

## **SPEED ZONE SURVEY**

## **SARATOGA WAY**

(No. 217)

FROM FINDERS WAY (NO. 110) EASTERLY TO EL DORADO HILLS BOULEVARD (NO. 219) (NEW SPEED ZONE)

Reviewed by the Train	ffic Advisory Committee on _	MAY	1 9 2021
COMMITTEE A	APPROVED STAFF'S RECO	OMMENDATIO	N.
[ ] COMMITTEE R	REQUESTED FURTHER AC	CTION.	
Action	APPROVED		

### DEPARTMENT OF TRANSPORTATION

#### ENGINEERING AND TRAFFIC SURVEY

Location: Saratoga Way (No. 217) from Finders Way (No. 1107) Easterly to El Dorado

Hills Boulevard (No. 219)

**Subject:** Speed Zone Survey: New Speed Zone

**Date:** March 4, 2021

### 2021 ENGINEERING AND TRAFFIC SURVEY FOR SPEED LIMITS

### 1. INTRODUCTION

The California Vehicle Code, Section 22358, allows local authorities to establish speed limits based on an "Engineering and Traffic Survey". The Vehicle Code goes on, in Section 40801 to prohibit the use of "speed traps" for the purpose of speed enforcement and, in Section 40802, defines "speed trap". Section 40802 also indicates that an "Engineering and Traffic Survey" is required where speed enforcement involves the use of radar and establishes the frequency with which surveys must be conducted for continued radar enforcement. In order to comply with the provisions of the Vehicle Code, and insure that radar enforced speed zones are based on recent data, the County of El Dorado has established a practice of conducting engineering and traffic survey updates based on a cycle length of five (5) years or less.

In Section 627, the Vehicle Code provides a definition for "Engineering and Traffic Survey", and states that an "Engineering and Traffic Survey" shall include:

- 1. Prevailing speeds as determined by traffic engineering measurements.
- 2. Accident records.
- 3. Highway, traffic, and roadside conditions not readily apparent to the driver.

In addition, the 2001 edition of the Vehicle Code added that residential density, pedestrian, and bicycle safety may be considered.

While the California Vehicle Code is silent regarding the relationship of the 85th percentile speed to the posted speed, the California Manual on Uniform Traffic Control Devices (CAMUTCD), Section 2B.13, "Speed Limit Sign", "Engineering and Traffic Survey", states in part:

"When a speed limit is to be posted, it shall be established at the nearest 5 mph increment of the 85th percentile speed of free-flowing traffic . . . [except] the posted speed may be reduced by 5 mph from the nearest 5 mph increment of the 85th percentile speed . . ."

Section 2B.13 further states in part:

"If the speed limit to be posted has had the 5 mph reduction applied, then an E&TS shall

document in writing the conditions and justification for the lower speed limit and be approved by a registered Civil or Traffic Engineer. The reasons for the lower speed limit shall be in compliance with CVC Sections 627 and 22358.5.

All "Engineering and Traffic Surveys" performed by the El Dorado County Department of Transportation for establishing speed limits, stop controlled intersections, crosswalks, painted traffic curbs, regulatory traffic signage, and other traffic control devices, use the current publications of the California Vehicle Code, CAMUTCD, California Manual for Setting Speed Limits, applicable County Ordinance Code, and other Civil Engineering publications and California Codes pertaining to the establishment and placement of traffic control devices.

# 2. SARATOGA WAY FROM FINDERS WAY (NO. 1107) EASTERLY TO EL DORADO HILLS BOULEVARD (NO. 219) (MP 0.11 – 0.63) (NEW SPEED ZONE)

This Engineering and Traffic Survey was initiated in response to a change in roadway characteristics due to the completed construction of a non-county maintained segment of Saratoga Way.

# Saratoga Way (No. 217) From Finders Way (No. 1107) easterly to El Dorado Hills Boulevard (No. 219) (Segment Length 0.52 mi.) (MP 0.11-0.63)

This segment of Saratoga Way is a two lane, Collector Road, which is 0.52 miles in length and serves an average of 9,062 vehicles per day. There has been one (1) reported collision with zero (0) injuries and zero (0) fatalities in the past three years, resulting in a collision rate of 0.30 Collisions per Million Vehicle Miles. Until the spring of 2020 Saratoga Way ended at a barricade 0.63 miles west of El Dorado Hills Boulevard. When the newly constructed, non-county maintained, segment of Saratoga Way was completed a connection was created between El Dorado Hills Boulevard and the City of Folsom's Iron Point Road. As a result, the Average Daily Trips on the County maintained segment went from approximately one thousand (1,000) to nine thousand and sixty two (9,062). This segment of Saratoga Way provides access to three (3) County maintained roads and several commercial driveways. This segment of Saratoga Way functions as a connector between El Dorado Hills and the City of Folsom as well as providing access to several residential subdivisions and business locations. The adjoining terrain is mostly level and consists of commercial businesses and open space.

