

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

January 15, 2020

TO: Community Planning/Sponsor Group Chairpersons

FROM: Secretary, Traffic Advisory Committee

MEETING NOTICE

Attached is the preliminary agenda for the January 24, 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

**January 24, 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 5</u>			
5-A. INTERSECTION CONTROLS	VALLEY CENTER RD & RIDGE RANCH RD	VALLEY CENTER	VALLEY CENTER
5-B. INTERSECTION CONTROLS	RANCHO SANTA FE FARMS RD & RANCHO SANTA FE LAKES DR	FAIRBANKS RANCH	SAN DIEGUITO
5-C. RADAR CERTIFICATION	MONTE VISTA DR	VISTA	N/A

SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: January 24, 2020 **Item 5-A**

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 not meeting any 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 not 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 (05-01-16 to 06-31-19). This collision resulted in an intersection accident rate of 0.033 collisions per million vehicles entering the intersection. The statewide average is 0.16 for similar stop controlled rural tee intersections.

5-A. Intersection Control

Valley Center Road & Ridge Ranch Road





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: January 16, 2020
Item Title: Traffic Control Signal
Location: Valley Center Road and Ridge Ranch Road

CTE Recommendation: Deny a Request for a traffic control signal

A handwritten signature in blue ink, appearing to be 'ZAO', is written over the 'CTE Recommendation' line.

Conditions:

- 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 does not meet any of the warrants for traffic signal consideration.
- 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.

- To further enhance the safety of the intersection, it is recommended that the left turn movement from Ridge Ranch Road be prohibited using a non-traversable striped median and 'No-Left Turn' signs.
- A traffic control signal at the intersection of Valley Center Road and Ridge Ranch Road is not recommended at this time.

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

COUNT DATE 12/10/19
 CALC 383 DATE 1/8/20
 CHK 240 DATE 01/15/2020

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 ☐ } RURAL (R)
 In built up area of isolated community of < 10,000 population..... ☐ } 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 ☒

MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)												
	U	R	U	R								
APPROACH LANES	1		2 or More		7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00
Both Approaches Major Street	500 (400)	350 (280)	600 (480)	420 (336)	1896	1396	1354	1649	1765	2194	2024	1616
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 ☒

MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)												
	U	R	U	R								
APPROACH LANES	1		2 or More		7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00
Both Approaches Major Street	750 (600)	525 (420)	900 (720)	630 (504)	1896	1396	1354	1649	1765	2194	2024	1616
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	2 or One More		Hour			
	One	More	7:00	10:00	11:00	16:00
Both Approaches - Major Street		X	188	134	135	219
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 checked="" type="checkbox"/>
<u>OR</u> , 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

SATISFIED YES ☐ NO ☐

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

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; <u>AND</u>	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; <u>AND</u>	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	2 or One More		Hour			
	One	More	7:00	10:00	11:00	16:00
Both Approaches - Major Street		X	188	134	135	219
Higher Approach - Minor Street	X		17	12	12	11

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

AND , The distance to the nearest traffic signal along the major street is greater than 300 ft	Yes <input type="checkbox"/>	No <input type="checkbox"/>
OR , 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	Hour
	Number of Adequate Gaps	
School Age Pedestrians Crossing Street / hr		

Gaps < Minutes YES ☐ NO ☐

AND Children > 20/hr YES ☐ NO ☐

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

N/A

SATISFIED YES ☐ NO ☒

MINIMUM REQUIREMENTS	DISTANCE TO NEAREST SIGNAL	
≥ 1000 ft	N _____ ft, S _____ ft, E _____ ft, W _____ ft	Yes <input 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 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	
	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 _____ 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 _____ 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 _____

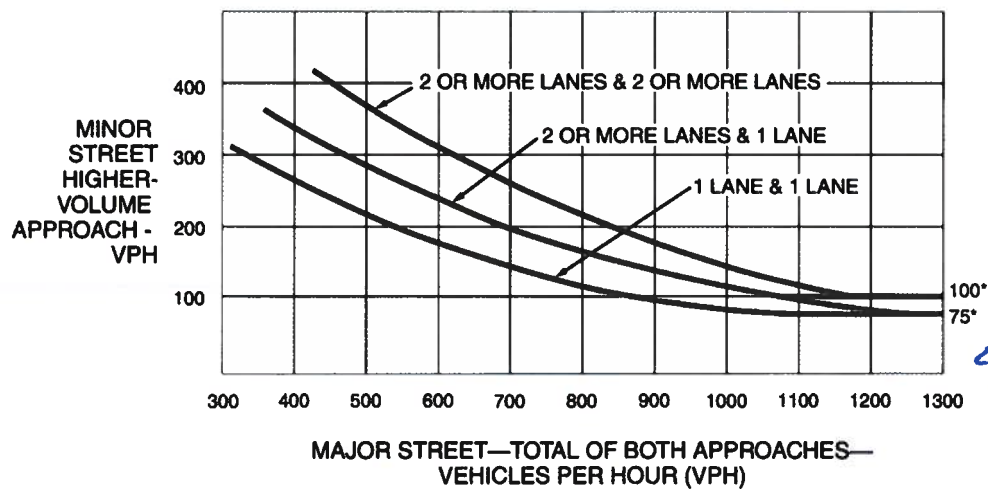
NOTE: If no data is available or known, then use AF = 1 (no adjustment)

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.

