



SPEED ZONE SURVEY

SARATOGA WAY

(No. 217)

FROM THE SACRAMENTO COUNTY LINE EASTERLY TO EL DORADO HILLS
BOULEVARD (NO. 219) (SPEED ZONE LENGTH AMENDMENT)

Reviewed by the Traffic Advisory Committee on DEC 16 2021

COMMITTEE APPROVED STAFF'S RECOMMENDATION.

COMMITTEE REQUESTED FURTHER ACTION.

Action APPROVED

DEPARTMENT OF TRANSPORTATION
ENGINEERING AND TRAFFIC SURVEY

Location: Saratoga Way (No. 217) from Sacramento County Line Easterly to El Dorado Hills Boulevard (No. 219)

Subject: Speed Zone Survey: Amended Speed Zone Boundaries

Date: October 15, 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 THE SACRAMENTO COUNTY LINE EASTERLY TO EL DORADO HILLS BOULEVARD (NO. 219) (MP 0.00 – 1.06)

This Engineering and Traffic Survey was initiated in response to the County of El Dorado accepting a newly constructed segment of Saratoga Way into the County Maintained Mileage System. The proposed amended Saratoga Way speed zone consists of two segments. Segment one (1) is the newly constructed segment of Saratoga Way that was accepted into the County Maintained Mileage System on September 21, 2021. Segment two (2) contains the existing speed zone approved by the El Dorado County Board of Supervisors on July 27, 2021.

Segment 1: (Proposed speed zone extension) Saratoga Way (No. 217) From the Sacramento County Line easterly to Finders Way (No. 1107) (Segment Length 0.54 mi.) (MP 0.00-0.54)

This newly constructed segment of Saratoga Way is a two to four lane, Collector Road, which is 0.54 miles in length and serves an average of 13,556 vehicles per day. Until the spring of 2020 Saratoga Way ended at a barricade 0.63 miles west of El Dorado Hills Boulevard. When the newly constructed segment of Saratoga Way was completed a connection was created between El Dorado Hills Boulevard and the City of Folsom’s Iron Point Road. In addition to connecting with Iron Point Road, this segment of Saratoga Way provides access to one (1) County maintained road and several new and existing subdivisions. The adjoining terrain is mostly rolling.

- 85th percentile speed of fifty one (51) miles per hour was recorded.
- During the first week of October 2021, the calculated average week day traffic volume was 13,556 vehicles per day.
- Newly constructed segment linking an existing segment of Saratoga Way with Folsom’s Iron Point Road.
- Roadway is curvilinear with level to moderate grades.
- There is one (1) intersecting County maintained road.
- Saratoga Way provides a connection between El Dorado Hills and the City of Folsom.
- Saratoga Way provides access to commercial and residential areas.
- Staff observed four (4) bicyclists, and two (2) pedestrians utilizing this segment of Saratoga Way during the field review that lasted approximately forty five (45) minutes.
- There were zero (0) California Highway Patrol (CHP) reported collisions, on this

segment, from the date of opening (spring 2020) to the end of 2020.

<i>2021 SITE LOCATION SEGMENT 1</i>	<i>MILE POST</i>	<i>EXISTING SPEED LIMIT</i>	<i>85% SPEED</i>	<i>10 MPH PACE</i>	<i>% IN PACE SPEED</i>
<i>350 feet West of Wilson Boulevard</i>	<i>0.28</i>	<i>None</i>	<i>51 mph</i>	<i>41-50 mph</i>	<i>72.4%</i>

Segment 2: (Existing Speed Zone) Saratoga Way (No. 217) From Finders Way (No. 1107) easterly to El Dorado Hills Boulevard (No. 219) (Segment Length 0.52 mi.) (New Mileposts 0.54-1.06)

This segment of Saratoga Way is a two lane, Collector Road, which is 0.52 miles in length and serves an average of 13,556 vehicles per day. This 45 mile per hour speed zone was approved by the El Dorado County Board of Supervisors on July 27, 2021.

- 85th percentile speed of fifty one (51) miles per hour was recorded.
- The calculated average daily traffic volume was 13,556 vehicles per day.
- 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 0.11 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.

<i>2021 SITE LOCATION SEGMENT 2</i>	<i>MILE POST</i>	<i>EXISTING SPEED LIMIT</i>	<i>85% SPEED</i>	<i>10 MPH PACE</i>	<i>% IN PACE SPEED</i>
<i>100 feet East of Finders Way</i>	<i>0.57</i>	<i>45 mph</i>	<i>51 mph</i>	<i>43-52 mph</i>	<i>80.7%</i>

Conclusions:

The 85th percentile speeds of fifty one (51) and 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 moderate grades, curvilinear alignment, limited sight distance and observed 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.