- 85th percentile speed of fifty one (51) miles per hour was recorded.
- The calculated average daily traffic volume was 9,062 vehicles per day.
- A newly constructed, non-county maintained, segment was completed, linking an existing County maintained segment of Saratoga Way with Folsom's Iron Point Road.
- Roadway is curvilinear with level to gentle grades.
- There are three (3) intersecting County maintained roads.
- This segment of Saratoga Way provides a connection between El Dorado Hills and the City of Folsom.
- This segment of Saratoga Way provides access to commercial and residential areas.
- There was one (1) collision reported on this segment of Saratoga Way for the three (3) year period from January 1, 2018, through December 31, 2020 with a collision rate of 0.30 Collisions per Million Vehicle Miles. This collision rate is much lower than the

- countywide benchmark of 1.70 collisions per Million Vehicle Miles.
- Staff observed four (4) bicyclists, and four (4) pedestrians utilizing this segment of Saratoga Way during the field review that lasted approximately thirty (30) minutes.
- The existing 85th percentile speeds of fifty one (51) miles per hour, justifies, in accordance with the CAMUTCD, a radar enforced fifty (50) miles per hour speed zone. However, due to the curvilinear alignment, limited sight distances, commercial driveways and large numbers of pedestrians and bicyclists, staff recommends the need for a further reduction of five (5) miles per hour to forty five (45) miles per hour.

2021 SITE LOCATIONS	MILE POST	EXISTING SPEED LIMIT	85% SPEED	10 MPH PACE	% IN PACE SPEED
100 feet East of Finders Way	0.57	55 mph	51 mph	43-52 mph	80.7%

### **RECOMMENDATION:**

Based on the findings of this survey it is recommended that the Traffic Advisory Committee approve the following.

- The Traffic Advisory Committee approves the speed zone with a limit of forty five 1. (45) miles per hour on Saratoga Way from Finders Way easterly to El Dorado Hills Boulevard.
- Following approval by the Traffic Advisory Committee, the following resolution be 2. prepared and referred to the Board of Supervisors with a recommendation for adoption:

BE IT RESOLVED that resolution No. 247-81, which establishes speed restrictions pursuant to Section 10.08.020 of the El Dorado County Ordinance Code, is amended as follows:

#### ADD:

"(\*\*) Saratoga Way (No. 217) forty five (45) miles per hour from Finders Way (No. 1107) easterly to El Dorado Hills Boulevard. (No. 219)."

- That following the adoption of the sanctioning Resolution by the County of El 3. Dorado Board of Supervisors, R2-1 (45) (Forty Five Mile per Hour signs) and R48 (CA) (Radar Enforced) signs be installed on the east and westbound lanes of Saratoga Way between Finders Way and El Dorado Hills Boulevard.
- That the California Highway Patrol utilize radar enforcement on Saratoga Way from 4. Finders Way to El Dorado Hills Boulevard.

Prepared by:

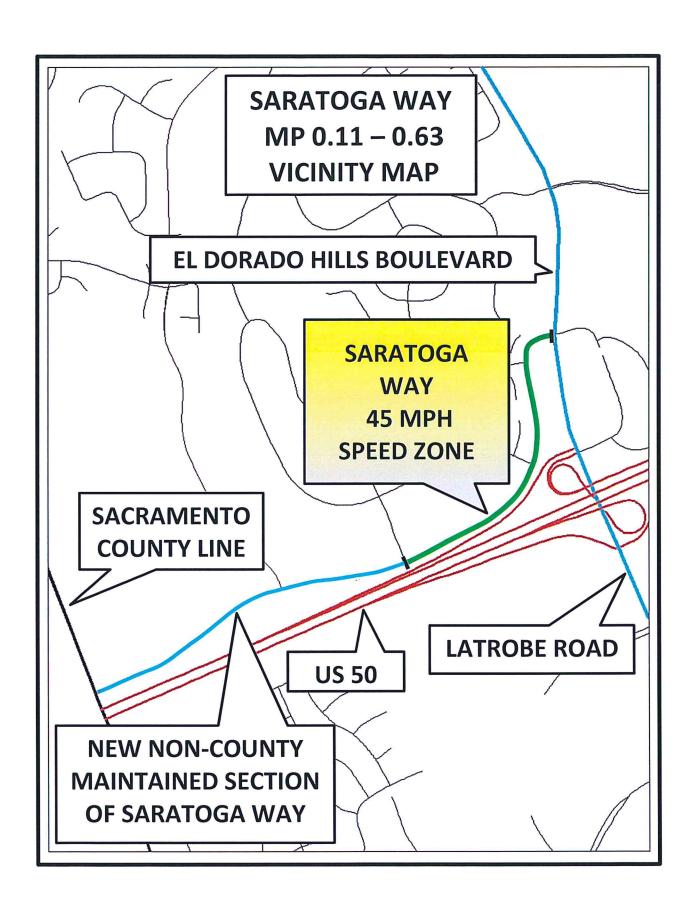
Michael Bastian
Senior Engineering Technician