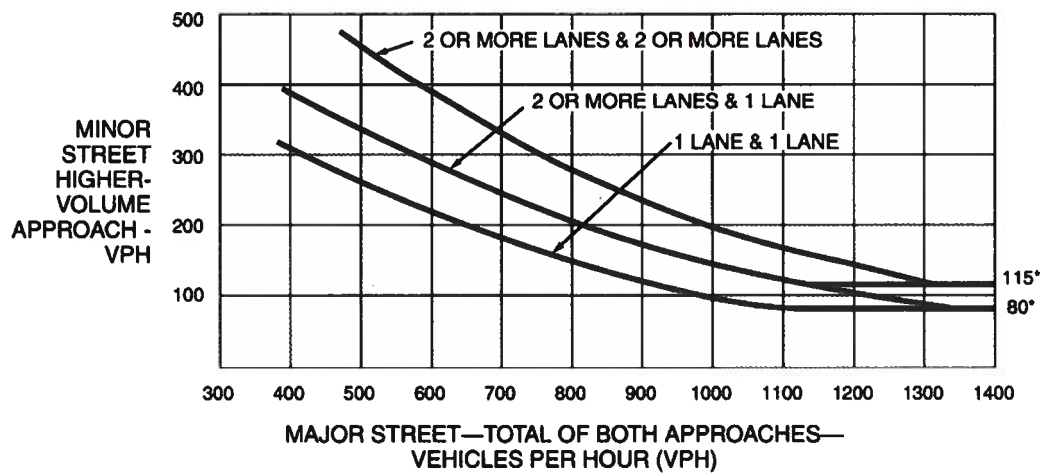
Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*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*

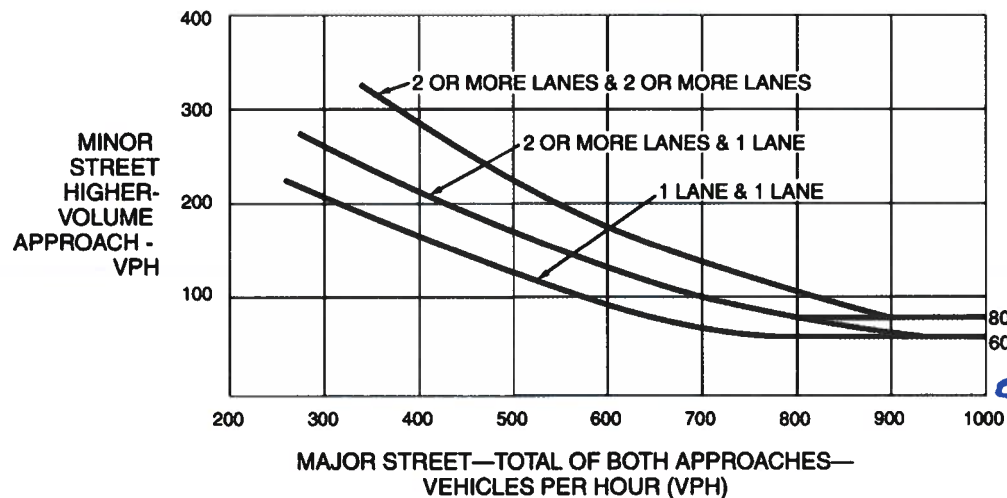
Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



*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							

SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: January 24, 2020 **Item 5-B**

SUPERVISORIAL DISTRICT: 5

SUBJECT: Intersection Control

LOCATION: Rancho Santa Fe Farms Road & Rancho Santa Fe Lakes Drive, Fairbanks Ranch (Thos. Bros. 1188 G3)

INITIATED BY: DPW Traffic Engineering

REQUEST: All-Way Stop Control and/or Traffic Control Signal

PROBLEM AS STATED BY REQUESTER:

The intersection of Rancho Santa Fe Farms Road & Rancho Santa Fe Lakes Drive has been identified by Traffic Engineering as not meeting any of the Multi-Way Stop Application criteria as described in the California Manual on Uniform Traffic Control Devices (CA MUTCD), Section 2B.07, nor any of the nine traffic signal warrants as described in the CA MUTCD, Section 4C.01, therefore an all-way stop control and/or a Traffic Control Signal should not be considered.

Existing Traffic Devices

Rancho Santa Fe Farms Road is a striped three-lane roadway with striped two way left turn lane. The road runs north/south and has a 24-foot travelled way on a 40-foot roadbed. The roadway is unclassified on the County General Plan Mobility Element Network and posted 40 MPH.

Rancho Santa Fe Lakes Drive 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. Rancho Santa Fe Lakes Drive is stop controlled at Rancho Santa Fe Farms Road.

Average Daily Traffic Volumes

08/18

Rancho Santa Fe Farms Road:	
N/o Rancho Santa Fe Lakes Road	2,842 SB
S/o Rancho Santa Fe Lakes Road	3,083 NB
 Rancho Santa Fe Lakes Road:	
E/o Rancho Santa Fe Farms Road	356 WB

Collision Data

There have been 0 reported collision at this intersection within a past 3-year period (10-01-16 to 09-31-19).

5-B. Intersection Control

Rancho Santa Fe Farms Road & Rancho Santa Fe Lakes Drive





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: January 15, 2020

Item Title: Traffic Control Signal or All-Way Stop Control

Location: Rancho Santa Fe Farms Road and Rancho Santa Fe Lakes Drive *Z40*

CTE Recommendation: Deny a request for a traffic signal or an All-Way Stop Controls

Conditions:

- 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 does not meet any of the warrants for traffic signal consideration.
- Section 2B.07 "Multi-Way Stop Applications" of the California MUTCD, provides four guidance and four optional criteria that may

be considered in an engineering study when evaluating an intersection of an all-way stop control.

- An evaluation of the intersection for an All-Way Stop Control shows that guidance criteria (A-D) and Optional Criteria (A-D) per Section 2B.07 "Multi-Way Stop Applications" of the California MUTCD are not satisfied for the intersection.
- Pedestrian counts were performed at the subject intersection and found there were no pedestrians crossing Rancho Santa Fe Farms Road during the peak hours.
- A traffic Control Signal or an all-way stop at the intersection of Rancho Santa Fe Farms Road and Rancho Santa Fe Lakes Drive is not recommended at this time.

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

COUNT DATE 8/16/18
 CALC SS DATE 1/9/20
 CHK ZAO DATE 01/19/2020

DIST _____ CO _____ RTE _____ PM _____

Major St: RANCHO SANTA FE FARMS RD Critical Approach Speed 40 mph
 Minor St: RANCHO SANTA FE GARDENS RD Critical Approach Speed N/A mph

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

MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)					80% SATISFIED YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>									
		U	R	U	R									
APPROACH LANES	1		2 or More											
						9:00	11:00	12:00	13:00	14:00	15:00	17:00	18:00	Hour
Both Approaches Major Street	500 (400)	350 (280)	600 (480)	420 (336)		369	432	415	437	433	453	448	365	
Highest Approach Minor Street	150 (120)	105 (84)	200 (160)	140 (112)		26	34	29	34	32	32	34	27	

Condition B - Interruption of Continuous Traffic 100% SATISFIED YES ☐ NO ☒
 80% SATISFIED YES ☐ NO ☒

MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)					80% SATISFIED YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>									
		U	R	U	R									
APPROACH LANES	1		2 or More											
Both Approaches Major Street	750 (600)	525 (420)	900 (720)	630 (504)	9:00	11:00	12:00	13:00	14:00	15:00	17:00	18:00	Hour	
Highest Approach Minor Street	75 (60)	53 (42)	100 (80)	70 (56)	369	432	415	437	433	453	448	365		
	75 (60)	53 (42)	100 (80)	70 (56)	26	34	29	34	32	32	34	27		

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"/> <u>N/A</u> <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 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	11:00	13:00	15:00	17:00	Hour
Both Approaches - Major Street	<input checked="" type="checkbox"/>	<input type="checkbox"/>	432	437	453	448	
Higher Approach - Minor Street	<input checked="" type="checkbox"/>	<input type="checkbox"/>	34	34	32	34	

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

PART B

SATISFIED YES ☐ NO ☒

APPROACH LANES	One	2 or More	17:00	Hour
Both Approaches - Major Street	<input checked="" type="checkbox"/>	<input type="checkbox"/>	448	
Higher Approach - Minor Street	<input checked="" type="checkbox"/>	<input type="checkbox"/>	34	

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

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 ☐

AND. The distance to the nearest traffic signal along the major street is greater than 300 ft	Yes <input type="checkbox"/>	No <input type="checkbox"/>
OR. 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)

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 ☐

AND. 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"/>
OR. 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)

N/A

SATISFIED YES ☐ NO ☒

MINIMUM REQUIREMENTS	DISTANCE TO NEAREST SIGNAL	
≥ 1000 ft	N _____ ft, S _____ ft, E _____ ft, W _____ ft	Yes <input 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 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.		Yes <input type="checkbox"/> No <input type="checkbox"/>

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 $\geq 80\%$ 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 _____ 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 _____ 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)

Table 4C-1. Warrant 1, Eight-Hour Vehicular Volume

Condition A—Minimum Vehicular Volume

Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)				Vehicles per hour on higher-volume minor-street approach (one direction only)			
Major Street	Minor Street	100% ^a	80% ^b	70% ^c	56% ^d	100% ^a	80% ^b	70% ^c	56% ^d
1	1	500	400	350	280	150	120	105	84
2 or more	1	600	480	420	336	150	120	105	84
2 or more	2 or more	600	480	420	336	200	160	140	112
1	2 or more	500	400	350	280	200	160	140	112

Condition B—Interruption of Continuous Traffic

Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)				Vehicles per hour on higher-volume minor-street approach (one direction only)			
Major Street	Minor Street	100% ^a	80% ^b	70% ^c	56% ^d	100% ^a	80% ^b	70% ^c	56% ^d
1	1	750	600	525	420	75	60	53	42
2 or more	1	900	720	630	504	75	60	53	42
2 or more	2 or more	900	720	630	504	100	80	70	56
1	2 or more	750	600	525	420	100	80	70	56