RECOMMENDATION:

1. The Traffic Advisory Committee approves the amended speed zone with a limit of forty five (45) miles per hour on Saratoga Way from the Sacramento County Line easterly to El Dorado Hills Boulevard.
2. Following approval by the Traffic Advisory Committee, the following resolution be 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:

Delete:

~~“(gj) Saratoga Way (No. 217) forty five (45) miles per hour from Finders Way (No. 1107) easterly to El Dorado Hills Boulevard. (No. 219).”~~

Add:

“(gj) Saratoga Way (No. 217) forty five (45) miles per hour from the Sacramento County Line easterly to El Dorado Hills Boulevard. (No. 219).”

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

Prepared by: 
Michael Bastian
Senior Engineering Technician

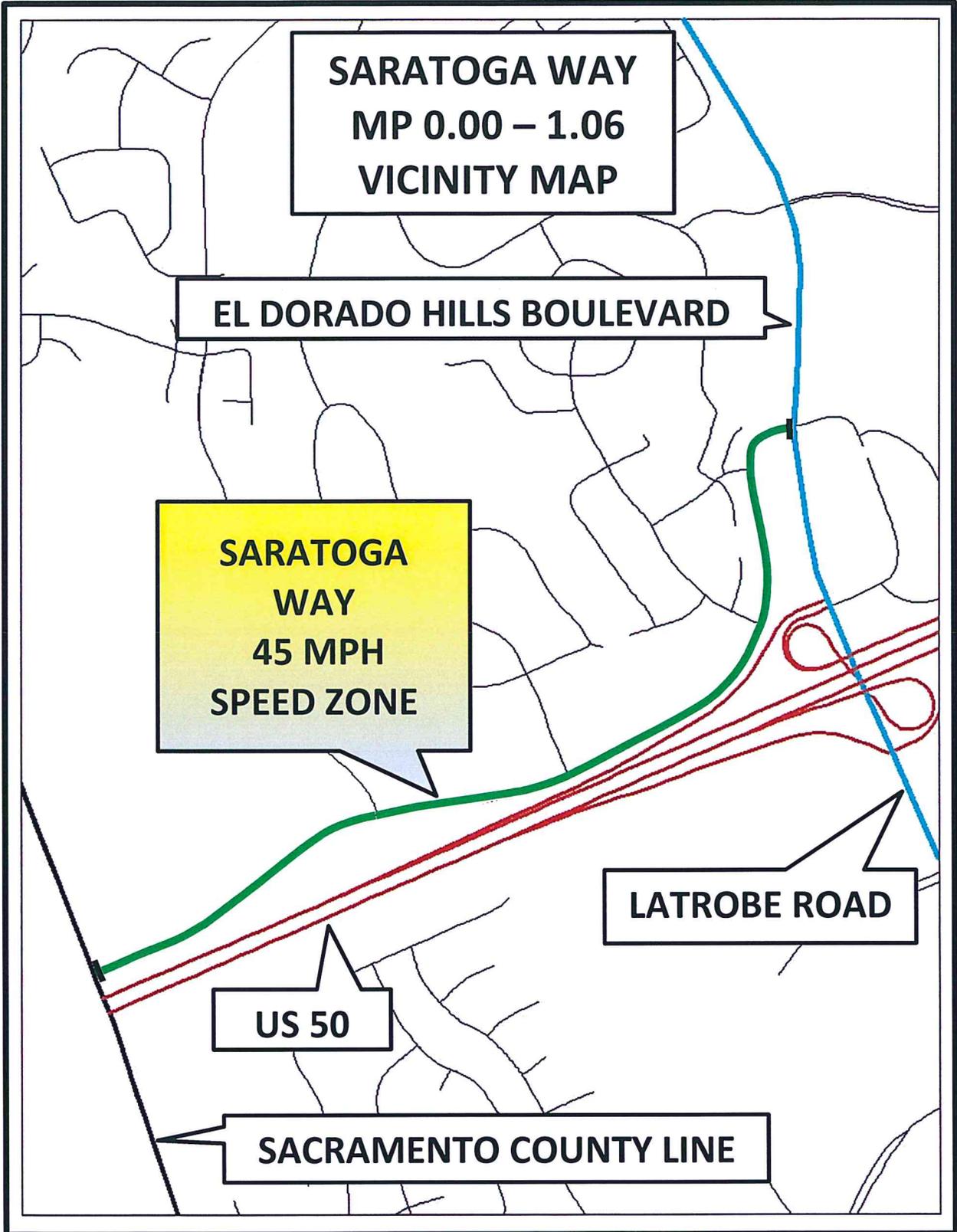
APPROVED BY:  on 11/18/21
Rafael Martinez, T.E., Director
Community Development Services
Department of Transportation
Date

