



# SPEED ZONE SURVEY

## WILSON BOULEVARD (No. 255)

FROM EL DORADO HILLS BOULEVARD (No. 219) TO SARATOGA WAY (No. 217)  
(SPEED ZONE LENGTH AMENDMENT)

Reviewed by the Traffic Advisory Committee on JUL 13 2022

*COMMITTEE APPROVED STAFF'S RECOMMENDATION.*

*COMMITTEE REQUESTED FURTHER ACTION.*

Action APPROVED

---

---

---

## DEPARTMENT OF TRANSPORTATION

### ENGINEERING AND TRAFFIC SURVEY

**Location:** Wilson Boulevard (No. 255) from El Dorado Hills Boulevard (No. 219) to Saratoga Way (No. 217)

**Subject:** Speed Zone Survey: Amend Speed Zone Boundaries

**Date:** April 21, 2022

## 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. WILSON BOULEVARD FROM EL DORADO HILLS BOULEVARD (No. 219) TO SARATOGA WAY (No. 217) (MP 0.00-1.44) (SPEED ZONE LENGTH AMENDMENT)**

This Engineering and Traffic Survey was initiated in response to the County of El Dorado accepting a newly constructed segment of Wilson Boulevard into the County Maintained Mileage System. The proposed amended Wilson Boulevard speed zone consists of two segments. Segment one (1) is the existing speed zone approved by the El Dorado County Board of Supervisors in September 2007. Segment two (2) contains the newly constructed segment of Wilson Boulevard that was accepted into the County Maintained System on September 21, 2021.

### **Segment 1: Wilson Boulevard (No. 255) from El Dorado Hills Blvd (No. 219) to 400 feet south of Montridge Way (MP 0.00-0.97)**

This segment of Wilson Boulevard is a two-lane, Local Road that is 0.97 miles in length and serves an average of 3,607 vehicles per day. There were five (5) collisions with zero (0) injuries and zero (0) fatalities in the past three years, resulting in a collision rate of 1.31 Collisions per Million Vehicle Miles. This segment provides access to seven (7) County maintained roads, and zero (0) private roads. This segment mainly serves residential properties.

- 85th percentile speeds of forty three (43), forty four (44), and forty eight (48) miles per hour were recorded.
- The calculated average daily traffic volume was 3,607 vehicles per day.
- Roadway is straight with moderate to steep grades.
- There are seven (7) intersecting County maintained roads.
- This segment of Wilson Boulevard provides access to residential areas.
- There were five (5) collisions reported on this segment of Wilson Boulevard for the three (3) year period from January 1, 2018, through December 31, 2020 with a collision rate of 1.31 Collisions per Million Vehicle Miles. This collision rate is lower than the countywide benchmark of 1.70 Collisions per Million Vehicle Miles.
- Staff observed four (4) bicyclists, and two (2) pedestrians utilizing this segment of Wilson Boulevard during the field review that lasted approximately three (3) hours.

<i>2021 SITE LOCATIONS</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>500 ft west of El Dorado Hills Blvd</i>	<i>0.09</i>	<i>40 mph</i>	<i>44 mph</i>	<i>33-42 mph</i>	<i>80.8%</i>
<i>500 ft east of Ridgeview Dr</i>	<i>0.37</i>	<i>40 mph</i>	<i>48 mph</i>	<i>39-48 mph</i>	<i>69.8%</i>
<i>500 ft west of Lago Vista Dr</i>	<i>0.73</i>	<i>40 mph</i>	<i>43 mph</i>	<i>34-43 mph</i>	<i>80.8%</i>

The existing 85th percentile speeds of forty three (43), forty four (44), and forty eight (48) miles per hour, justifies, in accordance with the CAMUTCD, a radar enforced forty five (45) miles per hour speed zone. However, due to steep grades, lack of sight distance, turn movements, pedestrians, and bicyclists, staff recommends the need for a further reduction of five (5) miles per hour to forty (40) miles per hour.

**Segment 2: (Proposed speed zone extension) Wilson Boulevard (No. 255) from 400 feet south of Montridge Way to Saratoga Way (No. 217) (MP 0.97-1.44)**

This segment of Wilson Boulevard is a two-lane, Local Road that is 0.47 miles in length and serves an average of 3,607 vehicles per day. This segment is new with no collision history as of April 2022. This segment provides access to zero (0) County maintained roads, and three (3) private roads. This segment mainly serves residential subdivisions.

- 85th percentile speed of thirty eight (38) miles per hour was recorded.
- The calculated average daily traffic volume was 3,607 vehicles per day.
- Roadway is straight with lightly rolling grades.
- There are zero (0) intersecting County maintained roads and three (3) private roads.
- This segment of Wilson Boulevard provides access to residential areas.
- There were zero (0) collisions reported on this segment of Wilson Boulevard for the three (3) year period from January 1, 2018, through December 31, 2020.
- Staff observed zero (0) bicyclists, and two (2) pedestrians utilizing this segment of Wilson Boulevard during the field review that lasted approximately one (1) hour.

