



San Diego County Traffic Advisory Committee

Committee Secretary
5510 Overland Avenue #410, Room 470, M.S. 0-334
San Diego, California 92123-1239
kenton.jones@sdcounty.ca.gov

Represented Agencies

County of San Diego Fire Authority
California Department of
Transportation
California Highway Patrol
Independent Insurance Agents
& Brokers of San Diego
San Diego County Bicycle Coalition
San Diego County Department of
Public Works
San Diego County Office of Education
Pacific Safety Center
San Diego County Sheriff's
Department

September 27, 2024

TO: Community Planning/Sponsor Group Chairpersons

FROM: Secretary, Traffic Advisory Committee

MEETING NOTICE

Attached is the preliminary agenda for the October 4, 2024 meeting of the Traffic Advisory Committee (TAC).

If your community group has not previously provided input on the proposed agenda items in your jurisdiction and your group would like to provide input, we recommend you place the relevant items on your next available community group meeting agenda for discussion. Please let us know if your group decides to review an item and TAC staff will ensure that your group has adequate time to review before the item is placed on a future TAC meeting agenda.

After reviewing the data and discussing alternatives, the TAC submits a recommendation to the Board as to what it believes to be the most appropriate action based upon sound traffic engineering principles, the California Vehicle Code, and driver expectation. The Board of Supervisors will make a final decision as to what action will be taken after reviewing TAC recommendations and community group input, when available.

If you do have any questions or need additional information regarding this procedure, please contact me at kenton.jones@sdcounty.ca.gov. TAC staff is available to provide background information on items and to answer questions you may have.

This TAC meeting on October 4, 2024, will be conducted with a virtual meeting platform option. Please join us in person or use this link below to join the meeting:

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 234 770 770 151

Passcode: yqCrLH

[Download Teams](#) | [Join on the web](#)

Or call in (audio only)

[+1 619-343-2539,,311196924#](#) United States, San Diego

Phone Conference ID: 311 196 924#

[Find a local number](#) | [Learn More](#)

Very truly yours,

Kenton R. Jones, Secretary
San Diego County Traffic Advisory Committee

KRJ:bb
Attachment



SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

**October 4, 2024 ~ 9:00 AM
5510 Overland Ave, Room 271
San Diego CA, 92123**

AGENDA

- I. Call to Order / Roll Call**
- II. Pledge of Allegiance**
- III. Approval of Minutes**
- IV. Announcements / Public Forum**
- V. Items for Review**

SUBJECT	LOCATION	AREA/ COMMUNITY GROUP
<u>SUPERVISORIAL DISTRICT 2</u>		
2-A. INTERSECTION CONTROLS	RIVERVIEW AV & LEMON CREST DR	LAKESIDE/ LAKESIDE CPG
2-B. RADAR CERTIFICATION	SOUTHERN OAK RD DYE RD TO END	RAMONA/ RAMONA CPG
2-C. RADAR CERTIFICATION	OLD JULIAN HY VISTA RAMONA RD TO 800' E/O MP 7.0	RAMONA/ RAMONA CPG
2-D. RADAR CERTIFICATION	ARENA WY GUNN STAGE RD TO OPEN VIEW RD	RAMONA/ RAMONA CPG
<u>ALL DISTRICTS</u>		
A. SIGHT DISTANCE	COUNTY OF SAN DIEGO SIGHT DISTANCE STANDARDS	
<u>INFORMATIONAL ITEM</u>		
SAFETY CORRIDOR PRESENTATION		

For information on joining the meeting via Microsoft Teams, please look for the meeting agenda on the Traffic Advisory Committee website at:

<https://www.sandiegocounty.gov/content/sdc/dpw/transportation/tacagenda.html>

Riverview Avenue & Lemon Crest Drive



SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: October 4, 2024 **Item 2-A**

SUPERVISORIAL DISTRICT: 2

SUBJECT: Intersection Control

LOCATION: Riverview Avenue & Lemon Crest Drive, LAKESIDE

INITIATED BY: DPW Traffic Engineering

REQUEST: All-Way Stop Control

PROBLEM AS STATED BY REQUESTER:

The intersection of Riverview Avenue & Lemon Crest Drive has been identified by Traffic Engineering as meeting Option C, intersections where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop, and Option D, at an intersection of two residential collectors of similar design and the all-way stop would enhance the traffic operations of said intersection, of the Multi-Way Stop Application optional criteria as described in the California Manual on Uniform Traffic Control Devices (CA MUTCD), Section 2B.07, therefore an all-way stop control should be considered.

Existing Traffic Devices

Riverview Avenue is a striped two-lane undivided through highway with a 36 to 40-foot pavement width. The roadway is striped with a no passing centerline and white edgeline. Riverview Avenue is signed with a school zone signage and curve advisories. The road is unclassified on the County General Plan Mobility Element Network. The road has a posted 25 MPH radar enforced speed limit.

Lemon Crest Drive is a striped two-lane undivided highway with a 28-foot pavement width. The roadway is striped with a no passing centerline. Lemon Crest Drive is stop controlled at the intersection with Riverview Avenue. The road is unclassified on the County General Plan Mobility Element Network. The road has a posted 25 MPH radar enforced speed limit.

Average Daily Traffic Volumes

04/23

Riverview Avenue:	
N/o Lemon Crest Drive	893 SB
S/o Lemon Crest Drive	896 NB
Lemon Crest Drive:	
E/o Riverview Avenue	1,030 WB

Collision Data

There have been 0 reported collisions at this intersection within a past 3-year period (2021-07-01 to 2024-06-30).



WILLIAM P. MORGAN, P.E.
INTERIM DIRECTOR

PUBLIC WORKS
5510 OVERLAND AVENUE, SUITE 410, SAN DIEGO, CALIFORNIA 92123-1237
(858) 694-2212

COUNTY TRAFFIC ENGINEER RECOMMENDATION

Date: September 11, 2024
Item Title: All-Way Stop Control
Location: Lemon Crest Drive and Riverview Avenue
CTE Recommendation: **Install an All-Way Stop Control**
Conditions:

- Section 21354 “Stop Signs on Local Highways” of the California Vehicle Code (CVC) authorizes local agencies to designate any intersection under its exclusive jurisdiction as a stop intersection.
- Section 2B.07 “Multi-Way Stop Applications” of the California Manual on Uniform Traffic Control Devices (MUTCD) provides guidelines that should and/or may be considered in an engineering study when evaluating an intersection for an all-way stop control.
- Option C of Section 2B.07 - Intersections where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop.
- Sight visibility is obstructed at the southeast corner of the intersection due to vegetation, limiting visibility when looking south from Lemon Crest Drive onto Riverview Avenue.
- Option D of Section 2B.07 - An intersection of two Residential Collectors, indicates all-way stop controls may be considered at an intersection of two residential collectors of similar design and the all-way stop control would

enhance the traffic operations of said intersection. Both Lemon Crest Drive and Riverview Avenue are considered Residential Collectors with similar traffic operation.

- Pursuant to CVC section 21354 coupled with traffic condition noted above in accordance with Section 2B.07 of the California MUTCD, it is my recommendation that an All-Way Stop Control is appropriate and safe for the intersection of Lemon Crest Drive and Riverview Avenue.



Michael Kenney, TE 2045 & CE 56661

9/16/24

Date

VOLUME

Riverview Ave & Lemon Crest Dr

Day: Tuesday
Date: 04/18/2023

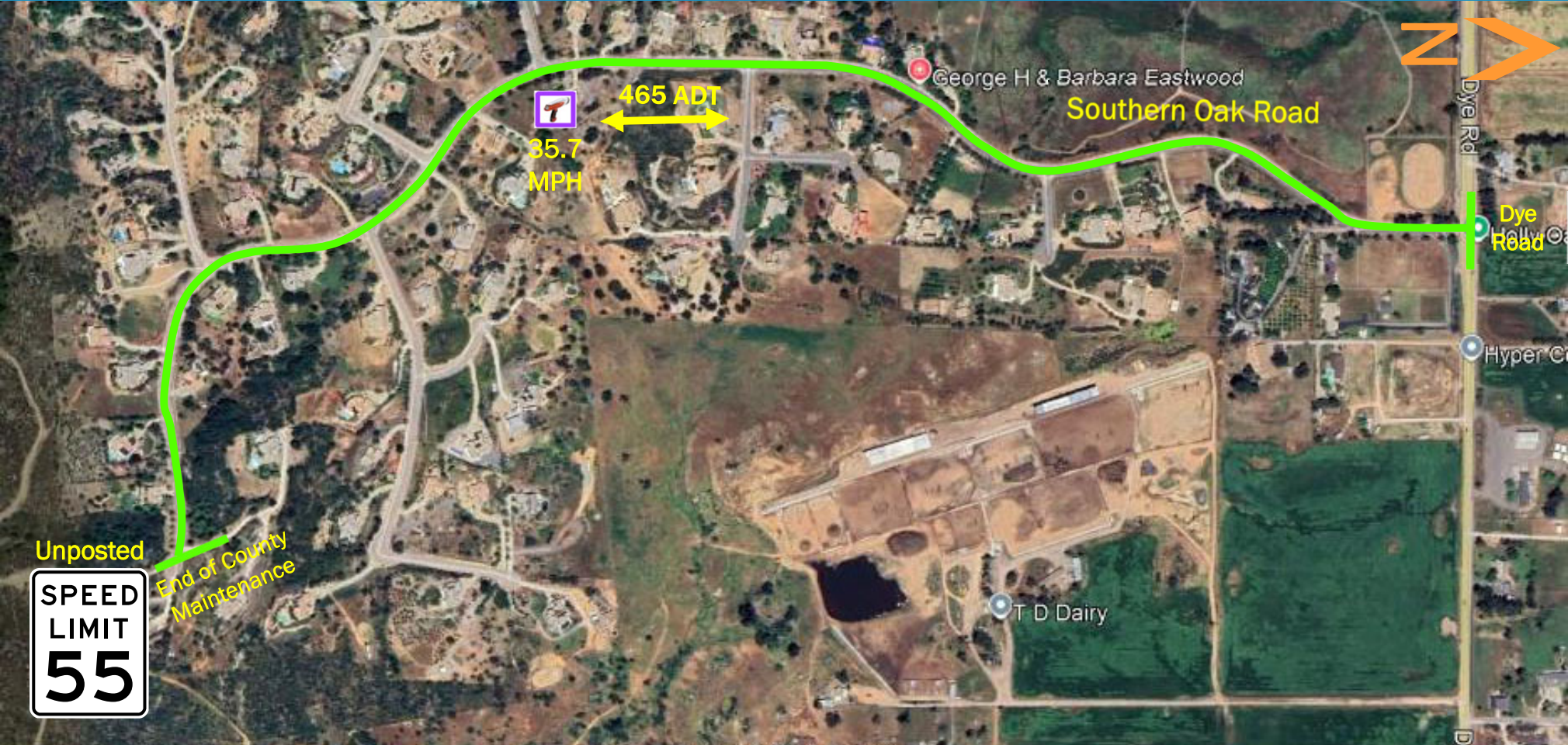
City: Winter Gardens
Project #: CA23_040066_001

DAILY TOTALS						NB	SB					Total
						896	893					2,819
								EB	WB			
								0	1,030			
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
0:00	0	2	0	1	3	12:00	12	21	0	10	43	
0:15	2	1	0	2	5	12:15	14	13	0	14	41	
0:30	0	2	0	1	3	12:30	17	14	0	12	43	
0:45	0	2	0	5	0	12:45	10	53	13	61	0	
					4					21	57	
1:00	0	1	0	0	1	13:00	10	16	0	15	41	
1:15	0	0	0	1	1	13:15	12	13	0	17	42	
1:30	0	2	0	1	3	13:30	17	15	0	19	51	
1:45	1	1	0	3	0	13:45	7	46	23	67	0	
					1					18	69	
2:00	1	0	0	1	2	14:00	18	25	0	16	59	
2:15	0	0	0	0	0	14:15	13	15	0	23	51	
2:30	0	0	0	0	0	14:30	17	18	0	19	54	
2:45	0	1	0	0	0	14:45	11	59	12	70	0	
					1					15	73	
3:00	0	0	0	1	1	15:00	15	17	0	13	45	
3:15	1	0	0	1	2	15:15	18	19	0	18	55	
3:30	0	0	0	0	0	15:30	20	27	0	23	70	
3:45	1	2	0	0	1	15:45	12	65	17	80	0	
					3					19	73	
4:00	0	1	0	2	3	16:00	12	21	0	20	53	
4:15	1	0	0	1	2	16:15	16	20	0	24	60	
4:30	6	0	0	0	6	16:30	23	22	0	20	65	
4:45	3	10	0	1	0	16:45	7	58	13	76	0	
					1					26	90	
5:00	3	0	0	0	3	17:00	15	13	0	17	45	
5:15	4	2	0	2	8	17:15	13	14	0	19	46	
5:30	2	2	0	1	5	17:30	13	13	0	18	44	
5:45	7	16	0	4	0	17:45	16	57	18	58	0	
					5					20	74	
6:00	12	3	0	5	20	18:00	12	21	0	21	54	
6:15	13	3	0	6	22	18:15	18	19	0	20	57	
6:30	10	4	0	7	21	18:30	12	13	0	25	50	
6:45	14	49	4	14	0	18:45	9	51	15	68	0	
					8					13	79	
7:00	15	8	0	6	29	19:00	20	8	0	10	38	
7:15	27	15	0	14	56	19:15	10	8	0	18	36	
7:30	32	31	0	25	88	19:30	5	15	0	14	34	
7:45	25	99	18	72	0	19:45	14	49	6	37	0	
					39					11	53	
8:00	27	26	0	28	81	20:00	9	11	0	11	31	
8:15	39	42	0	37	118	20:15	2	10	0	8	20	
8:30	19	23	0	29	71	20:30	5	7	0	7	19	
8:45	14	99	8	99	0	20:45	3	19	9	37	0	
					14					8	34	
9:00	12	7	0	16	35	21:00	7	3	0	8	18	
9:15	6	8	0	8	22	21:15	3	6	0	6	15	
9:30	13	7	0	7	27	21:30	6	5	0	4	15	
9:45	8	39	7	29	0	21:45	1	17	2	16	0	
					9					4	22	
10:00	14	12	0	7	33	22:00	1	2	0	7	10	
10:15	13	10	0	11	34	22:15	5	0	0	2	7	
10:30	6	6	0	6	18	22:30	2	1	0	5	8	
10:45	10	43	9	37	0	22:45	1	9	2	5	0	
					10					3	17	
11:00	12	6	0	12	30	23:00	3	5	0	3	11	
11:15	14	11	0	19	44	23:15	0	5	0	1	6	
11:30	14	8	0	18	40	23:30	1	2	0	4	7	
11:45	8	48	11	36	0	23:45	0	4	6	18	0	
					15					2	10	
TOTALS	409	300	379	1088	TOTALS	487	593	651	1731			
SPLIT %	37.6%	27.6%	34.8%	38.6%	SPLIT %	28.1%	34.3%	37.6%	61.4%			

DAILY TOTALS						NB	SB					Total
						896	893					2,819
								EB	WB			
								0	1,030			
AM Peak Hour	7:30	7:30		7:45	7:30	PM Peak Hour	15:00	15:30		16:00	15:30	
AM Pk Volume	123	117		133	369	PM Pk Volume	65	85		90	231	
Pk Hr Factor	0.788	0.696		0.853	0.782	Pk Hr Factor	0.813	0.787		0.865	0.825	
7 - 9 Volume	198	171	0	192	561	4 - 6 Volume	115	134	0	164	413	
7 - 9 Peak Hour	7:30	7:30		7:45	7:30	4 - 6 Peak Hour	16:15	16:00		16:00	16:00	
7 - 9 Pk Volume	123	117	0	133	369	4 - 6 Pk Volume	61	76	0	90	224	
Pk Hr Factor	0.788	0.696	0.000	0.853	0.782	Pk Hr Factor	0.663	0.864	0.000	0.865	0.862	

Southern Oak Road

Dye Road to End of County Maintenance (1.20 miles)



SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: October 4, 2024 **Item 2-B**
SUPERVISORIAL DISTRICT: 2
SUBJECT: Radar Certification
LOCATION: Southern Oak Road from Dye Road to end of County maintained road (a distance of 1.20 miles) RAMONA
INITIATED BY: DPW Traffic Engineering
REQUEST: Radar Certification

PROBLEM AS STATED BY REQUESTER:

Southern Oak Road from Dye Road to End of County maintained road currently has no posted speed limit and is subject to the 55 MPH State maximum speed limit. A preliminary review of prevailing speeds and roadway conditions could support radar certification the 35 MPH speed limit.

Existing Traffic Devices

Southern Oak Road is a striped 2-lane highway that varies between 30 and 35 feet wide. The roadway is striped with a no passing centerline. The road is posted with equestrian signs. Southern Oak Road is currently unclassified on the County General Plan Mobility Element Network.

Average Daily Traffic Volumes

05/24

Southern Oak Road:
250' S/o Luelf Street 465

<u>Speed Data</u>	<u>85th Percentile</u>	<u>10 MPH Pace</u>	<u>% in Pace</u>
Southern Oak Road: @ Oak Shade Lane	(2024) 35.7 MPH	26-35	75%

Collision Data

There have been 0 reported collisions at this intersection within a past 3-year period (2021-07-01 to 2024-06-30).

VOLUME

Southern Oak Rd 250' S/O Luelf St

Day: Tuesday
 Date: 5/7/2024

City: Ramona
 Project #: CA24_040082_029

DAILY TOTALS					NB	SB	EB	WB	Total			
					239	226	0	0	465			
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
0:00	0	0	0	0		12:00	3	4	0	0	7	
0:15	0	0	0	0		12:15	2	4	0	0	6	
0:30	0	0	0	0		12:30	5	4	0	0	9	
0:45	0	0	0	0		12:45	4	14	0	12	4	26
1:00	0	0	0	0		13:00	4	3	0	0	7	
1:15	0	0	0	0		13:15	1	3	0	0	4	
1:30	0	0	0	0		13:30	2	5	0	0	7	
1:45	0	0	0	0		13:45	1	8	2	13	3	21
2:00	0	0	0	0		14:00	9	7	0	0	16	
2:15	0	0	0	0		14:15	6	5	0	0	11	
2:30	0	0	0	0		14:30	8	5	0	0	13	
2:45	0	0	0	0		14:45	8	31	5	22	13	53
3:00	1	1	0	0	2	15:00	2	4	0	0	6	
3:15	0	0	0	0		15:15	2	2	0	0	4	
3:30	0	0	0	0		15:30	4	5	0	0	9	
3:45	0	1	0	1	2	15:45	2	10	3	14	5	24
4:00	0	0	0	0		16:00	5	6	0	0	11	
4:15	0	0	0	0		16:15	5	3	0	0	8	
4:30	0	0	0	0		16:30	4	4	0	0	8	
4:45	0	0	0	0		16:45	2	16	5	18	7	34
5:00	0	0	0	0		17:00	2	2	0	0	4	
5:15	3	1	0	0	4	17:15	5	8	0	0	13	
5:30	6	2	0	0	8	17:30	3	4	0	0	7	
5:45	3	12	4	7	7	17:45	1	11	7	21	8	32
6:00	10	3	0	0	13	18:00	2	3	0	0	5	
6:15	4	3	0	0	7	18:15	2	6	0	0	8	
6:30	4	1	0	0	5	18:30	3	4	0	0	7	
6:45	5	23	2	9	7	18:45	1	8	4	17	5	25
7:00	6	1	0	0	7	19:00	1	3	0	0	4	
7:15	4	2	0	0	6	19:15	1	2	0	0	3	
7:30	4	1	0	0	5	19:30	1	1	0	0	2	
7:45	9	23	4	8	13	19:45	1	4	3	9	4	13
8:00	5	0	0	0	5	20:00	0	4	0	0	4	
8:15	6	3	0	0	9	20:15	3	3	0	0	6	
8:30	5	4	0	0	9	20:30	0	1	0	0	1	
8:45	1	17	2	9	3	20:45	0	3	0	8	0	11
9:00	7	6	0	0	13	21:00	0	2	0	0	2	
9:15	5	1	0	0	6	21:15	0	2	0	0	2	
9:30	4	2	0	0	6	21:30	0	3	0	0	3	
9:45	4	20	3	12	7	21:45	1	1	1	8	2	9
10:00	2	5	0	0	7	22:00	6	4	0	0	10	
10:15	5	5	0	0	10	22:15	2	0	0	0	2	
10:30	3	5	0	0	8	22:30	0	1	0	0	1	
10:45	3	13	3	18	6	22:45	0	8	1	6	1	14
11:00	2	3	0	0	5	23:00	0	1	0	0	1	
11:15	5	2	0	0	7	23:15	0	0	0	0	0	
11:30	4	5	0	0	9	23:30	0	0	0	0	0	
11:45	5	16	3	13	8	23:45	0	0	1	0	1	
TOTALS	125	77			202	TOTALS	114	149			263	
SPLIT %	61.9%	38.1%			43.4%	SPLIT %	43.3%	56.7%			56.6%	

DAILY TOTALS					NB	SB	EB	WB	Total
					239	226	0	0	465
AM Peak Hour	7:45	9:45		7:45	PM Peak Hour	14:00	14:00		14:00
AM Pk Volume	25	18		36	PM Pk Volume	31	22		53
Pk Hr Factor	0.694	0.900		0.692	Pk Hr Factor	0.861	0.786		0.828
7 - 9 Volume	40	17	0	57	4 - 6 Volume	27	39	0	66
7 - 9 Peak Hour	7:45	7:45		7:45	4 - 6 Peak Hour	16:00	17:00		16:00
7 - 9 Pk Volume	25	11	0	36	4 - 6 Pk Volume	16	21	0	34
Pk Hr Factor	0.694	0.688	0.000	0.692	Pk Hr Factor	0.800	0.656	0.000	0.773



RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name: Southern Oak Rd **From:** Shadow Oak Ct **To:** Lucelf Ct

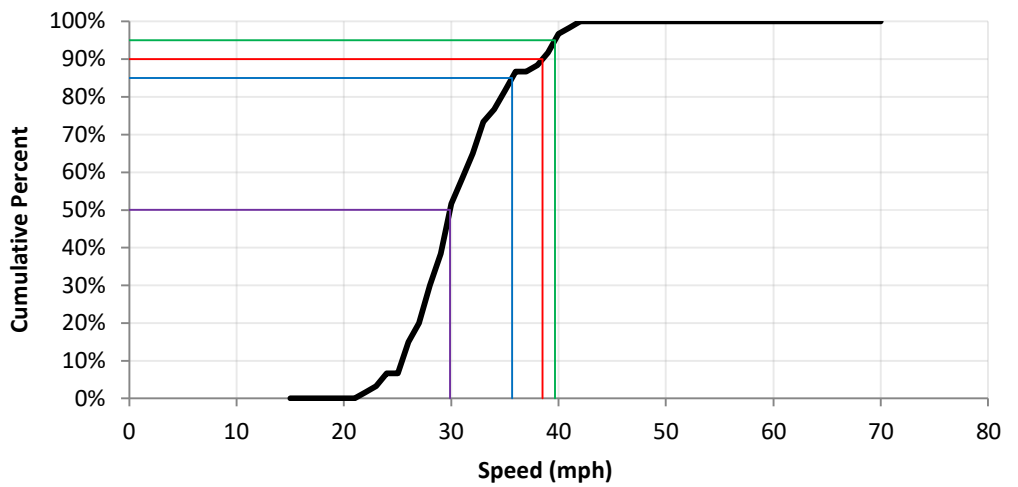
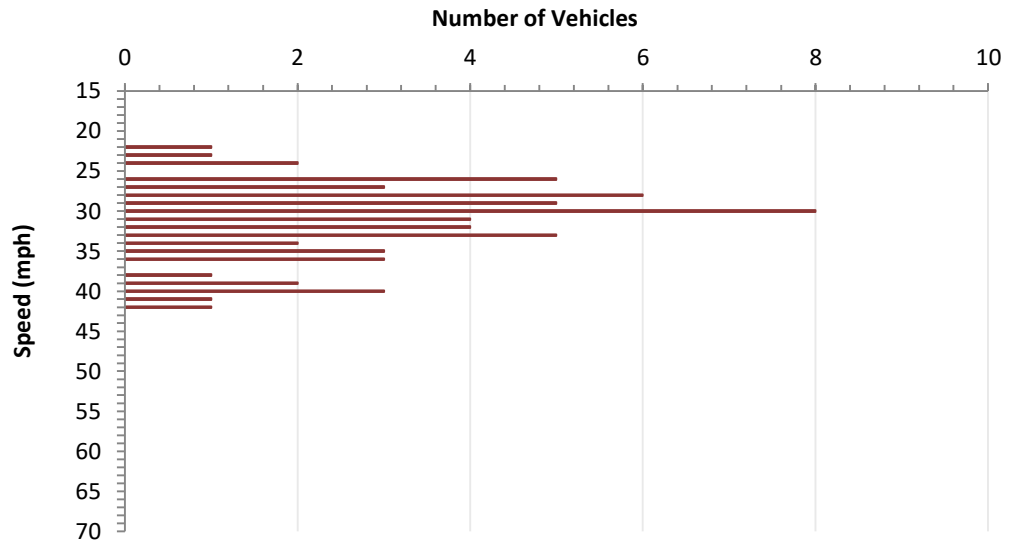
Position: At Oak Shade Ln **Direction:** NB/SB

Date: 7/31/2024 **Weather:** Clear **Project Number:** 0

Time Start: 12:30 PM **Road Condition:** Dry **Observer:** County

Time End: 2:30 PM **Posted Speed:** NOT POSTED **Calibration Test:** Y

Speed (mph)	Num. Veh.	Cum. Pct.
15		
16		
17		
18		
19		
20		
21		
22	1	1.7%
23	1	3.3%
24	2	6.7%
25		
26	5	15.0%
27	3	20.0%
28	6	30.0%
29	5	38.3%
30	8	51.7%
31	4	58.3%
32	4	65.0%
33	5	73.3%
34	2	76.7%
35	3	81.7%
36	3	86.7%
37		
38	1	88.3%
39	2	91.7%
40	3	96.7%
41	1	98.3%
42	1	100.0%
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		
Total	60	



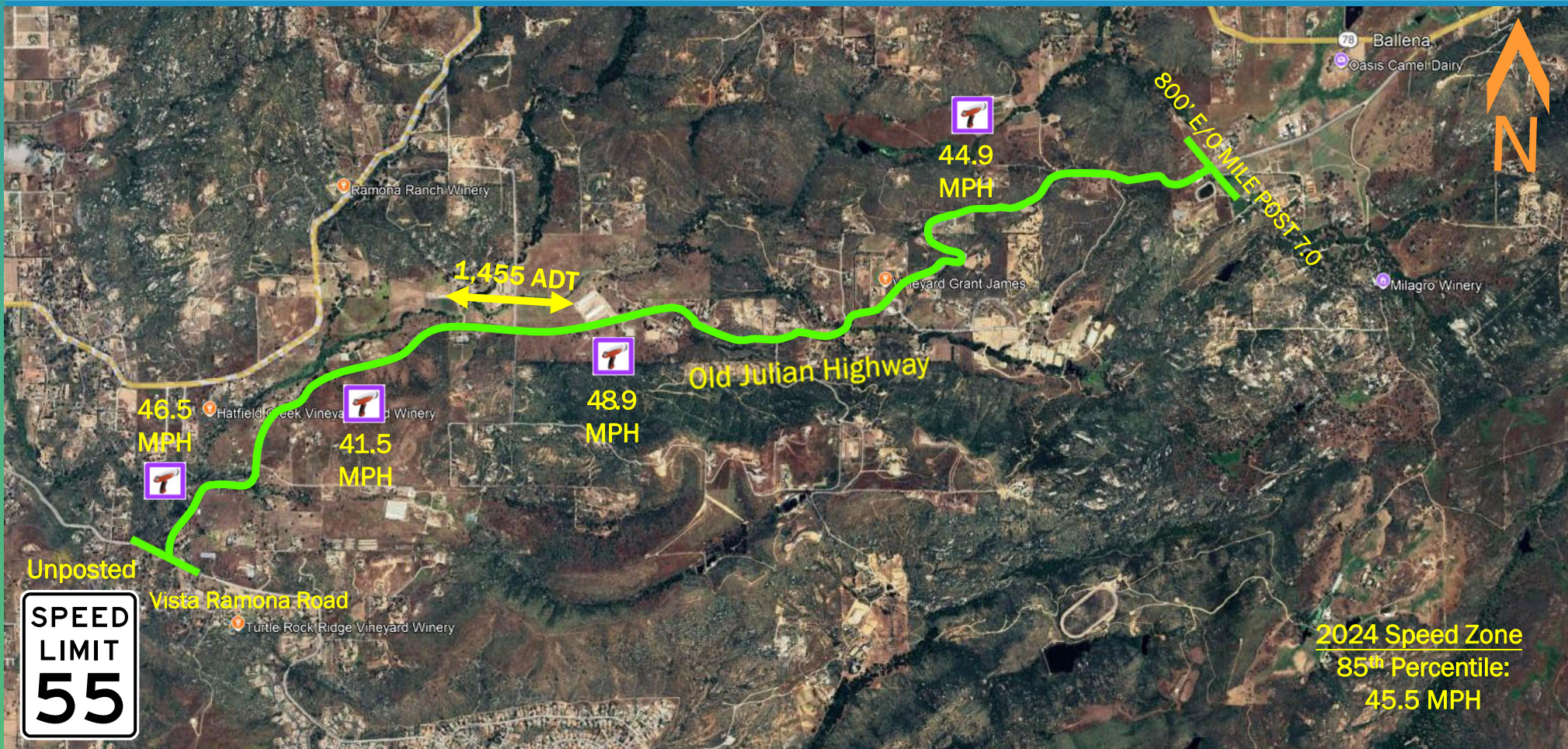
— Data Plot — 50th Percentile — 85th Percentile — 90th Percentile — 95th Percentile

DATA ANALYSIS

Metric	Value	Range	Notes
Average Speed	31.2	22 - 42	
50th Percentile	29.9	26 - 35	10 mph Pace
85th Percentile	35.7		Number in Pace: 45
90th Percentile	38.5		Percent in Pace: 75%
95th Percentile	39.7		

Old Julian Highway

Vista Ramona Road to 800' E/o Mile Post 7.0 (5.14 miles)



2-C. Radar Certification

SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: October 4, 2024 **Item 2-C**

SUPERVISORIAL DISTRICT: 2

SUBJECT: Radar Certification

LOCATION: Old Julian Highway from Vista Ramona Road to 800' east of Mile Post 7.0 (a distance of 5.14 miles) RAMONA

INITIATED BY: DPW Traffic Engineering

REQUEST: Radar Certification

PROBLEM AS STATED BY REQUESTER:

Old Julian Highway from Vista Ramona Road to 800' east of Mile Post 7.0 currently has no posted speed limit and is subject to the 55 MPH State maximum speed limit. A preliminary review of prevailing speeds and roadway conditions could support radar certification the 40 MPH speed limit.

Existing Traffic Devices

Old Julian Highway is a striped 2-lane highway that varies between 22 and 28 feet wide. The roadways are striped with a no crossing centerline and white edgeline. The road is posted with a variety of advisory signs, including cattle crossing, bus stop, head-on arrow signs, as well as multiple turn and reverse turn advisories throughout the segment. Old Julian Highway is currently classified as a Community Collector on the County General Plan Mobility Element Network.

Average Daily Traffic Volumes **09/24**

Old Julian Highway:
 980' E/o Vista Ramona Road 1,455

<u>Speed Data</u>	<u>85th Percentile</u>	<u>10 MPH Pace</u>	<u>% in Pace</u>
Old Julian Highway: 980' E/o Vista Ramona Road	(2024) 46.5 MPH	33-42	67%
2,525' E/o Starlight Mountain Road	(2024) 41.5 MPH	34-43	78%
1,875' E/o Swan Road	(2024) 48.9 MPH	38-47	66%
2,440' W/o Sunshine Valley Road	(2024) 44.9 MPH	36-45	73%
Speed Zone	(2024) 45.5 MPH	35-44	71%

Collision Data

There have been 14 reported collisions, 2 of which involved an injury, along this segment of roadway in a 3-year (2021-08-01 to 2024-07-31) This collision results in a segment accident rate of 1.71 collisions per million vehicle miles. The statewide average is 1.41 collisions per million vehicle miles for similar rolling, rural, conventional 2 lanes or less, roads with speeds less than or equal to 55 MPH.



PUBLIC WORKS

5510 OVERLAND AVENUE, SUITE 410, SAN DIEGO, CALIFORNIA 92123-1237
(858) 694-2212

WILLIAM P. MORGAN, P.E.
INTERIM DIRECTOR

COUNTY TRAFFIC ENGINEER RECOMMENDATION

Date: September 11th, 2024
Item Title: Speed Limit and Radar Certification
Location: Old Julian Highway from Vista Ramona Drive to 800 Feet
East of Mile Post 7.0
Conditions: **Establish 40 MPH Radar Enforced Speed Limit**

- Section 22358 of the California Vehicle Code (CVC) authorizes a local agency to determine upon the basis of an Engineering and Traffic Survey (E&TS) that the speed limit of 65 miles per hour (mph) is more than is reasonable or safe, the agency may declare a prima facie speed limit of 60, 55, 50, 45, 40, 35, 30, or 25 mph, whichever is found most appropriate and is reasonable and safe.
- Section 2B.13 "Speed Limit Sign (R2-1)" of the California Manual on Uniform Traffic Control Devices (MUTCD), provides that an E&TS shall include a) prevailing speeds, b) collision records, and c) highway, traffic and roadside conditions that are not apparent to a driver.
- The California MUTCD stipulates that speed limits are usually set at the 5 mph increment above or below the prevailing (85th percentile) speed of motorists.
- Old Julian Highway is a two-lane roadway, rolling, curvy, with limited shoulder throughout its length of 5.14 miles. Its pavement width varies between 22' and 28' feet in width with a striped center line and edge-lines on the roadway.
- Recent speed surveys on Old Julian Highway resulted in a prevailing 85th percentile of 45.5 mph.
- A review of the roadway collision data for the most recent 3-year period shows a total of 14 reported collisions on the subject segment of Old Julian Highway which results in a collision rate of 1.71 collisions per million-vehicle-mile (c/mvm) compared to a state average of 1.41 c/mvm for similar roadway.

- Pursuant to CVC section 22358 coupled with above conditions on Old Julian Highway and the guidance of the California MUTCD section 2B.13, a 40 mph radar enforced speed limit on Old Julian Highway from Vista Ramona Drive to 800 east of Mile Post 7.0 is reasonable and safe based on prevailing speed and collision rate.



Michael L. Kenney, TE 2045 & CE 56661

9/16/24

Date

VOLUME

E Old Julian Hwy 980' E/O Vista Ramona Rd

Day: Tuesday
 Date: 5/14/2024

City: Ramona
 Project #: CA24_040088_018

DAILY TOTALS					NB	SB	EB	WB	Total						
					0	0	710	745	1,455						
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL			
0:00	0	0	0	0			12:00	0	0	17	15	32			
0:15	0	0	0	0			12:15	0	0	10	8	18			
0:30	0	0	0	0			12:30	0	0	8	13	21			
0:45	0	0	1	1	0	0	12:45	0	0	11	46	18	29	100	
1:00	0	0	0	0			13:00	0	0	11	12	23			
1:15	0	0	0	0			13:15	0	0	7	9	16			
1:30	0	0	0	1	1	1	13:30	0	0	11	13	24			
1:45	0	0	2	2	0	1	13:45	0	0	10	39	9	43	19	82
2:00	0	0	1	1	2	2	14:00	0	0	10	13	23			
2:15	0	0	0	1	1	1	14:15	0	0	15	11	26			
2:30	0	0	0	0			14:30	0	0	12	18	30			
2:45	0	0	1	2	0	2	14:45	0	0	10	47	17	59	27	106
3:00	0	0	0	1	1	1	15:00	0	0	16	21	37			
3:15	0	0	0	0			15:15	0	0	17	20	37			
3:30	0	0	1	1	2	2	15:30	0	0	28	12	40			
3:45	0	0	1	2	1	3	15:45	0	0	13	74	14	67	27	141
4:00	0	0	0	1	1	1	16:00	0	0	25	20	45			
4:15	0	0	1	2	3	3	16:15	0	0	18	13	31			
4:30	0	0	0	1	1	1	16:30	0	0	21	14	35			
4:45	0	0	0	1	5	9	16:45	0	0	14	78	22	69	36	147
5:00	0	0	2	4	6	6	17:00	0	0	16	17	33			
5:15	0	0	2	4	6	6	17:15	0	0	20	15	35			
5:30	0	0	4	5	9	9	17:30	0	0	15	6	21			
5:45	0	0	3	11	13	26	17:45	0	0	14	65	14	52	28	117
6:00	0	0	5	12	17	17	18:00	0	0	9	8	17			
6:15	0	0	7	9	16	16	18:15	0	0	5	13	18			
6:30	0	0	12	16	28	28	18:30	0	0	11	11	22			
6:45	0	0	16	40	13	50	18:45	0	0	18	43	4	36	22	79
7:00	0	0	10	20	30	30	19:00	0	0	4	9	13			
7:15	0	0	11	20	31	31	19:15	0	0	6	3	9			
7:30	0	0	14	20	34	34	19:30	0	0	10	4	14			
7:45	0	0	3	38	13	73	19:45	0	0	7	27	6	22	13	49
8:00	0	0	6	13	19	19	20:00	0	0	6	6	12			
8:15	0	0	5	18	23	23	20:15	0	0	6	5	11			
8:30	0	0	6	12	18	18	20:30	0	0	6	2	8			
8:45	0	0	13	30	6	49	20:45	0	0	8	26	6	19	14	45
9:00	0	0	13	9	22	22	21:00	0	0	9	1	10			
9:15	0	0	11	7	18	18	21:15	0	0	3	0	3			
9:30	0	0	11	8	19	19	21:30	0	0	4	1	5			
9:45	0	0	8	43	7	31	21:45	0	0	6	22	0	2	6	24
10:00	0	0	10	5	15	15	22:00	0	0	3	1	4			
10:15	0	0	7	13	20	20	22:15	0	0	1	0	1			
10:30	0	0	9	10	19	19	22:30	0	0	2	2	4			
10:45	0	0	7	33	13	41	22:45	0	0	0	6	0	3	9	
11:00	0	0	5	7	12	12	23:00	0	0	1	0	1			
11:15	0	0	9	11	20	20	23:15	0	0	1	0	1			
11:30	0	0	6	8	14	14	23:30	0	0	0	1	1			
11:45	0	0	11	31	7	33	23:45	0	0	1	3	0	1	1	4
TOTALS			234	318	552	552	TOTALS			476	427	903			
SPLIT %			42.4%	57.6%	37.9%	37.9%	SPLIT %			52.7%	47.3%	62.1%			

DAILY TOTALS					NB	SB	EB	WB	Total			
					0	0	710	745	1,455			
AM Peak Hour			6:45	6:45	6:45		PM Peak Hour			15:30	14:30	15:15
AM Pk Volume			51	73	124		PM Pk Volume			84	76	149
Pk Hr Factor			0.797	0.913	0.912		Pk Hr Factor			0.750	0.905	0.828
7 - 9 Volume	0	0	68	122	190		4 - 6 Volume	0	0	143	121	264
7 - 9 Peak Hour			7:00	7:00	7:00		4 - 6 Peak Hour			16:00	16:00	16:00
7 - 9 Pk Volume	0	0	38	73	111		4 - 6 Pk Volume	0	0	78	69	147
Pk Hr Factor	0.000	0.000	0.679	0.913	0.816		Pk Hr Factor	0.000	0.000	0.780	0.784	0.817

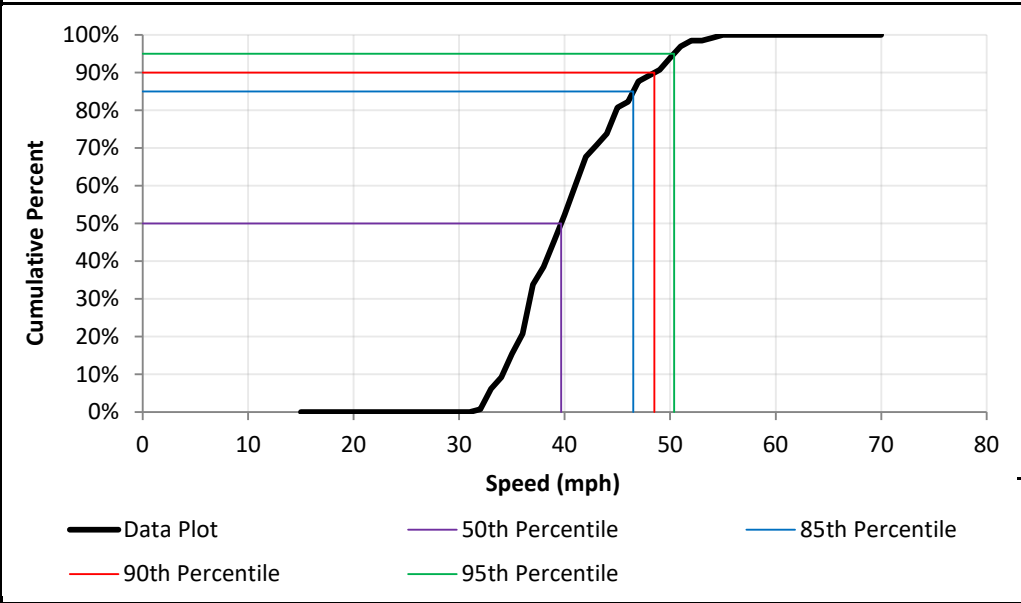
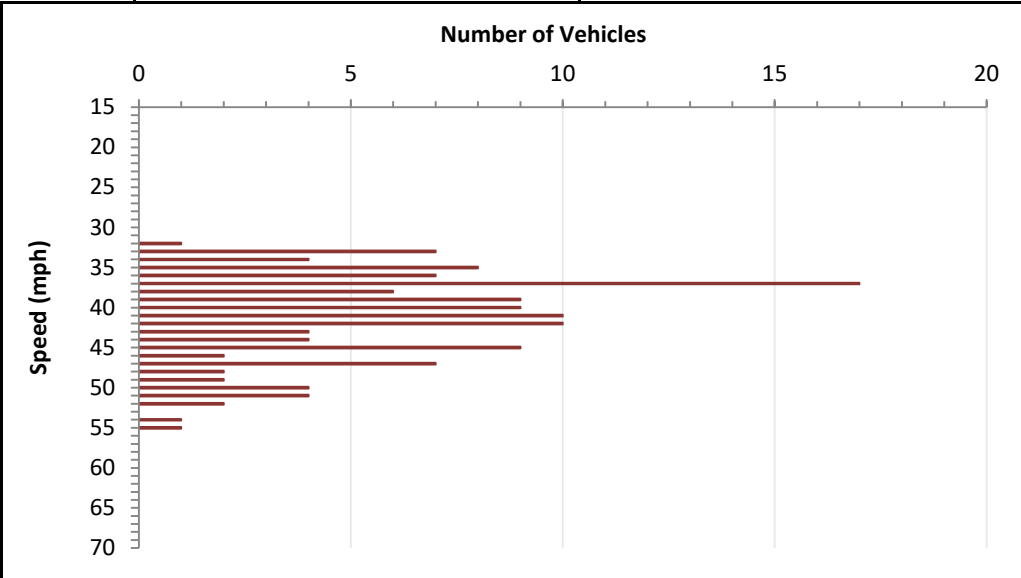


RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name:	Old Julian Hy	From:	Vista Ramona Rd	To:	800' EO MP 7
Position:	980' E/O Vista Ramona Rd			Direction:	WB/EB
Date:	5/22/2024	Weather:	Clear, Sunny	Project Number:	24-040089-001
Time Start:	11:35 AM	Road Condition:	Dry	Observer:	Contractor
Time End:	1:35 PM	Posted Speed:	Unposted	Calibration Test:	Y

Speed (mph)	Num. Veh.	Cum. Pct.
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32	1	0.8%
33	7	6.2%
34	4	9.2%
35	8	15.4%
36	7	20.8%
37	17	33.8%
38	6	38.5%
39	9	45.4%
40	9	52.3%
41	10	60.0%
42	10	67.7%
43	4	70.8%
44	4	73.8%
45	9	80.8%
46	2	82.3%
47	7	87.7%
48	2	89.2%
49	2	90.8%
50	4	93.8%
51	4	96.9%
52	2	98.5%
53		
54	1	99.2%
55	1	100.0%
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
Total	130	



DATA ANALYSIS

Average Speed	40.9	Range	32 - 55
50th Percentile	39.7	10 mph Pace	33 - 42
85th Percentile	46.5	Number in Pace	87
90th Percentile	48.5	Percent in Pace	67%
95th Percentile	50.4		

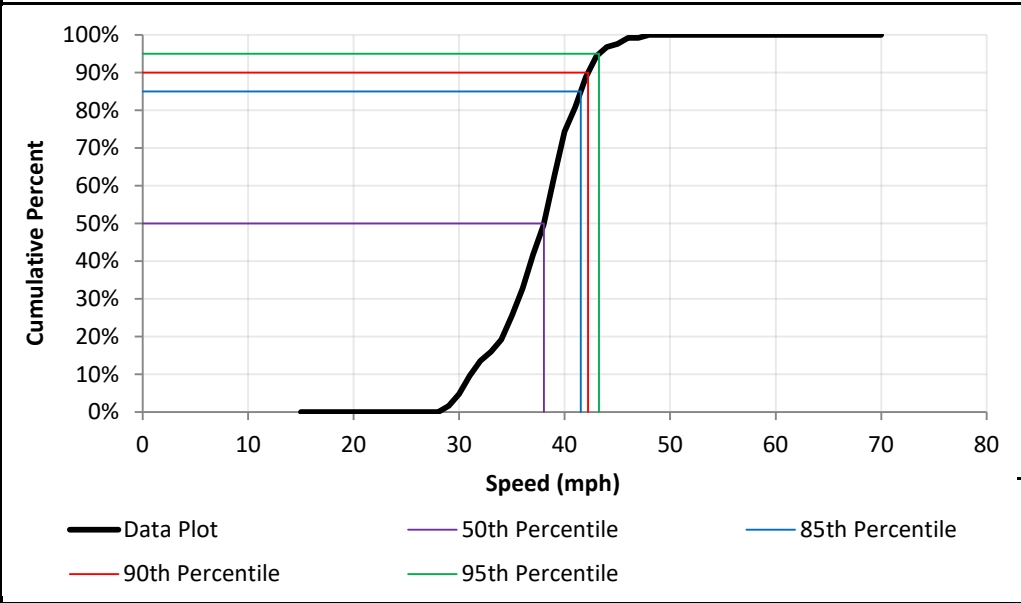
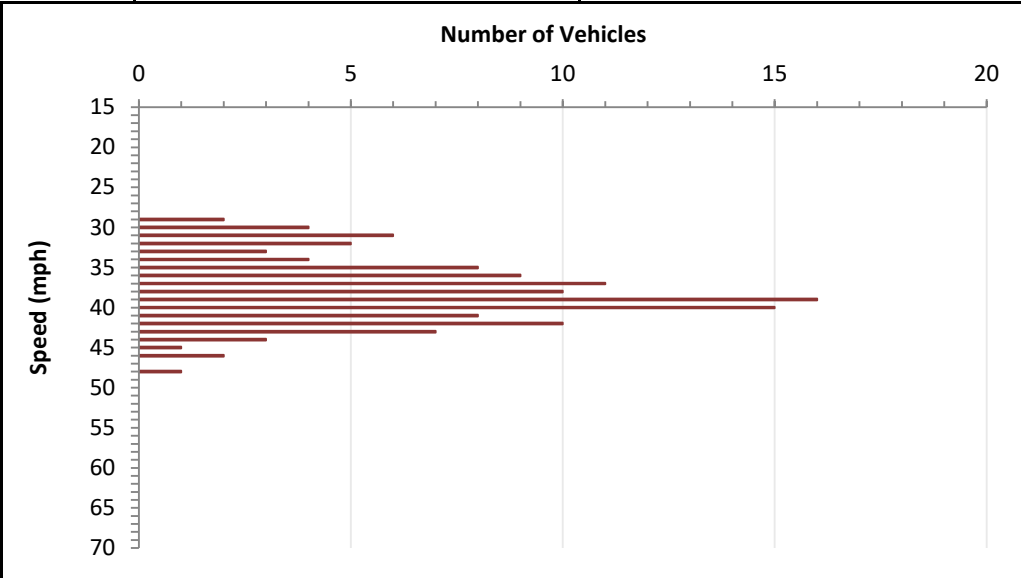


RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name: Old Julian Hy	From: Vista Ramona Rd	To: 800' EO MP 7
Position: 2,525' E/O Starlight Mountain Rd	Direction: WB/EB	
Date: 5/22/2024	Weather: Clear, Sunny	Project Number: 24-040089-002
Time Start: 9:35 AM	Road Condition: Dry	Observer: Contractor
Time End: 11:35 AM	Posted Speed: Unposted	Calibration Test: Y

Speed (mph)	Num. Veh.	Cum. Pct.
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29	2	1.6%
30	4	4.8%
31	6	9.6%
32	5	13.6%
33	3	16.0%
34	4	19.2%
35	8	25.6%
36	9	32.8%
37	11	41.6%
38	10	49.6%
39	16	62.4%
40	15	74.4%
41	8	80.8%
42	10	88.8%
43	7	94.4%
44	3	96.8%
45	1	97.6%
46	2	99.2%
47		
48	1	100.0%
49		
50		
51		
52		
53		
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
Total	125	



DATA ANALYSIS

Average Speed	37.9	Range	29 - 48
50th Percentile	38.0	10 mph Pace	34 - 43
85th Percentile	41.5	Number in Pace	98
90th Percentile	42.2	Percent in Pace	78%
95th Percentile	43.3		



RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name: Old Julian Hy **From:** Vista Ramona Rd **To:** 800' EO MP 7

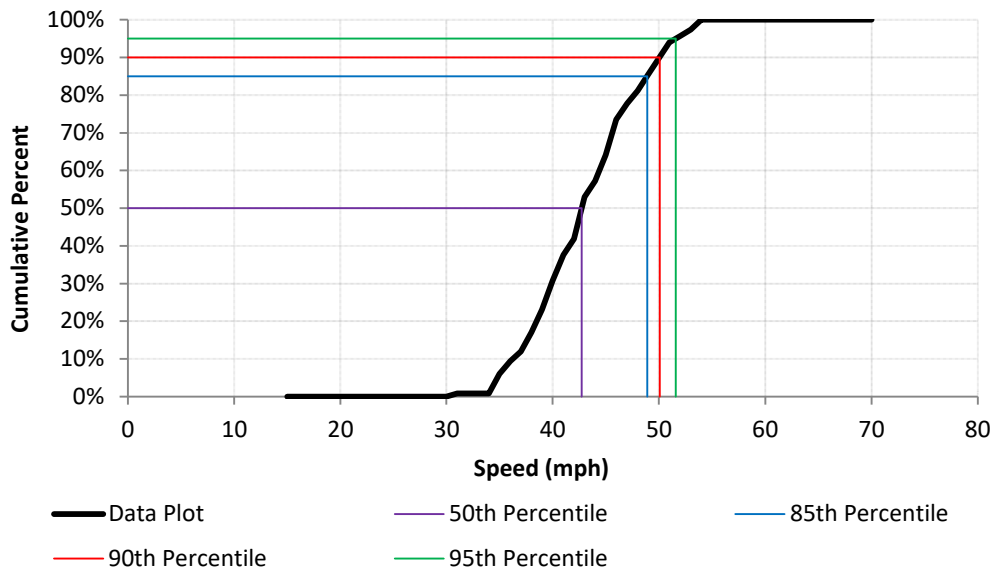
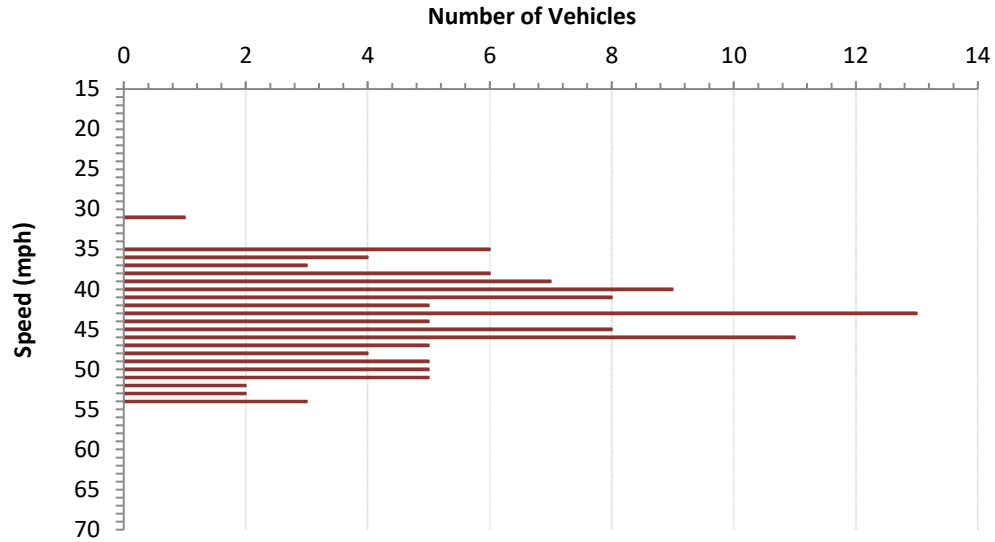
Position: 1,875' EO Swan Rd **Direction:** WB/EB

Date: 5/22/2024 **Weather:** Clear, Sunny **Project Number:** 24-040089-003

Time Start: 12:15 PM **Road Condition:** Dry **Observer:** Contractor

Time End: 2:15 PM **Posted Speed:** Unposted **Calibration Test:** Y

Speed (mph)	Num. Veh.	Cum. Pct.
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31	1	0.9%
32		
33		
34		
35	6	6.0%
36	4	9.4%
37	3	12.0%
38	6	17.1%
39	7	23.1%
40	9	30.8%
41	8	37.6%
42	5	41.9%
43	13	53.0%
44	5	57.3%
45	8	64.1%
46	11	73.5%
47	5	77.8%
48	4	81.2%
49	5	85.5%
50	5	89.7%
51	5	94.0%
52	2	95.7%
53	2	97.4%
54	3	100.0%
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
Total	117	



DATA ANALYSIS

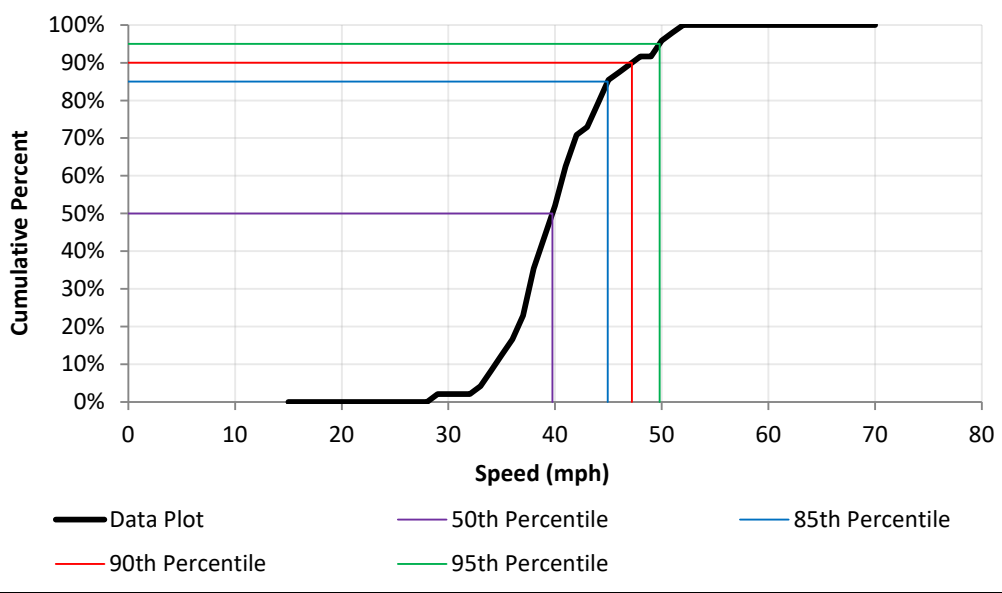
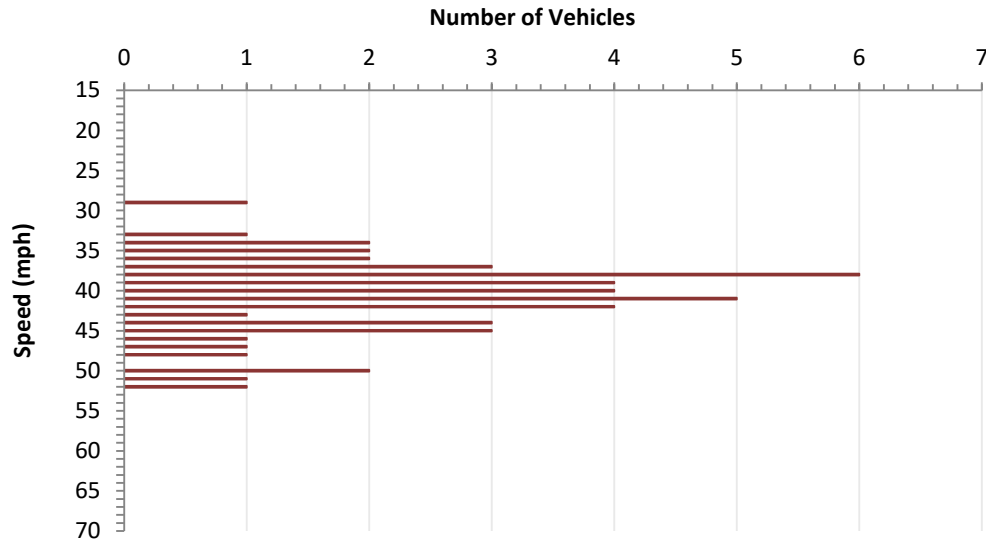
Average Speed	43.5	Range	31 - 54
50th Percentile	42.7	10 mph Pace	38 - 47
85th Percentile	48.9	Number in Pace	77
90th Percentile	50.1	Percent in Pace	66%
95th Percentile	51.6		