Attachments:

Vicinity Map (1 page)

Photos (2 pages)

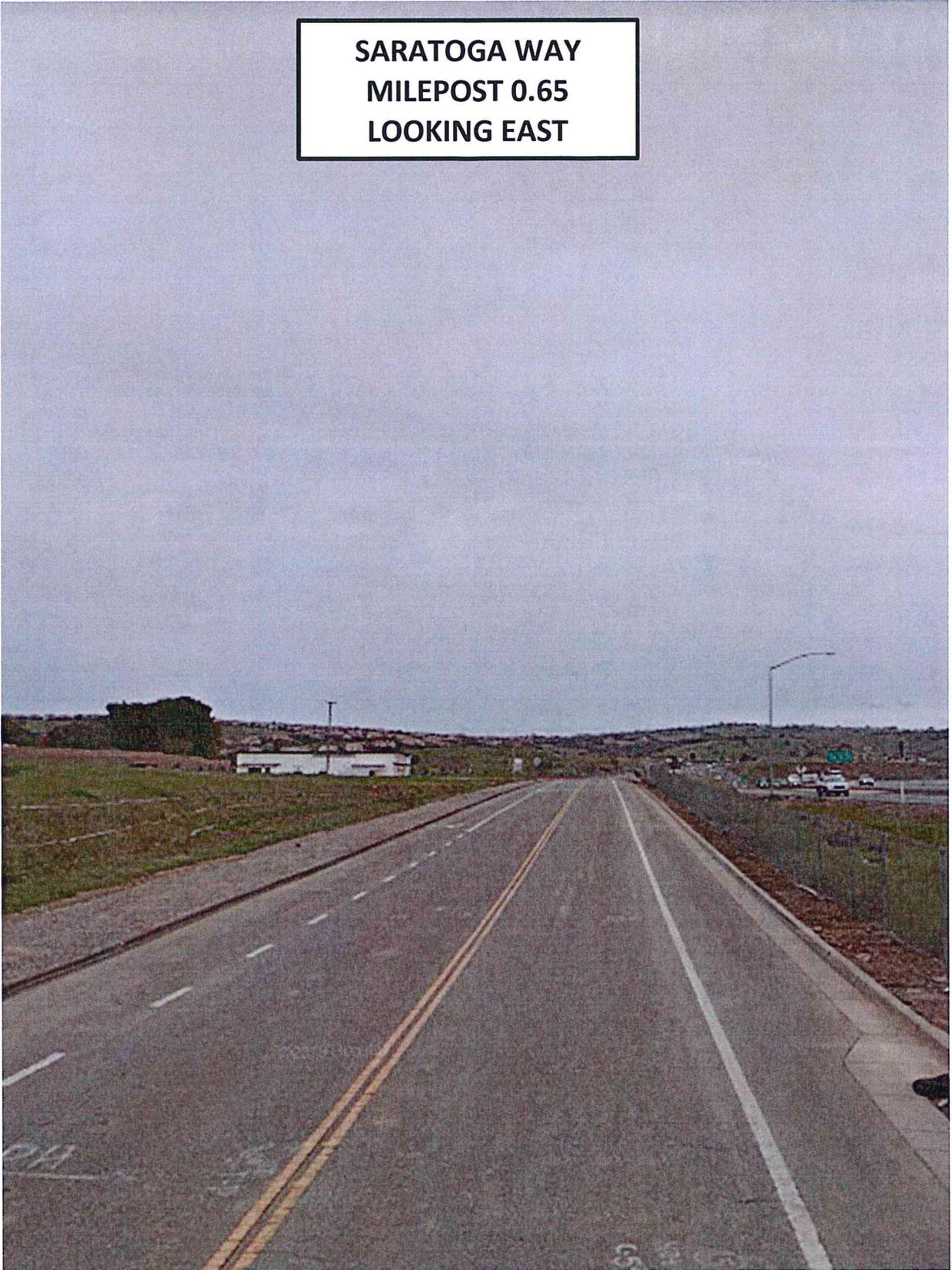
Speed Surveys (2 pages)



**SARATOGA WAY
MILEPOST 0.30
LOOKING EAST**



**SARATOGA WAY
MILEPOST 0.65
LOOKING EAST**



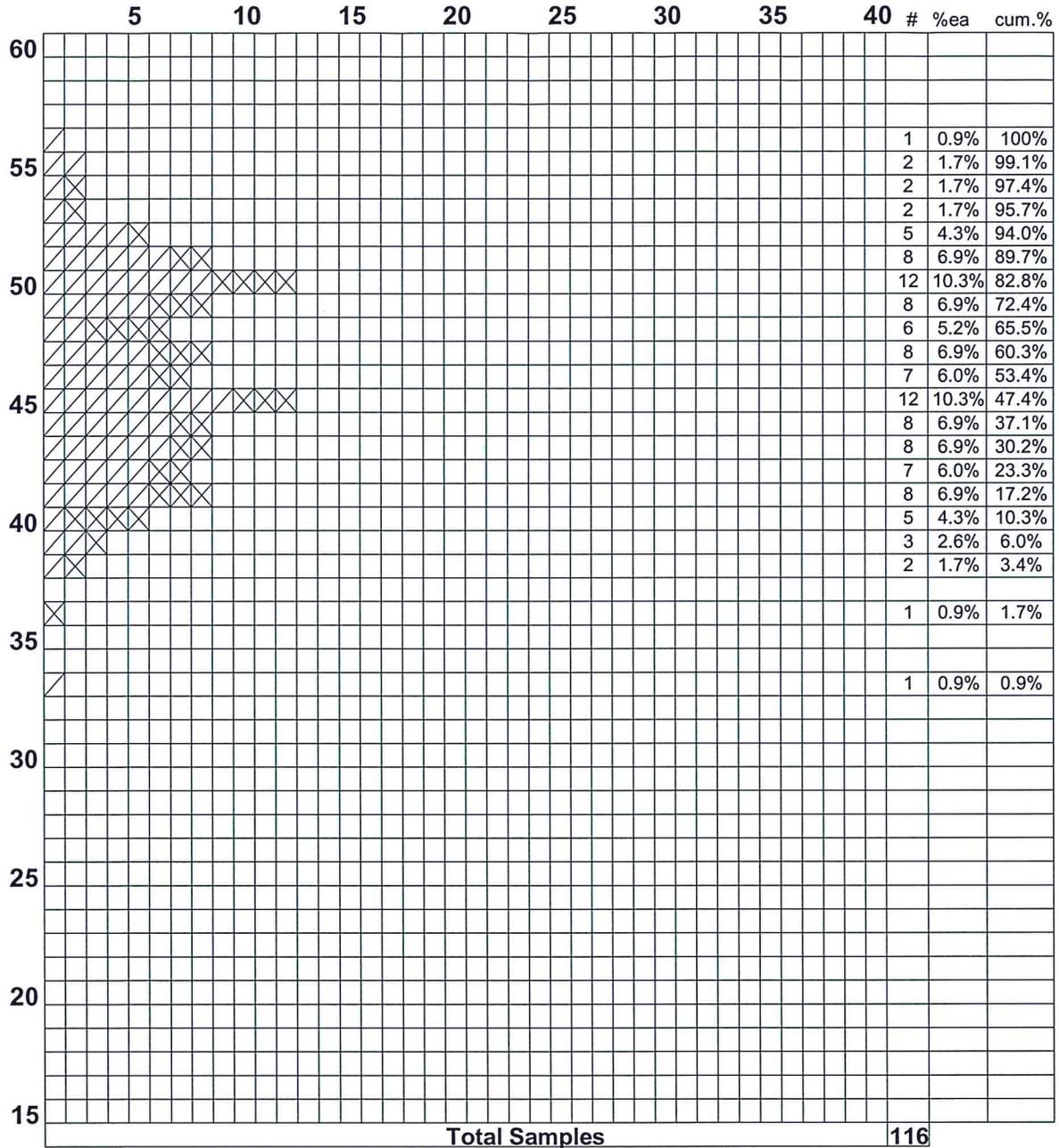
**County of El Dorado
Transportation Division**

Street Name: SARATOGA WAY

Limits: WILSON BLVD to SARATOGA ESTATES DRIVE

Radar Survey Sheet

X=West /=East



85th Percentile Speed: 51
 50th Percentile Speed: 46
 15th Percentile Speed: 41
 10 MPH Pace: 41- 50
 Number in Pace: 84
 Percent in Pace: 72.4%

Date of Survey: 2/10/2021 Start Time: 14:15
 Weather: Clear End Time: 14:30
 Road Condition: Good Posted Speed: 45
 Street Class.:
 Observer: M. BASTIAN
 Conditions not Apparent: peds = 2, bikes = 4