<i>2021 SITE LOCATIONS</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>600 ft north of Adirondack Dr</i>	<i>0.29</i>	<i>35 mph</i>	<i>38 mph</i>	<i>28-37 mph</i>	<i>84.3%</i>

The existing 85th percentile speed of thirty eight (38) miles per hour, justifies, in accordance with the CAMUTCD, a radar enforced forty (40) miles per hour speed zone. However, due to the anticipated turn movements, sight distance, increased volume when subdivisions are built out, and pedestrians, staff recommends the need for a further reduction of five (5) miles per hour to thirty five (35) miles per hour.

**RECOMMENDATION:**

1. The Traffic Advisory Committee approves the amended speed zone with a speed limit on Wilson Boulevard of forty (40) miles per hour from El Dorado Hills Boulevard to a point 400 feet south of Montridge Way and from that point south thirty five (35) miles per hour to Saratoga Way.
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. 234-2007, which establishes speed restrictions pursuant to Section 10.08.020 of the El Dorado County Ordinance Code, is amended as follows:

**Delete:**

~~“(fn) Wilson Boulevard (No. 255) forty (40) miles per hour from its intersection with El Dorado Hills Boulevard (No. 219) to its end.”~~

**Add:**

“(fn) Wilson Boulevard (No. 255) forty (40) miles per hour from El Dorado Hills Boulevard (No. 219) to a point 400 feet south of Montridge Way (No. 1026) and from that point south thirty five (35) miles per hour to Saratoga Way (No. 217).”

3. That the California Highway Patrol utilize radar enforcement on Wilson Boulevard from El Dorado Hills Boulevard to Saratoga Way.

Prepared by: \_\_\_\_\_



Jim Hunnicutt  
Senior Engineering Technician

APPROVED BY: \_\_\_\_\_



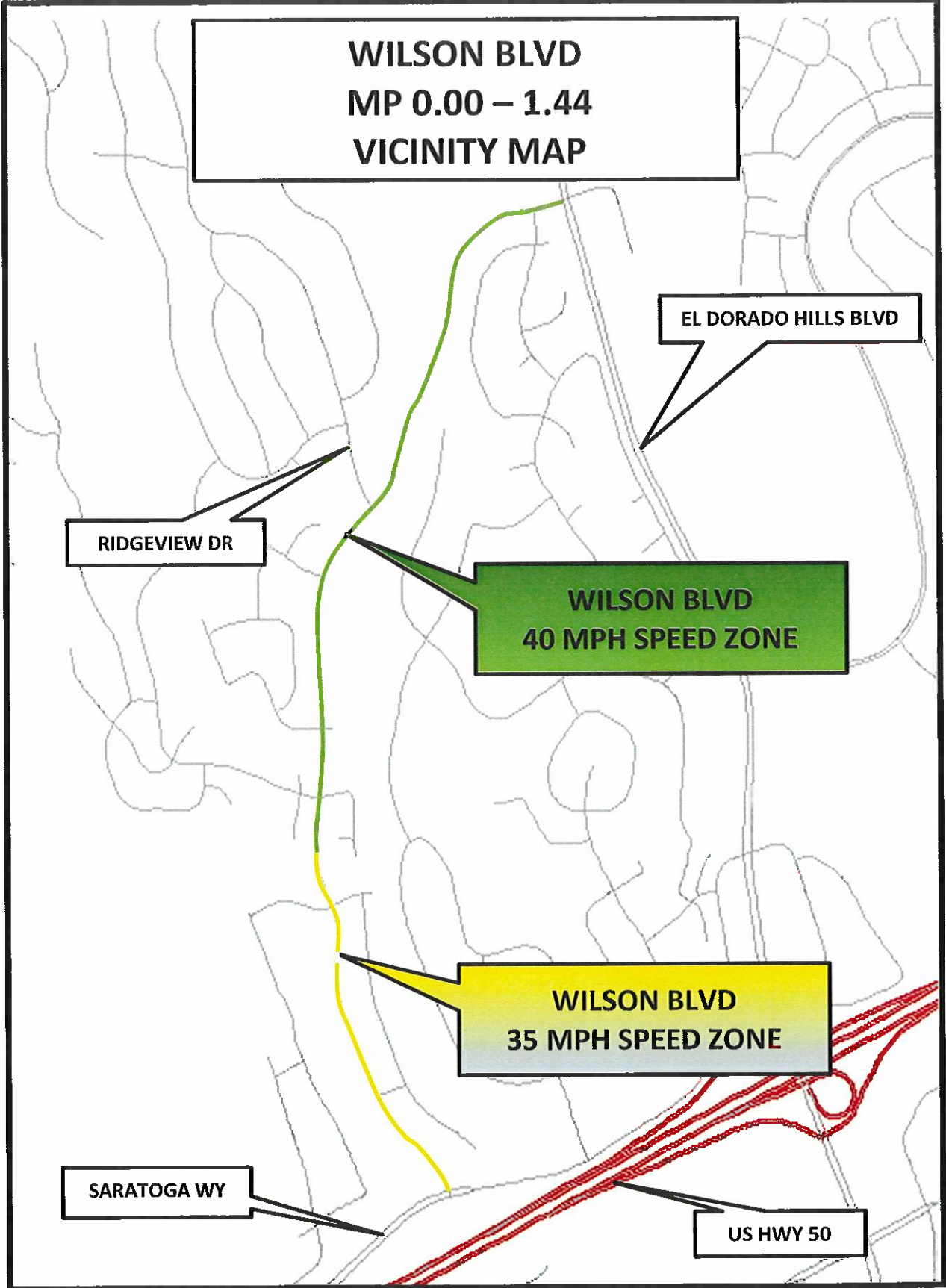
Rafael Martinez, TE, Director  
El Dorado County Department of Transportation

