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

April 12, 2022

TO: Community Planning/Sponsor Group Chairpersons

FROM: Secretary, Traffic Advisory Committee

MEETING NOTICE

Attached is the preliminary agenda for the April 22, 2022 meeting of the Traffic Advisory Committee (TAC).

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Social distancing is currently recommended due to the COVID-19 pandemic. This TAC meeting on April 22, 2022, will be conducted with a virtual meeting platform option. Please use this link below to join the meeting:

Join on your computer or mobile app
Click here to join the meeting
Or call in (audio only)
+1 619-343-2539,,435835775# United States, San Diego
Phone Conference ID: 435 835 775#
Find a local number | Learn More

***

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:sh

Attachment

SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

April 22, 2022 ~ 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
SUPERVISORIAL DISTRICT 2				
2-A.	INTERSECTION CONTROLS		DUNBAR LANE & CHOCOLATE SUMMIT DRIVE/OLDE HIGHWAY 80	BLOSSOM VALLEY/ ALPINE CPG
2-B.	RADAR CERTIFICATION		ALPINE HEIGHTS ROAD SOUTH GRADE ROAD TO END	ALPINE/ ALPINE CPG
2-C.	RADAR CERTIFICATION		LAKESIDE AVENUE RIVERSIDE DRIVE TO PALM ROW DRIVE	LAKESIDE FARMS/ LAKESIDE CPG
SUPERVISORIAL DISTRICT 3				
3-A.	RADAR CERTIFICATION		CALZADA DEL BOSQUE VIA DE SANTA FE TO VIA DE LA VALLE	RANCHO SANTA FE/ SAN DIEGUITO CPG
3-B.	RADAR CERTIFICATION		CALZADA DEL BOSQUE VIA DE LA VALLE TO LINEA DEL CIELO	RANCHO SANTA FE/ SAN DIEGUITO CPG
3-C.	RADAR CERTIFICATION		VIA DE FORTUNA EL CAMINO DEL NORTE TO LA CRESENTA	RANCHO SANTA FE/ SAN DIEGUITO CPG
3-D.	RADAR CERTIFICATION		VIA DE FORTUNA LA CRESCENTA TO SAN ELIJO	RANCHO SANTA FE/ SAN DIEGUITO CPG
SUPERVISORIAL DISTRICT 4				
4-A.	INTERSECTION CONTROLS		LAMAR STREET & HELIX STREET (EAST INTERSECTION)	SPRING VALLEY/ SPRING VALLEY CPG
4-B.	INTERSECTION CONTROLS		LAMAR STREET & HELIX STREET (WEST INTERSECTION)	SPRING VALLEY/ SPRING VALLEY CPG
4-C.	INTERSECTION CONTROLS		LAMAR STREET & VISTA DRIVE	SPRING VALLEY/ SPRING VALLEY CPG

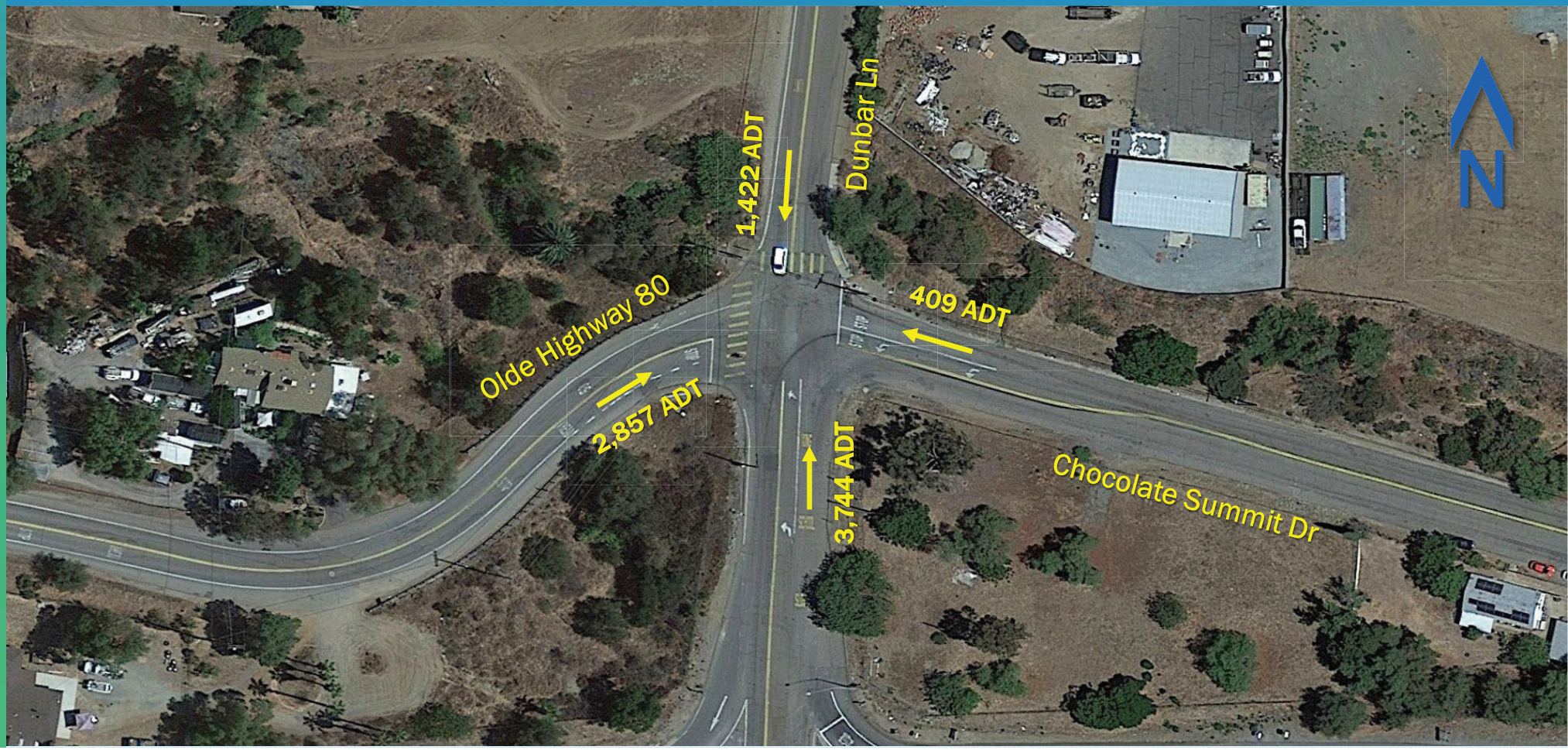
SUPERVISORIAL DISTRICT 5

5-A.	**RADAR CERTIFICATION**	**PAUMA RESERVATION ROAD STATE ROUTE 67 TO ADAMS DRIVE**	**PAUMA/ PALA-PAUMA CSG**

ALL SUPERVISORIAL DISTRICTS

A.	**LOCAL ROADWAY SAFETY PLAN**	**COUNTY MAINTAINED ROADS**	**COUNTYWIDE/ ALL CPG/CSGs**

Dunbar Lane
& Olde Highway 80 / Chocolate Summit Drive



SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: April 22, 2022 **Item 2-A**

SUPERVISORIAL DISTRICT: 2

SUBJECT: Intersection Control

LOCATION: Dunbar Lane and Chocolate Summit Drive/Olde Highway 80, ALPINE (Thos. Bros. 1271-C6)

INITIATED BY: DPW Traffic Engineering

REQUEST: Traffic Control Signal

PROBLEM AS STATED BY REQUESTER:
The intersection of Dunbar Lane and Chocolate Summit Drive/Olde Highway 80 has been identified by Traffic Engineering as meeting Warrant 3, peak hour, of the traffic signal warrants as described in the California Manual on Uniform Traffic Control Devices (CA MUTCD), Chapter 4C, therefore a traffic control signal should be considered.

Existing Traffic Devices
Dunbar Lane is a striped two-lane road with a 36 to 50-foot pavement width. The roadway is striped with a no passing centerline and white edgeline on the west side. The road north of the intersection has a school speed limit signage adjacent to the Los Coches Creek Middle School. Dunbar Lane is unclassified on the County General Plan Mobility Element Network on the north of the intersection of Olde Highway 80/Chocolate Summit Drive and is classified as a Light Collector south of the intersection. The road has no posted speed limit.

Olde Highway 80 is a striped two-lane road with a 36 to 40-foot pavement width. The roadway is striped with a no passing centerline and white edgeline. The road is stop controlled in the eastbound direction at Dunbar Lane. It is classified as a Light Collector on the County General Plan Mobility Element Network. Olde Highway 80 is a designated through highway. The road has a posted 45 speed limit.

Chocolate Summit Drive is a striped two-lane road with a 36-foot pavement width. The roadway is striped with a no passing centerline. The road is stop controlled in the westbound direction at Dunbar Lane. It is classified as a Light Collector on the County General Plan Mobility Element Network. The road has no posted speed limit.

Average Daily Traffic Volumes	**05/21**
Dunbar Lane:	
N/o Olde Highway 80	1,422 SB
S/o Olde Highway 80	3,744 NB

Olde Highway 80:

W/o Dunbar Lane	2,857 EB

Chocolate Summit Drive:

E/o Dunbar Lane	409 WB

Collision Data

There have been 3 reported collisions, none of which involved injury, at this intersection, within a past 5-year period (11-01-2016 to 10-31-2021).

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.sdcounty.ca.gov/dpw/

COUNTY TRAFFIC ENGINEER RECOMMENDATION

Date:	April 4, 2022
Item Title:	Traffic Control Signal
Location:	Dunbar Lane and Chocolate Summit Drive / Old Hwy 80
CTE Recommendation:	**Install a Traffic Control Signal**

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.

- The posted speed limit on Olde Hwy 80 is 50 MPH and unposted on Dunbar Lane and Chocolate Summit Drive (55 MPH Statutory Speed Limit) and the intersection total approach traffic volume (ADT) is 8,432 vehicles/day.

- An engineering study following Chapter 4C of the California MUTCD guidelines, shows that the subject intersection meets warrant 3 – Peak Hour, based on the intersection AM peak hour of 8 - 9 traffic conditions. Hence, a traffic signal control is justified and can be considered for the intersection of Dunbar Lane and Chocolate Summit Drive / Old Hwy 80.

- It is my recommendation, as the County Traffic Engineer to consider a traffic control signal at the intersection of Dunbar Lane and Chocolate Summit Drive / Old Hwy 80 pursuant to Section 21351 of the CVC and the noted engineering study (warrant analysis) dated April 1, 2022.

Zoubir A. Ouadah

Zoubir A. Ouadah, PE. TE.
County Traffic Engineer

04/06/2022

Date

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

COUNT DATE 5/18/2021
CALC [illegible] DATE 4/6/22
CHK [illegible] DATE 4/6/22

DIST ____ CO ____ RTE ____ PM ____

Major St: DAINBAR LN.
Minor St: CHOCOLATE SUMMIT DR / OLDE HWY 80

Critical Approach Speed 55 mph
Critical Approach Speed 50 mph

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

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)												Hour
	U	R	U	R									
APPROACH LANES	1		2 or More										
Both Approaches Major Street	500 (400)	350 (280)	600 (480)	420 (336)									
Highest Approach Minor Street	150 (120)	105 (84)	200 (160)	140 (112)									

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

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)												Hour
	U	R	U	R									
APPROACH LANES	1		2 or More										
Both Approaches Major Street	750 (600)	525 (420)	900 (720)	630 (504)									
Highest Approach Minor Street	75 (60)	53 (42)	100 (80)	70 (56)									

Combination of Conditions A & B SATISFIED YES ☐ NO ☐

REQUIREMENT	CONDITION	✓	FULFILLED
TWO CONDITIONS SATISFIED 80%	A. MINIMUM VEHICULAR VOLUME		Yes ☐ No ☐
	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 ☐ No ☐

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				Hour
Both Approaches - Major Street						
Higher Approach - Minor Street						

*All plotted points fall above the applicable curve in Figure 4C-1. (URBAN AREAS)	Yes ☐ No ☐
OR, All plotted points fall above the applicable curve in Figure 4C-2. (RURAL AREAS)	Yes ☐ No ☐

WARRANT 3 - Peak Hour **SATISFIED YES ☑ NO ☐**
(Part A or Part B must be satisfied)

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; AND	Yes ☐ No ☐
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 ☐ No ☐
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 ☐ No ☐

PART B **SATISFIED YES ☑ NO ☐**

APPROACH LANES	One	2 or More	8-9 Hour
Both Approaches - Major Street			838
Higher Approach - Minor Street			281

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes ☐ No ☐
OR, The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes ☑ No ☐

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 ☐ No ☐
OR, The proposed traffic signal will not restrict progressive traffic flow along the major street.	Yes ☐ No ☐

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

SATISFIED YES ☐ NO ☐

Part A
Gap/Minutes and # of Children

SATISFIED YES ☐ NO ☐

		Hour
Gaps vs Minutes	Minutes Children Using Crossing	
	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 ☐ No ☐

Part B **SATISFIED YES ☐ NO ☐**

The distance to the nearest traffic signal along the major street is greater than 300 ft	Yes ☐ No ☐
OR, The proposed signal will not restrict the progressive movement of traffic.	Yes ☐ No ☐

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 **SATISFIED YES ☐ NO ☐**
(All Parts Must Be Satisfied)

MINIMUM REQUIREMENTS	DISTANCE TO NEAREST SIGNAL	
≥ 1000 ft	N _____ ft, S _____ ft, E _____ ft, W _____ ft	Yes ☐ No ☐
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 ☐ No ☐
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 **SATISFIED YES ☐ NO ☐**
(All Parts Must Be Satisfied)

Adequate trial of alternatives with satisfactory observance and enforcement has failed to reduce the crash frequency.			Yes ☐ No ☐
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 ☐ No ☐
5 OR MORE			
REQUIREMENTS	CONDITIONS	✓	
ONE CONDITION SATISFIED 80%	Warrant 1, Condition A - Minimum Vehicular Volume		Yes ☐ No ☐
	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 **SATISFIED YES ☐ NO ☐**
(All Parts Must Be Satisfied)

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 ☐ No ☐
	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 ☐ No ☐

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 **SATISFIED YES ☐ NO ☐**
(Both Parts A and B Must Be Satisfied)

PART A 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	Yes ☐ No ☐
PART B **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. 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	Yes ☐ No ☐
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. 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 calcualte AF) = _____ VPH	

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

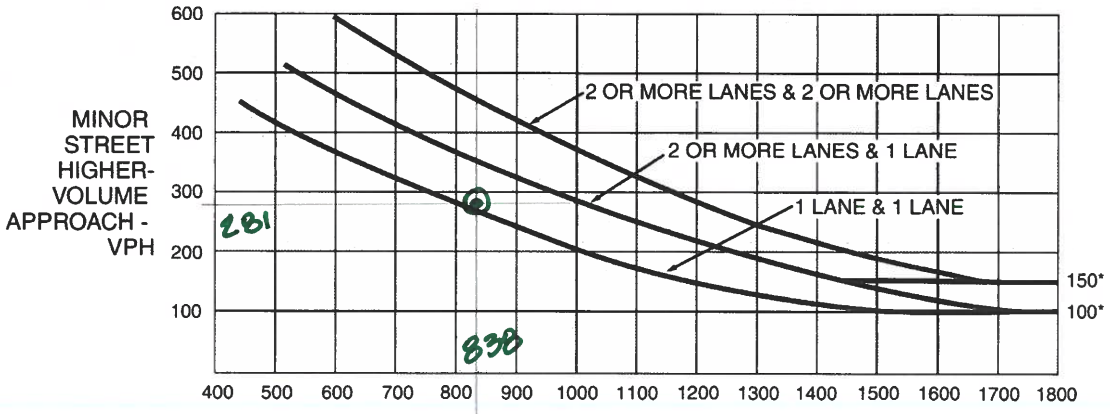
1- Number of Rail Traffic per Day_____ Adjustment factor from table 4C-2____

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 availale or known, then use AF = 1 (no adjustment)

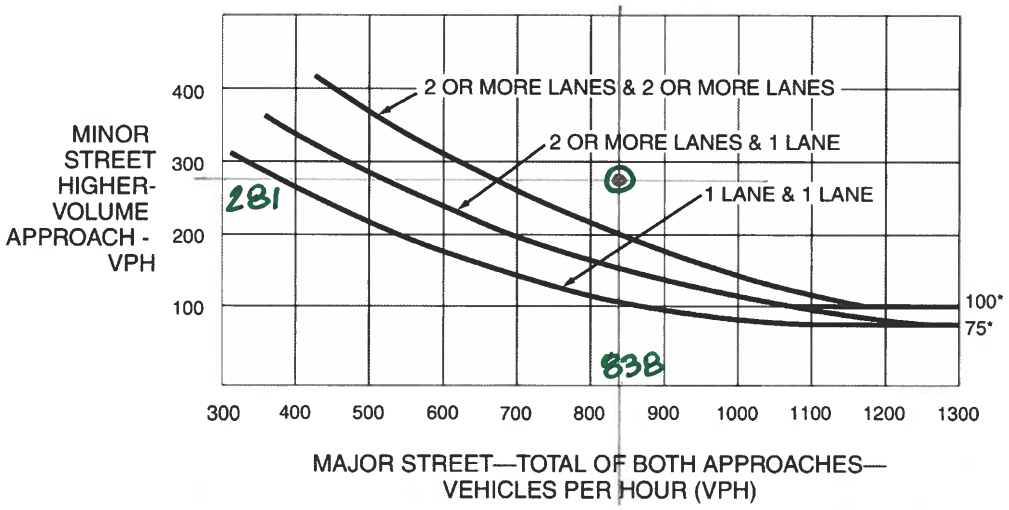
Figure 4C-3. Warrant 3, Peak Hour



*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.