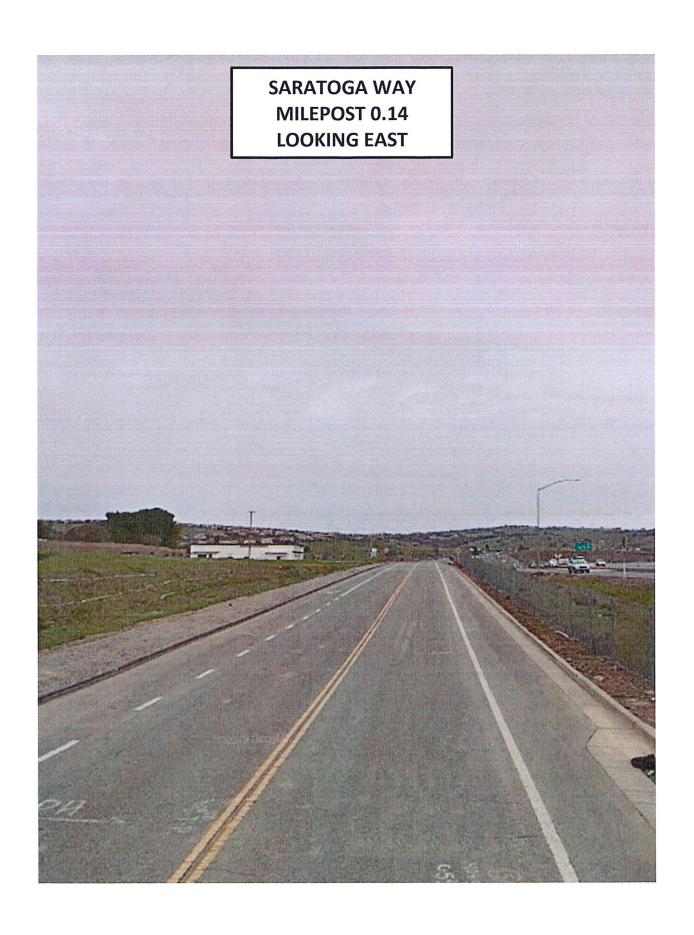
APPROVED BY:

Rafael Martinez, T.E., Director
Community Development Services
Department of Transportation

Attachments:

Vicinity Map (1 page) Photos (1 page) Speed Surveys (1 page)





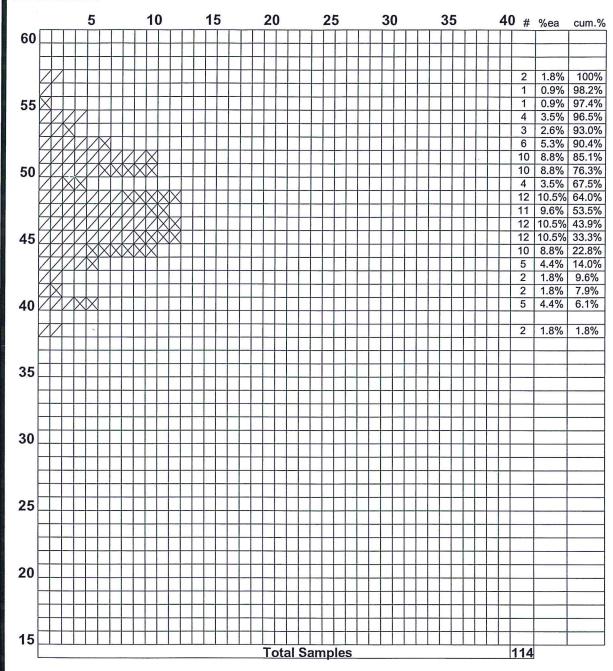
### **County of El Dorado Transportation Division**

Street Name: SARATOGA WY

Limits: ARROWHEAD DR to FINDERS WAY

### Radar Survey Sheet

X=West /=East



85th Percentile Speed: <u>51</u> 50th Percentile Speed: <u>47</u>

15th Percentile Speed: 44

10 MPH Pace: 43- 52 Number in Pace: 92

Percent in Pace: <u>80.7%</u> Date of Survey:

2/11/2021

Clear

14:35

Road Condition: Good

Start Time: **End Time:** 

Posted Speed: 45

<u>15:00</u>

Street Class.:

Weather:

Observer: M. BASTIAN

Conditions not peds = 4, bikes = 4

Apparent: