley Pkwy	Citrus Ave	El Norte Pkwy	02/01/2017	45 (25 WCAP*)	P	52	50	45* (25 WCAP*)

~ Indicates rounded down from the 85th percentile speed to the lower five miles per hour increment, per CVC 22358.6  
 \* Retain existing speed limit per CVC 22358.8

LC- Local Collector; C-Collector; M-Major Arterial, P-Prime Arterial

**Necessary Council Action:** Six (6) speed survey segments to retain existing posted speed limits by ordinance in conformance with CVC Section 22358.8.

**Respectfully submitted:**

*Prepared by:*

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*Approved by:*

*Julie Procopio*

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