on \_\_\_\_\_

5/12/22  
Date

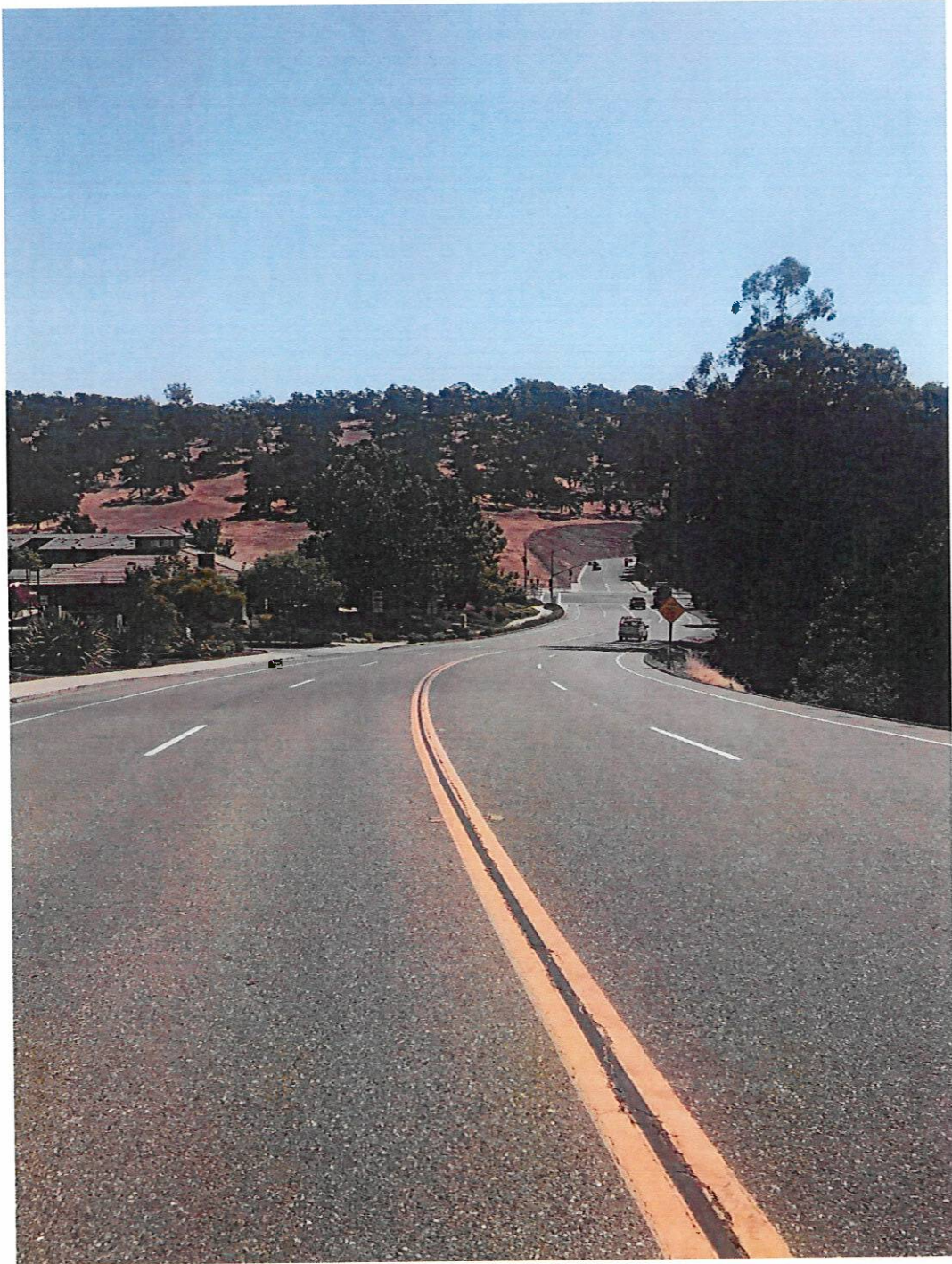
**Attachments:**

- Vicinity Map (1 page)
- Photos (4 pages)
- Speed Surveys (4 pages)