RADAR SPEED SURVEY SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name: E Old Julian Highway	From: Vista Ramona Rd	To: 800' EO MP 7
Position: 2,440' W/o Sunshine Valley Rd	Direction: WB/EB	
Date: 7/30/2024	Weather: Clear, Sunny	Project Number: 0
Time Start: 11:15 AM	Road Condition: Dry	Observer: County
Time End: 12:15 PM	Posted Speed: 0	Calibration Test: Y

Speed (mph)	Num. Veh.	Cum. Pct.
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29	1	2.1%
30		
31		
32		
33	1	4.2%
34	2	8.3%
35	2	12.5%
36	2	16.7%
37	3	22.9%
38	6	35.4%
39	4	43.8%
40	4	52.1%
41	5	62.5%
42	4	70.8%
43	1	72.9%
44	3	79.2%
45	3	85.4%
46	1	87.5%
47	1	89.6%
48	1	91.7%
49		
50	2	95.8%
51	1	97.9%
52	1	100.0%
53		
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
Total	48	

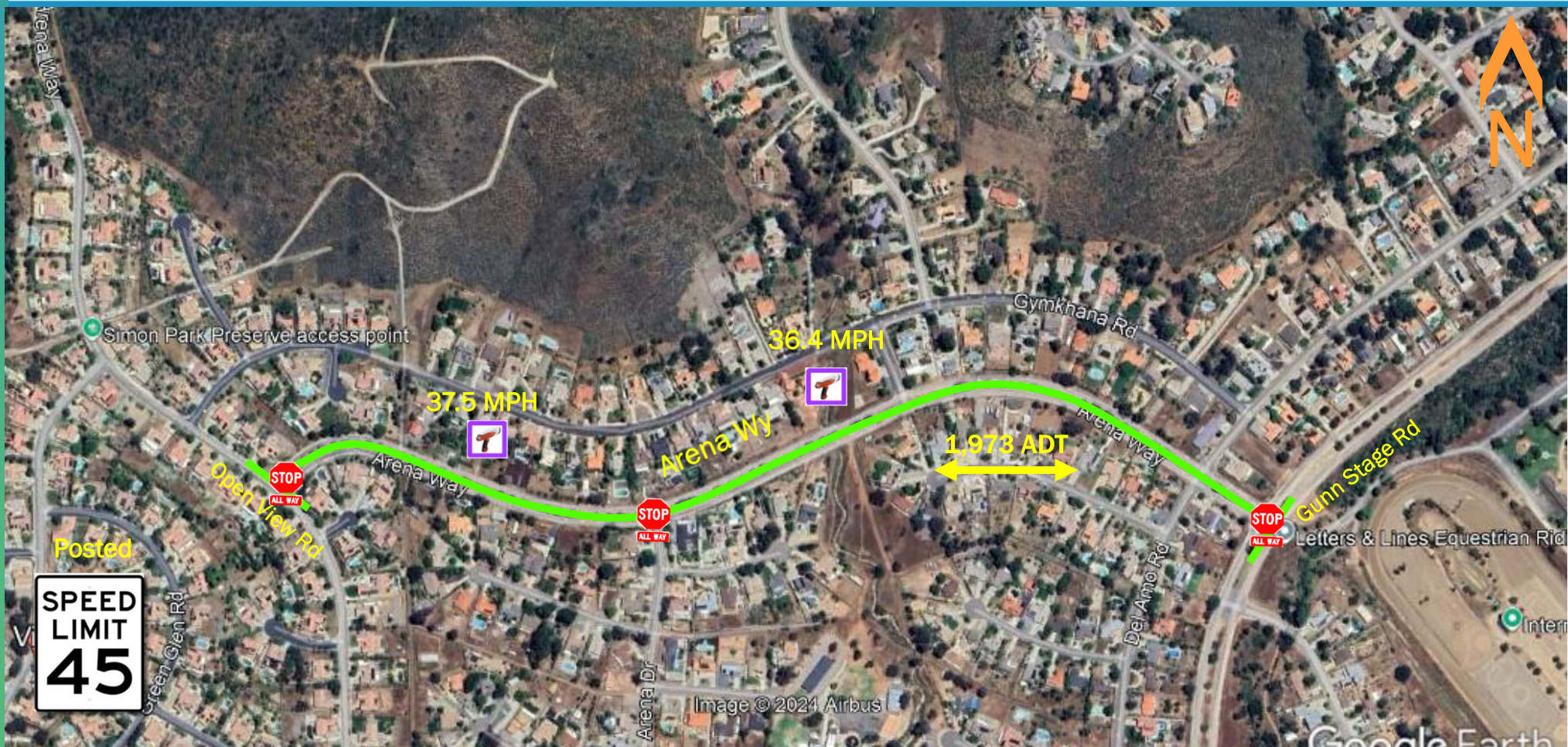


DATA ANALYSIS

Average Speed	40.7	Range	29 - 52
50th Percentile	39.8	10 mph Pace	36 - 45
85th Percentile	44.9	Number in Pace	35
90th Percentile	47.2	Percent in Pace	73%
95th Percentile	49.8		

Arena Way

Gunn Stage Road to Open View Road (0.72 miles)



SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: October 4, 2024 **Item 2-D**

SUPERVISORIAL DISTRICT: 2

SUBJECT: Radar Certification

LOCATION: Arena Way from Gunn Stage Rd to Open View Road
(a distance of 0.72 miles) RAMONA

INITIATED BY: DPW Traffic Engineering

REQUEST: Radar Certification

PROBLEM AS STATED BY REQUESTER:

Arena Way from Gunn Stage Rd to Open View Road is currently posted with a 45 MPH speed limit. A preliminary review of prevailing speeds and roadway conditions could support radar certification the 35 MPH speed limit.

Existing Traffic Devices

Arena Way is a striped 2-lane divided highway that is two 20-foot roadways. The roadways are striped with a yellow left edgeline. Arena Way is stop controlled at Arena Drive and Del Amo Road. The road has an uncontrolled marked school crossing at Baba Drive. The Road is currently posted with a 45 MPH radar enforced speed limit. Arena Way between Arena Drive and Baba Drive is currently classified as a Community Collector on the County General Plan Mobility Element Network.

<u>Average Daily Traffic Volumes</u>	<u>09/24</u>	<u>02/08</u>		
Arena Way:				
200' E/o Baba Street	1,638	1,530		
700' W/o Arena Drive	2,308			
			<u>85th</u>	<u>10 MPH</u>
<u>Speed Data</u>			<u>Percentile</u>	<u>Pace</u>
Arena Way:				<u>% in</u>
250' W/o Baba Street	(2024)	36.4 MPH	29-38	89%
	(2015)	43.0 MPH	33-42	72%
700' E/o Arena Drive	(2024)	37.5 MPH	29-38	73%
Speed Zone	(2024)	37.0 MPH	29-38	81%

Collision Data

There have been 2 reported collisions, 1 of which involved an injury, along this segment of roadway in a 3-year (2021-07-01 to 2024-06-30) This collision results in a segment accident rate of 1.10 collisions per million vehicle miles. The statewide average is 1.24

collisions per million vehicle miles for similar suburban, conventional 2 lanes or less, roads with speeds between 45 MPH and 55 MPH.

VOLUME

Arena Way 700' W/O Arena Dr

Day: Thursday
 Date: 9/5/2024

City: Ramona
 Project #: CA24_040151_003

DAILY TOTALS					NB	SB	EB	WB	Total					
					0	0	1,186	1,122	2,308					
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
0:00	0	0	0	0		12:00	0	0	13	12	25			
0:15	0	0	0	3	3	12:15	0	0	16	13	29			
0:30	0	0	0	0		12:30	0	0	8	12	20			
0:45	0	0	0	1	4	12:45	0	0	13	50	11	48	24	98
1:00	0	0	0	1	1	13:00	0	0	20	16	36			
1:15	0	0	0	0		13:15	0	0	25	11	36			
1:30	0	0	1	0	1	13:30	0	0	34	10	44			
1:45	0	0	0	1	0	13:45	0	0	29	108	14	51	43	159
2:00	0	0	1	0	1	14:00	0	0	18	57	75			
2:15	0	0	0	1	1	14:15	0	0	16	21	37			
2:30	0	0	0	0		14:30	0	0	14	17	31			
2:45	0	0	0	1	0	14:45	0	0	14	62	24	119	38	181
3:00	0	0	0	0		15:00	0	0	13	29	42			
3:15	0	0	0	1	1	15:15	0	0	17	24	41			
3:30	0	0	0	2	2	15:30	0	0	20	25	45			
3:45	0	0	0	0	3	15:45	0	0	25	75	26	104	51	179
4:00	0	0	3	1	4	16:00	0	0	21	23	44			
4:15	0	0	1	2	3	16:15	0	0	18	21	39			
4:30	0	0	1	4	5	16:30	0	0	28	14	42			
4:45	0	0	3	8	0	16:45	0	0	34	101	16	74	50	175
5:00	0	0	6	3	9	17:00	0	0	45	20	65			
5:15	0	0	5	3	8	17:15	0	0	28	21	49			
5:30	0	0	5	3	8	17:30	0	0	32	13	45			
5:45	0	0	8	24	4	17:45	0	0	38	143	15	69	53	212
6:00	0	0	13	12	25	18:00	0	0	29	20	49			
6:15	0	0	15	5	20	18:15	0	0	22	13	35			
6:30	0	0	12	11	23	18:30	0	0	10	31	41			
6:45	0	0	18	58	6	18:45	0	0	9	70	36	100	45	170
7:00	0	0	19	10	29	19:00	0	0	22	29	51			
7:15	0	0	30	19	49	19:15	0	0	9	35	44			
7:30	0	0	75	39	114	19:30	0	0	12	13	25			
7:45	0	0	29	153	56	19:45	0	0	11	54	7	84	18	138
8:00	0	0	10	22	32	20:00	0	0	8	12	20			
8:15	0	0	20	16	36	20:15	0	0	5	7	12			
8:30	0	0	14	7	21	20:30	0	0	8	6	14			
8:45	0	0	13	57	11	20:45	0	0	9	30	8	33	17	63
9:00	0	0	8	15	23	21:00	0	0	8	10	18			
9:15	0	0	10	13	23	21:15	0	0	3	3	6			
9:30	0	0	10	6	16	21:30	0	0	7	9	16			
9:45	0	0	14	42	14	21:45	0	0	4	22	5	27	9	49
10:00	0	0	17	15	32	22:00	0	0	4	4	8			
10:15	0	0	16	16	32	22:15	0	0	4	2	6			
10:30	0	0	16	12	28	22:30	0	0	3	0	3			
10:45	0	0	12	61	12	22:45	0	0	4	15	1	7	5	22
11:00	0	0	17	14	31	23:00	0	0	0	2	2			
11:15	0	0	7	8	15	23:15	0	0	7	4	11			
11:30	0	0	9	15	24	23:30	0	0	0	2	2			
11:45	0	0	10	43	15	23:45	0	0	1	8	0	8	1	16
TOTALS			448	398	846	TOTALS			738	724	1462			
SPLIT %			53.0%	47.0%	36.7%	SPLIT %			50.5%	49.5%	63.3%			

DAILY TOTALS					NB	SB	EB	WB	Total		
					0	0	1,186	1,122	2,308		
AM Peak Hour			7:00	7:15	7:15	PM Peak Hour			17:00	18:30	17:00
AM Pk Volume			153	136	280	PM Pk Volume			143	131	212
Pk Hr Factor			0.510	0.607	0.614	Pk Hr Factor			0.794	0.910	0.815
7 - 9 Volume	0	0	210	180	390	4 - 6 Volume	0	0	244	143	387
7 - 9 Peak Hour			7:00	7:15	7:15	4 - 6 Peak Hour			17:00	16:00	17:00
7 - 9 Pk Volume	0	0	153	136	280	4 - 6 Pk Volume	0	0	143	74	212
Pk Hr Factor	0.000	0.000	0.510	0.607	0.614	Pk Hr Factor	0.000	0.000	0.794	0.804	0.815

VOLUME

Arena Way 200' E/O Baba Dr

Day: Thursday
 Date: 9/5/2024

City: Ramona
 Project #: CA24_040151_002

DAILY TOTALS					NB	SB	EB	WB	Total			
					0	0	822	816	1,638			
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL
0:00	0	0	0	0			12:00	0	0	5	11	16
0:15	0	0	0	3	3		12:15	0	0	11	14	25
0:30	0	0	0	0			12:30	0	0	5	9	14
0:45	0	0	0	1	4	1	12:45	0	0	15	36	43
1:00	0	0	0	0			13:00	0	0	12	10	22
1:15	0	0	0	0			13:15	0	0	14	12	26
1:30	0	0	0	0			13:30	0	0	24	10	34
1:45	0	0	0	0			13:45	0	0	24	74	44
2:00	0	0	0	1	1		14:00	0	0	20	23	43
2:15	0	0	0	1	1		14:15	0	0	15	17	32
2:30	0	0	0	0			14:30	0	0	17	11	28
2:45	0	0	0	0	2	2	14:45	0	0	13	65	67
3:00	0	0	0	0			15:00	0	0	10	12	22
3:15	0	0	0	1	1		15:15	0	0	11	23	34
3:30	0	0	0	1	1		15:30	0	0	15	18	33
3:45	0	0	0	0	2	2	15:45	0	0	16	52	18
4:00	0	0	1	0	1		16:00	0	0	11	17	28
4:15	0	0	1	0	1		16:15	0	0	14	13	27
4:30	0	0	2	1	3		16:30	0	0	16	17	33
4:45	0	0	1	5	0	1	16:45	0	0	22	63	13
5:00	0	0	3	2	5		17:00	0	0	15	19	34
5:15	0	0	6	2	8		17:15	0	0	20	19	39
5:30	0	0	4	4	8		17:30	0	0	17	13	30
5:45	0	0	8	21	3	11	17:45	0	0	14	66	20
6:00	0	0	7	8	15		18:00	0	0	12	20	32
6:15	0	0	12	3	15		18:15	0	0	18	8	26
6:30	0	0	10	11	21		18:30	0	0	15	9	24
6:45	0	0	13	42	6	28	18:45	0	0	7	52	10
7:00	0	0	17	13	30		19:00	0	0	24	20	44
7:15	0	0	18	17	35		19:15	0	0	5	19	24
7:30	0	0	34	19	53		19:30	0	0	10	8	18
7:45	0	0	23	92	23	72	19:45	0	0	7	46	10
8:00	0	0	10	15	25		20:00	0	0	5	9	14
8:15	0	0	15	12	27		20:15	0	0	6	4	10
8:30	0	0	14	8	22		20:30	0	0	9	8	17
8:45	0	0	5	44	10	45	20:45	0	0	4	24	3
9:00	0	0	4	12	16		21:00	0	0	8	10	18
9:15	0	0	11	12	23		21:15	0	0	2	3	5
9:30	0	0	9	5	14		21:30	0	0	2	8	10
9:45	0	0	3	27	14	43	21:45	0	0	3	15	7
10:00	0	0	11	11	22		22:00	0	0	6	5	11
10:15	0	0	8	12	20		22:15	0	0	0	1	1
10:30	0	0	11	16	27		22:30	0	0	2	0	2
10:45	0	0	11	41	12	51	22:45	0	0	3	11	1
11:00	0	0	10	7	17		23:00	0	0	0	2	2
11:15	0	0	7	9	16		23:15	0	0	3	4	7
11:30	0	0	13	7	20		23:30	0	0	0	1	1
11:45	0	0	13	43	7	30	23:45	0	0	0	3	1
TOTALS			315	289	604		TOTALS			507	527	1034
SPLIT %			52.2%	47.8%	36.9%		SPLIT %			49.0%	51.0%	63.1%

DAILY TOTALS					NB	SB	EB	WB	Total		
					0	0	822	816	1,638		
AM Peak Hour			7:00	7:15	7:00	PM Peak Hour			13:30	15:15	13:30
AM Pk Volume			92	74	164	PM Pk Volume			83	76	145
Pk Hr Factor			0.676	0.804	0.774	Pk Hr Factor			0.865	0.826	0.843
7 - 9 Volume	0	0	136	117	253	4 - 6 Volume	0	0	129	131	260
7 - 9 Peak Hour			7:00	7:15	7:00	4 - 6 Peak Hour			16:45	17:00	16:30
7 - 9 Pk Volume	0	0	92	74	164	4 - 6 Pk Volume	0	0	74	71	141
Pk Hr Factor	0.000	0.000	0.676	0.804	0.774	Pk Hr Factor	0.000	0.000	0.841	0.888	0.904

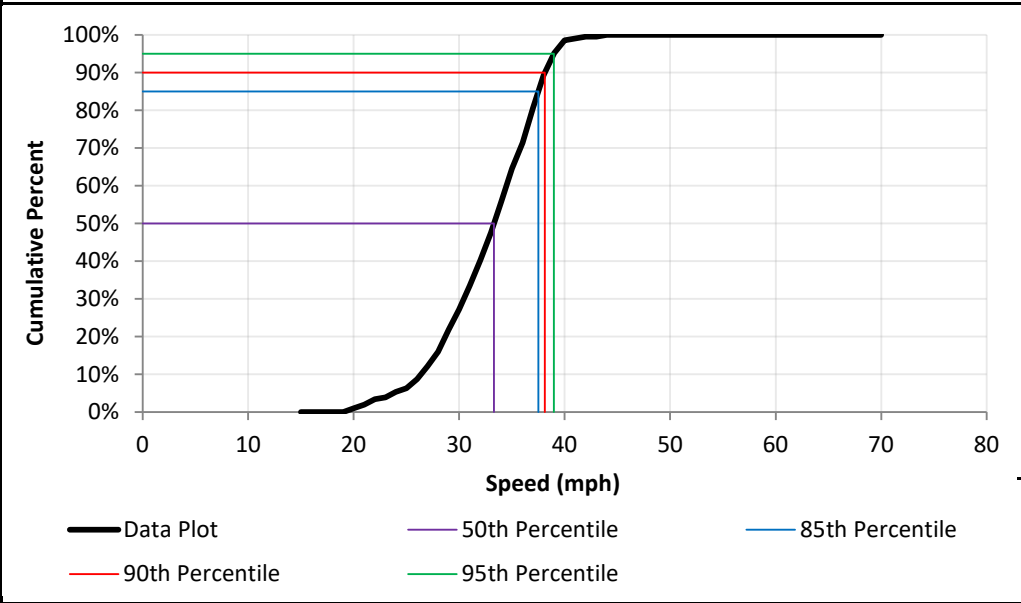
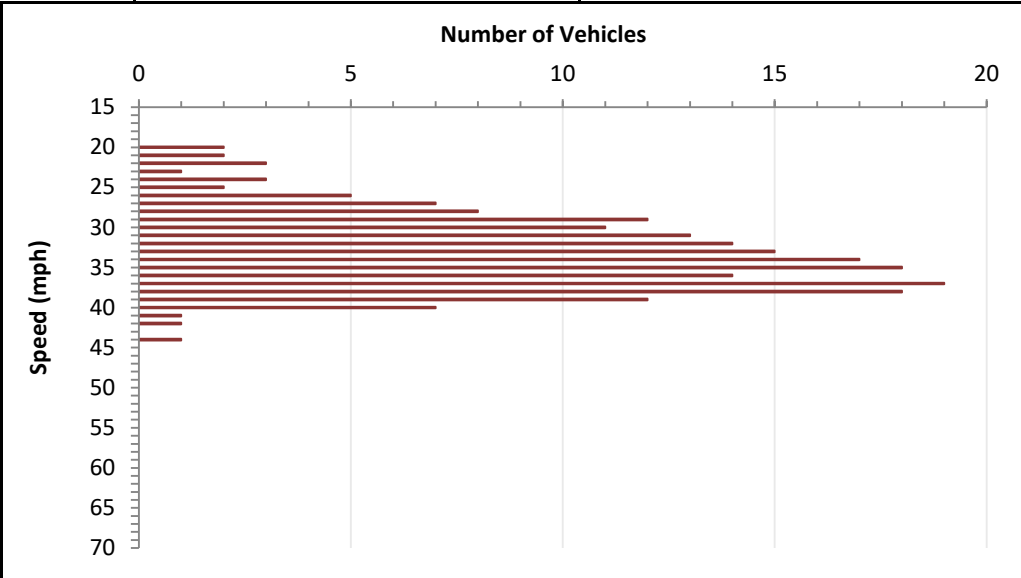


RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name: Arena Wy	From: Open View Rd	To: Gunn Stage Rd
Position: 700' W/o Arena Dr	Direction: WB/EB	
Date: 9/5/2024	Weather: Clear	Project Number: 24-040152-003
Time Start: 1:30 PM	Road Condition: Dry	Observer: Contractor
Time End: 3:30 PM	Posted Speed: 40 MPH	Calibration Test: Y

Speed (mph)	Num. Veh.	Cum. Pct.
15		
16		
17		
18		
19		
20	2	1.0%
21	2	1.9%
22	3	3.4%
23	1	3.9%
24	3	5.3%
25	2	6.3%
26	5	8.7%
27	7	12.1%
28	8	16.0%
29	12	21.8%
30	11	27.2%
31	13	33.5%
32	14	40.3%
33	15	47.6%
34	17	55.8%
35	18	64.6%
36	14	71.4%
37	19	80.6%
38	18	89.3%
39	12	95.1%
40	7	98.5%
41	1	99.0%
42	1	99.5%
43		
44	1	100.0%
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		
Total	206	



DATA ANALYSIS			
Average Speed	33.2	Range	20 - 44
50th Percentile	33.3	10 mph Pace	29 - 38
85th Percentile	37.5	Number in Pace	151
90th Percentile	38.1	Percent in Pace	73%
95th Percentile	39.0		

