

San Diego County Traffic Advisory Committee



Committee Secretary
5510 Overland Avenue #410, Room 470, M.S. 0-334
San Diego, California 92123-1239
(858) 694-3843

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

March 2, 2020

TO: Community Planning/Sponsor Group Chairpersons

FROM: Secretary, Traffic Advisory Committee

MEETING NOTICE

Attached is the preliminary agenda for the March 13, 2020, meeting of the Traffic Advisory Committee (TAC). The meeting will begin at 9:00 AM in the following location:

Department of Public Works
Second Floor, Room 271
5510 Overland Avenue
San Diego, CA 92123

Your community group may have previously provided formal input on these matters and your group's recommendations would be included as part of the Chief Administrative Officer's report to the Board of Supervisors along with TAC recommendations. 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 your community planning/sponsor group representative would like to attend the TAC meeting and participate in the discussion of an item on this agenda, or if you do have any questions or need additional information regarding this procedure, please contact me at (858) 694-3843. TAC staff is available to provide background information on items and to answer questions you may have.

Very truly yours,


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

KRJ:bb

Attachment



SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

March 13, 2020 ~ 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. Items for Review**

SUBJECT		LOCATION	AREA	PLANNING/ SPONSOR GROUP
<u>SUPERVISORIAL DISTRICT 2</u>				
2-A.	RADAR CERTIFICATION	GREENFIELD DR	BOSTONIA	LAKESIDE
2-B.	RADAR CERTIFICATION	GREENFIELD DR	BOSTONIA	LAKESIDE
2-C.	RADAR CERTIFICATION	HANSON LN	RAMONA	RAMONA
2-D.	RADAR CERTIFICATION	HANSON LN	RAMONA	RAMONA
2-E.	RADAR CERTIFICATION	THIRD ST/ OLD JULIAN HY	RAMONA	RAMONA
2-F.	RADAR CERTIFICATION	MOUNT HELIX DR	MT HELIX	VALLE DE ORO
2-G.	RADAR CERTIFICATION	WIEGHORST WAY	RANCHO SAN DIEGO	VALLE DE ORO
<u>SUPERVISORIAL DISTRICT 5</u>				
5-A.	RADAR CERTIFICATION	BROOKE RD	FALLBROOK	FALLBROOK
5-B.	RADAR CERTIFICATION	VIA CUATRO CAMINOS	RANCHO SANTA FE	SAN DIEGUITO
5-C.	INTERSECTION CONTROL	VALLEY CENTER RD & RIDGE RANCH RD	VALLEY CENTER	VALLEY CENTER

SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: March 13, 2020

Item 2-A

SUPERVISORIAL DISTRICT: 2

SUBJECT: Radar Certification

LOCATION: Greenfield Drive from the El Cajon city limit (near Pioneer Way) to the El Cajon city limit (near Victor Street) (a distance of 0.59 miles) BOSTONIA (Thos. Bros. 1251-F3)

INITIATED BY: DPW Traffic Engineering

REQUEST: Radar Recertification

PROBLEM AS STATED BY REQUESTER:

Greenfield Drive from the El Cajon city limit (near Pioneer Way) to the El Cajon city limit (near Victor Street) is posted 40 MPH. Preliminary review of prevailing speeds and roadway conditions could support radar recertification of the existing 40 MPH speed limit.

Existing Traffic Devices

Greenfield Road is a striped two-lane through highway with a 30 to 36 foot travelled way on a 44 to 70 feet road bed. There is a signalized intersection at Ballantyne Street. The roadway is striped with bike lane and centerline striping with intermittent left turn pockets west of Ballantyne Street and is striped a two-way left-turn lane separating both directions of travel east of Ballantyne Street to the El Cajon city limit near Victor St. The road is classified as a Light Collector on the County General Plan Mobility Element Network. The road is posted 40 MPH.

Average Daily Traffic Volumes

Greenfield Drive:

700' E/o Magnolia Bridge

03/20

12,800*

04/12

10,101

**Estimated*

Speed Data

Greenfield Drive:

120' W/o Greenfield Access (2020)

**85th
Percentile**

42.4 MPH

**10 MPH
Pace**

35-44

**% in
Pace**

82.0%

Collision Data

There have been 16 reported collisions along this segment of roadway, 9 of which involved injury, in a 3 year period (10-01-16 to 09-30-19). These collisions result in a segment accident rate of 2.08 collisions per million vehicle miles. The statewide average is 1.80 collisions per million vehicle miles for similar suburban conventional 2 lanes or less with speed limit less than 45 mile per hour.



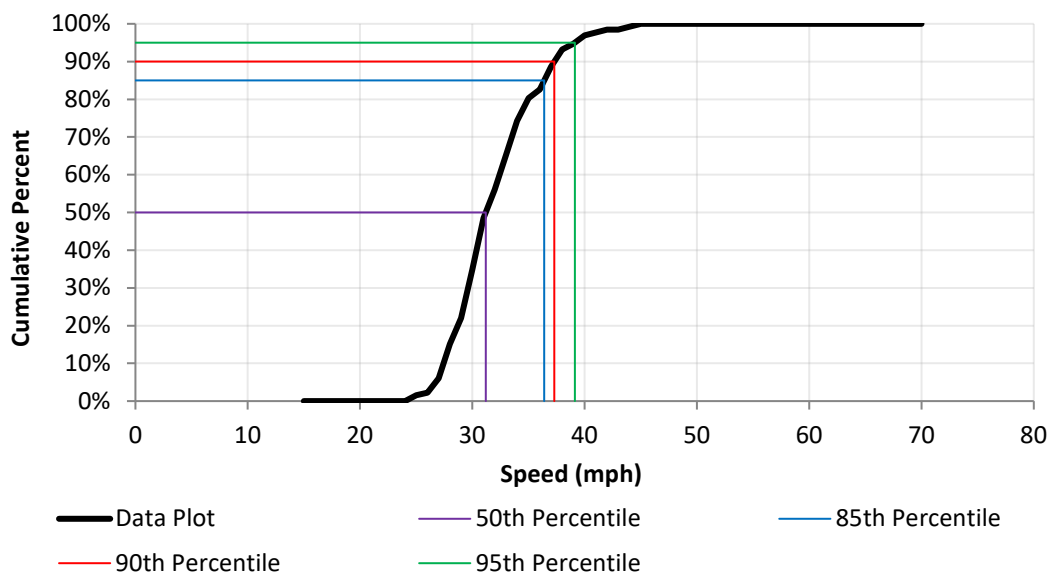
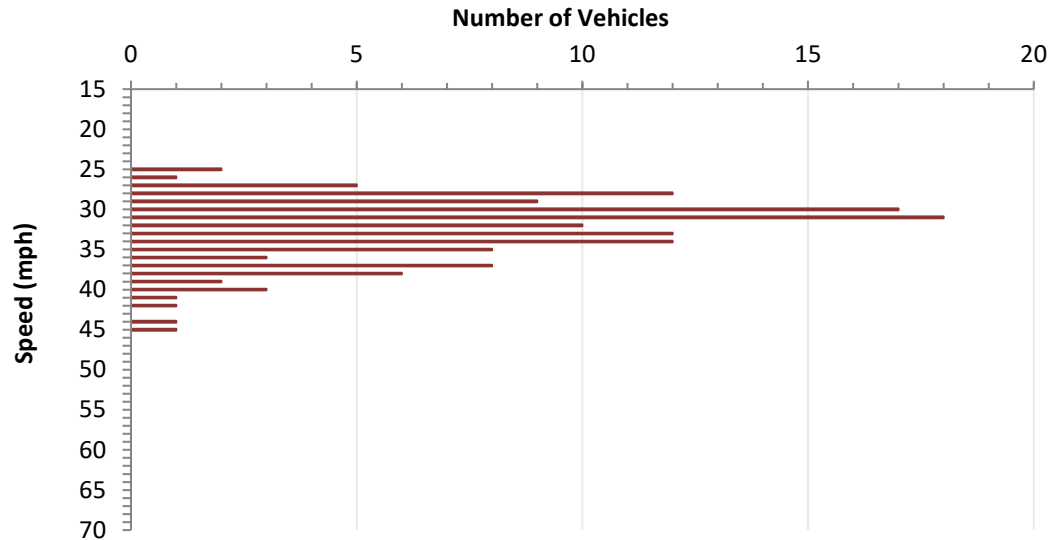
RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name:	Greenfield Dr	From:	El Cajon CL (at Denver Ln)	To:	El Cajon CL (near 2nd St)
Position:	100' W/o Oro St	Direction:	EB/WB		

Date:	2/12/2020	Weather:	Clear	Project Number:	N/A
Time Start:	11:25 AM	Road Condition:	Dry	Observer:	County
Time End:	12:35 PM	Posted Speed:	35	Calibration Test:	Y

Speed (mph)	Num. Veh.	Cum. Pct.
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25	2	1.5%
26	1	2.3%
27	5	6.1%
28	12	15.2%
29	9	22.0%
30	17	34.8%
31	18	48.5%
32	10	56.1%
33	12	65.2%
34	12	74.2%
35	8	80.3%
36	3	82.6%
37	8	88.6%
38	6	93.2%
39	2	94.7%
40	3	97.0%
41	1	97.7%
42	1	98.5%
43		
44	1	99.2%
45	1	100.0%
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	132	



DATA ANALYSIS

Average Speed	32.4	Range	25 - 45
50th Percentile	31.2	10 mph Pace	28 - 37
85th Percentile	36.4	Number in Pace	109
90th Percentile	37.3	Percent in Pace	83%
95th Percentile	39.1		

SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: March 13, 2020

Item 2-B

SUPERVISORIAL DISTRICT: 2

SUBJECT: Radar Certification

LOCATION: Greenfield Drive from the El Cajon city limit (near Mollison Avenue) to the El Cajon city limit (near Second Street) (a distance of 0.75 miles) BOSTONIA (Thos. Bros. 1251-H3)

INITIATED BY: DPW Traffic Engineering

REQUEST: Radar Recertification

PROBLEM AS STATED BY REQUESTER:

Greenfield Drive from the El Cajon city limit (near Mollison Avenue) to the El Cajon city limit (near Second Street) is posted 35 MPH Radar Enforced. Preliminary review of prevailing speeds and roadway conditions could support radar recertification of the existing 35 MPH speed limit.

Existing Traffic Devices

Greenfield Road is a striped two-lane through highway with a 26 to 30 foot travelled way on a 32 to 64 foot road bed. There is a signalized intersection at First Street. The roadway is striped with bike lane and centerline striping with intermittent parking lanes along the roadway. The road is classified as a Light Collector on the County General Plan Mobility Element Network. The road is posted 35 MPH Radar Enforced.

Average Daily Traffic Volumes

Greenfield Drive:

W/o Oro Street

03/20

13,660*

03/13

11,110

**Estimated*

Speed Data

Greenfield Drive:

100' W/o Oro Street

(2020)

(2013)

**85th
Percentile**

36.4 MPH

39.5 MPH

**10 MPH
Pace**

28-37

30-39

**% in
Pace**

83.0%

69.0%

Collision Data

There have been 51 reported collisions along this segment of roadway, 29 of which involved injury, in a 3 year period (10-01-16 to 09-30-19). These collisions result in a segment accident rate of 4.56 collisions per million vehicle miles. The statewide average is 1.80 collisions per million vehicle miles for similar suburban conventional 2 lanes or less with speed limit less than 45 mile per hour.

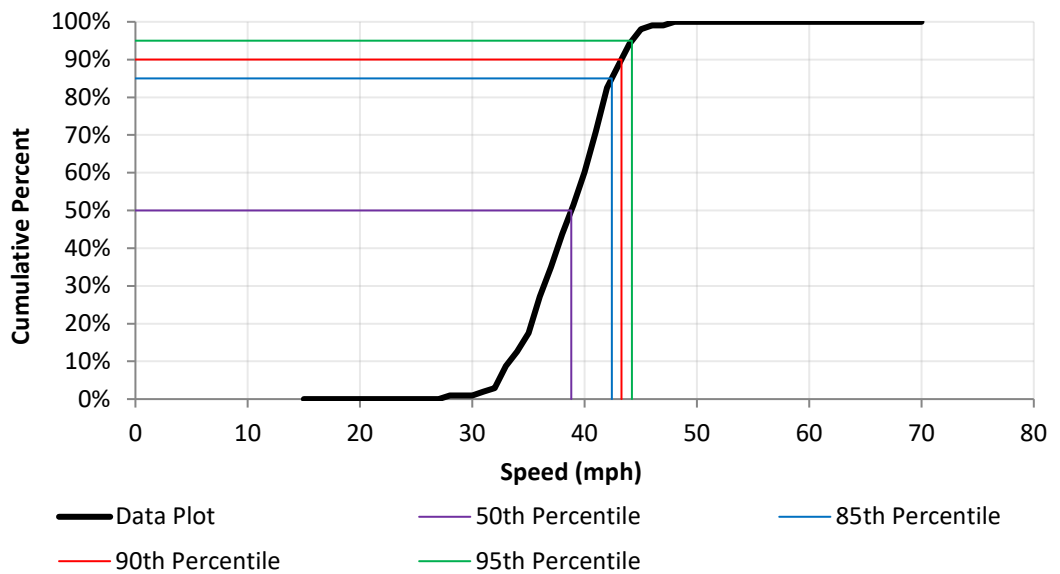
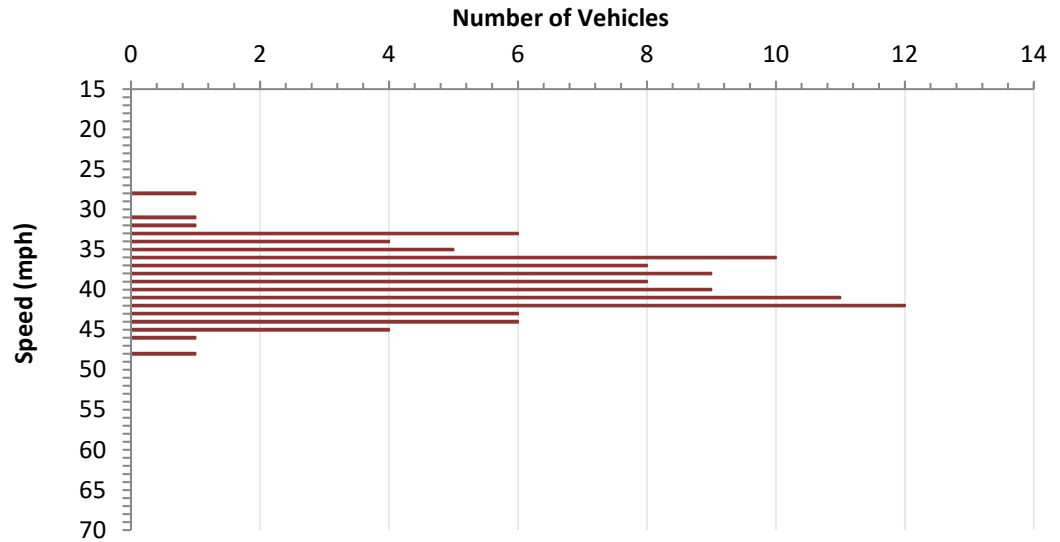


RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name:	Greenfield Dr	From:	Pioneer Way	To:	El Cajon CL (near Victor St)
Position:	120' W/o Greenfield Access	Direction:	EB/WB		
Date:	2/12/2020	Weather:	Clear	Project Number:	N/A
Time Start:	9:30 AM	Road Condition:	Dry	Observer:	County
Time End:	10:45 AM	Posted Speed:	40 MPH	Calibration Test:	Y

Speed (mph)	Num. Veh.	Cum. Pct.
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28	1	1.0%
29		
30		
31	1	1.9%
32	1	2.9%
33	6	8.7%
34	4	12.6%
35	5	17.5%
36	10	27.2%
37	8	35.0%
38	9	43.7%
39	8	51.5%
40	9	60.2%
41	11	70.9%
42	12	82.5%
43	6	88.3%
44	6	94.2%
45	4	98.1%
46	1	99.0%
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	103	



DATA ANALYSIS

Average Speed	39.0	Range	28 - 48
50th Percentile	38.8	10 mph Pace	35 - 44
85th Percentile	42.4	Number in Pace	84
90th Percentile	43.3	Percent in Pace	82%
95th Percentile	44.2		

SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: March 13, 2020

Item 2-C

SUPERVISORIAL DISTRICT: 2

SUBJECT: Radar Certification

LOCATION: Hanson Lane from Ramona Street to San Vicente Road (a distance of 0.75 miles) RAMONA (Thos. Bros. 1172-F1)

INITIATED BY: DPW Traffic Engineering

REQUEST: Radar Recertification

PROBLEM AS STATED BY REQUESTER:

Hanson Lane from Ramona Street to San Vicente Road is posted 40 MPH. Preliminary review of prevailing speeds and roadway conditions could support radar recertification of the existing 40 MPH speed limit.

Existing Traffic Devices

Hanson Lane is a striped three-lane through highway with a 24 foot travelled way on a 44 to 64 foot road bed. There is a signalized intersection at San Vicente Road. The roadway is striped with bike lane, intermittent parking lane, and a two-way left-turn lane separating both directions of travel. The road is classified as a Light Collector on the County General Plan Mobility Element Network. The road is posted 40 MPH.

Average Daily Traffic Volumes

Greenfield Drive:

W/o San Vicente

03/20

6,230*

03/02

5,208

**Estimated*

Speed Data

Greenfield Drive:

At School Daze Lane

(2020)

**85th
Percentile**

45.3 MPH

**10 MPH
Pace**

36-45

**% in
Pace**

69.0%

Collision Data

There have been 10 reported collisions along this segment of roadway, 6 of which involved injury, in a 3 year period (10-01-16 to 09-30-19). These collisions result in a segment accident rate of 1.96 collisions per million vehicle miles. The statewide average is 1.80 collisions per million vehicle miles for similar suburban conventional 2 lanes or less with speed limit less than 45 mile per hour.



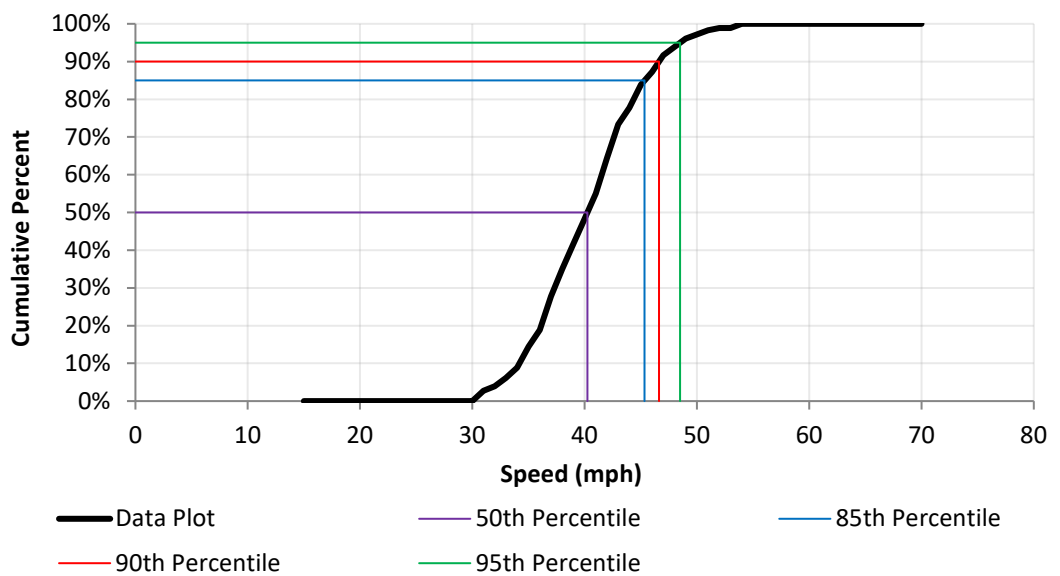
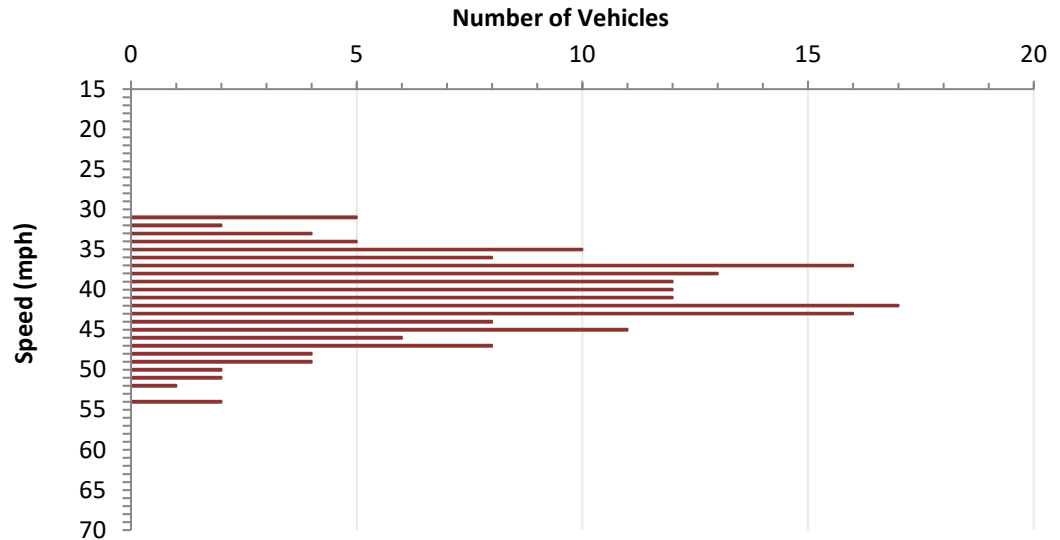
RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name:	Hanson Ln	From:	Ramona St	To:	San Vicente Rd
Position:	@ School Daze Ln (PVT)	Direction:	EB/WB		

Date:	2/19/2020	Weather:	Clear	Project Number:	N/A
Time Start:	10:10 AM	Road Condition:	Dry	Observer:	County
Time End:	11:10 AM	Posted Speed:	40 MPH	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	5	2.8%
32	2	3.9%
33	4	6.1%
34	5	8.9%
35	10	14.4%
36	8	18.9%
37	16	27.8%
38	13	35.0%
39	12	41.7%
40	12	48.3%
41	12	55.0%
42	17	64.4%
43	16	73.3%
44	8	77.8%
45	11	83.9%
46	6	87.2%
47	8	91.7%
48	4	93.9%
49	4	96.1%
50	2	97.2%
51	2	98.3%
52	1	98.9%
53		
54	2	100.0%
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
Total	180	



DATA ANALYSIS

Average Speed	40.8	Range	31 - 54
50th Percentile	40.3	10 mph Pace	36 - 45
85th Percentile	45.3	Number in Pace	125
90th Percentile	46.6	Percent in Pace	69%
95th Percentile	48.5		

SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: March 13, 2020

Item **2-D**

SUPERVISORIAL DISTRICT: 2

SUBJECT: Radar Certification

LOCATION: Hanson Lane from San Vicente Road to Wilson Road
(a distance of 1.25 miles) RAMONA (Thos. Bros. 1172-G1)

INITIATED BY: DPW Traffic Engineering

REQUEST: Radar Recertification

PROBLEM AS STATED BY REQUESTER:

Hanson Lane from San Vicente Road to Wilson Road is posted 45 MPH. Preliminary review of prevailing speeds and roadway conditions could support radar recertification of the existing 45 MPH speed limit.

Existing Traffic Devices

Hanson Lane is a striped two-lane through highway with a 24 foot travelled way on a 30 to 40 feet road bed. There is a signalized intersection at San Vicente Road. The roadway is striped with bike lane and passing and no passing centerlines. The road is classified as a Minor Collector on the County General Plan Mobility Element Network. The road is posted 40 MPH.

Average Daily Traffic Volumes

Hanson Lane:

W/o Ashley Road

03/20

5,250*

10/15

4,618

**Estimated*

Speed Data

Hanson Lane:

150' E/o Barnett Road

(2020)

(2013)

**85th
Percentile**

50.5 MPH

48.1 MPH

**10 MPH
Pace**

40-49

37-46

**% in
Pace**

60.0%

63.7%

300' W/o Keyes Road

(2020)

48.5 MPH

38-47

66.0%

Speed Zone

(2020)

49.5 MPH

39-48

63.0%

Collision Data

There have been 11 reported collisions along this segment of roadway, 4 of which involved injury, in a 3 year period (10-01-16 to 09-30-19). These collisions result in a segment accident rate of 1.53 collisions per million vehicle miles. The statewide average

is 1.19 collisions per million vehicle miles for similar suburban conventional 2 lanes or less with speeds 45 to 55 miles per hour.

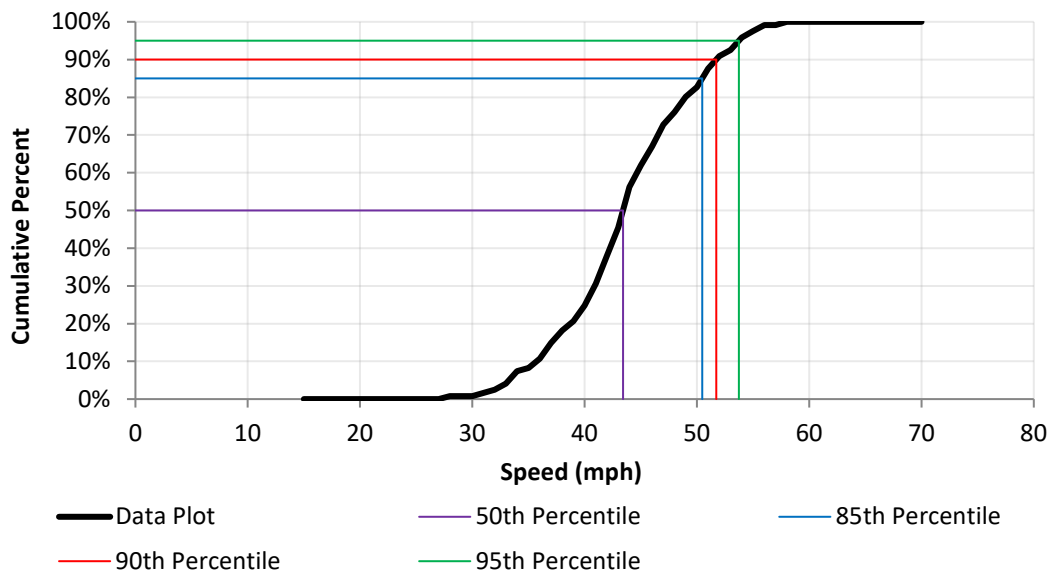
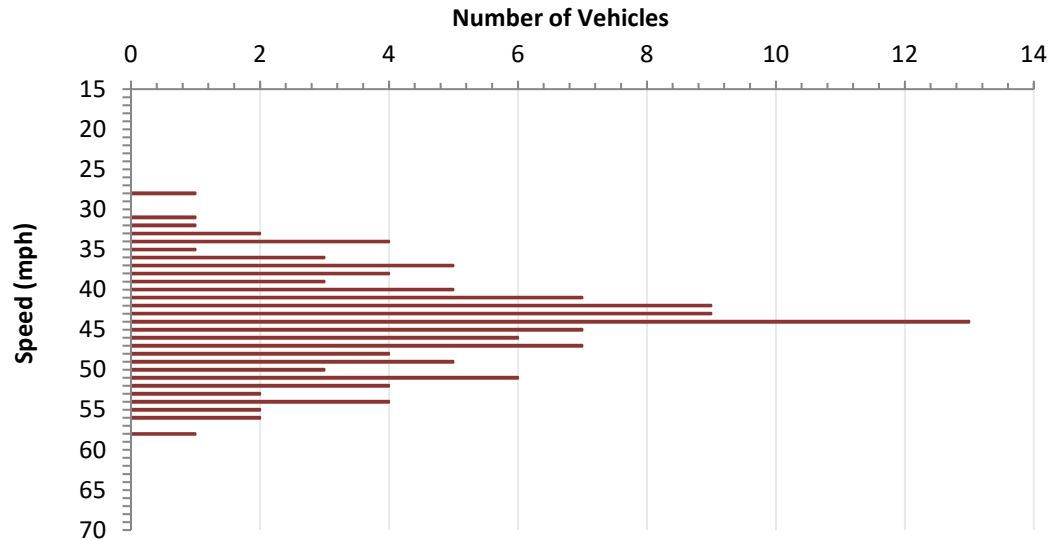


RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name:	Hanson Ln	From:	San Vicente Rd	To:	Wilson Rd
Position:	150' E/o Barnett Rd	Direction:	EB/WB		
Date:	2/19/2020	Weather:	Clear	Project Number:	N/A
Time Start:	11:25 AM	Road Condition:	Dry	Observer:	County
Time End:	12:25 PM	Posted Speed:	45 MPH	Calibration Test:	Y

Speed (mph)	Num. Veh.	Cum. Pct.
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28	1	0.8%
29		
30		
31	1	1.7%
32	1	2.5%
33	2	4.1%
34	4	7.4%
35	1	8.3%
36	3	10.7%
37	5	14.9%
38	4	18.2%
39	3	20.7%
40	5	24.8%
41	7	30.6%
42	9	38.0%
43	9	45.5%
44	13	56.2%
45	7	62.0%
46	6	66.9%
47	7	72.7%
48	4	76.0%
49	5	80.2%
50	3	82.6%
51	6	87.6%
52	4	90.9%
53	2	92.6%
54	4	95.9%
55	2	97.5%
56	2	99.2%
57		
58	1	100.0%
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
Total	121	



DATA ANALYSIS

Average Speed	44.1	Range	28 - 58
50th Percentile	43.4	10 mph Pace	40 - 49
85th Percentile	50.5	Number in Pace	72
90th Percentile	51.7	Percent in Pace	60%
95th Percentile	53.7		

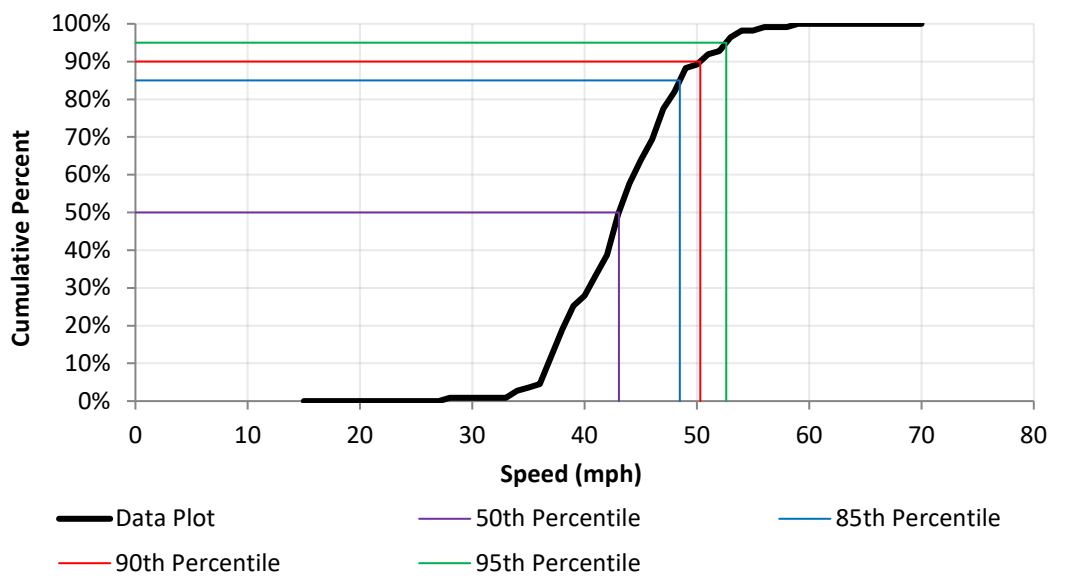
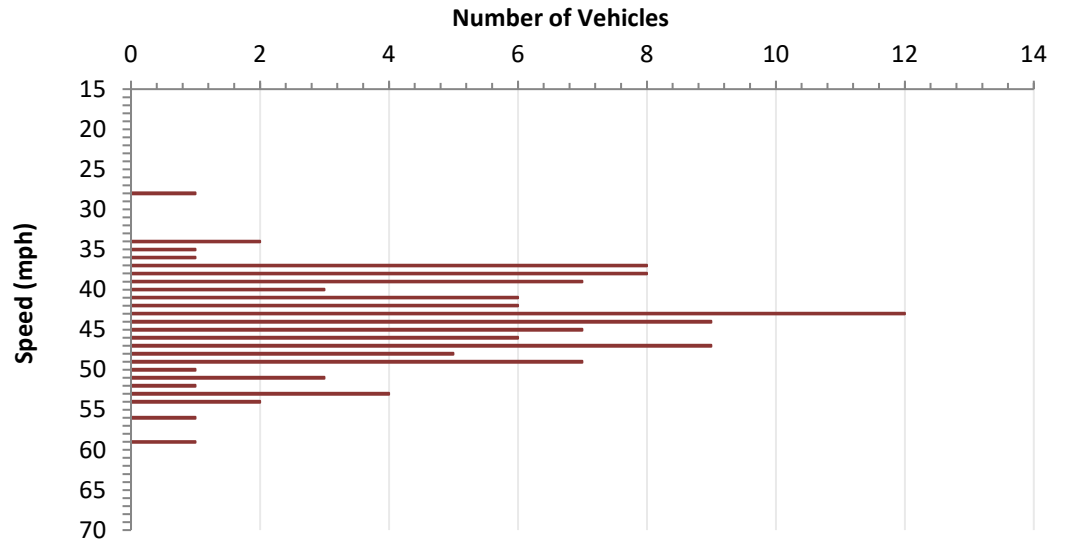


RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name:	Hanson Ln	From:	San Vicente Rd	To:	Wilson Rd
Position:	300' W/o Keyes Rd	Direction:	EB/WB		
Date:	2/18/2020	Weather:	Clear	Project Number:	N/A
Time Start:	10:25 AM	Road Condition:	Dry	Observer:	County
Time End:	11:25 AM	Posted Speed:	45 MPH	Calibration Test:	Y

Speed (mph)	Num. Veh.	Cum. Pct.
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28	1	0.9%
29		
30		
31		
32		
33		
34	2	2.7%
35	1	3.6%
36	1	4.5%
37	8	11.7%
38	8	18.9%
39	7	25.2%
40	3	27.9%
41	6	33.3%
42	6	38.7%
43	12	49.5%
44	9	57.7%
45	7	64.0%
46	6	69.4%
47	9	77.5%
48	5	82.0%
49	7	88.3%
50	1	89.2%
51	3	91.9%
52	1	92.8%
53	4	96.4%
54	2	98.2%
55		
56	1	99.1%
57		
58		
59	1	100.0%
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
Total	111	



DATA ANALYSIS

Average Speed	43.8	Range	28 - 59
50th Percentile	43.1	10 mph Pace	38 - 47
85th Percentile	48.5	Number in Pace	73
90th Percentile	50.3	Percent in Pace	66%
95th Percentile	52.6		

SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: March 13, 2020

Item 2-E

SUPERVISORIAL DISTRICT: 2

SUBJECT: Radar Certification

LOCATION: Third Street/Old Julian Highway from State Route 78 to a point 2,700 feet east of Keyes Road (a distance of 1.3 miles) RAMONA (Thos. Bros. 1152-H5)

INITIATED BY: DPW Traffic Engineering

REQUEST: Radar Recertification

PROBLEM AS STATED BY REQUESTER:

Third Street/Old Julian Highway from State Route 78 to a point 2,700 feet east of Keyes Road is posted 45 MPH Radar Enforced. Preliminary review of prevailing speeds and roadway conditions could support radar recertification of the existing 45 MPH speed limit.

Existing Traffic Devices

Third Street is a striped two-lane through highway with a 24 foot travelled way on a 28 foot road bed. The roadway is striped with a no passing centerline and white edgeline. There is a speed advisory curve and flashing beacon as the roadway changes names to Old Julian Highway. Third Street is classified as a Light Collector on the County General Plan Mobility Element Network. The roadway is posted 45 MPH/Radar Enforced.

Old Julian Highway is a striped two-lane through highway with a 24 foot travelled way on a 28 to 38 foot road bed. The roadway is striped with a no passing centerline and white edgeline. There is a speed advisory curve and flashing beacon as the roadway changes names from Third St . Old Julian Highway is classified as a Light Collector, west of Keyes Road, and a Community Collector, east of Keyes Road, on the County General Plan Mobility Element Network. The roadway is posted 45 MPH/Radar Enforced.

Average Daily Traffic Volumes

Third Street:

N/o D Street

03/20

7,310*

03/13

5,940

**Estimated*

Speed Data

Third Street:

At G Street

(2020)

(2011)

**85th
Percentile**

47.9 MPH

49.3 MPH

**10 MPH
Pace**

40-49

40-49

**% in
Pace**

73.0%

70.7%

Old Julian Highway:

240' E/o Keyes Road

(2020)

48.5 MPH

40-49

78.0%

Speed Zone	(2020)	48.2 MPH	40-49	75.5%
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Collision Data

There have been 21 reported collisions along this segment of roadway, 5 of which involved injury, in a 3 year period (10-01-16 to 09-30-19). These collisions result in a segment accident rate of 2.02 collisions per million vehicle miles. The statewide average is 1.19 collisions per million vehicle miles for similar suburban conventional 2 lanes or less with speeds 45 to 55 MPH.



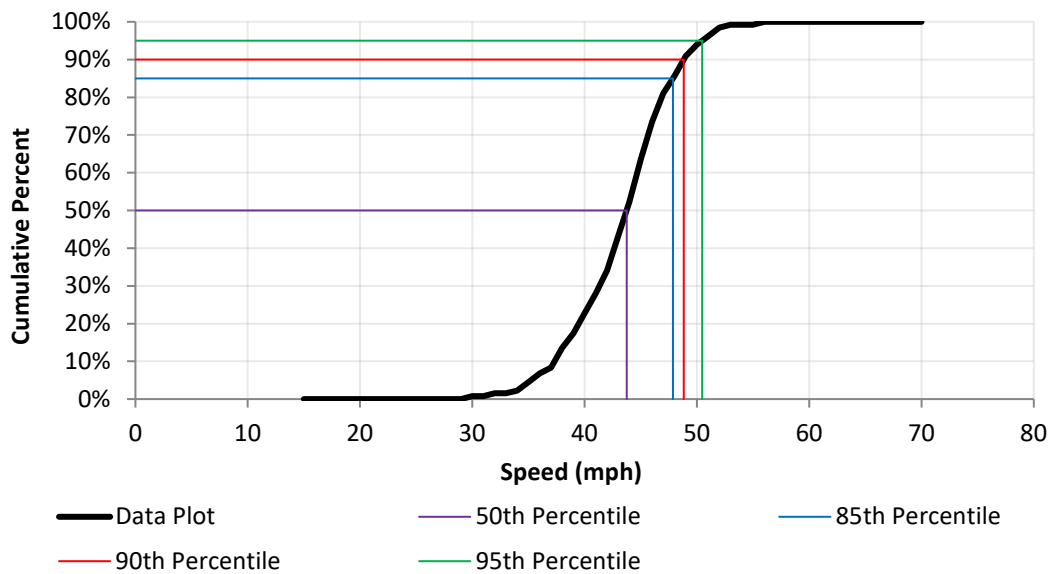
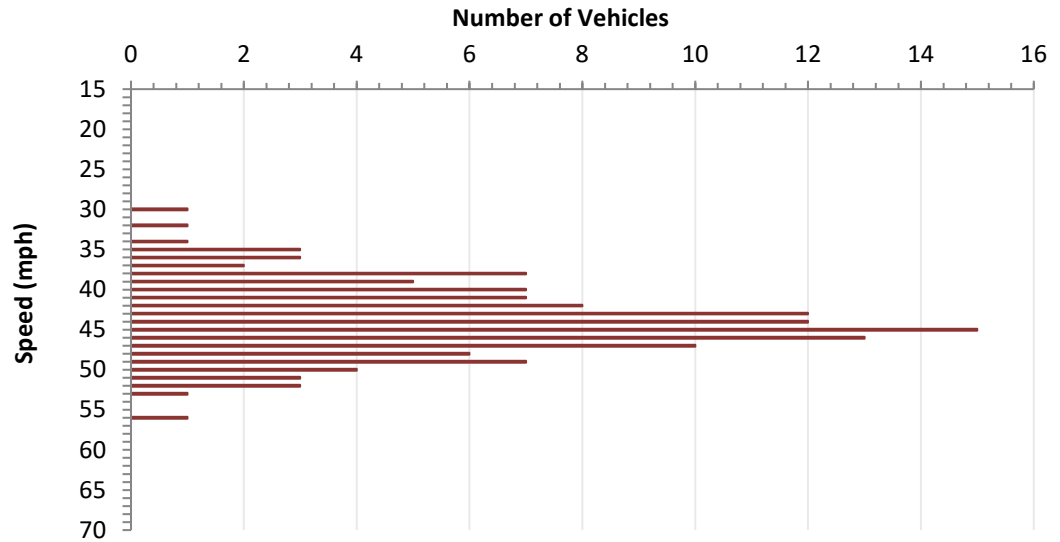
RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name:	Third St/Old Julian Hwy	From:	SR-78	To:	2,700' E/o Keyes Rd
Position:	@ G St	Direction:	NB/SB		

Date:	2/18/2020	Weather:	Clear	Project Number:	N/A
Time Start:	12:00 PM	Road Condition:	Dry	Observer:	County
Time End:	1:00 PM	Posted Speed:	45 MPH	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	1	0.8%
31		
32	1	1.5%
33		
34	1	2.3%
35	3	4.5%
36	3	6.8%
37	2	8.3%
38	7	13.6%
39	5	17.4%
40	7	22.7%
41	7	28.0%
42	8	34.1%
43	12	43.2%
44	12	52.3%
45	15	63.6%
46	13	73.5%
47	10	81.1%
48	6	85.6%
49	7	90.9%
50	4	93.9%
51	3	96.2%
52	3	98.5%
53	1	99.2%
54		
55		
56	1	100.0%
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
Total	132	