# WILSON BOULEVARD

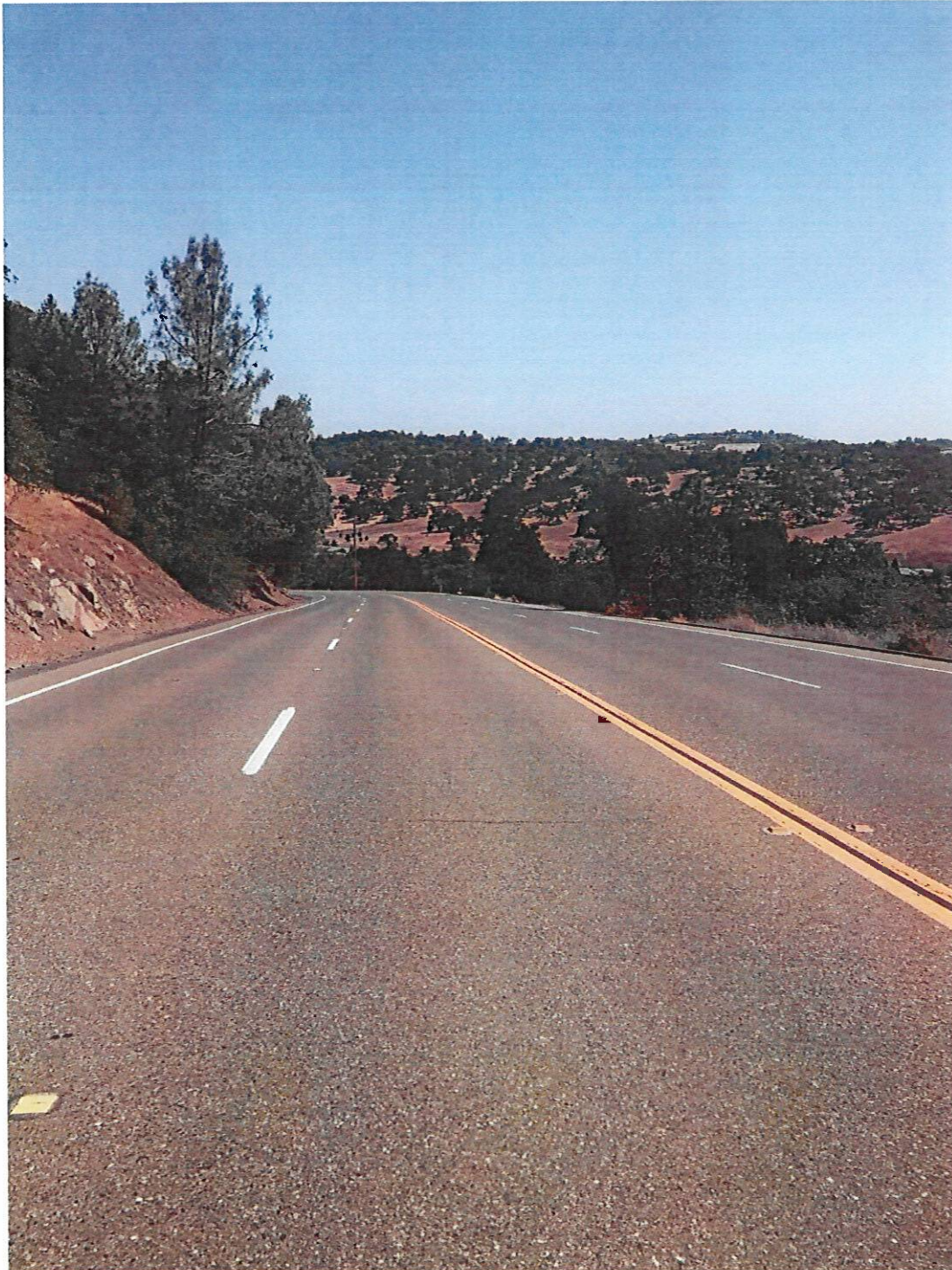
500 feet west of El Dorado Hills Blvd MP 1.34