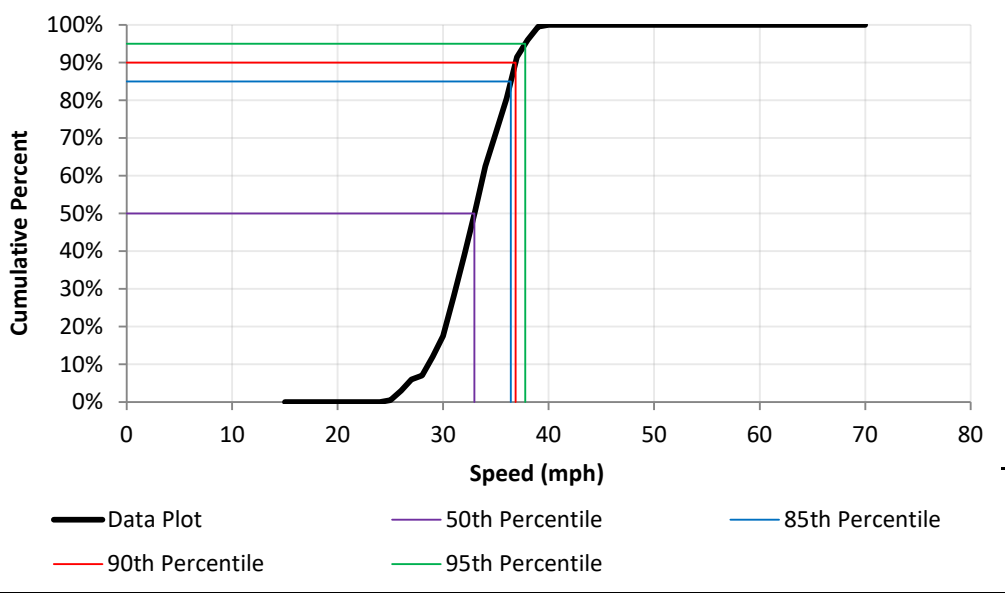
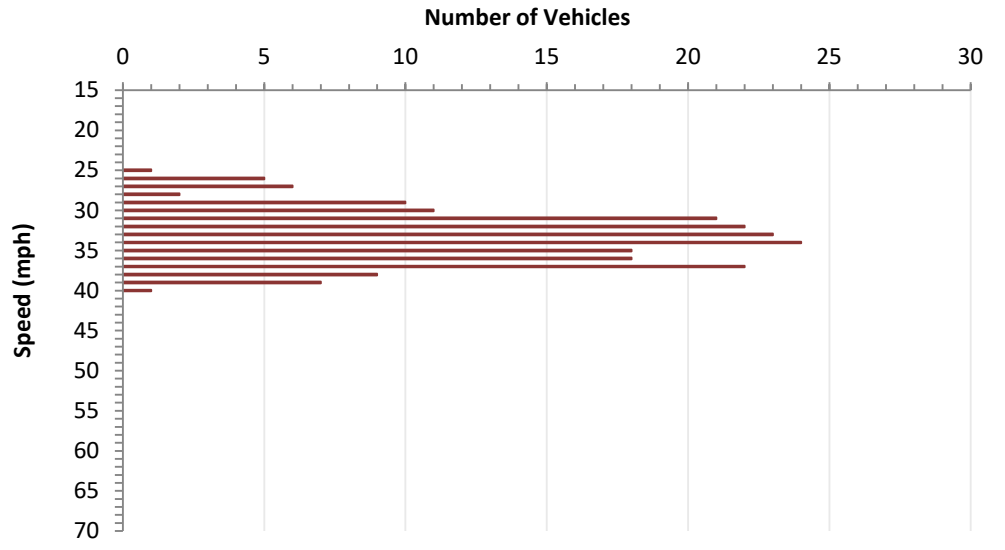


RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name: Arena Wy	From: Open View Rd	To: Gunn Stage Rd
Position: 250' W/o Baba Dr	Direction: WB/EB	
Date: 9/5/2024	Weather: Clear	Project Number: 24-040152-002
Time Start: 11:30 AM	Road Condition: Dry	Observer: Contractor
Time End: 1:30 PM	Posted Speed: 40 MPH	Calibration Test: Y

Speed (mph)	Num. Veh.	Cum. Pct.
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25	1	0.5%
26	5	3.0%
27	6	6.0%
28	2	7.0%
29	10	12.0%
30	11	17.5%
31	21	28.0%
32	22	39.0%
33	23	50.5%
34	24	62.5%
35	18	71.5%
36	18	80.5%
37	22	91.5%
38	9	96.0%
39	7	99.5%
40	1	100.0%
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		
Total	200	



DATA ANALYSIS

Average Speed	33.4	Range	25 - 40
50th Percentile	33.0	10 mph Pace	29 - 38
85th Percentile	36.4	Number in Pace	178
90th Percentile	36.9	Percent in Pace	89%
95th Percentile	37.8		

SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: October 4, 2024 **Item A**

SUPERVISORIAL DISTRICT: All

SUBJECT: County Standards

LOCATION: All unincorporated County roads

INITIATED BY: DPW Traffic Engineering

REQUEST: County Sight Distance Standards

PROBLEM AS STATED BY REQUESTER:

The County Public Road Standards requires that all intersections involving a public road conform to intersectional sight distance based on roadway design speed, Table 5 of said standards. Table 5 further notes that deviations from the County Public Road Standards shall follow the American Association of State Highway Transportation Officials manual, A Policy on Design of Highways and Streets (AASHTO design manual or “Green Book”). The AASHTO design manual provides an in-depth analysis of stopping sight distance, the sum of driver perception-reaction distance and deceleration distance. The manual provides for adjustment factors for differing grades (uphill and downhill) as well as reasoning and research behind the formulae used for calculation, including the determination of driver reaction times. Utilizing the reasoning and formulae, the County Traffic Engineering Section developed an exhibit illustrating operational and emergency sight distances to set a minimum standard for existing intersections.

Section 830.6 of the California Government Code notes that one of the factors for a public agency’s design immunity is the adoption of a standard, as the County Traffic Engineering Section’s developed sight distance standard exhibit. The TAC recommended the Board adopt the County of San Diego Sight Distance Standards from the September 9, 2022, TAC meeting agenda. On March 1, 2023, the Board of Supervisors adopted these standards.

A recent review has identified needed clarifications. The County Traffic Engineering Section recommends adoption of the included exhibit as the County standard for operational and emergency sight distances for existing intersections in the jurisdiction of the County of San Diego.

County of San Diego

Sight Distance Standards

Revised 2024-10-05 MK

Design Sight Distance

CORNER SIGHT DISTANCE ON LEVEL ROADWAYS	
Speed (mph)	Minimum Corner Sight Distance (feet)
15	150
20	200
25	250
30	300
35	350
40	400
45	450
50	500
55	550

Corner sight distance measured along the direction of travel from a point on the minor road at least 10 feet from the edge of the major road pavement and measured from a height of eye of 3.5 feet on the minor road to a height of object of 4.25 feet on the major road (see County Road Standard Drawings DS-20A and DS-20B). The design speed used to determine the minimum sight distance requirement shall be the greater of the current prevailing speed (if known) and the minimum design speed of the respective road classification. Additional corner intersection sight distance may be required for left turns at divided highways, left turns onto two-way highways with more than two lanes, or grades which exceed 3 percent, as per the 2018 American Association of State Highway and Transportation Officials (AASHTO), "A Policy on Geometric Design of Highways and Streets" (Green Book).

SIGHT DISTANCE (SD) FOR DESIGN ON LEVEL ROADWAYS			
$t_{PR} = 2.5 \text{ sec}, a = 11.2 \text{ ft/sec}^2$			
Speed (V) (mph)	Reaction (feet)	Breaking (feet)	Total SD (feet)
15	55	22	77
20	73	38	112
25	92	60	152
30	110	86	196
35	128	118	246
40	147	154	300
45	165	194	359
50	183	240	423
55	202	290	492

Sight distance for design is for new construction. This calculation assumes a conservative 2.5 second perception-reaction time that exceeds the 90th percentile of reaction time for all drivers and 11.2 ft/sec² deceleration rate threshold for design sight distance, per Section 3.2, "Sight Distance" of the Green Book.

Basis for Calculation of Green Book Sight Distance

Sight distance values are based on sight distance equations from Section 3.2 of the Green Book.

ON LEVEL ROADWAYS:

$$SD = 1.47Vt_{PR} + 1.075 \frac{V^2}{a}$$

ON GRADES:

$$SD = 1.47Vt_{PR} + \frac{V^2}{30 \left[\left(\frac{a}{32.2} \right) \pm G \right]}$$

Sight Distance for Operation

SIGHT DISTANCE (SD) FOR OPERATION									
$t_{PR} = 1.5 \text{ sec}, a = 14.8 \text{ ft/sec}^2$									
	ON LEVEL ROADWAYS			ON UPGRADES (G)			ON DOWNGRADES (G)		
				3%	6%	9%	-3%	-6%	-9%
Speed (V) (mph)	Reaction (feet)	Breaking (feet)	Total SD (feet)	Total SD (feet)	Total SD (feet)	Total SD (feet)	Total SD (feet)	Total SD (feet)	Total SD (feet)
15	33	16	49	48	47	47	50	52	53
20	44	29	73	71	70	68	75	77	80
25	55	45	100	98	95	93	104	107	111
30	66	65	131	127	124	121	136	141	147
35	77	89	166	161	156	151	172	179	188
40	88	116	204	197	191	185	212	222	233
45	99	147	246	237	229	222	256	268	282
50	110	182	292	281	271	262	304	319	336
55	121	220	341	327	315	305	356	374	394

Sight distance for operation is measured from a point on the minor road 8 feet from the edge of travelled way of the minor road (distance from the front of the vehicles to the driver's eye is nearly always 8 feet per Green Book Section 9.5 "Intersection Sight Distance") and 2 feet right of the center of the minor road (per DS-20A) at the height of the driver's eye, 3.5 feet, on the minor road to a height of an object, another vehicle, 3.5 feet, on the major road (Green Book Section 3.2). This calculation assumes a 1.5 second perception-reaction time that encompasses the 90th percentile of drivers and a 14.8 ft/sec^2 deceleration rate based on studies that show most drivers decelerate at a greater rate than 14.8 ft/sec^2 (Green Book Section 3.2).

Sight Distance for Emergency Stopping

SIGHT DISTANCE (SD) FOR EMERGENCY STOPPING									
$t_{PR} = 1.5 \text{ sec}, a = 16.1 \text{ ft/sec}^2$									
	ON LEVEL ROADWAYS			ON UPGRADES (G)			ON DOWNGRADES (G)		
				3%	6%	9%	-3%	-6%	-9%
Speed (V) (mph)	Reaction (feet)	Breaking (feet)	Total SD (feet)	Total SD (feet)	Total SD (feet)	Total SD (feet)	Total SD (feet)	Total SD (feet)	Total SD (feet)
15	33	15	48	47	46	46	49	50	51
20	44	27	71	69	68	67	72	74	77
25	55	42	97	94	92	90	99	102	106
30	66	60	126	123	120	117	130	134	139
35	77	82	159	154	150	146	164	170	177
40	88	107	195	189	183	179	202	209	218
45	99	135	234	227	220	214	243	253	264
50	110	167	277	268	259	252	288	300	314
55	121	202	323	312	301	292	336	351	367

Sight distance for emergency stopping is based on a greater deceleration rate of 16.1 ft/sec^2 . Multiple studies completed on County maintained roads indicated the ability to decelerate with a gravitational force of 0.5g based on road conditions. Sight distance for emergency is measured in the same manner as "Sight Distance for Operation".