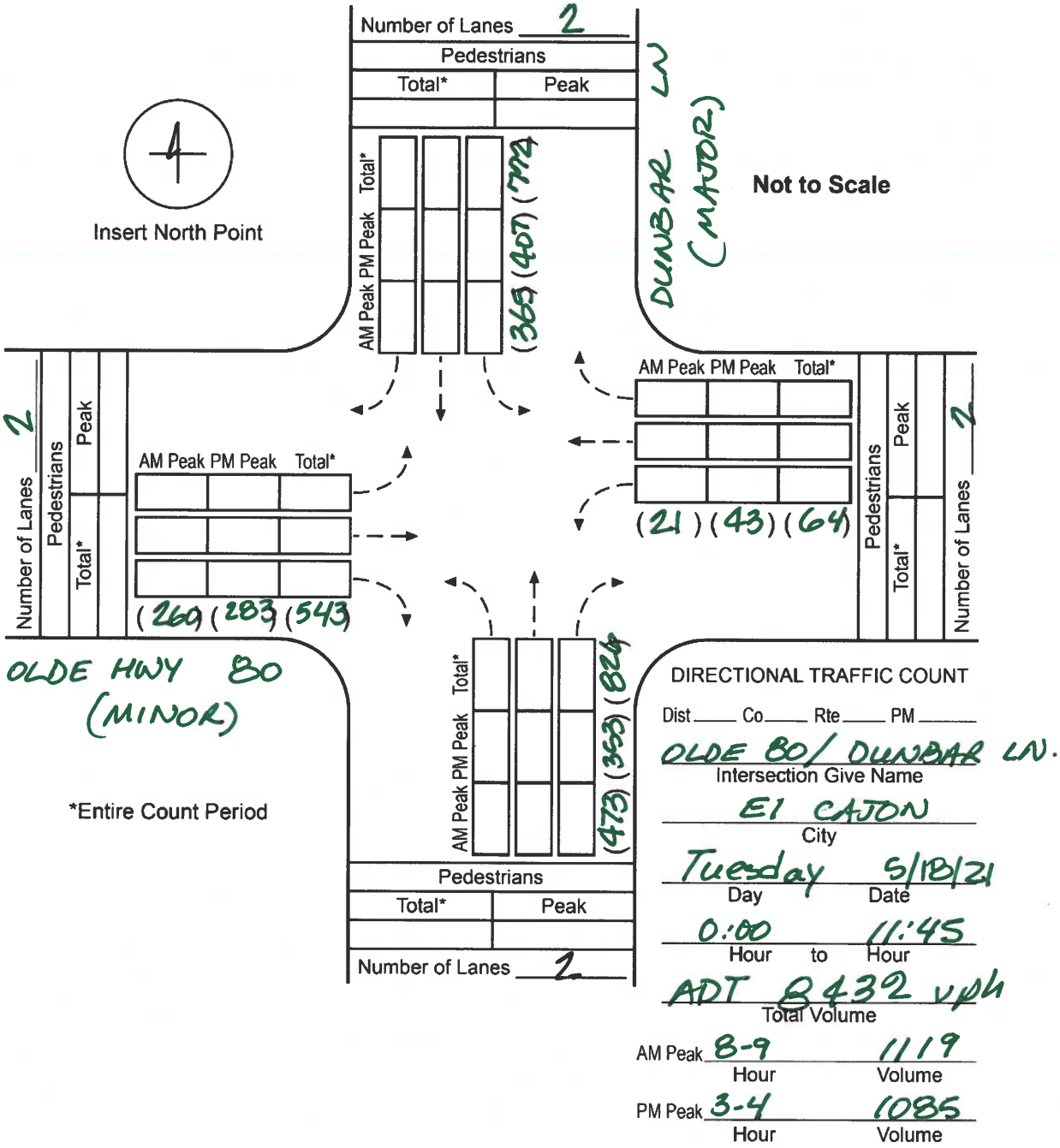
Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(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.

Figure 4C-102 (CA). Traffic Count Worksheet



Prepared by National Data & Surveying Services

VOLUME

Dunbar Ln & Chocolate Summit Dr

Day: Tuesday
Date: 5/18/2021

City: El Cajon
Project #: CA21_040086_001

DAILY TOTALS	NB	SB	EB	WB	Total
	3,744	1,422	2,857	409	8,432

AM Period	NB		SB		EB		WB		TOTAL	
00:00	3		0		3		0		6	
00:15	3		1		4		3		11	
00:30	3		0		4		0		7	
00:45	1	10	0	1	2	13	0	3	3	27
01:00	5		1		4		1		11	
01:15	5		0		3		0		8	
01:30	2		1		1		0		4	
01:45	4	16	0	2	3	11	0	1	7	30
02:00	0		0		4		0		4	
02:15	5		1		4		0		10	
02:30	3		1		4		0		8	
02:45	5	13	0	2	8	20	1	1	14	36
03:00	1		0		2		0		3	
03:15	3		1		6		0		10	
03:30	0		0		3		0		3	
03:45	2	6	1	2	3	14	1	1	7	23
04:00	7		2		3		0		12	
04:15	1		2		4		0		7	
04:30	6		2		6		0		14	
04:45	3	17	4	10	6	19	2	2	15	48
05:00	12		4		7		0		23	
05:15	14		6		12		3		35	
05:30	7		10		13		0		30	
05:45	24	57	7	27	11	43	1	4	43	131
06:00	21		11		25		3		60	
06:15	28		6		22		7		63	
06:30	33		14		30		6		83	
06:45	47	129	9	40	27	104	6	22	89	295
07:00	43		13		33		7		96	
07:15	30		18		33		14		95	
07:30	42		18		47		7		114	
07:45	67	182	17	66	29	142	7	35	120	425
08:00	68		14		43		3		128	
08:15	71		23		51		6		151	
08:30	157		129		82		7		375	
08:45	177	473	199	365	84	260	5	21	465	1119
09:00	56		33		43		1		133	
09:15	36		6		24		10		76	
09:30	39		10		42		3		94	
09:45	43	174	5	54	29	138	2	16	79	382
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10:15	45		8		33		8		94	
10:30	35		9		31		11		86	
10:45	41	149	7	41	38	147	5	26	91	363
11:00	43		17		42		9		111	
11:15	41		8		30		10		89	
11:30	36		11		54		9		110	
11:45	36	156	10	46	35	161	3	31	84	394
TOTALS		1382		656		1072		163		3273
SPLIT %		42.2%		20.0%		32.8%		5.0%		38.8%

PM Period	NB		SB		EB		WB		TOTAL	
12:00	40		12		38		4		94	
12:15	51		17		46		6		120	
12:30	44		17		47		7		115	
12:45	41	176	8	54	45	176	5	22	99	428
13:00	55		11		49		6		121	
13:15	52		14		49		0		115	
13:30	41		8		48		4		101	
13:45	71	219	14	47	45	191	8	18	138	475
14:00	65		14		47		5		131	
14:15	80		13		67		5		165	
14:30	100		10		69		11		190	
14:45	98	343	20	57	90	273	13	34	221	707
15:00	133		271		88		8		500	
15:15	84		83		84		11		262	
15:30	71		43		45		15		174	
15:45	65	353	10	407	66	283	8	42	149	1085
16:00	64		16		68		14		162	
16:15	67		14		59		6		146	
16:30	57		16		57		8		138	
16:45	54	242	14	60	64	248	5	33	137	583
17:00	65		7		54		4		130	
17:15	68		18		58		3		147	
17:30	38		10		51		5		104	
17:45	46	217	6	41	30	193	8	20	90	471
18:00	41		8		51		7		107	
18:15	26		11		48		2		87	
18:30	34		2		29		1		66	
18:45	36	137	13	34	33	161	1	11	83	343
19:00	28		3		32		3		66	
19:15	25		9		20		1		55	
19:30	27		4		29		3		63	
19:45	31	111	11	27	23	104	2	9	67	251
20:00	20		6		19		4		49	
20:15	31		6		18		7		62	
20:30	73		2		21		4		100	
20:45	60	184	2	16	15	73	6	21	83	294
21:00	47		4		17		6		74	
21:15	48		4		11		8		71	
21:30	49		2		9		6		66	
21:45	35	179	2	12	2	39	0	20	39	250
22:00	26		4		8		0		38	
22:15	44		2		8		8		62	
22:30	26		2		7		1		36	
22:45	26	122	1	9	7	30	3	12	37	173
23:00	26		1		5		2		34	
23:15	24		0		2		2		28	
23:30	17		1		4		0		22	
23:45	12	79	0	2	3	14	0	4	15	99
TOTALS		2362		766		1785		246		5159
SPLIT %		45.8%		14.8%		34.6%		4.8%		61.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	3,744	1,422	2,857	409	8,432