DATA ANALYSIS

Average Speed	43.8	Range	30 - 56
50th Percentile	43.8	10 mph Pace	40 - 49
85th Percentile	47.9	Number in Pace	97
90th Percentile	48.8	Percent in Pace	73%
95th Percentile	50.5		



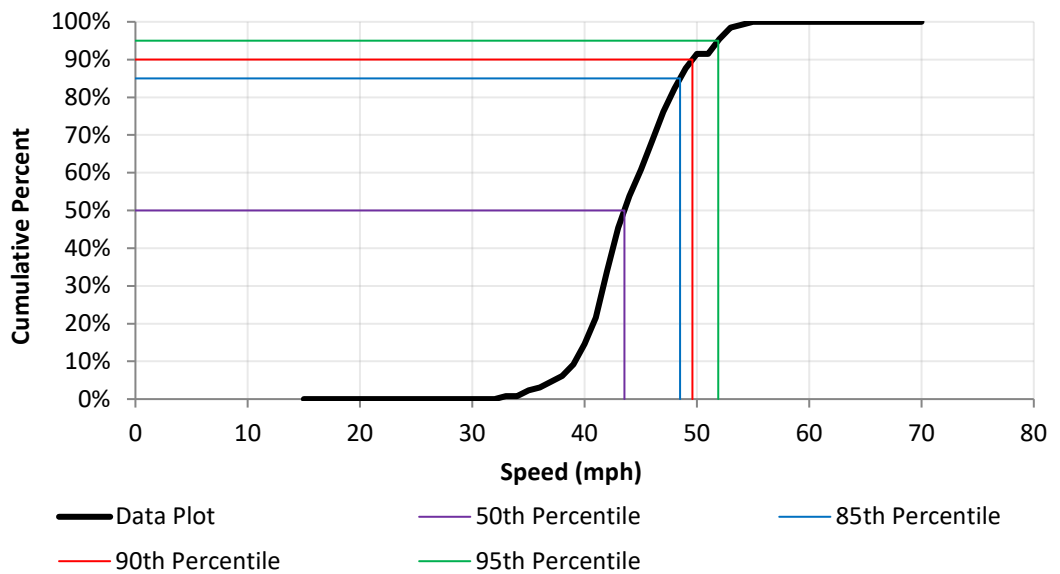
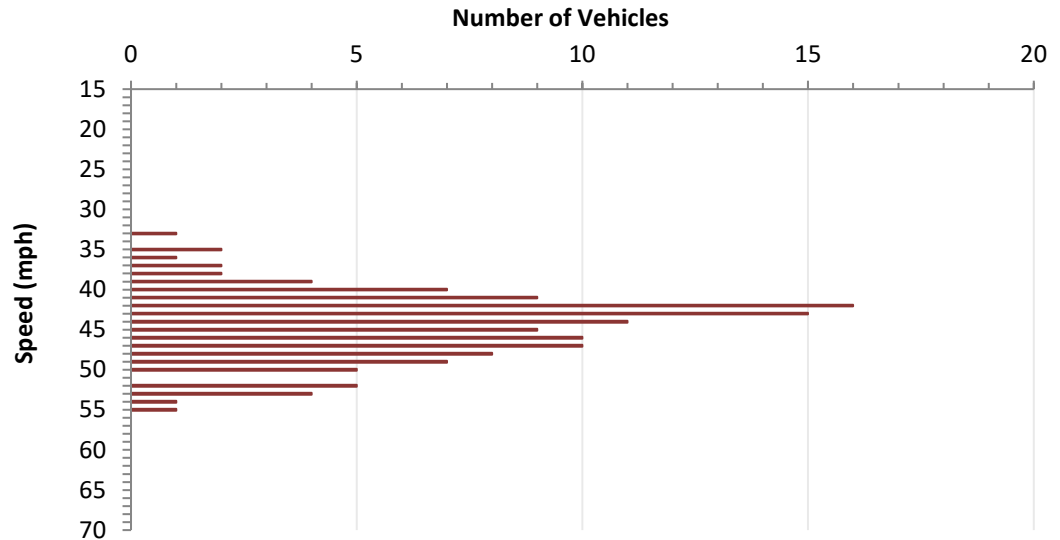
RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name:	Third St/Old Julian Hwy	From:	SR-78	To:	2,700' E/o Keyes Rd
Position:	240' E/o Keyes Rd	Direction:	EB/WB		

Date:	2/18/2020	Weather:	Clear	Project Number:	N/A
Time Start:	1:25 AM	Road Condition:	Dry	Observer:	County
Time End:	2:25 AM	Posted Speed:	45 MPH	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		
33	1	0.8%
34		
35	2	2.3%
36	1	3.1%
37	2	4.6%
38	2	6.2%
39	4	9.2%
40	7	14.6%
41	9	21.5%
42	16	33.8%
43	15	45.4%
44	11	53.8%
45	9	60.8%
46	10	68.5%
47	10	76.2%
48	8	82.3%
49	7	87.7%
50	5	91.5%
51		
52	5	95.4%
53	4	98.5%
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	44.5	Range	33 - 55
50th Percentile	43.5	10 mph Pace	40 - 49
85th Percentile	48.5	Number in Pace	102
90th Percentile	49.6	Percent in Pace	78%
95th Percentile	51.9		

SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: March 13, 2020

Item 2-F

SUPERVISORIAL DISTRICT: 2

SUBJECT: Radar Certification

LOCATION: Mount Helix Drive from and to Vivera Drive (a distance of 1.32 miles) MOUNT HELIX (Thos. Bros. 1271-D2)

INITIATED BY: DPW Traffic Engineering

REQUEST: Radar Certification

PROBLEM AS STATED BY REQUESTER:

Mount Helix Drive from and to Vivera Drive is posted 25 MPH. Preliminary review of prevailing speeds and roadway conditions could support a speed limit reduction to 20 MPH with certification for radar enforcement.

Existing Traffic Devices

Mount Helix Drive is a one-lane local roadway with a 12 to 16 foot travelled way on a 14 to 26 foot road bed. The roadway is striped as one way with white and yellow edgeline along almost its entirety, with the portion of roadway surrounding the park marked with a no passing centerline and fire lanes. The roadway has a 20 MPH speed advisory curve and a height advisory sign. There is an all-way stop control at the entrance to the Mt Helix Park & Nature Theatre gates. There are bollards, object markers and rubber berms along the roadway. Mount Helix Drive is unclassified on the County General Plan Mobility Element Network. The roadway is posted 25 MPH.

Average Daily Traffic Volumes

Mt Helix Drive:

250' S/o Vivera Drive

03/20

684*

10/13

566

**Estimated*

Speed Data

Mount Helix Drive:

850' E/o Halo Circle

(2020)

85th
Percentile

29.2 MPH

10 MPH
Pace

20-29

% in
Pace

84.0%

850' W/o Halo Circle

(2020)

20.2 MPH

15-24

100%

Speed Zone

(2020)

24.7 MPH

18-27

92.0%

Collision Data

There have been 9 reported collisions, 4 of which involved injury, along this segment of

roadway in a 3 year period (10-01-16 to 09-30-19). These collisions result in a segment accident rate of 9.13 collisions per million vehicle miles. The statewide average is 1.80 collisions per million vehicle miles for similar suburban conventional 2 lanes or less with speed limit less than 45 mile per hour.



County of San Diego

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COUNTY TRAFFIC ENGINEER RECOMMENDATION

Date: February 27, 2020

Item Title: Speed Limit and Radar Certification

Location: Mt. Helix Drive from/to Pinnacle Drive/Hermosa Way and Vivera Drive

CTE Recommendation: Establish a 20 MPH Radar Enforced Speed Limit

Conditions:

- Section 22358.3 "Decrease on Narrow Street" of the California Vehicle Code (CVC) authorizes a local agency to determine upon the basis of an Engineering and Traffic (E&T) Survey that the prima facie speed limit of 25 mph on a street having a roadway not exceeding 25 feet in width is more than reasonable or safe, the local agency determine a prima facie speed limit of 20 or 15 mph, whichever is found most appropriate and is reasonable and safe.
- Section 2B.13 "Speed Limit Sign (R2-1)" of the California MUTCD, provides that an E&T Survey shall include a) prevailing speeds, b) collision records, and c) highway, traffic, and roadside conditions that are not apparent to a driver.
- Mt. Helix Drive from/to Pinnacle Drive/Hermosa Way and Vivera Drive is a one-way road and less than 25 feet in pavement width and even less than 20 feet in many sections with tight horizontal and vertical curves, residential driveways, and limited shoulders for pedestrian to walk.
- Speed data collected on February 24 and 25, 2020 shows that the prevailing (85th %) speed is 20.2 mph in the northbound one-way direction at a location 850 feet west of Halo Circle and 29.2 mph in the southbound one-way direction at a location 850 feet east of Halo Circle for a combined prevailing speed of 24.7 mph.

- Pursuant to CVC Section 22358.3 coupled with the above conditions on Mt. Helix Drive and the guidance of the California MUTCD, 20 mph radar enforced speed limit on Mt. Helix Drive within the one-way section is reasonable and safe.



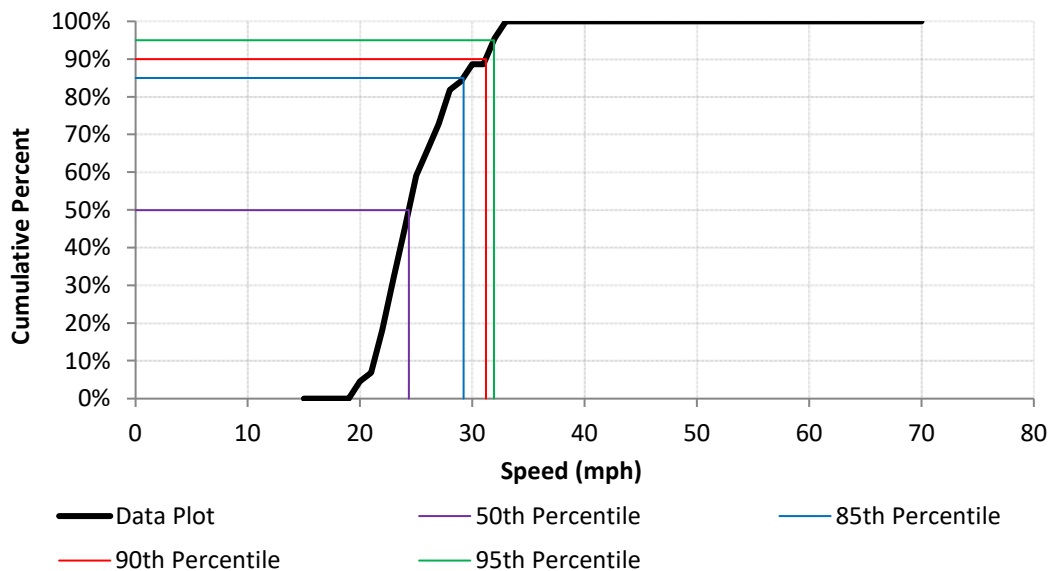
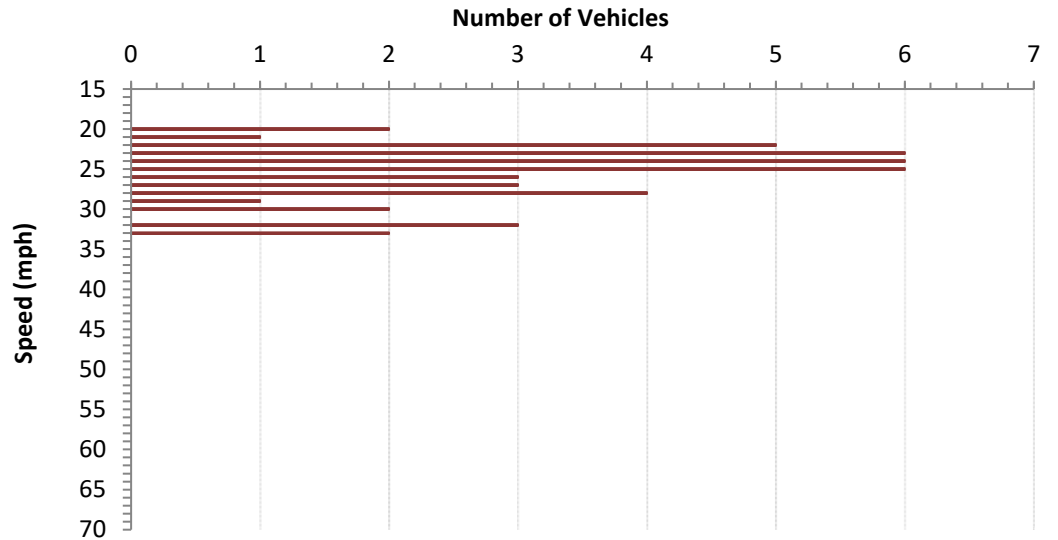
RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name:	Mt. Helix Dr	From:	Vivera Dr	To:	Vivera Dr
Position:	850 E/O Halo Cir	Direction:	SB		

Date:	2/24/2020	Weather:	Clear	Project Number:	0
Time Start:	12:00 PM	Road Condition:	DRY	Observer:	Barra Manaseer
Time End:	2:00 PM	Posted Speed:	25 MPH	Calibration Test:	0

Speed (mph)	Num. Veh.	Cum. Pct.
15		
16		
17		
18		
19		
20	2	4.5%
21	1	6.8%
22	5	18.2%
23	6	31.8%
24	6	45.5%
25	6	59.1%
26	3	65.9%
27	3	72.7%
28	4	81.8%
29	1	84.1%
30	2	88.6%
31		
32	3	95.5%
33	2	100.0%
34		
35		
36		
37		
38		
39		
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44		
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46		
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48		
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60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
Total	44	



DATA ANALYSIS

Average Speed	25.6	Range	20 - 33
50th Percentile	24.3	10 mph Pace	20 - 29
85th Percentile	29.2	Number in Pace	37
90th Percentile	31.2	Percent in Pace	84%
95th Percentile	31.9		



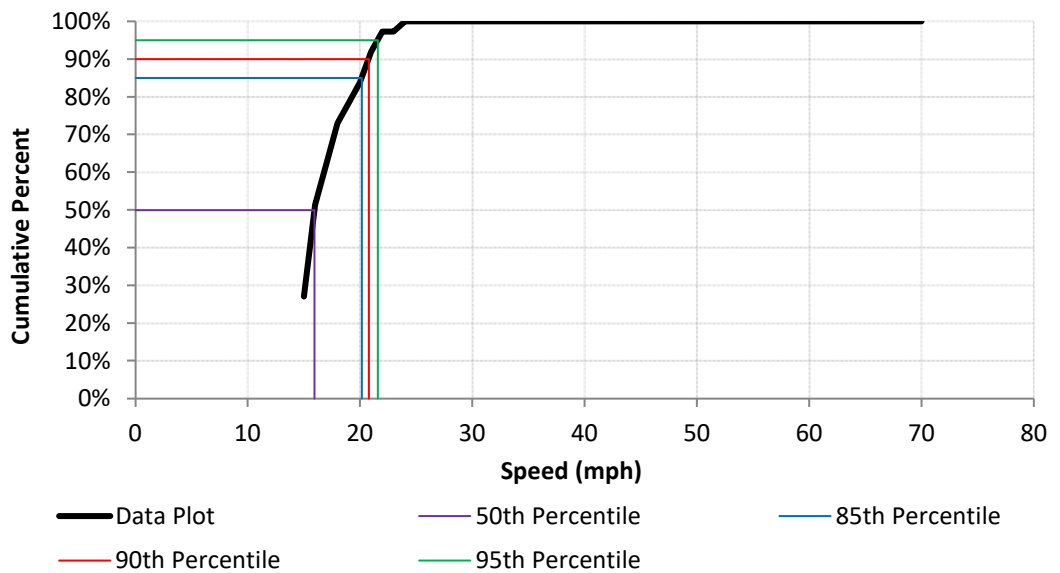
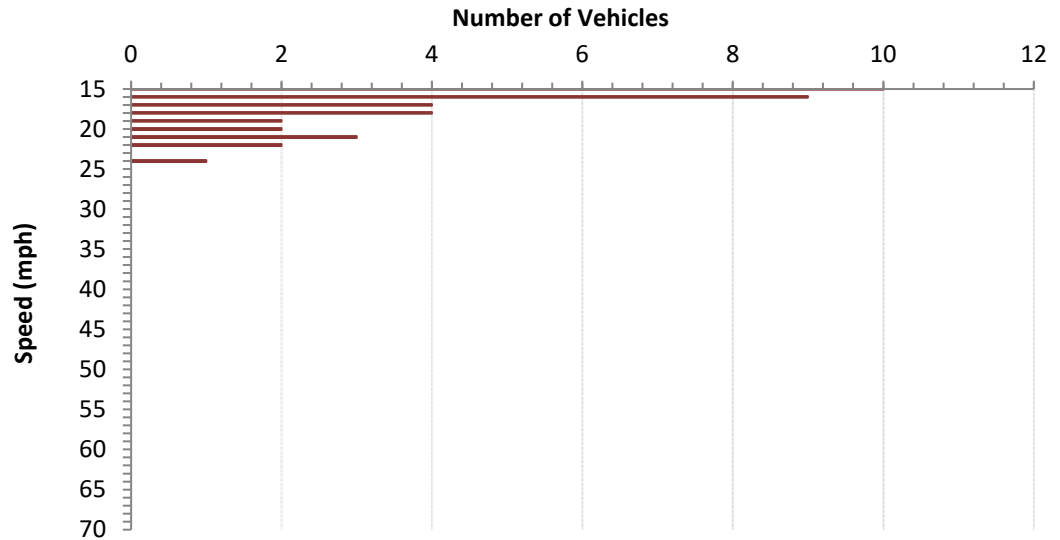
RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name:	Mt. Helix Dr	From:	Vivera Dr	To:	Vivera Dr
Position:	850 W/O Halo Cir	Direction:	NB		

Date:	2/25/2020	Weather:	Clear	Project Number:	0
Time Start:	10:30 AM	Road Condition:	DRY	Observer:	Barra Manaseer
Time End:	12:30 PM	Posted Speed:	25 MPH	Calibration Test:	0

Speed (mph)	Num. Veh.	Cum. Pct.
15	10	27.0%
16	9	51.4%
17	4	62.2%
18	4	73.0%
19	2	78.4%
20	2	83.8%
21	3	91.9%
22	2	97.3%
23		
24	1	100.0%
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		
36		
37		
38		
39		
40		
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	37	



DATA ANALYSIS

Average Speed	17.4	Range	15 - 24
50th Percentile	15.9	10 mph Pace	15 - 24
85th Percentile	20.2	Number in Pace	37
90th Percentile	20.8	Percent in Pace	100%
95th Percentile	21.6		

SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: March 13, 2020

Item 2-G

SUPERVISORIAL DISTRICT: 2

SUBJECT: Radar Certification

LOCATION: Wieghorst Way from Fury Lane to Calle Albara (0.60 miles) RANCHO SAN DIEGO (Thos. Bros. 1271-14)

INITIATED BY: DPW Traffic Engineering

REQUEST: Radar Recertification

PROBLEM AS STATED BY REQUESTER:

Wieghorst Way from Fury Lane easterly to Calle Albara is posted 50 MPH Radar Enforced. Preliminary review of prevailing speeds and roadway conditions could support a speed limit reduction to 45 MPH with certification for radar enforcement.

Existing Traffic Devices

Wieghorst Way is a striped four-lane divided through highway with a 50 foot travelled way on a 60 feet road bed. There is an all-way stop intersection at Calle Simpson. The roadway is striped with bike lane. The roadway is divided with a planted median separating both directions of travel. The road is unclassified on the County General Plan Mobility Element Network. The road is posted 50 MPH.

Average Daily Traffic Volumes

	<u>03/20</u>	<u>04/18</u>	
Wieghorst Way			
200' E/o Fury Lane	8,950*	8,460	<i>*Estimate</i>

<u>Speed Data</u>		<u>85th Percentile</u>	<u>10 MPH Pace</u>	<u>% in Pace</u>
Wieghorst Way				
920' N/o Calle Simpson	(2020)	46.6 MPH	36-45	67.0%
at Calle Simpson	(2018)	52.2 MPH	43-52	75.0%
	(2011)	52.1 MPH	44-53	78.0%

Collision Data

There have been 3 reported collisions along this segment of roadway, none of which involved injury, in a 3 year period (10-01-16 to 09-30-19). These collisions result in a segment accident rate of 0.51 collisions per million vehicle miles. The statewide average is 1.42 collisions per million vehicle miles for similar suburban divided 4 lanes with speeds less than or equal to 55 MPH.



County of San Diego

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COUNTY TRAFFIC ENGINEER RECOMMENDATION

Date: February 28, 2020

Item Title: Speed Limit and Radar Certification

Location: Wieghorst Way from Fury Lane to Calle Albara

CTE Recommendation: **Establish 45 MPH Radar Enforced Speed Limit**

Conditions:

- Section 22358 of the California Vehicle Code 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 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 Manual on Uniform Traffic Control Devices stipulates that speed limits are usually set at the 5 mph increment above or below the prevailing (85th percentile) speed of motorists.
- Wieghorst Way is a four-lane roadway providing direct access to 2 subdivisions east and west of the roadway. There are no driveways taking direct access onto Wieghorst Way. The County installed a recent All-Way Stop controls at the intersection of Wieghorst Way and Calle Simpson. The north end of Wieghorst Way is a dead end and the south end is controlled by a stop control at Fury Lane.

- Recent speed surveys taken on January 31, 2020 at a location 920 feet north of Calle Simpson shows a prevailing speed of 46.6 mph, which supports 45 mph speed limit radar enforced.
- Therefore, pursuant to CVC section 22358 and a prevailing speed of 46.6 mph taken in accordance with the guidance of the CA MUTCD section 2B.13, a 45 mph radar enforced speed limit on Wieghorst Way is reasonable, safe and recommended.



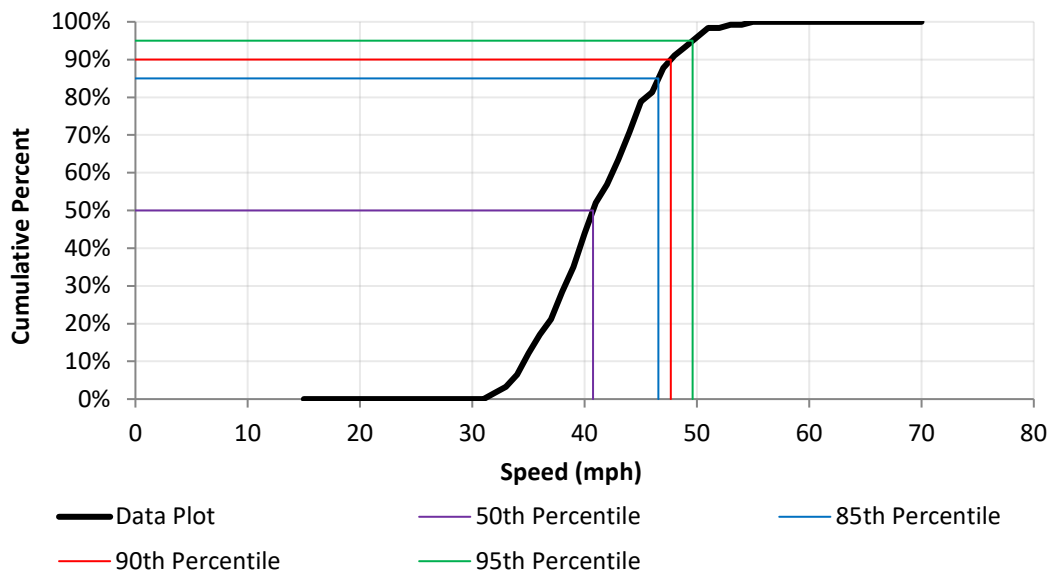
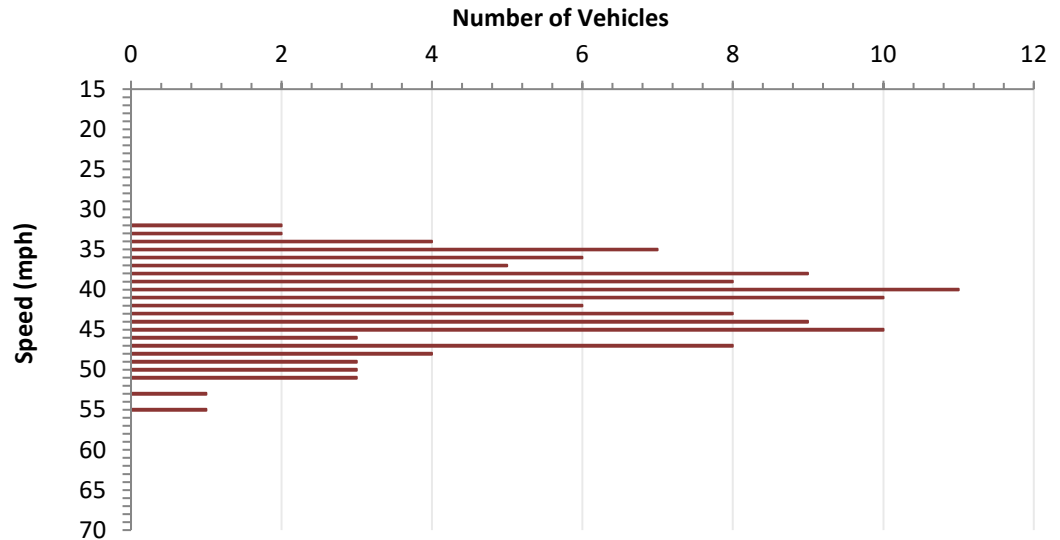
RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name:	Wieghorst Way	From:	Fury Lane	To:	Calle Albara
Position:	920' N/O Calle Simpson	Direction:	EB/WB		

Date:	1/31/2020	Weather:	Clear	Project Number:	0
Time Start:	11:55 AM	Road Condition:	DRY	Observer:	Barra Manaseer
Time End:	2:00 PM	Posted Speed:	50 MPH	Calibration Test:	0

Speed (mph)	Num. Veh.	Cum. Pct.
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32	2	1.6%
33	2	3.3%
34	4	6.5%
35	7	12.2%
36	6	17.1%
37	5	21.1%
38	9	28.5%
39	8	35.0%
40	11	43.9%
41	10	52.0%
42	6	56.9%
43	8	63.4%
44	9	70.7%
45	10	78.9%
46	3	81.3%
47	8	87.8%
48	4	91.1%
49	3	93.5%
50	3	95.9%
51	3	98.4%
52		
53	1	99.2%
54		
55	1	100.0%
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
Total	123	



DATA ANALYSIS

Average Speed	41.6	Range	32 - 55
50th Percentile	40.8	10 mph Pace	36 - 45
85th Percentile	46.6	Number in Pace	82
90th Percentile	47.7	Percent in Pace	67%
95th Percentile	49.6		

SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: March 13, 2020

Item 5-A

SUPERVISORIAL DISTRICT: 5

SUBJECT: Radar Certification

LOCATION: Brooke Road from Winter Haven Road to Stage Coach Lane (a distance of 0.68 miles) Fallbrook (Thos. Bros. 1027-J5)

INITIATED BY: DPW Traffic Engineering

REQUEST: Radar Recertification

PROBLEM AS STATED BY REQUESTER:

Brooke Road from Winter Haven Road to Stage Coach Lane is posted 45 MPH Radar Enforced. Preliminary review of prevailing speeds and roadway conditions could support radar recertification of the existing 45 MPH speed limit.

Existing Traffic Devices

Brooke Road is a striped two-lane through highway with a 24 foot travelled way on a 26 foot road bed. The roadway is striped with a no passing centerline and white edgeline. There are tractor advisory signs and intersection advisory signs posted near the southern end of the roadway segment. Brooke Road is unclassified on the County General Plan Mobility Element Network. The roadway is posted 45 MPH/Radar Enforced.

Average Daily Traffic Volumes

Brooke Road:

S/o Stage Coach Lane

03/20

5,400*

04/13

2,800

**Estimated*

Speed Data

Brooke Road:

70' N/o Rancho Mia

(2020)

(2013)

**85th
Percentile**

49.5 MPH

49.1 MPH

**10 MPH
Pace**

40-49

40-49

**% in
Pace**

70.0%

67.6%

Collision Data

There have been 8 reported collisions along this segment of roadway, 3 of which involved injury, in a 3 year period (10-01-16 to 09-30-19). These collisions result in a segment accident rate of 2.00 collisions per million vehicle miles. The statewide average is 1.19 collisions per million vehicle miles for similar suburban conventional 2 lanes or less with speeds 45 to 55 MPH.



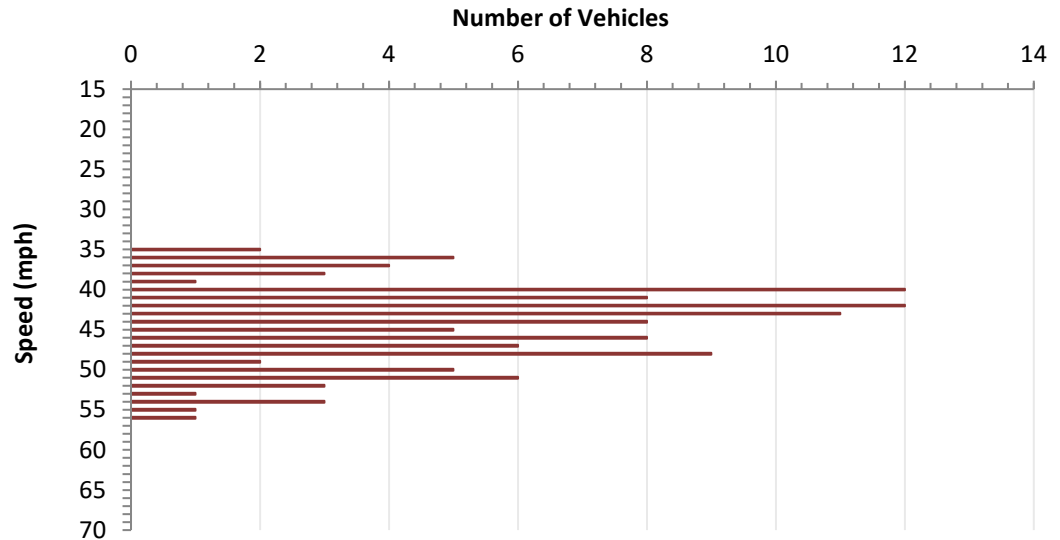
RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

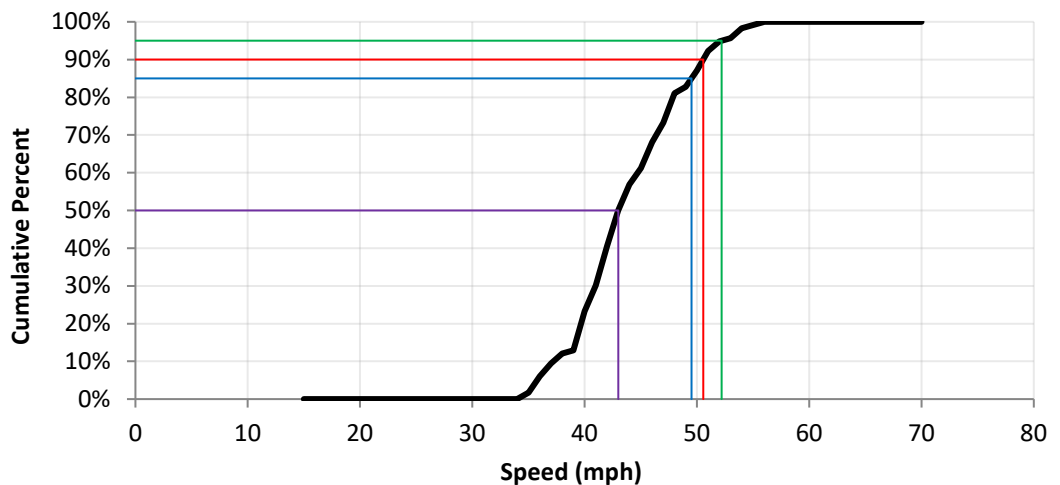
Road Name:	Brooke Rd	From:	Stage Coach Ln	To:	Winter Haven Rd
Position:	70' E/o Rancho Mia	Direction:	NB/SB		

Date:	2/20/2020	Weather:	Clear	Project Number:	N/A
Time Start:	9:30 AM	Road Condition:	Dry	Observer:	County
Time End:	11:00 AM	Posted Speed:	45 MPH	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		
33		
34		



35	2	1.7%
36	5	6.0%
37	4	9.5%
38	3	12.1%
39	1	12.9%
40	12	23.3%
41	8	30.2%
42	12	40.5%
43	11	50.0%
44	8	56.9%
45	5	61.2%
46	8	68.1%
47	6	73.3%
48	9	81.0%
49	2	82.8%
50	5	87.1%
51	6	92.2%
52	3	94.8%
53	1	95.7%
54	3	98.3%
55	1	99.1%
56	1	100.0%



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

DATA ANALYSIS

Average Speed	44.2	Range	35 - 56
50th Percentile	43.0	10 mph Pace	40 - 49
85th Percentile	49.5	Number in Pace	81
90th Percentile	50.6	Percent in Pace	70%
95th Percentile	52.2		
Total	116		

SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: March 13, 2020

Item **5-B**

SUPERVISORIAL DISTRICT: 5

SUBJECT: Radar Certification

LOCATION: Via Cuatro Caminos from Del Dios Highway to End (a distance of 0.67 miles) RANCHO SANTA FE (Thos. Bros. 1168-G1)

INITIATED BY: DPW Traffic Engineering

REQUEST: Radar Recertification

PROBLEM AS STATED BY REQUESTER:

Via Cuatro Caminos from Del Dios Highway to End is posted 35 MPH Radar Enforced. Preliminary review of prevailing speeds and roadway conditions could support a speed limit reduction to 30 MPH with certification for radar enforcement.

Existing Traffic Devices

Via Cuatro Caminos is a two-lane local roadway with a 24 foot travelled way on a 36 foot road bed. There intersection advisory signs posted along the roadway segment. Via Cuatro Caminos is unclassified on the County General Plan Mobility Element Network. The roadway is posted 35 MPH/Radar Enforced.

Average Daily Traffic Volumes

	<u>03/20</u>	<u>10/13</u>	
Via Cuatro Caminos:			
N/o Siete Leguas	1,000*	840	<i>*Estimated</i>

<u>Speed Data</u>		<u>85th Percentile</u>	<u>10 MPH Pace</u>	<u>% in Pace</u>
Via Cuatro Caminos:				
100' S/o Siete Leguas	(2020)	33.3 MPH	22-31	73.0%
	(2013)	35.0 MPH	28-37	74.0%
@ La Soldadera	(2020)	32.2 MPH	24-33	72.0%
Speed Zone	(2020)	32.8 MPH	23-32	72.5%

Collision Data

There have been 0 reported collisions along this segment of roadway in a 3 year period (10-01-16 to 09-30-19).



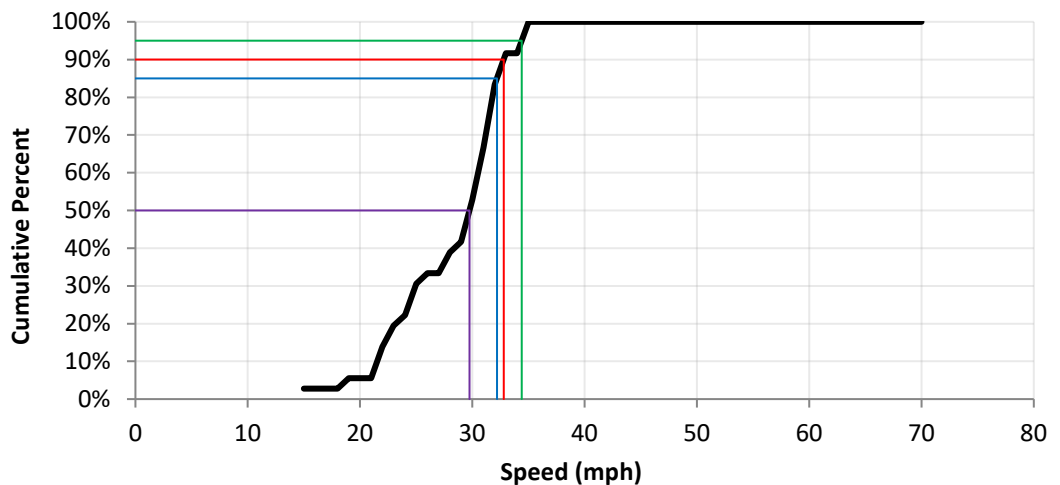
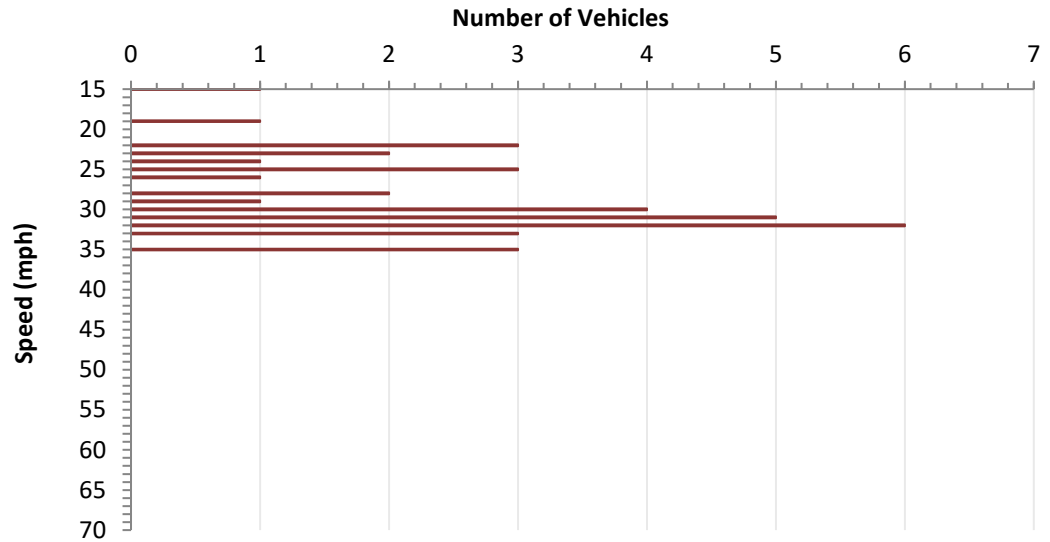
RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name:	Via Cutra Caminos	From:	Del Dios Hy	To:	End
Position:	@ La Soldadera	Direction:	NB/SB		

Date:	2/13/2020	Weather:	Clear	Project Number:	N/A
Time Start:	12:50 PM	Road Condition:	Dry	Observer:	County
Time End:	2:50 AM	Posted Speed:	35 MPH	Calibration Test:	Y

Speed (mph)	Num. Veh.	Cum. Pct.
15	1	2.8%
16		
17		
18		
19	1	5.6%
20		
21		
22	3	13.9%
23	2	19.4%
24	1	22.2%
25	3	30.6%
26	1	33.3%
27		
28	2	38.9%
29	1	41.7%
30	4	52.8%
31	5	66.7%
32	6	83.3%
33	3	91.7%
34		
35	3	100.0%



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

DATA ANALYSIS

62	Average Speed	28.5	Range	15 - 35
63	50th Percentile	29.8	10 mph Pace	24 - 33
64	85th Percentile	32.2	Number in Pace	26
65	90th Percentile	32.8	Percent in Pace	72%
66	95th Percentile	34.4		
70	Total	36		



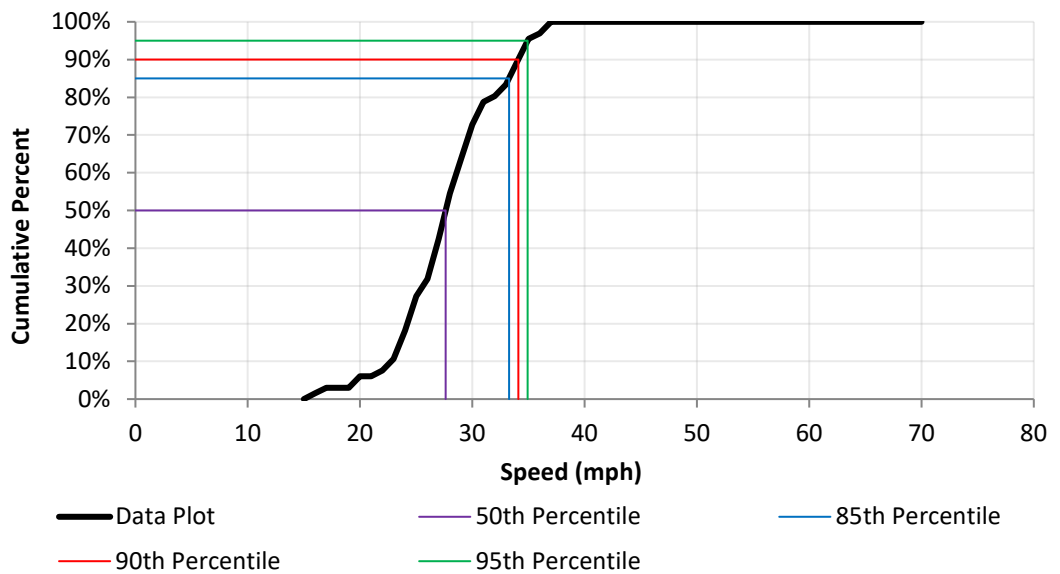
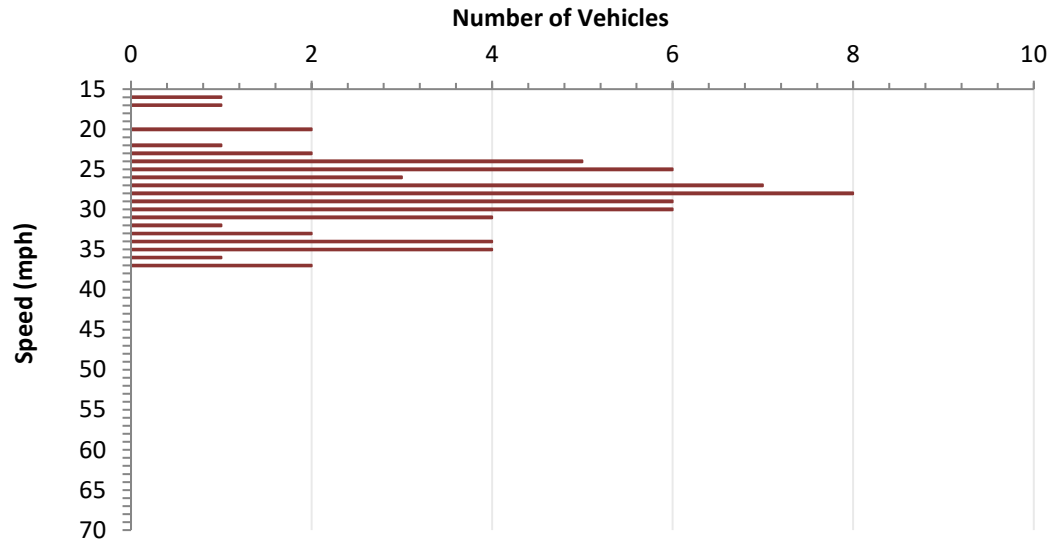
RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name:	Via Cutra Caminos	From:	Del Dios Hy	To:	End
Position:	100' S/o Siete Laguna	Direction:	NB/SB		

Date:	2/21/2020	Weather:	Clear	Project Number:	N/A
Time Start:	12:30 PM	Road Condition:	Dry	Observer:	County
Time End:	2:30 PM	Posted Speed:	35 MPH	Calibration Test:	Y

Speed (mph)	Num. Veh.	Cum. Pct.
15		
16	1	1.5%
17	1	3.0%
18		
19		
20	2	6.1%
21		
22	1	7.6%
23	2	10.6%
24	5	18.2%
25	6	27.3%
26	3	31.8%
27	7	42.4%
28	8	54.5%
29	6	63.6%
30	6	72.7%
31	4	78.8%
32	1	80.3%
33	2	83.3%
34	4	89.4%
35	4	95.5%
36	1	97.0%
37	2	100.0%
38		
39		
40		
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	66	



DATA ANALYSIS

Average Speed	28.2	Range	16 - 37
50th Percentile	27.6	10 mph Pace	22 - 31
85th Percentile	33.3	Number in Pace	48
90th Percentile	34.1	Percent in Pace	73%
95th Percentile	34.9		

SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: March 13, 2020 **Item 5-C**

SUPERVISORIAL DISTRICT: 5

SUBJECT: Intersection Control

LOCATION: Valley Center Road & Ridge Ranch Road, VALLEY CENTER (Thos. Bros. 1090 E6)

INITIATED BY: DPW Traffic Engineering

REQUEST: Traffic Signal Control

PROBLEM AS STATED BY REQUESTER:

The intersection of Valley Center Road & Ridge Ranch Road has been identified by Traffic Engineering as meeting Warrant 6, Coordinated Signal System, of the nine traffic signal warrants as described in the California Manual on Uniform Traffic Control Devices (CA MUTCD), Section 4C.01, therefore a traffic control signal should be considered.

Existing Traffic Devices

Valley Center Road is a striped four-lane divided Through Highway with marked centerline bike lane. The road runs north/south and has a 64-foot travelled way on a 76-foot roadbed. The roadway is classified as a Major Road on the County General Plan Mobility Element Network and has a posted 60 MPH speed limit.

Ridge Ranch Road is a striped two-lane private roadway. The road runs east/west and has a 24-foot travelled way and roadbed. The roadway is unclassified on the County General Plan Mobility Element Network. Ridge Ranch Road is stop controlled at Valley Center Road.

<u>Average Daily Traffic Volumes</u>	<u>12/19</u>	<u>05/15</u>	<u>12/12</u>
Valley Center Road:			
N/o Ridge Ranch Road	13,556 SB	12,636 SB	12,367 SB
S/o Ridge Ranch Road	13,851 NB	12,898 NB	12,466 NB
Ridge Ranch Road:			
E/o Valley Center Road	156 WB	169 WB	235 WB

Collision Data

There has been 1 reported collision at this intersection, not involving an injury, within a past 3-year period (10-01-16 to 09-30-19). This collision resulted in an intersection accident rate of 0.03 collisions per million vehicles entering the intersection. The statewide average is 0.16 for similar stop controlled rural tee intersections.



County of San Diego

DEPARTMENT OF PUBLIC WORKS
5510 OVERLAND AVE, SUITE 410
SAN DIEGO, CALIFORNIA 92123-1237
(858) 694-2212 FAX: (858) 694-3597
Web Site: www.sdcountry.ca.gov/dpw/

COUNTY TRAFFIC ENGINEER RECOMMENDATION.

Date: February 27, 2020
Item Title: Traffic Control Signal
Location: Valley Center Road and Ridge Ranch Road
CTE Recommendation: Install a traffic control signal *ZAO*
Conditions:

- In 2017, DPW implemented several traffic safety improvements at the intersection, which included a northbound right-turn lane, a northbound acceleration lane, and removed the northbound "No-U Turn" prohibition sign at Valley Center Road and Woods Valley Road signal to provide for a safe and controlled turning movement for Ridge Ranch area residents wanting to travel southbound on Valley Center Road.
- Section 21351 of the California Vehicle Code (CVC) authorizes a local agency to place and maintain or cause to be placed and maintained traffic signs, signals and other traffic control devices upon streets and highways within their jurisdiction as may be necessary to warn and guide traffic.
- Chapter 4C "Traffic Control Signal Needs Studies" of the California Manual on Uniform Traffic Control Devices (MUTCD), provides guidance for the preparation of an engineering study of traffic conditions to determine whether a traffic control signal is justified.

- An engineering study following Chapter 4C of the California MUTCD guidelines, shows that the subject intersection meets warrant 6 (Coordinated Signal System). Hence, a traffic signal control can be considered for the intersection of Valley Center Road and Ridge Ranch Road.
- The proposed traffic signal at the intersection of Valley Center Road and Ridge Ranch Road will provide for a better traffic flow system coordination along Valley Center Road within the Valley Center South Village as additional traffic signals are installed part of development conditioning within the village.
- It is my recommendation, as the County Traffic Engineer to place a traffic control signal at the intersection of Ridge Ranch Road and Valley Center Road pursuant to Section 21351 of the CVC and the engineering study (warrant analysis), dated February 27, 2020.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 1 of 5)

COUNT DATE 12/10/19
 CALC EB DATE 2/19/20
 CHK JKO DATE 2/27/2020

DIST _____ CO _____ RTE _____ PM _____

Major St: VALLEY CENTER ROAD Critical Approach Speed 60 mph
 Minor St: RIDGE RANCH ROAD (PVT) Critical Approach Speed N/A mph

Speed limit or critical speed on major street traffic > 40 mph..... ☒ }
 or
 In built up area of isolated community of < 10,000 population..... ☐ } **RURAL (R)**
☐ **URBAN (U)**

WARRANT 1 - Eight Hour Vehicular Volume SATISFIED YES ☐ NO ☒
 (Condition A or Condition B or combination of A and B must be satisfied)

Condition A - Minimum Vehicle Volume

100% SATISFIED YES ☐ NO ☒

80% SATISFIED YES ☐ NO ☒

APPROACH LANES	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)											
	U	R	U	R								
	1		2 or More		7:00	10:00	11:00	13:00	14:00	16:00	17:00	18:00
Both Approaches Major Street	500 (400)	350 (280)	600 (480)	420 (336)	188	139	135	166	170	219	208	161
Highest Approach Minor Street	150 (120)	105 (84)	200 (160)	140 (112)	17	12	12	11	11	11	11	11

Condition B - Interruption of Continuous Traffic

100% SATISFIED YES ☐ NO ☒

80% SATISFIED YES ☐ NO ☒

APPROACH LANES	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)											
	U	R	U	R								
	1		2 or More		7:00	10:00	11:00	13:00	14:00	16:00	17:00	18:00
Both Approaches Major Street	750 (600)	525 (420)	900 (720)	630 (504)	188	139	135	166	170	219	208	161
Highest Approach Minor Street	75 (60)	53 (42)	100 (80)	70 (56)	17	12	12	11	11	11	11	11

Combination of Conditions A & B

SATISFIED YES ☐ NO ☒

REQUIREMENT	CONDITION	✓	FULFILLED
TWO CONDITIONS SATISFIED 80%	A. MINIMUM VEHICULAR VOLUME		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	AND, B. INTERRUPTION OF CONTINUOUS TRAFFIC		
AND, AN ADEQUATE TRIAL OF OTHER ALTERNATIVES THAT COULD CAUSE LESS DELAY AND INCONVENIENCE TO TRAFFIC HAS FAILED TO SOLVE THE TRAFFIC PROBLEMS			Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 2 of 5)

WARRANT 2 - Four Hour Vehicular Volume

SATISFIED* YES ☐ NO ☒

Record hourly vehicular volumes for any four hours of an average day.

APPROACH LANES	One	2 or More	7:00	10:00	11:00	16:00	Hour
Both Approaches - Major Street		X	1886	1396	1354	2174	
Higher Approach - Minor Street	X		17	12	12	11	

*All plotted points fall above the applicable curve in Figure 4C-1. (URBAN AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A
OR, All plotted points fall above the applicable curve in Figure 4C-2. (RURAL AREAS)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	

WARRANT 3 - Peak Hour
(Part A or Part B must be satisfied)

SATISFIED YES ☐ NO ☒

PART A

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

SATISFIED YES ☐ NO ☒

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; AND	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

PART B

SATISFIED YES ☐ NO ☒

APPROACH LANES	One	2 or More	7:00	Hour
Both Approaches - Major Street		X	1886	
Higher Approach - Minor Street	X		17	

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A
OR, The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 3 of 5)

WARRANT 4 - Pedestrian Volume
(Parts 1 and 2 Must Be Satisfied)

N/A No PED ACTIVITY

SATISFIED YES ☐ NO ☐

Part 1 (Parts A or B must be satisfied)

Hours --->

A.

Vehicles per hour for any 4 hours				
Pedestrians per hour for any 4 hours				

Figure 4C-5 or Figure 4C-6
SATISFIED YES ☐ NO ☐

Hours --->

B.

Vehicles per hour for any 1 hour				
Pedestrians per hour for any 1 hour				

Figure 4C-7 or Figure 4C-8
SATISFIED YES ☐ NO ☐

Part 2

SATISFIED YES ☐ NO ☐

<u>AND</u> , The distance to the nearest traffic signal along the major street is greater than 300 ft	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<u>OR</u> , The proposed traffic signal will not restrict progressive traffic flow along the major street.	Yes <input type="checkbox"/>	No <input type="checkbox"/>

WARRANT 5 - School Crossing
(Parts A and B Must Be Satisfied)

N/A

SATISFIED YES ☐ NO ☐

Part A

Gap/Minutes and # of Children

SATISFIED YES ☐ NO ☐

Gaps vs Minutes	Minutes Children Using Crossing	
	Number of Adequate Gaps	
School Age Pedestrians Crossing Street / hr		

Hour

Gaps < Minutes YES ☐ NO ☐

AND Children > 20/hr YES ☐ NO ☐

<u>AND</u> , Consideration has been given to less restrictive remedial measures.	Yes <input type="checkbox"/>	No <input type="checkbox"/>
--	------------------------------	-----------------------------

Part B

SATISFIED YES ☐ NO ☐

The distance to the nearest traffic signal along the major street is greater than 300 ft	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<u>OR</u> , The proposed signal will not restrict the progressive movement of traffic.	Yes <input type="checkbox"/>	No <input type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 4 of 5)

**WARRANT 6 - Coordinated Signal System
(All Parts Must Be Satisfied)**

SATISFIED YES ☒ NO ☐

MINIMUM REQUIREMENTS	DISTANCE TO NEAREST SIGNAL	
≥ 1000 ft	N <u>2850</u> ft, S <u>15340</u> ft, E <u> </u> ft, W <u> </u> ft	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
On a one-way street or a street that has traffic predominantly in one direction, the adjacent traffic control signals are so far apart that they do not provide the necessary degree of vehicular platooning.		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
OR, On a two-way street, adjacent traffic control signals do not provide the necessary degree of platooning and the proposed and adjacent traffic control signals will collectively provide a progressive operation.		