^a Basic minimum hourly volume

^b Used for combination of Conditions A and B after adequate trial of other remedial measures

^c May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

^d May be used for combination of Conditions A and B after adequate trial of other remedial measures when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

**Table 4C-2. Warrant 9,
Adjustment Factor for
Daily Frequency of Rail Traffic**

Rail Traffic per Day	Adjustment Factor
1	0.67
2	0.91
3 to 5	1.00
6 to 8	1.18
9 to 11	1.25
12 or more	1.33

**Table 4C-3. Warrant 9, Adjustment Factor
for Percentage of High-Occupancy Buses**

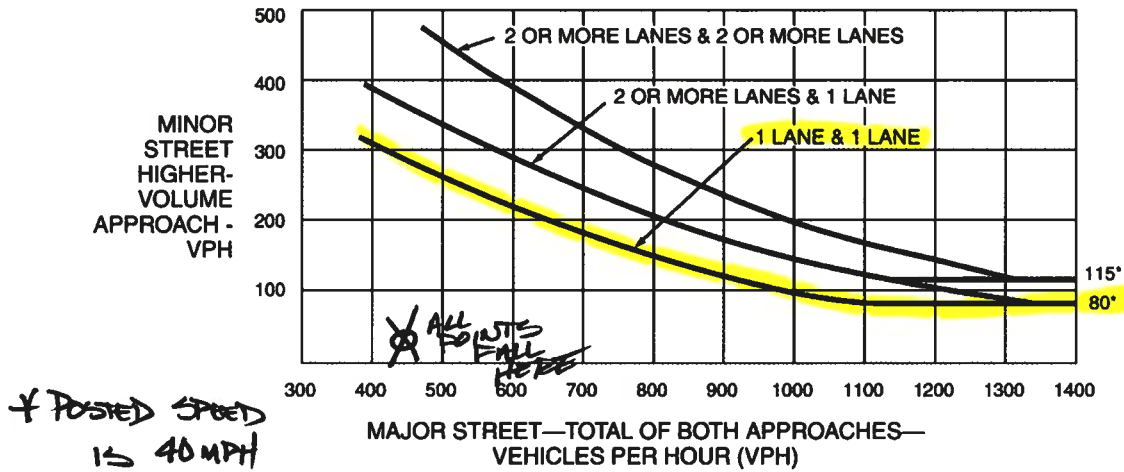
% of High-Occupancy Buses* on Minor-Street Approach	Adjustment Factor
0%	1.00
2%	1.09
4%	1.19
6% or more	1.32

* A high-occupancy bus is defined as a bus occupied by at least 20 people.

**Table 4C-4. Warrant 9, Adjustment Factor
for Percentage of Tractor-Trailer Trucks**

% of Tractor-Trailer Trucks on Minor-Street Approach	Adjustment Factor	
	D less than 70 feet	D of 70 feet or more
0% to 2.5%	0.50	0.50
2.6% to 7.5%	0.75	0.75
7.6% to 12.5%	1.00	1.00
12.6% to 17.5%	2.30	1.15
17.6% to 22.5%	2.70	1.35
22.6% to 27.5%	3.28	1.64
More than 27.5%	4.18	2.09

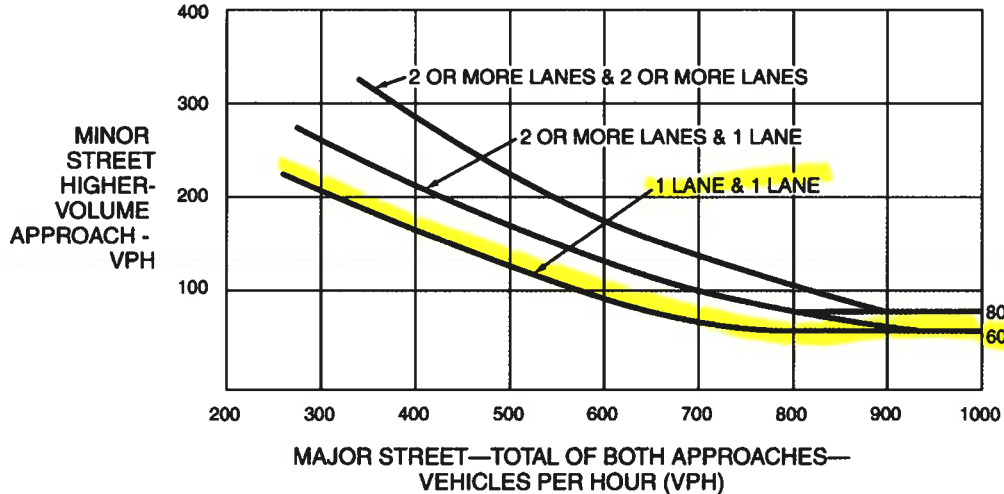
Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



*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)



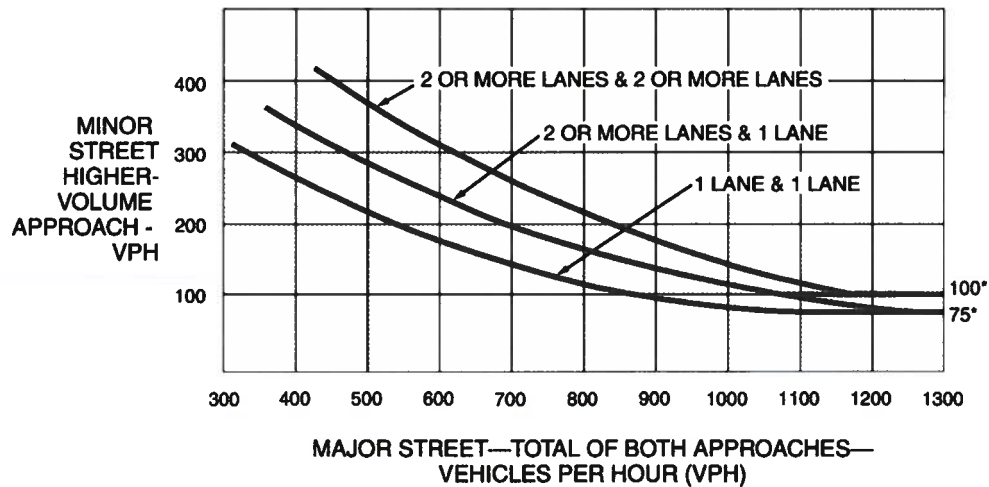
*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane.

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-WAY STOP CONTROL PER CA MUTCD SECTION 2B.07

Intersection: RANCHO SANTA FE FARMS RD & RANCHO SANTA FE LAKES DR (PVT)

Speed on Major: 40 Mph

Guidance A
(NOT Satisfied) *Where traffic control signals are justified and all-way stop is interim measure*

Guidance B
(NOT Satisfied) *Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation*

Guidance C1
(Satisfied) *Minimum volumes entering intersection from major street on both approaches average at least 300 vph for any 8 hours of an average day and ;*

Guidance C2
(NOT Satisfied) *The combined veh., ped, and bike volume entering the intersection from minor street on both approaches average at least 200 units/hr for the same 8 hour period, with an average veh. delay to minor street of at least 30 sec/veh during the highest hour; but*

Guidance C3
(NOT Satisfied) *Use 70% of the values provided in C1 & C2 if the 85th% approach speed on the major street exceeds 40 mph*

Guidance D
(NOT Satisfied) *Where no single criterion is satisfied, but where criteria B, C1, and C2 are all satisfied to 80% of the minimum values. Criterion C3 is excluded from this condition.*

Approach Lanes	Starting Hour							
	8:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM
Total Approaches on Major Street (vph)	469	432	415	437	433	453	445	448
Total Approaches on Minor Street (units/hr)	18	34	29	34	32	32	16	34
100% Satisfied (Major \geq 300 vph & Minor \geq 200 units/hr)	Yes ()					No (X)		
70% Satisfied (Major \geq 210 vph & Minor \geq 140 units/hr)	Yes ()					No (X)		
80% Satisfied (Major \geq 240 vph & Minor \geq 160 units/hr)	Yes ()					No (X)		

Option A
(N/A) *Need to control left-turn conflict*

Option B
(N/A) *Need to control veh/ped conflicts near high ped generators*

Option C
(N/A) *Lack of Corner Sight Distance*

Option D
(N/A) *Intersection of two Residential Collectors (through) streets of similar design and operation Characteristics to improve traffic operation*

City: Carmel Valley
Project #: CA18_4290_001

DAILY TOTALS			NB	SB	EB			WB	Total		
			3,083	2,842				0			356
AM Peak Hour	08:00	08:30		11:45	11:30	PM Peak Hour	16:15	14:30		14:45	14:30
AM Pk Volume	239	240		41	503	PM Pk Volume	249	255		37	506
Pk Hr Factor	0.818	0.882		0.683	0.844	Pk Hr Factor	0.902	0.898		0.712	0.930
7 - 9 Volume	416	352	0	26	794	4 - 6 Volume	476	417	0	50	943
7 - 9 Peak Hour	08:00	08:00		07:45	08:00	4 - 6 Peak Hour	16:15	16:45		16:30	16:30
7 - 9 Pk Volume	239	230	0	23	487	4 - 6 Pk Volume	249	226	0	35	498
Pk Hr Factor	0.818	0.846	0.000	0.821	0.876	Pk Hr Factor	0.902	0.897	0.000	0.673	0.889

SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: January 24, 2020

Item 5-C

SUPERVISORIAL DISTRICT: 5

SUBJECT: Speed Limit / Radar Certification

LOCATION: Monte Vista Drive from the Vista City Limit to Buena Creek Road (a distance of 0.87 miles), VISTA (Thos. Bros. 1108-C1)

INITIATED BY: DPW Traffic Engineering

REQUEST: Speed Limit

PROBLEM AS STATED BY REQUESTER:

Monte Vista Drive from the Vista City Limit to Buena Creek Road is posted 45 MPH. Preliminary review of prevailing speeds and roadway conditions could support radar certification of a 45 MPH speed limit.

Existing Traffic Devices

Monte Vista Drive is a striped two-lane roadway with 24 foot travelled way on a 26 foot road bed. There is all-way stop control at the intersection of Buena Creek Road at the eastern end of the segment and an at the intersection with Foothill Drive. There is a 30 MPH speed advisory curve near La Rueda Road. The roadway is classified as a Major Road on the County General Plan Mobility Element Network and is posted 45 MPH.

Average Daily Traffic Volumes

09/19

Monte Vista Drive

200' W/o Loma Vista Way

5,422

Speed Data

**85th
Percentile**

**10 MPH
Pace**

**% in
Pace**

Monte Vista Drive

220' W/o Loma Vista Way (2019)

48.6 MPH

40-49

74.0%

@ Pod Drive

(2020)

43.8 MPH

35-44

70.0%

Speed Zone

(2020)

46.2 MPH

38-47

72.0%

Collision Data

There have been 15 reported collisions along this segment of roadway, 3 of which involved injury, in a 3 year period (10-01-16 to 09-31-19). These collisions result in a segment accident rate of 2.91 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 speed between 45 and 55 mph.

5-C. Radar Recertification

Monte Vista Drive from Vista City Limit to Buena Creek Road (0.87 miles)



VOLUME

Monte Vista Dr @200' W/O Loma Vista Wy

Day: Wednesday
Date: 9/25/2019City: Vista
Project #: CA19_4362_001

DAILY TOTALS					NB	SB						EB	WB	Total	
					0	0						2,665	2,757	5,422	
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL			
00:00			4	3	7		12:00			18	31	49			
00:15			2	3	5		12:15			41	26	67			
00:30			3	0	3		12:30			25	26	51			
00:45			0	9	3	18	12:45			19	103	49	216		
01:00			3	4	7		13:00			16	27	43			
01:15			0	2	2		13:15			36	39	75			
01:30			1	2	3		13:30			28	34	62			
01:45			1	5	2	14	13:45			31	111	76	256		
02:00			3	1	4		14:00			21	59	80			
02:15			1	1	2		14:15			58	49	107			
02:30			0	3	3		14:30			66	40	106			
02:45			2	6	3	12	14:45			58	203	100	393		
03:00			0	1	1		15:00			57	51	108			
03:15			1	2	3		15:15			69	70	139			
03:30			1	0	1		15:30			60	65	125			
03:45			2	4	2	7	15:45			61	247	110	482		
04:00			1	4	5		16:00			65	58	123			
04:15			0	1	1		16:15			69	49	118			
04:30			1	0	1		16:30			71	67	138			
04:45			4	6	8	15	16:45			62	267	137	516		
05:00			3	4	7		17:00			59	74	133			
05:15			6	5	11		17:15			66	79	145			
05:30			16	10	26		17:30			66	78	144			
05:45			15	40	31	75	17:45			75	266	154	576		
06:00			26	14	40		18:00			61	65	126			
06:15			19	24	43		18:15			63	48	111			
06:30			28	45	73		18:30			40	31	71			
06:45			48	121	99	255	18:45			53	217	84	392		
07:00			23	51	74		19:00			34	34	68			
07:15			36	68	104		19:15			27	20	47			
07:30			46	85	131		19:30			23	15	38			
07:45			77	182	174	483	19:45			23	107	37	190		
08:00			64	53	117		20:00			23	7	30			
08:15			49	56	105		20:15			24	11	35			
08:30			49	48	97		20:30			20	11	31			
08:45			29	191	84	403	20:45			22	89	33	129		
09:00			38	38	76		21:00			22	14	36			
09:15			29	45	74		21:15			27	11	38			
09:30			24	36	60		21:30			18	12	30			
09:45			27	118	66	276	21:45			9	76	19	123		
10:00			30	32	62		22:00			10	4	14			
10:15			27	25	52		22:15			7	2	9			
10:30			32	36	68		22:30			6	6	12			
10:45			28	117	61	243	22:45			9	32	14	49		
11:00			28	26	54		23:00			7	6	13			
11:15			32	45	77		23:15			4	4	8			
11:30			35	36	71		23:30			3	5	8			
11:45			36	131	62	264	23:45			3	17	6	35		
TOTALS			930	1135	2065		TOTALS			1735	1622	3357			
SPLIT %			45.0%	55.0%	38.1%		SPLIT %			51.7%	48.3%	61.9%			

DAILY TOTALS					NB	SB						EB	WB	Total	
					0	0						2,665	2,757	5,422	
AM Peak Hour			07:45	07:15	07:30		PM Peak Hour			17:15	17:00	17:00			
AM Pk Volume			239	303	527		PM Pk Volume			268	310	576			
Pk Hr Factor			0.776	0.781	0.757		Pk Hr Factor			0.893	0.981	0.935			
7 - 9 Volume	0	0	373	513	886		4 - 6 Volume	0	0	533	559	1092			
7 - 9 Peak Hour			07:45	07:15	07:30		4 - 6 Peak Hour			16:00	17:00	17:00			
7 - 9 Pk Volume	0	0	239	303	527		4 - 6 Pk Volume	0	0	267	310	576			
Pk Hr Factor	0.000	0.000	0.776	0.781	0.757		Pk Hr Factor	0.000	0.000	0.940	0.981	0.935			

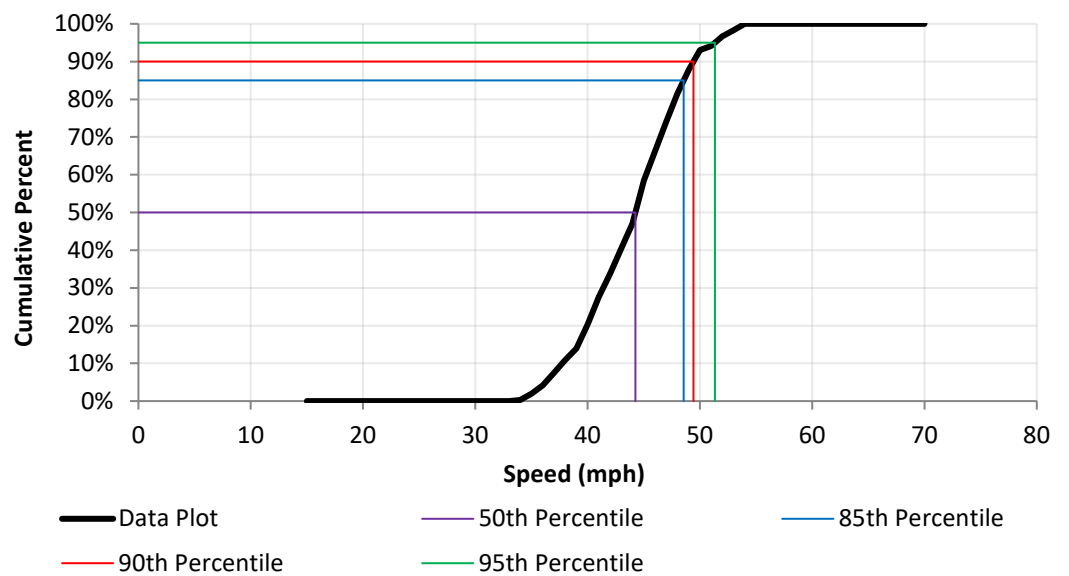
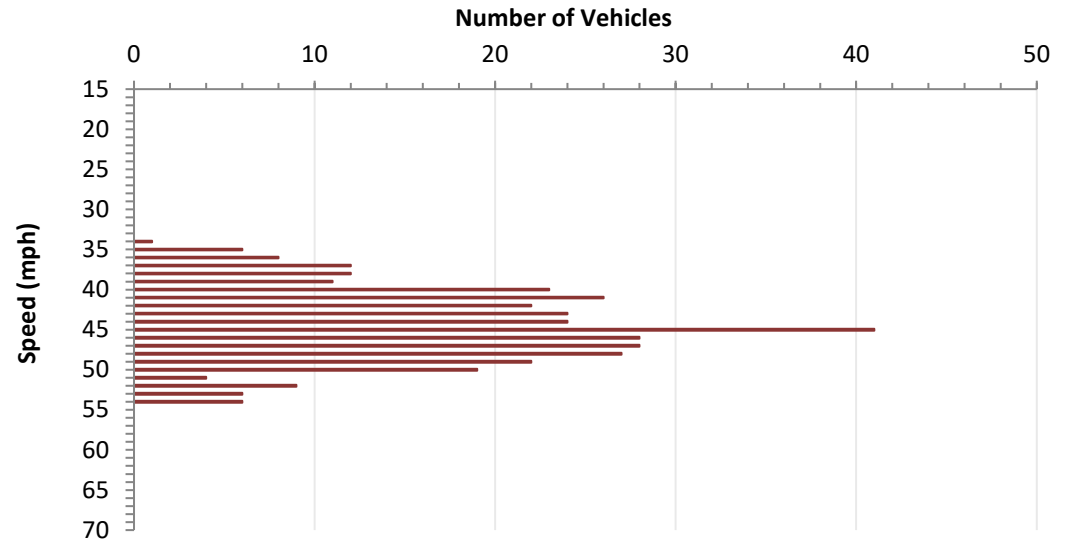


RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name:	Monte Vista Dr	From:	Vista City Limits	To:	Buena Creek Rd
Position:	220' WO Loma Vista Way	Direction:	EB/WB		
Date:	9/25/2019	Weather:	Clear	Project Number:	19-4363-001
Time Start:	12:15 PM	Road Condition:	Dry	Observer:	Contractor
Time End:	2:15 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		
31		
32		
33		
34	1	0.3%
35	6	1.9%
36	8	4.2%
37	12	7.5%
38	12	10.9%
39	11	13.9%
40	23	20.3%
41	26	27.6%
42	22	33.7%
43	24	40.4%
44	24	47.1%
45	41	58.5%
46	28	66.3%
47	28	74.1%
48	27	81.6%
49	22	87.7%
50	19	93.0%
51	4	94.2%
52	9	96.7%
53	6	98.3%
54	6	100.0%
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
Total	359	



DATA ANALYSIS

Average Speed	44.4	Range	34 - 54
50th Percentile	44.3	10 mph Pace	40 - 49
85th Percentile	48.6	Number in Pace	265
90th Percentile	49.4	Percent in Pace	74%
95th Percentile	51.3		



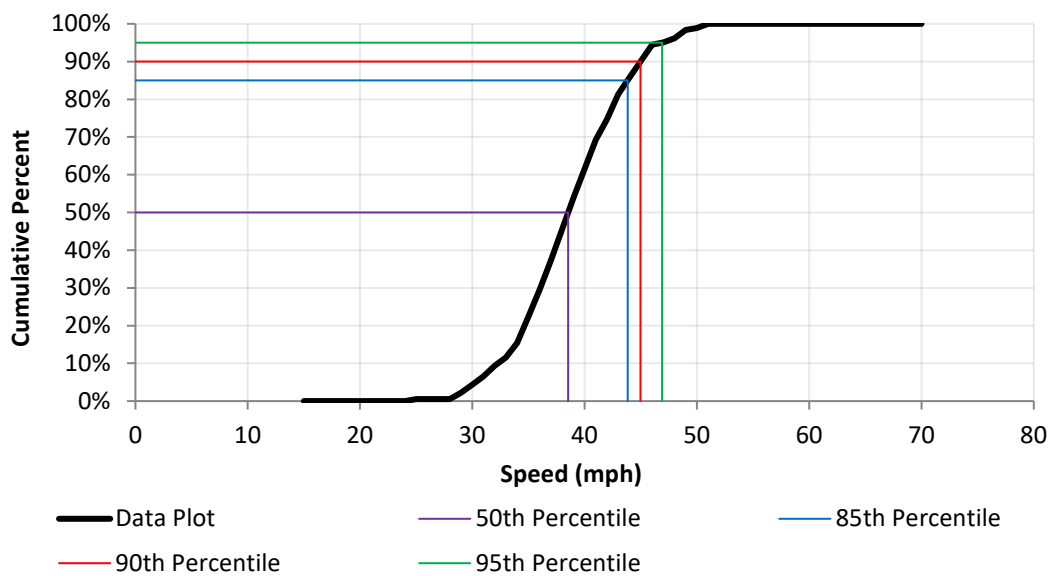
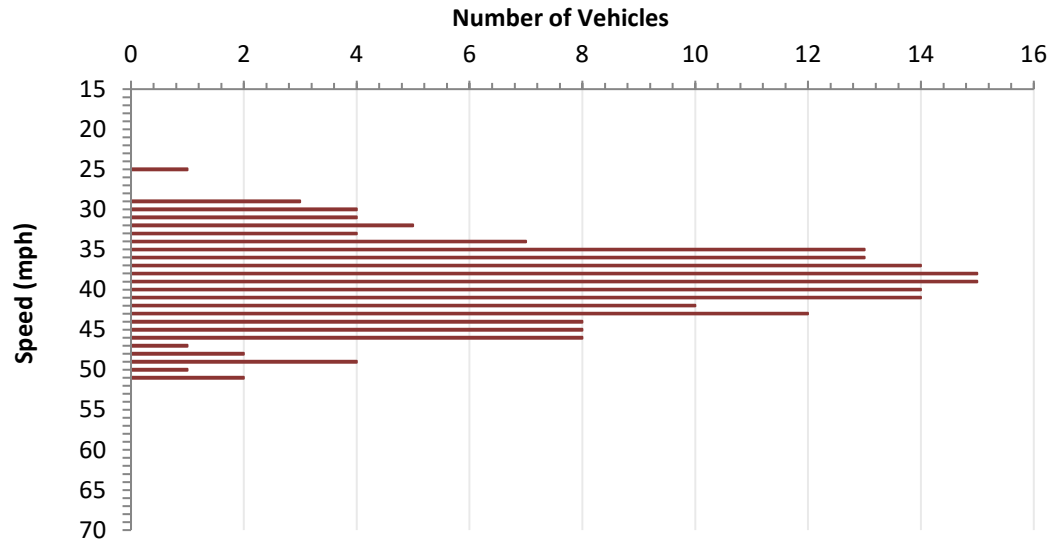
RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name:	Monte Vista Dr	From:	Buena Creek Rd	To:	Vista C/L
Position:	@ Pod Dr	Direction:	NB/SB		

Date:	1/9/2020	Weather:	Clear	Project Number:	N/A
Time Start:	9:30 AM	Road Condition:	Dry	Observer:	County
Time End:	11:30 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	1	0.5%
26		
27		
28		
29	3	2.2%
30	4	4.4%
31	4	6.6%
32	5	9.3%
33	4	11.5%
34	7	15.4%
35	13	22.5%
36	13	29.7%
37	14	37.4%
38	15	45.6%
39	15	53.8%
40	14	61.5%
41	14	69.2%
42	10	74.7%
43	12	81.3%
44	8	85.7%
45	8	90.1%
46	8	94.5%
47	1	95.1%
48	2	96.2%
49	4	98.4%
50	1	98.9%
51	2	100.0%
52		
53		
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
Total	182	



DATA ANALYSIS

Average Speed	39.1	Range	25 - 51
50th Percentile	38.5	10 mph Pace	35 - 44
85th Percentile	43.8	Number in Pace	128
90th Percentile	45.0	Percent in Pace	70%
95th Percentile	46.9		