October 2021 Speed Survey

# WILSON BOULEVARD

500 feet east of Ridgeview Dr MP 1.07

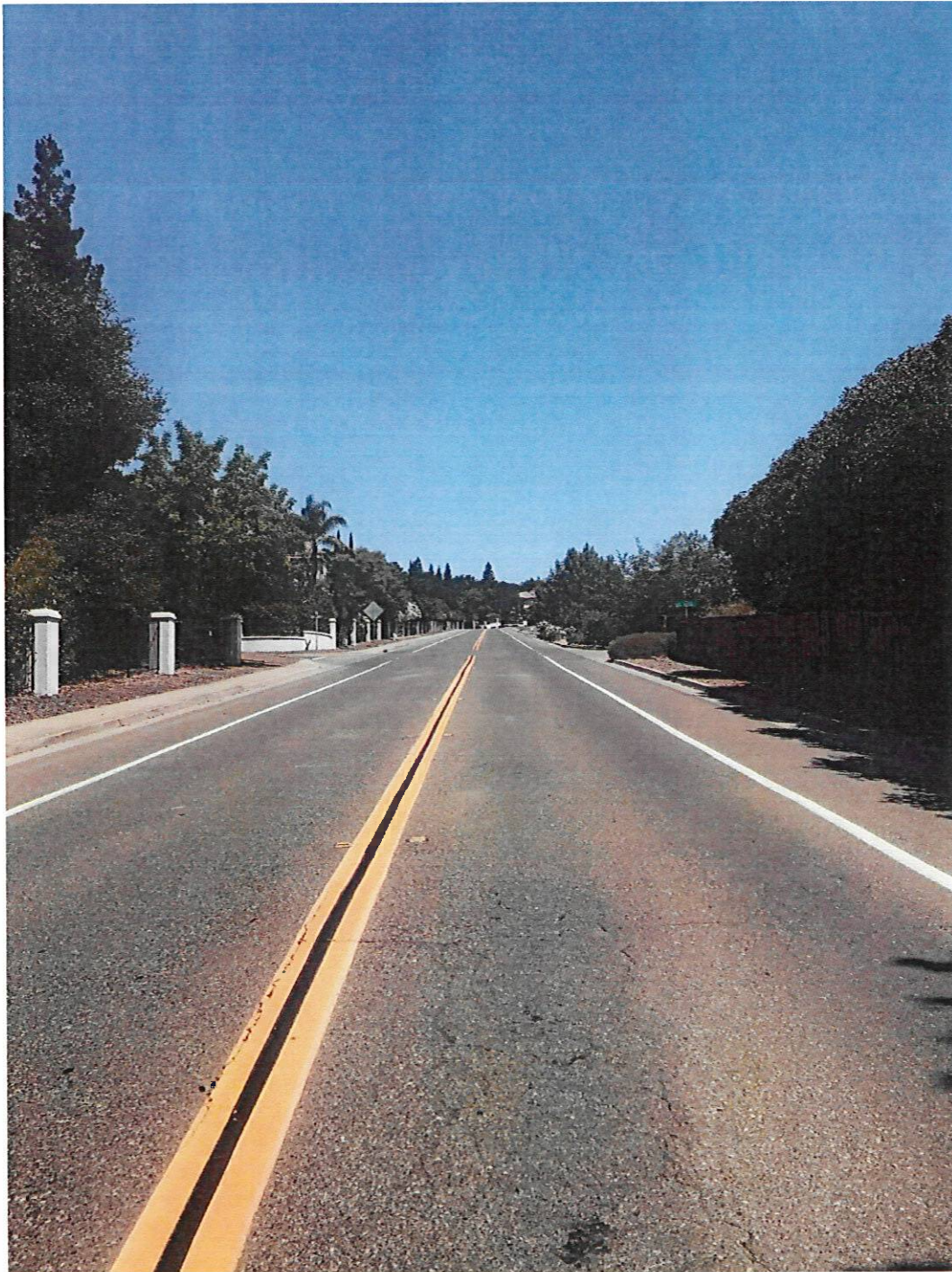


October 2021 Speed Survey



# WILSON BOULEVARD

500 feet west of Lago Vista Dr MP 0.71



October 2021 Speed Survey

# WILSON BOULEVARD

630 feet north of Adirondack Dr MP 0.29



October 2021 Speed Survey

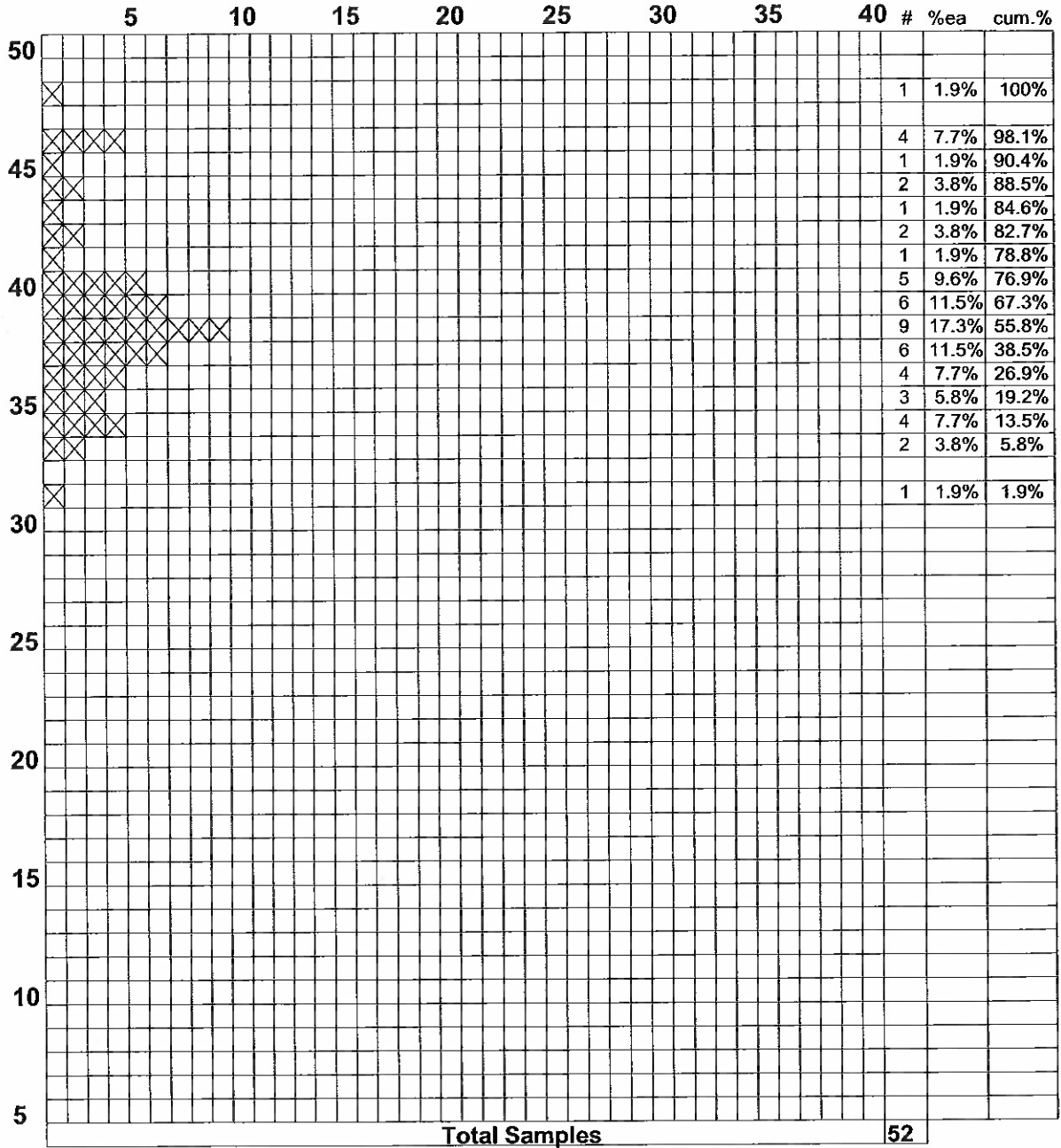
**County of El Dorado  
Transportation Division**

Street Name: WILSON BLVD

Limits: MUIR WOODS DR to RIDGEVIEW DR

**Radar Survey Sheet**

X=North/South



85th Percentile Speed: 44  
 50th Percentile Speed: 38  
 15th Percentile Speed: 35  
 10 MPH Pace: 33- 42  
 Number in Pace: 42  
 Percent in Pace: 80.8%

Date of Survey: 6/30/2021  
 Weather: Sunny  
 Road Condition: Good  
 Street Class.: Local  
 Observer: J. HUNNICUTT  
 Conditions not  
 Apparent:

Start Time: 9:45  
 End Time: 10:40  
 Posted Speed: 40

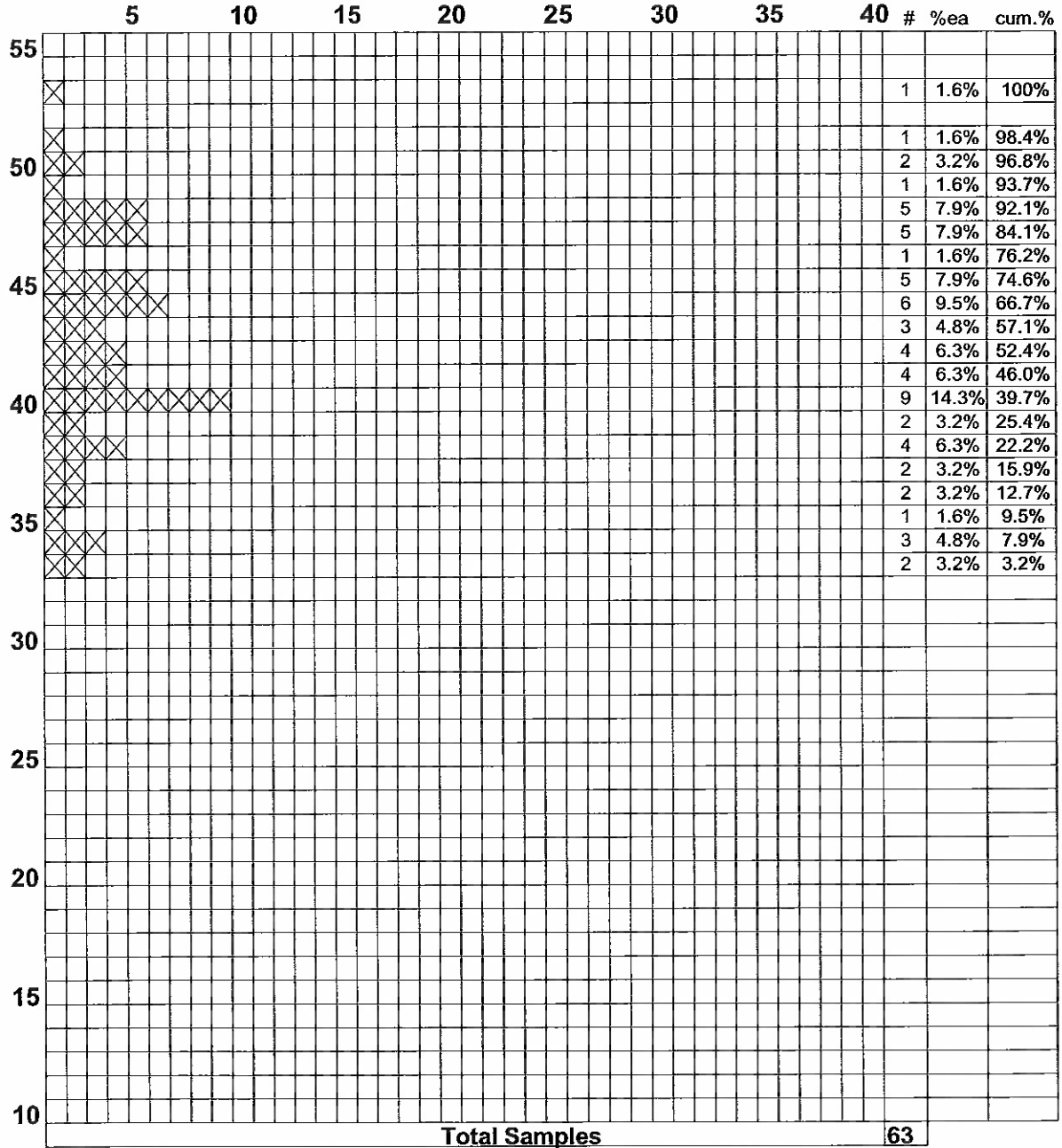
**County of El Dorado  
Transportation Division**

Street Name: WILSON BLVD

Limits: EAST OF RIDGEVIEW to RIDGEVIEW DR

**Radar Survey Sheet**

X=North/South



85th Percentile Speed: 48  
 50th Percentile Speed: 42  
 15th Percentile Speed: 37  
 10 MPH Pace: 39-48  
 Number in Pace: 44  
 Percent in Pace: 69.8%

Date of Survey: 6/30/2021  
 Weather: Sunny  
 Road Condition: Good  
 Street Class.: Local  
 Observer: J. HUNNICUTT  
 Conditions not Apparent:

Start Time: 10:45  
 End Time: 11:37  
 Posted Speed: 40

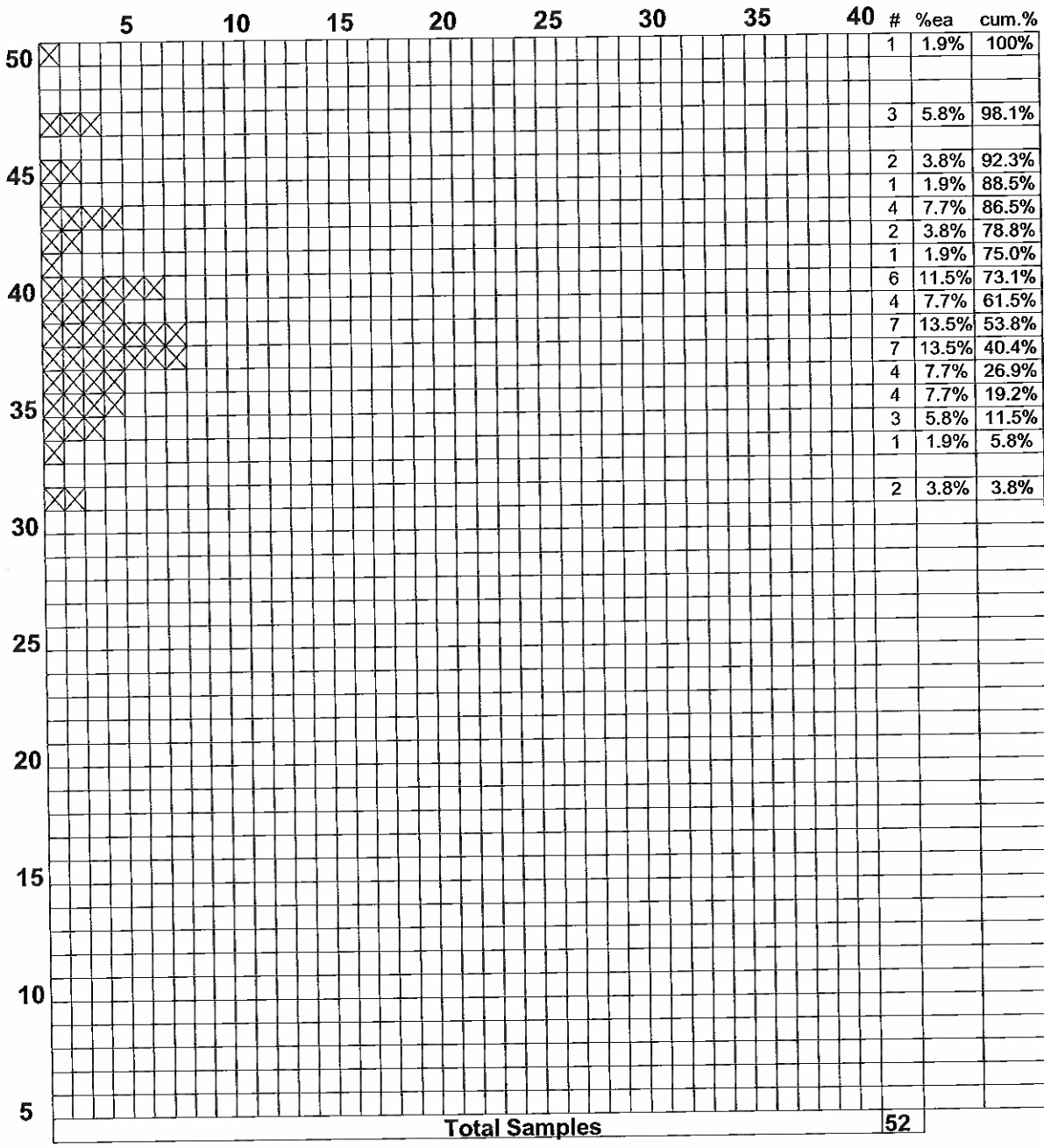
**County of El Dorado  
Transportation Division**