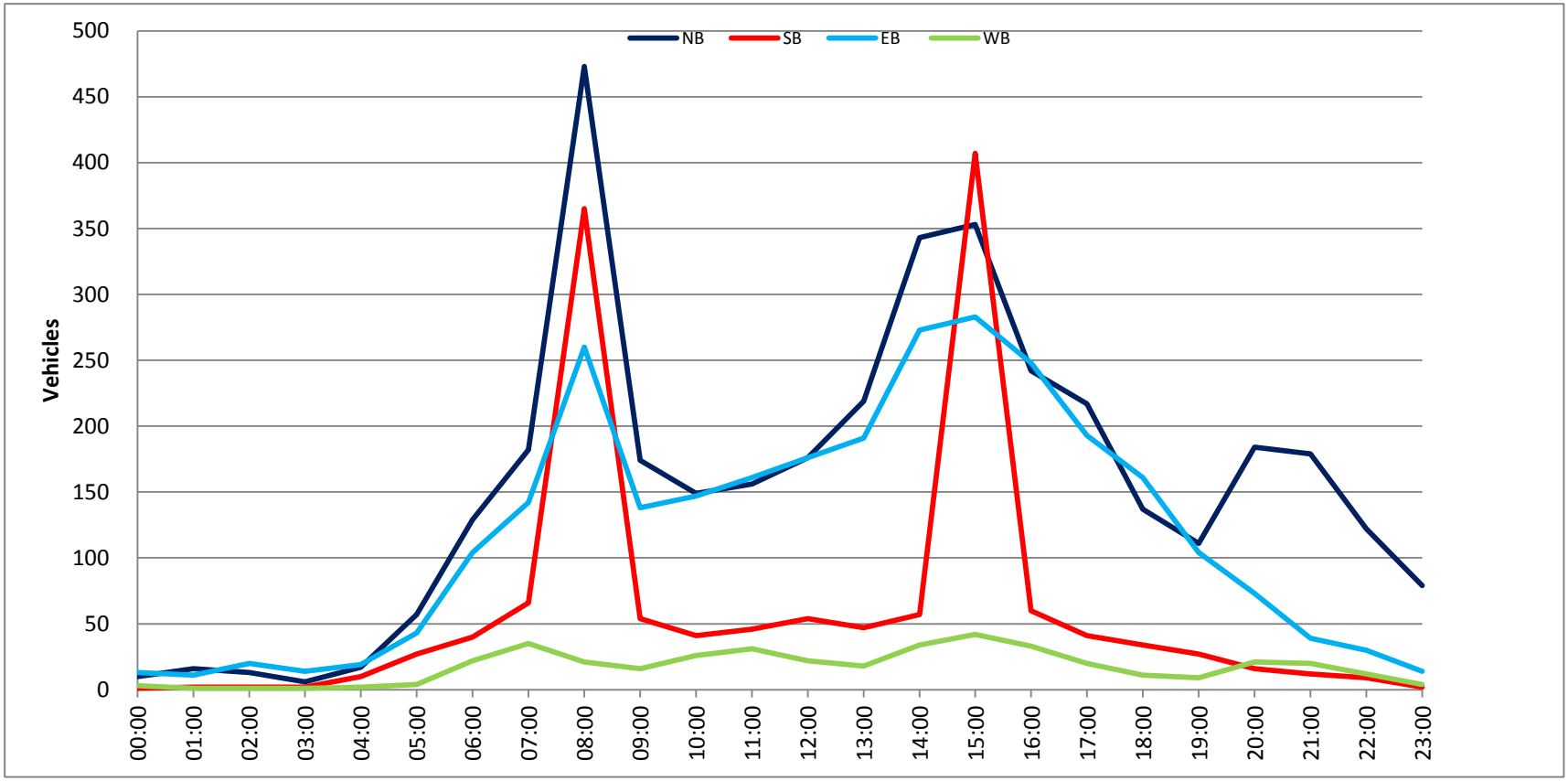
AM Peak Hour	08:00	08:15	08:00	07:00	08:15
AM Pk Volume	473	384	260	35	1124
Pk Hr Factor	0.668	0.482	0.774	0.625	0.604
7 - 9 Volume	655	431	402	56	1544
7 - 9 Peak Hour	08:00	08:00	08:00	07:00	08:00
7 - 9 Pk Volume	473	365	260	35	1119
Pk Hr Factor	0.668	0.459	0.774	0.625	0.602

PM Peak Hour	14:30	14:45	14:30	15:15	14:30
PM Pk Volume	415	417	331	48	1173
Pk Hr Factor	0.780	0.385	0.919	0.800	0.587
4 - 6 Volume	459	101	441	53	1054
4 - 6 Peak Hour	16:30	16:00	16:00	16:00	16:00
4 - 6 Pk Volume	244	60	248	33	583
Pk Hr Factor	0.897	0.938	0.912	0.589	0.900

Prepared by National Data & Surveying Services

Project #: CA21_040086_001 **City:** El Cajon

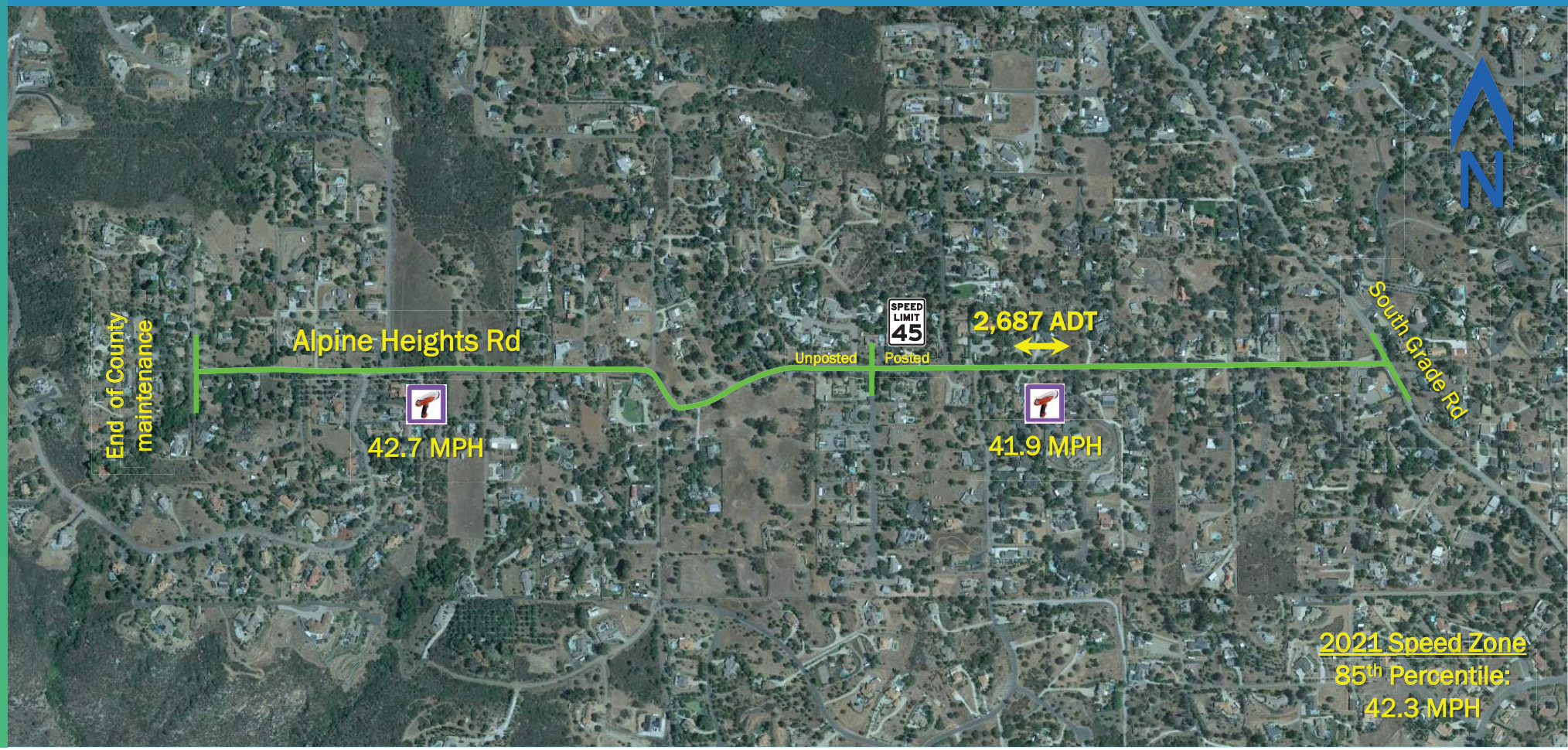
Location: Dunbar Ln & Chocolate Summit Dr **Date:** 5/18/2021



2-B. Radar Certification

Alpine Heights Road

South Grade Road to end of County maintenance (1.34 miles)



SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: April 22, 2022 **Item 2-B**

SUPERVISORIAL DISTRICT: 2

SUBJECT: Radar Certification

LOCATION: Alpine Heights Road from South Grade Road to end of County maintance (a distance of 1.34 miles) ALPINE (Thos. Bros. 1253-J3)

INITIATED BY: DPW Traffic Engineering

REQUEST: Radar Recertification

PROBLEM AS STATED BY REQUESTER:
Alpine Heights Road from South Grade Road westerly 3,000 feet is posted 45 MPH. Alpine Heights Road from that point 3,000 feet west of South Grade Road to the end of County maintenance is currently unposted. A preliminary review of prevailing speeds and roadway conditions could support radar certification of a 40 MPH speed limit on Alpine Heights Road from South Grade Road to the end of County maintenance.

Existing Traffic Devices
Alpine Heights Road is a striped 2-lane undivided highway with a pavement width of 30 feet. The roadway is striped with no passing and passing centerlines and white edgeline. The road is posted with equestrian advisory and a speed advised reverse turn. Alpine Heights Road is unclassified on the County General Plan Mobility Element Network. The roadway splits into two roadbeds from Lilac Lane to Michael Court with a landscaped median between. Alpine Heights Road is posted 45 MPH/Radar Enforced from South Grade Road to westerly 3,000 feet and has no formal posted speed limit from that point 3,000 feet west of South Grade Road to the end of County maintenance.