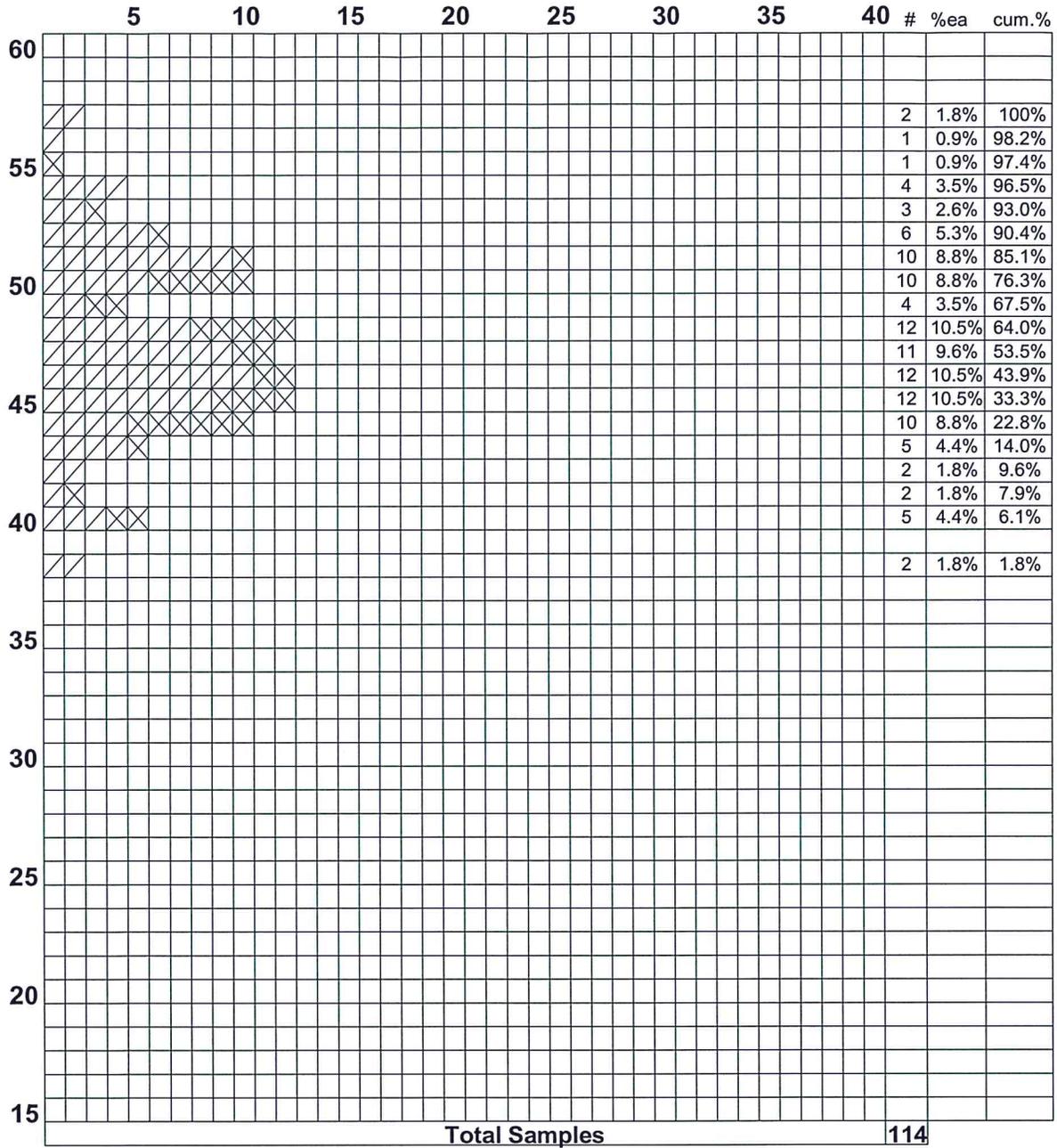
**County of El Dorado
Transportation Division**

Street Name: SARATOGA WY

Limits: ARROWHEAD DR to FINDERS WAY

Radar Survey Sheet

X=West /=East



85th Percentile Speed: 51
 50th Percentile Speed: 47
 15th Percentile Speed: 44
 10 MPH Pace: 43- 52
 Number in Pace: 92
 Percent in Pace: 80.7%

Date of Survey: 2/11/2021
 Weather: Clear
 Road Condition: Good
 Street Class.:
 Observer: M. BASTIAN
 Conditions not Apparent: peds = 4, bikes = 4

Start Time: 14:35
 End Time: 15:00
 Posted Speed: 45