**WARRANT 7 - Crash Experience Warrant
(All Parts Must Be Satisfied)**

SATISFIED YES ☐ NO ☒

Adequate trial of alternatives with satisfactory observance and enforcement has failed to reduce the crash frequency.		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
REQUIREMENTS	Number of crashes reported within a 12 month period susceptible to correction by a traffic signal, and involving injury or damage exceeding the requirements for a reportable crash.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
5 OR MORE		
REQUIREMENTS	CONDITIONS	
ONE CONDITION SATISFIED 80%	Warrant 1, Condition A - Minimum Vehicular Volume	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	OR, Warrant 1, Condition B - Interruption of Continuous Traffic	
	OR, Warrant 4, Pedestrian Volume Condition Ped Vol ≥ 80% of Figure 4C-5 through Figure 4C-8	

**WARRANT 8 - Roadway Network
(All Parts Must Be Satisfied)**

N/A

SATISFIED YES ☐ NO ☒

MINIMUM VOLUME REQUIREMENTS	ENTERING VOLUMES - ALL APPROACHES	✓	FULFILLED
1000 Veh/Hr	During Typical Weekday Peak Hour <u> </u> Veh/Hr and has 5-year projected traffic volumes that meet one or more of Warrants 1, 2, and 3 during an average weekday.		Yes <input type="checkbox"/> No <input type="checkbox"/>
	OR During Each of Any 5 Hrs. of a Sat. or Sun <u> </u> Veh/Hr		
CHARACTERISTICS OF MAJOR ROUTES		MAJOR ROUTE A	MAJOR ROUTE B
Hwy. System Serving as Principal Network for Through Traffic			
Rural or Suburban Highway Outside Of, Entering, or Traversing a City			
Appears as Major Route on an Official Plan			
Any Major Route Characteristics Met, Both Streets			Yes <input type="checkbox"/> No <input type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 5 of 5)

WARRANT 9 - Intersection Near a Grade Crossing
(Both Parts A and B Must Be Satisfied)

N/A SATISFIED YES ☐ NO ☒

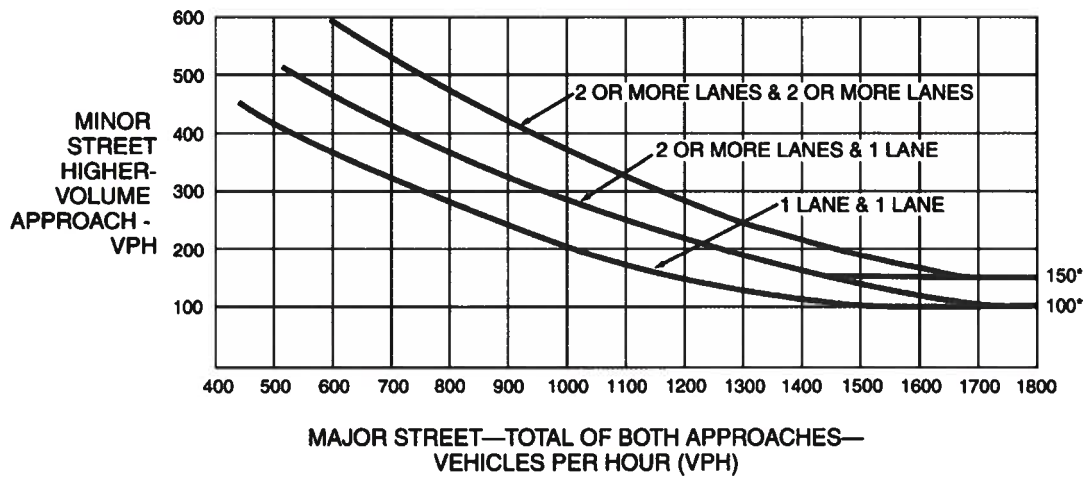
<p>PART A</p> <p>A grade crossing exists on an approach controlled by a STOP or YIELD sign and the center of the track nearest to the intersection is within 140 feet of the stop line or yield line on the approach. Track Center Line to Limit Line _____ ft</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/></p>
<p>PART B</p> <p>There is one minor street approach lane at the track crossing - During the highest traffic volume hour during which rail traffic uses the crossing, the plotted point falls above the applicable curve in Figure 4C-9.</p> <p>Major Street - Total of both approaches: _____ VPH Minor Street - Crosses the track (one direction only, approaching the intersection): _____ VPH X AF (Use Tables 4C-2, 3, & 4 below to calculate AF) = _____ VPH</p> <hr/> <p>OR, There are two or more minor street approach lanes at the track crossing - During the highest traffic volume hour during which rail traffic uses the crossing, the plotted point falls above the applicable curve in Figure 4C-10.</p> <p>Major Street - Total of both approaches : _____ VPH Minor Street - Crosses the track (one direction only, approaching the intersection): _____ VPH X AF (Use Tables 4C-2, 3, & 4 below to calculate AF) = _____ VPH</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/></p>

The minor street approach volume may be multiplied by up to three following adjustment factors (AF) as described in Section 4C.10.

- 1- Number of Rail Traffic per Day _____ Adjustment factor from table 4C-2 _____
- 2- Percentage of High-Occupancy Buses on Minor Street Approach _____ Adjustment factor from table 4C-3 _____
- 3- Percentage of Tractor-Trailer Trucks on Minor Street Approach _____ Adjustment factor from table 4C-4 _____

NOTE: If no data is available or known, then use AF = 1 (no adjustment)

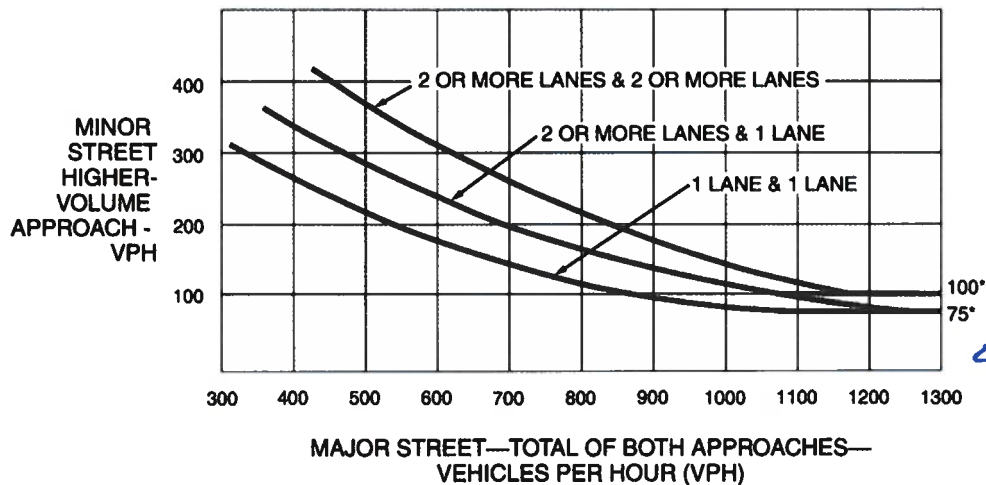
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

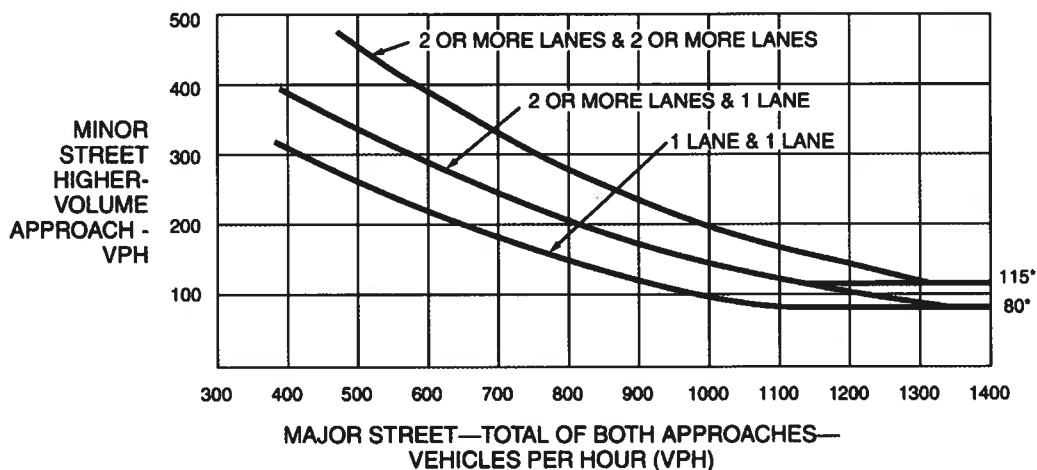
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

ALL POINTS PLOT OUTSIDE GRAPH, LESS THAN MINIMUM THRESHOLD

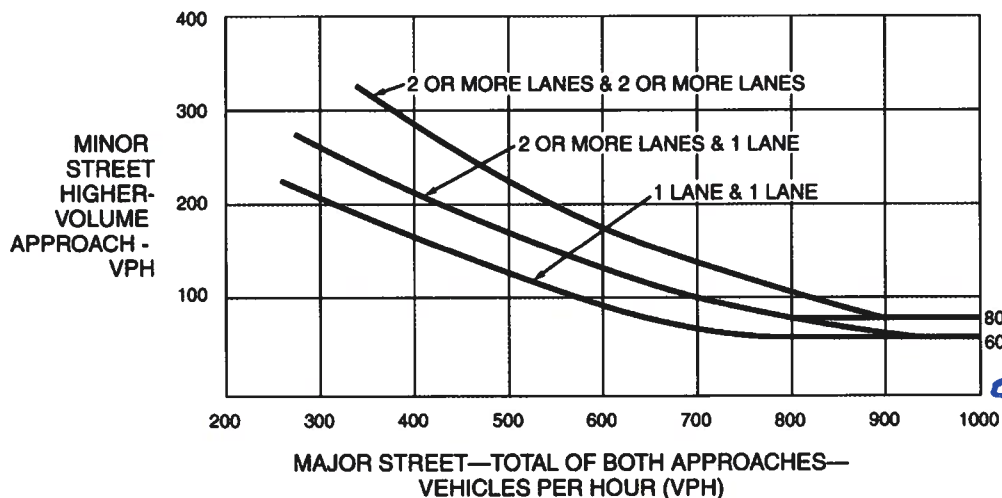
Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane.

ALL POINTS FALL OUTSIDE GRAPH, LESS THAN 60 VPH THRESHOLD

VOLUME

Valley Center Rd & Ridge Ranch Rd

Day: Tuesday, Wednesday

Date: 12/10/2019, 12/18/2019 (NB Counts)

City: Valley Center

Project #: CA19_4464_001, _002, _003

DAILY TOTALS					NB	SB						EB	WB						Total
					13,851	13,556						0	156						27,563
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							TOTAL
00:00	22	34		0	56		12:00	173	195		1	369							
00:15	16	28		1	45		12:15	188	194		5	387							
00:30	24	23		0	47		12:30	216	184		3	403							
00:45	17	79	21	106	0	1	12:45	205	782	173	746	2	11	380	1539				
01:00	8	20		0	28		13:00	207	189		2	398							
01:15	15	16		0	31		13:15	193	186		4	383							
01:30	14	12		0	26		13:30	222	231		5	458							
01:45	9	46	23	71	0		13:45	241	863	200	806	0	11	441	1680				
02:00	12	11		0	23		14:00	244	196		2	442							
02:15	13	25		0	38		14:15	237	168		2	407							
02:30	12	28		2	42		14:30	245	187		4	436							
02:45	6	43	12	76	0	2	14:45	241	967	187	738	3	11	431	1716				
03:00	9	13		0	22		15:00	265	199		2	466							
03:15	9	21		0	30		15:15	280	214		4	498							
03:30	13	27		0	40		15:30	299	221		0	520							
03:45	9	40	24	85	0		15:45	287	1131	189	823	2	8	478	1962				
04:00	10	29		0	39		16:00	313	214		4	531							
04:15	22	50		0	72		16:15	303	254		1	558							
04:30	17	67		1	85		16:30	313	228		2	543							
04:45	12	61	65	211	0	1	16:45	349	1278	220	916	4	11	573	2205				
05:00	21	106		0	127		17:00	305	210		3	518							
05:15	52	150		1	203		17:15	347	244		4	595							
05:30	58	202		2	262		17:30	326	200		2	528							
05:45	64	195	198	656	3	6	17:45	294	1272	160	814	2	11	456	2097				
06:00	113	216		3	332		18:00	281	164		4	449							
06:15	132	261		2	395		18:15	325	159		3	487							
06:30	148	294		2	444		18:30	256	121		3	380							
06:45	158	551	263	1034	2	9	18:45	207	1069	103	547	1	11	311	1627				
07:00	111	335		4	450		19:00	233	101		1	335							
07:15	141	331		4	476		19:15	223	89		0	312							
07:30	141	348		3	492		19:30	197	74		1	272							
07:45	157	550	322	1336	6	17	19:45	190	843	87	351	0	2	277	1196				
08:00	151	265		3	419		20:00	180	75		0	255							
08:15	140	304		2	446		20:15	154	67		0	221							
08:30	154	245		0	399		20:30	151	66		0	217							
08:45	159	604	213	1027	4	9	20:45	137	622	66	274	1	1	204	897				
09:00	139	188		1	328		21:00	121	61		0	182							
09:15	131	255		2	388		21:15	145	67		0	212							
09:30	136	255		4	395		21:30	113	52		1	166							
09:45	143	549	222	920	2	9	21:45	109	488	57	237	0	1	166	726				
10:00	147	177		2	326		22:00	107	63		0	170							
10:15	137	237		2	376		22:15	96	53		0	149							
10:30	157	197		2	356		22:30	81	49		0	130							
10:45	173	614	171	782	6	12	22:45	62	346	34	199	0		96	545				
11:00	153	161		1	315		23:00	47	44		0	91							
11:15	159	191		6	356		23:15	41	41		0	82							
11:30	197	160		2	359		23:30	51	26		0	77							
11:45	182	691	151	663	3	12	23:45	28	167	27	138	0		55	305				
TOTALS	4023	6967		78	11068		TOTALS	9828	6589		78	16495							
SPLIT %	36.3%	62.9%		0.7%	40.2%		SPLIT %	59.6%	39.9%		0.5%	59.8%							

DAILY TOTALS					NB	SB						EB	WB						Total
					13,851	13,556						0	156						27,563
AM Peak Hour	11:45	07:00		07:00	07:00		PM Peak Hour	16:45	16:00		12:45	16:30							
AM Pk Volume	759	1336		17	1903		PM Pk Volume	1327	916		13	2229							
Pk Hr Factor	0.878	0.960		0.708	0.967		Pk Hr Factor	0.951	0.902		0.650	0.937							
7 - 9 Volume	1154	2363	0	26	3543		4 - 6 Volume	2550	1730	0	22	4302							
7 - 9 Peak Hour	08:00	07:00		07:00	07:00		4 - 6 Peak Hour	16:45	16:00		16:30	16:30							
7 - 9 Pk Volume	604	1336	0	17	1903		4 - 6 Pk Volume	1327	916	0	13	2229							
Pk Hr Factor	0.950	0.960	0.000	0.708	0.967		Pk Hr Factor	0.951	0.902	0.000	0.813	0.937							

Project #: CA19_4464_001, _002, _003

City: Valley Center

Location: Valley Center Rd & Ridge Ranch Rd

Date: 12/10/2019, 12/18/2019 (NB Counts)