Average Daily Traffic Volumes	**12/21**	**07/14**
Alpine Heights Road:		
350’ E/o Tompau Place	2,687	2,350

Speed Data		**85th Percentile**	**10 MPH Pace**	**% in Pace**
Alpine Heights Road:				
350’ E/o Tompau Place	(2021)	41.9 MPH	32-41	73.0%
	(2014)	44.0 MPH	35-44	74.0%
180’ E/o Via Corina	(2021)	42.7 MPH	35-44	78.0%
Speed Zone	(2021)	42.3 MPH	33-42	75.5%

Collision Data

There have been 4 reported collisions, none of which involved injury, along this segment of roadway in a 3 year period (11-01-18 to 10-31-21). These collisions result in a segment accident rate of 1.02 collisions per million vehicle miles. The statewide average is 1.32 collisions per million vehicle miles for similar suburban 2 lanes or less with speeds 45 to 55 MPH.

Prepared by National Data & Surveying Services

VOLUME

Alpine Heights Rd 350' E/O Tompau Pl

Day: Wednesday
Date: 12/8/2021

City: Alpine
Project #: CA21_040210_007

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,335	1,352	2,687

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		0		0		12:00			12		14		26	
00:15			0		4		4		12:15			22		18		40	
00:30			1		0		1		12:30			20		17		37	
00:45			0	1	0	4	0	5	12:45			23	77	14	63	37	140
01:00			0		0		0		13:00			19		20		39	
01:15			0		0		0		13:15			28		29		57	
01:30			0		0		0		13:30			21		19		40	
01:45			0		0		0		13:45			18	86	27	95	45	181
02:00			0		1		1		14:00			20		24		44	
02:15			0		0		0		14:15			23		21		44	
02:30			0		0		0		14:30			31		27		58	
02:45			0		0	1	0	1	14:45			24	98	20	92	44	190
03:00			0		1		1		15:00			33		33		66	
03:15			2		0		2		15:15			16		38		54	
03:30			1		0		1		15:30			32		43		75	
03:45			1	4	0	1	1	5	15:45			20	101	32	146	52	247
04:00			2		0		2		16:00			25		35		60	
04:15			0		0		0		16:15			20		39		59	
04:30			2		2		4		16:30			24		37		61	
04:45			9	13	0	2	9	15	16:45			20	89	37	148	57	237
05:00			13		0		13		17:00			17		39		56	
05:15			13		0		13		17:15			19		34		53	
05:30			14		2		16		17:30			25		30		55	
05:45			8	48	1	3	9	51	17:45			11	72	21	124	32	196
06:00			17		5		22		18:00			8		33		41	
06:15			28		5		33		18:15			16		22		38	
06:30			29		6		35		18:30			7		20		27	
06:45			29	103	11	27	40	130	18:45			6	37	22	97	28	134
07:00			32		22		54		19:00			7		12		19	
07:15			32		5		37		19:15			4		19		23	
07:30			44		9		53		19:30			2		14		16	
07:45			37	145	17	53	54	198	19:45			6	19	15	60	21	79
08:00			27		20		47		20:00			5		11		16	
08:15			24		19		43		20:15			1		17		18	
08:30			57		23		80		20:30			5		11		16	
08:45			29	137	32	94	61	231	20:45			1	12	10	49	11	61
09:00			22		18		40		21:00			8		15		23	
09:15			27		18		45		21:15			2		8		10	
09:30			23		19		42		21:30			6		16		22	
09:45			22	94	10	65	32	159	21:45			3	19	7	46	10	65
10:00			18		10		28		22:00			2		6		8	
10:15			22		20		42		22:15			4		3		7	
10:30			16		16		32		22:30			4		8		12	
10:45			22	78	20	66	42	144	22:45			0	10	5	22	5	32
11:00			21		19		40		23:00			1		3		4	
11:15			23		21		44		23:15			1		2		3	
11:30			15		20		35		23:30			0		6		6	
11:45			31	90	21	81	52	171	23:45			0	2	2	13	2	15
TOTALS				713		397		1110	TOTALS				622		955		1577
SPLIT %				64.2%		35.8%		41.3%	SPLIT %				39.4%		60.6%		58.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,335	1,352	2,687

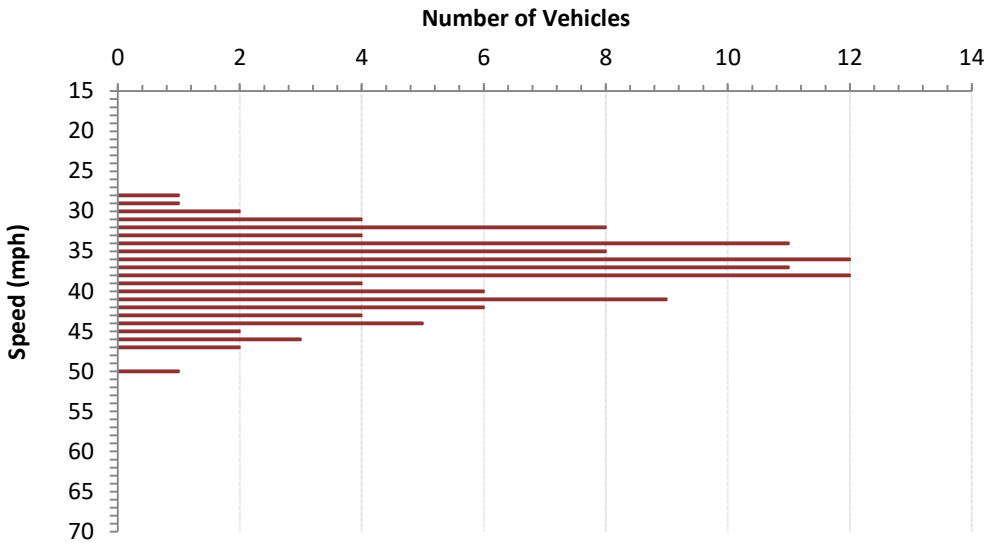
AM Peak Hour			07:00	08:00	08:00	PM Peak Hour	14:15	16:15	15:00
AM Pk Volume			145	94	231	PM Pk Volume	111	152	247
Pk Hr Factor			0.824	0.734	0.722	Pk Hr Factor	0.841	0.974	0.823
7 - 9 Volume	0	0	282	147	429	4 - 6 Volume	0	0	161	272	433
7 - 9 Peak Hour			07:00	08:00	08:00	4 - 6 Peak Hour			16:00	16:15	16:00
7 - 9 Pk Volume	0	0	145	94	231	4 - 6 Pk Volume	0	0	89	152	237
Pk Hr Factor	0.000	0.000	0.824	0.734	0.722	Pk Hr Factor	0.000	0.000	0.890	0.974	0.971

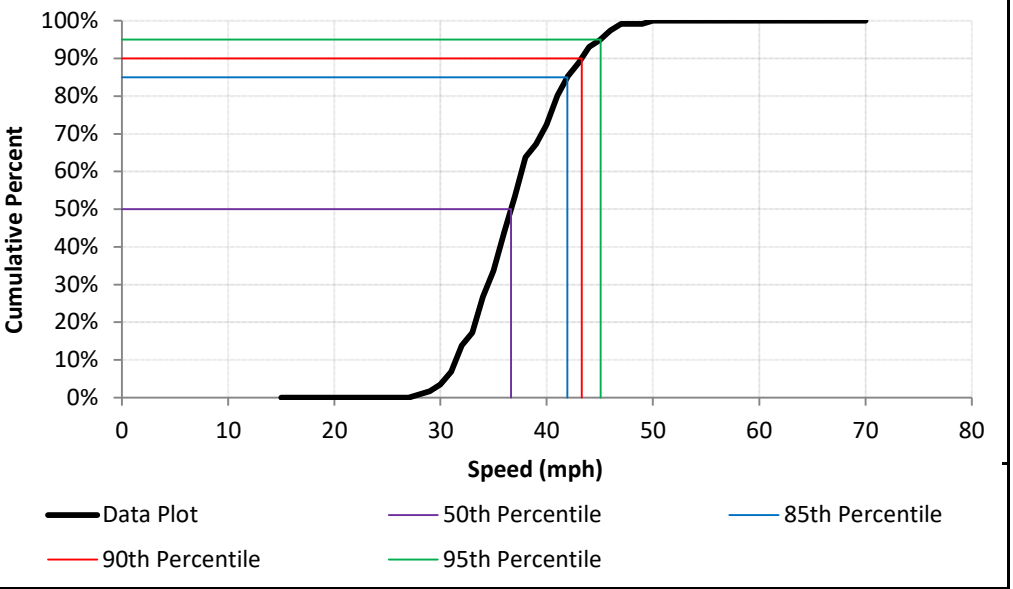
RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name:	Alpine HeightsRd	**From:**	Tompau Pl	**To:**	S Grade Rd
Position:	Alpine Heights Rd 350 E/O Tompau Pl			**Direction:**	EBT/WBT
Date:	12/21/2021	**Weather:**	Partly Cloudy	**Project Number:**	0
Time Start:	9:37AM	**Road Condition:**	Dry	**Observer:**	Samuel Cecere
Time End:	10:28AM	**Posted Speed:**	45mph	**Calibration Test:**	0

Speed (mph)	Num. Veh.	Cum. Pct.
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28	1	0.9%
29	1	1.7%
30	2	3.4%
31	4	6.9%
32	8	13.8%
33	4	17.2%
34	11	26.7%
35	8	33.6%
36	12	44.0%
37	11	53.4%
38	12	63.8%
39	4	67.2%
40	6	72.4%
41	9	80.2%
42	6	85.3%
43	4	88.8%
44	5	93.1%
45	2	94.8%
46	3	97.4%
47	2	99.1%
48		
49		
50	1	100.0%
51		
52		
53		
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
Total	116	