Street Name: WILSON BLVD

Limits: MONTRIDGE WY to LAGO VISTA DR

**Radar Survey Sheet**

X=North/South



85th Percentile Speed: 43  
 50th Percentile Speed: 38  
 15th Percentile Speed: 35  
 10 MPH Pace: 34-43  
 Number in Pace: 42  
 Percent in Pace: 80.8%

Date of Survey: 6/30/2021  
 Weather: Sunny  
 Road Condition: Good  
 Street Class.: Local  
 Observer: J. HUNNICUTT  
 Conditions not Apparent:

Start Time: 11:50  
 End Time: 12:35  
 Posted Speed: 40

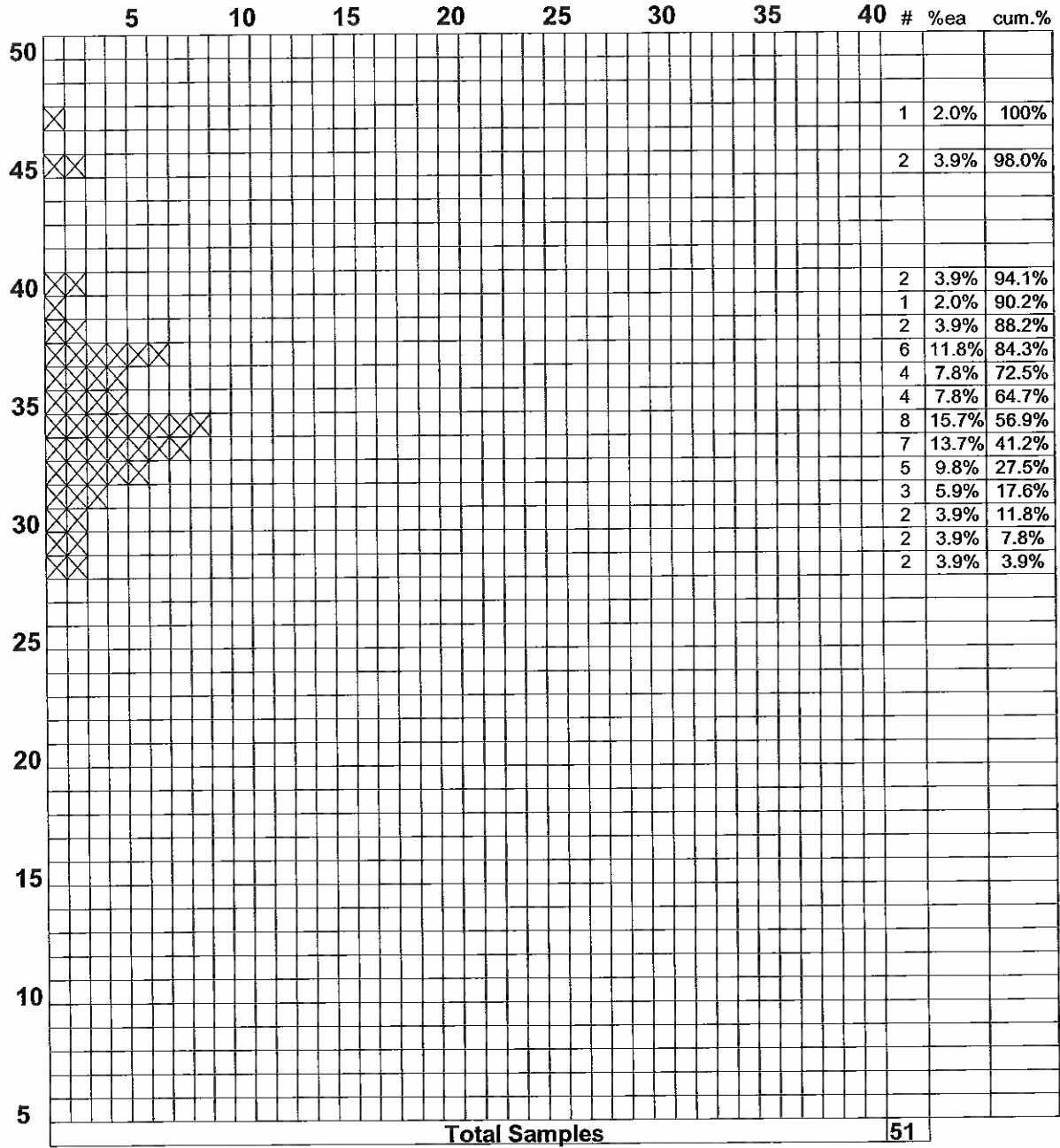
**County of El Dorado  
Transportation Division**

Street Name: WILSON BLVD

Limits: PEQUOT ST to ADIRONDACK DR

**Radar Survey Sheet**

X=North/South



85th Percentile Speed: 38  
 50th Percentile Speed: 34  
 15th Percentile Speed: 31  
 10 MPH Pace: 28-37  
 Number in Pace: 43  
 Percent in Pace: 84.3%

Date of Survey: 10/13/2021  
 Weather: Cloudy  
 Road Condition: Good  
 Street Class.: Local  
 Observer: J. HUNNICUTT  
 Conditions not Apparent:

Start Time: 11:00  
 End Time: 11:55  
 Posted Speed: 35