DATA ANALYSIS

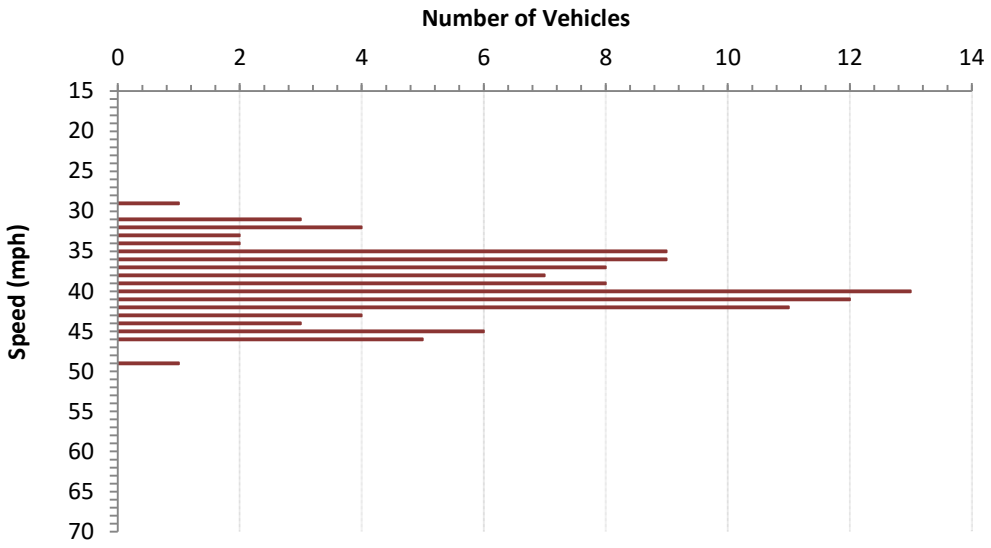
Average Speed	37.6	Range	28 - 50
50th Percentile	36.6	10 mph Pace	32 - 41
85th Percentile	41.9	Number in Pace	85
90th Percentile	43.3	Percent in Pace	73%
95th Percentile	45.1		

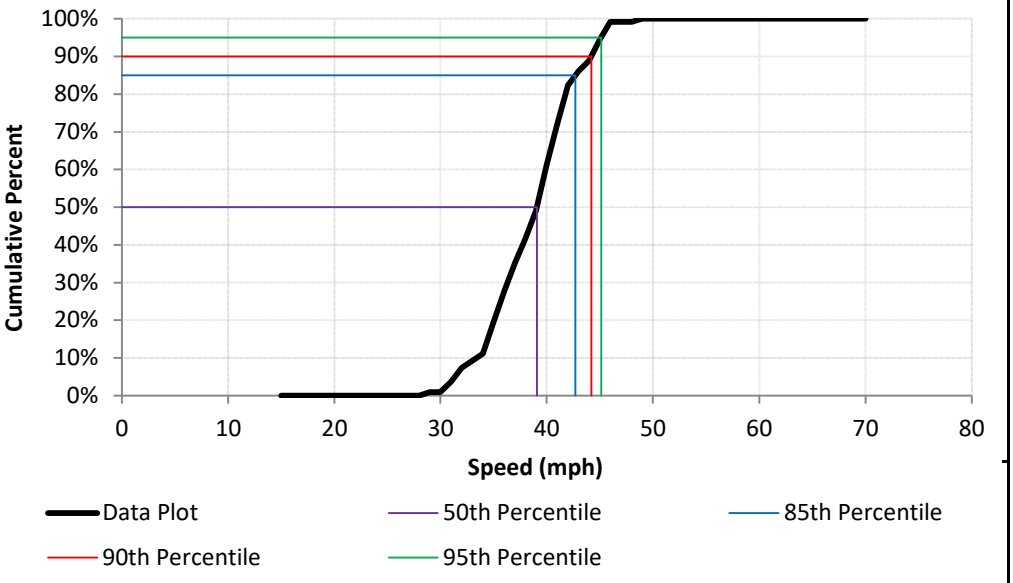
RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name:	Alpine HeightsRd	**From:**	Via Corina	**To:**	Lilac Ln
Position:	Alpine Heights Rd 180' E/O Via Corina			**Direction:**	EBT/WBT
Date:	12/21/2021	**Weather:**	Partly Cloudy	**Project Number:**	0
Time Start:	11:07AM	**Road Condition:**	Dry	**Observer:**	Samuel Cecere
Time End:	1:35PM	**Posted Speed:**	45mph	**Calibration Test:**	0

Speed (mph)	Num. Veh.	Cum. Pct.
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29	1	0.9%
30		
31	3	3.7%
32	4	7.4%
33	2	9.3%
34	2	11.1%
35	9	19.4%
36	9	27.8%
37	8	35.2%
38	7	41.7%
39	8	49.1%
40	13	61.1%
41	12	72.2%
42	11	82.4%
43	4	86.1%
44	3	88.9%
45	6	94.4%
46	5	99.1%
47		
48		
49	1	100.0%
50		
51		
52		
53		
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
Total	108	





DATA ANALYSIS

Average Speed	39.1	Range	29 - 49
50th Percentile	39.1	10 mph Pace	35 - 44
85th Percentile	42.7	Number in Pace	84
90th Percentile	44.2	Percent in Pace	78%
95th Percentile	45.1		

2-C. Radar Certification

Lakeside Avenue

Riverside Drive to Palm Row Drive (0.59 miles)

SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: April 22, 2022 **Item 2-C**

SUPERVISORIAL DISTRICT: 2

SUBJECT: Radar Certification

LOCATION: Lakeside Avenue from Riverside Drive to Palm Row Drive (a distance of 0.59 miles) LAKESIDE FARMS (Thos. Bros. 1231-J2)

INITIATED BY: DPW Traffic Engineering

REQUEST: Radar Recertification

PROBLEM AS STATED BY REQUESTER:
Lakeside Avenue from Riverside Drive to Palm Row Drive is posted 35 MPH. A preliminary review of prevailing speeds and roadway conditions could support radar certification of a 30 MPH speed limit.

Existing Traffic Devices
Lakeside Avenue is a striped 2-lane undivided highway with a pavement width of 24 to 40 feet. The roadway is striped with no passing centerline. The road is posted with stop advisory signs and school zone ahead, school crossing ahead, school crossing, and school speed limit signage adjacent to the Lakside Farms Elementary School. Lakeside Avenue is unclassified on the County General Plan Mobility Element Network. The roadway has two school crosswalks and 90 degree angled parking adjacent to the elementary school and an all-way stop intersection at Vista Camino. Lakeside Avenue is posted 35 MPH/Radar Enforced.

Average Daily Traffic Volumes	**03/22**	**01/16**
Lakeside Avenue:		
200' E/o Palm Row Drive	657	850

Speed Data		**85th Percentile**	**10 MPH Pace**	**% in Pace**
Lakeside Avenue:				
500' W/o Vista Camino	(2022)	31.0 MPH	22-31	82.0%
300' W/o Vista Camino	(2016)	35.0 MPH	26-35	85.0%

Collision Data
There have been 3 reported collisions, none of which involved injury, along this segment of roadway in a 3 year period (11-01-18 to 10-31-21). These collisions result in a segment accident rate of 0.76 collisions per million vehicle miles. The statewide average is 1.6 collisions per million vehicle miles for similar suburban 2 lanes or less with speeds less than 45 MPH.

Prepared by National Data & Surveying Services

VOLUME

Lakeside Ave 200' E/O Palm Row Dr

Day: Tuesday
Date: 3/22/2022

City: Lakeside
Project #: CA22_040044_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	301	356	657

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		0		0		12:00			7		2		9	
00:15			1		0		1		12:15			2		6		8	
00:30			0		0		0		12:30			6		4		10	
00:45			0	1	0		0	1	12:45			7	22	5	17	12	39
01:00			0		0		0		13:00			6		7		13	
01:15			0		0		0		13:15			4		5		9	
01:30			1		0		1		13:30			5		1		6	
01:45			0	1	2	2	2	3	13:45			10	25	7	20	17	45
02:00			1		0		1		14:00			8		2		10	
02:15			0		0		0		14:15			8		3		11	
02:30			1		1		2		14:30			5		8		13	
02:45			0	2	0	1	0	3	14:45			10	31	7	20	17	51
03:00			0		0		0		15:00			11		11		22	
03:15			0		0		0		15:15			4		29		33	
03:30			0		0		0		15:30			4		8		12	
03:45			0		0		0		15:45			7	26	13	61	20	87
04:00			1		0		1		16:00			3		8		11	
04:15			0		0		0		16:15			4		12		16	
04:30			1		0		1		16:30			5		8		13	
04:45			1	3	1	1	2	4	16:45			7	19	10	38	17	57
05:00			0		0		0		17:00			7		15		22	
05:15			0		3		3		17:15			5		6		11	
05:30			1		0		1		17:30			6		7		13	
05:45			1	2	1	4	2	6	17:45			8	26	8	36	16	62
06:00			1		1		2		18:00			3		5		8	
06:15			2		2		4		18:15			3		6		9	
06:30			4		2		6		18:30			0		4		4	
06:45			0	7	4	9	4	16	18:45			2	8	3	18	5	26
07:00			7		2		9		19:00			5		1		6	
07:15			1		7		8		19:15			4		3		7	
07:30			5		6		11		19:30			2		2		4	
07:45			8	21	4	19	12	40	19:45			2	13	3	9	5	22
08:00			4		9		13		20:00			0		5		5	
08:15			6		12		18		20:15			3		1		4	
08:30			13		4		17		20:30			0		1		1	
08:45			7	30	9	34	16	64	20:45			5	8	4	11	9	19
09:00			1		6		7		21:00			1		2		3	
09:15			5		6		11		21:15			1		2		3	
09:30			2		7		9		21:30			2		0		2	
09:45			2	10	6	25	8	35	21:45			0	4	0	4	0	8
10:00			8		3		11		22:00			1		1		2	
10:15			2		2		4		22:15			1		0		1	
10:30			3		3		6		22:30			1		2		3	
10:45			5	18	2	10	7	28	22:45			1	4	0	3	1	7
11:00			3		1		4		23:00			1		2		3	
11:15			5		5		10		23:15			2		0		2	
11:30			2		4		6		23:30			1		0		1	
11:45			6	16	2	12	8	28	23:45			0	4	0	2	0	6
TOTALS				111		117		228	TOTALS				190		239		429
SPLIT %				48.7%		51.3%		34.7%	SPLIT %				44.3%		55.7%		65.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	301	356	657

AM Peak Hour			07:45	08:00	08:00	PM Peak Hour			14:15	15:00	15:00
AM Pk Volume			31	34	64	PM Pk Volume			34	61	87
Pk Hr Factor			0.596	0.708	0.889	Pk Hr Factor			0.773	0.526	0.659
7 - 9 Volume	0	0	51	53	104	4 - 6 Volume	0	0	45	74	119
7 - 9 Peak Hour			07:45	08:00	08:00	4 - 6 Peak Hour			17:00	16:15	16:15
7 - 9 Pk Volume	0	0	31	34	64	4 - 6 Pk Volume	0	0	26	45	68
Pk Hr Factor	0.000	0.000	0.596	0.708	0.889	Pk Hr Factor	0.000	0.000	0.813	0.750	0.773

RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name:	Lakeside Ave	**From:**	Vista Camino	**To:**	Palm Row Dr
Position:	500' W/O Vista Camino			**Direction:**	EB/WB
Date:	04/04//2022	**Weather:**	Clear	**Project Number:**	0
Time Start:	1:10PM	**Road Condition:**	Dry	**Observer:**	Samuel Cecere
Time End:	3:20PM	**Posted Speed:**	35 MPH	**Calibration Test:**	Y

Speed (mph)	Num. Veh.	Cum. Pct.
15		
16		
17		
18		
19		
20	2	1.9%
21	1	2.8%
22	6	8.3%
23	5	13.0%
24	6	18.5%
25	10	27.8%
26	11	38.0%
27	9	46.3%
28	12	57.4%
29	12	68.5%
30	9	76.9%
31	9	85.2%
32	3	88.0%
33	3	90.7%
34	2	92.6%
35	4	96.3%
36		
37		
38	2	98.1%
39	2	100.0%
40		
41		
42		
43		
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51		
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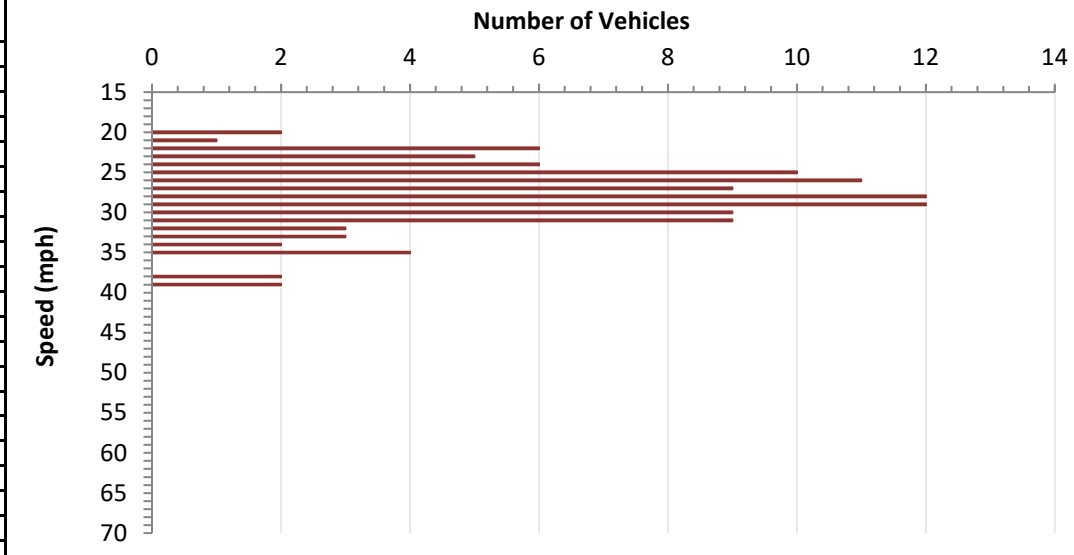
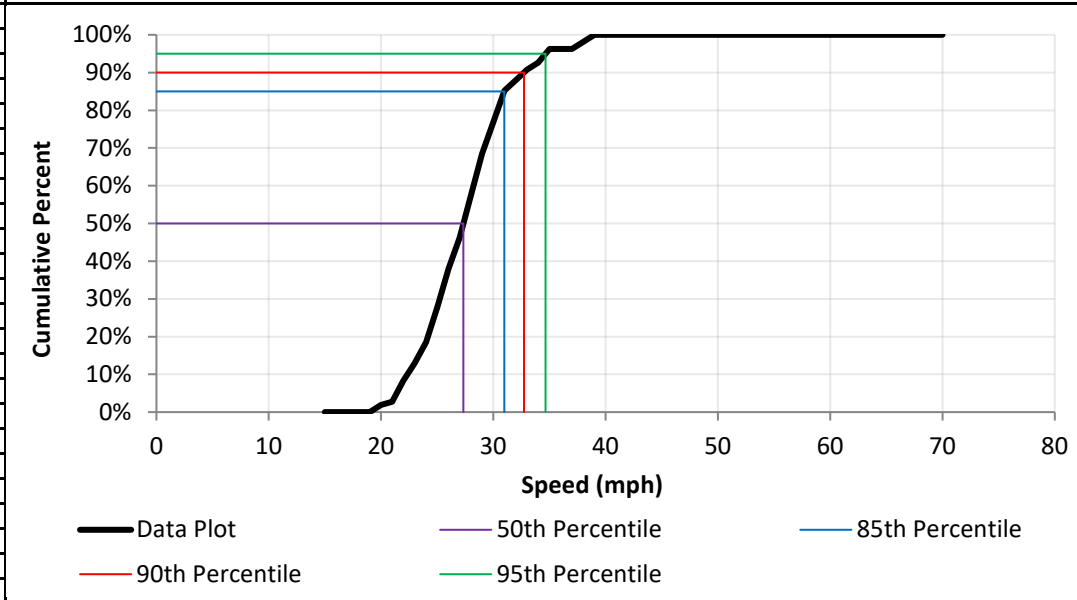
66		
67		
68		
69		
70		
Total	108	





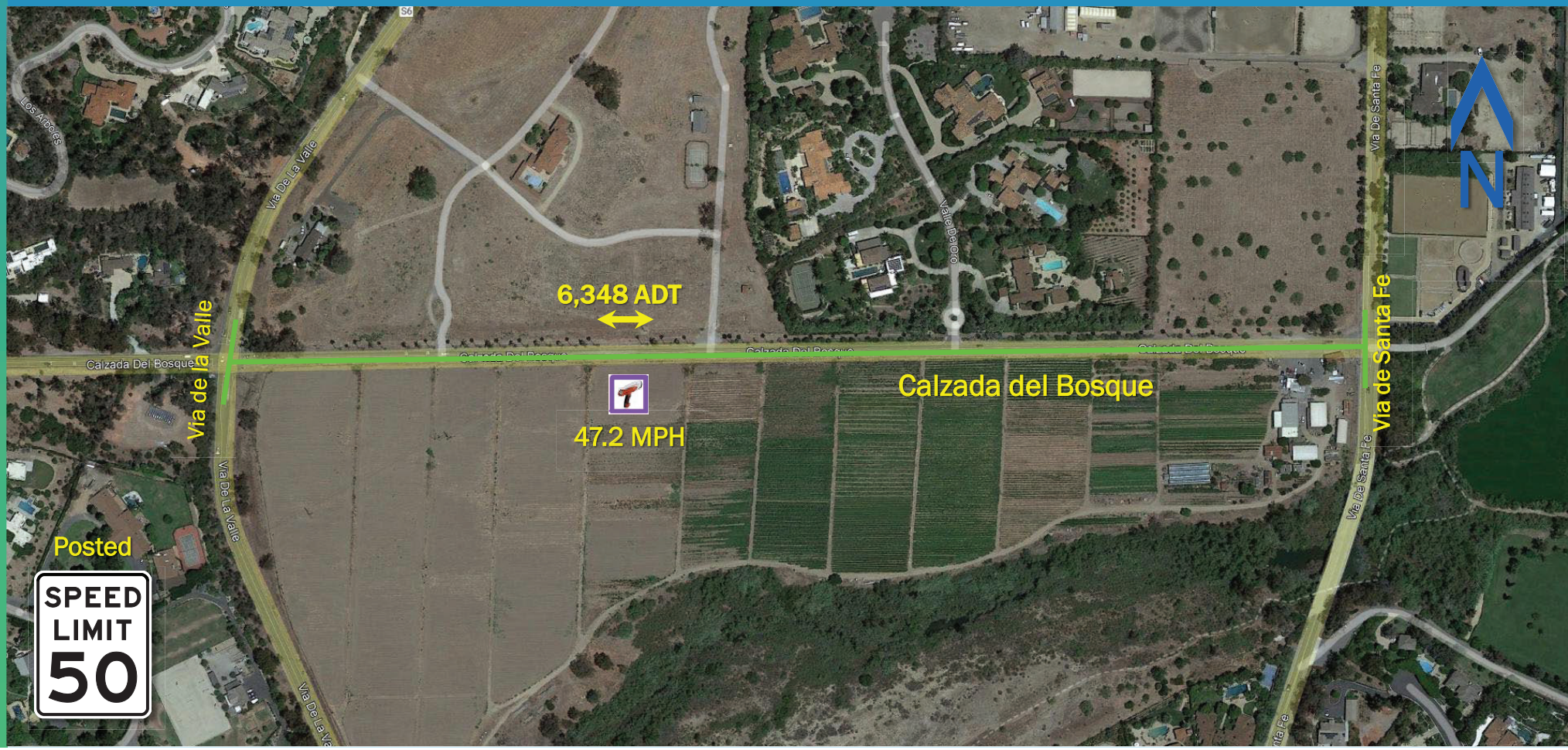
DATA ANALYSIS

Average Speed	28.0	Range	20 - 39
50th Percentile	27.3	10 mph Pace	22 - 31
85th Percentile	31.0	Number in Pace	89
90th Percentile	32.7	Percent in Pace	82%
95th Percentile	34.7		

3-A. Radar Certification

Calzada del Bosque

Via de Santa Fe to Via de la Valle (0.55 miles)



SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: April 22, 2022 **Item 3-A**

SUPERVISORIAL DISTRICT: 3

SUBJECT: Radar Certification

LOCATION: Calzada del Bosque from Via de Santa Fe to Via de la Valle (a distance of 0.55 miles) RANCHO SANTA FE (Thos. Bros. 1168-E5)

INITIATED BY: DPW Traffic Engineering

REQUEST: Radar Recertification

PROBLEM AS STATED BY REQUESTER:
Calzada del Bosque from Via de Santa Fe to Via de la Valle is posted 50 MPH. A preliminary review of prevailing speeds and roadway conditions could support radar certification of a 45 MPH speed limit.

Existing Traffic Devices
Calzada del Bosque is a striped 2-lane undivided highway with a pavement width of 26 feet. The roadway is striped with no passing and passing centerline. The road is posted with stop advisory and signal advisory signs. Calzada del Bosque is unclassified on the County General Plan Mobility Element Network. The road is posted 7-ton weight restricted. Calzada del Bosque is posted 50 MPH/Radar Enforced.

Average Daily Traffic Volumes	**03/22**	**06/16**
Calzada del Bosque:		
1,000' E/o Via de la Valle	6,348	6,930

Speed Data		**85th Percentile**	**10 MPH Pace**	**% in Pace**
Calzada del Bosque:				
1,000' E/o Via de la Valle	(2022)	47.2 MPH	36-45	65.0%
	(2016)	51.8 MPH	43-52	81.5%

Collision Data
There have been 2 reported collisions, none of which involved injury, along this segment of roadway in a 3 year period (11-01-18 to 10-31-21). These collisions result in a segment accident rate of 0.52 collisions per million vehicle miles. The statewide average is 1.32 collisions per million vehicle miles for similar suburban 2 lanes or less with speeds 45 to 55 MPH.

Prepared by National Data & Surveying Services

VOLUME

Calzada Del Bosque 1000' E/O Via De La Valle

Day: Tuesday
Date: 3/22/2022

City: Rancho Santa Fe
Project #: CA22_040044_004

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	3,352	2,996	6,348

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			3		2		5		12:00			62		49		111	
00:15			3		4		7		12:15			50		40		90	
00:30			2		0		2		12:30			56		38		94	
00:45			1	9	1	7	2	16	12:45			49	217	48	175	97	392
01:00			1		0		1		13:00			54		41		95	
01:15			1		0		1		13:15			41		48		89	
01:30			0		0		0		13:30			49		30		79	
01:45			0	2	0		0	2	13:45			37	181	51	170	88	351
02:00			0		0		0		14:00			37		52		89	
02:15			1		1		2		14:15			73		47		120	
02:30			0		0		0		14:30			64		42		106	
02:45			0	1	0	1	0	2	14:45			65	239	70	211	135	450
03:00			1		0		1		15:00			89		105		194	
03:15			1		0		1		15:15			60		89		149	
03:30			0		0		0		15:30			76		95		171	
03:45			0	2	3	3	3	5	15:45			72	297	90	379	162	676
04:00			0		2		2		16:00			73		82		155	
04:15			1		1		2		16:15			78		80		158	
04:30			0		0		0		16:30			74		57		131	
04:45			1	2	5	8	6	10	16:45			75	300	91	310	166	610
05:00			0		0		0		17:00			78		76		154	
05:15			3		2		5		17:15			74		54		128	
05:30			4		7		11		17:30			75		57		132	
05:45			10	17	4	13	14	30	17:45			93	320	67	254	160	574
06:00			17		5		22		18:00			55		44		99	
06:15			19		12		31		18:15			54		43		97	
06:30			25		11		36		18:30			49		35		84	
06:45			42	103	20	48	62	151	18:45			40	198	55	177	95	375
07:00			43		24		67		19:00			46		39		85	
07:15			62		29		91		19:15			51		31		82	
07:30			68		56		124		19:30			37		17		54	
07:45			94	267	66	175	160	442	19:45			19	153	8	95	27	248
08:00			109		78		187		20:00			16		15		31	
08:15			86		79		165		20:15			26		15		41	
08:30			56		91		147		20:30			20		14		34	
08:45			63	314	58	306	121	620	20:45			19	81	14	58	33	139
09:00			34		48		82		21:00			22		11		33	
09:15			57		40		97		21:15			20		9		29	
09:30			61		48		109		21:30			20		12		32	
09:45			33	185	44	180	77	365	21:45			13	75	7	39	20	114
10:00			29		40		69		22:00			12		4		16	
10:15			54		47		101		22:15			10		2		12	
10:30			32		40		72		22:30			8		4		12	
10:45			52	167	47	174	99	341	22:45			5	35	1	11	6	46
11:00			40		51		91		23:00			7		1		8	
11:15			39		45		84		23:15			4		3		7	
11:30			55		54		109		23:30			3		1		4	
11:45			36	170	47	197	83	367	23:45			3	17	0	5	3	22
TOTALS				1239		1112		**2351**	**TOTALS**				2113		1884		**3997**
SPLIT %				52.7%		47.3%		**37.0%**	**SPLIT %**				52.9%		47.1%		**63.0%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	3,352	2,996	6,348

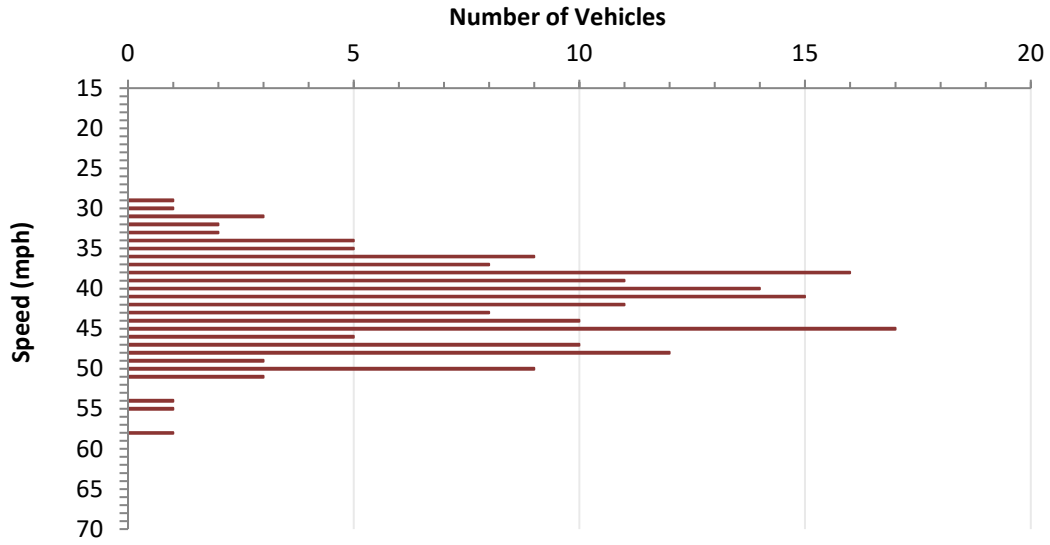
AM Peak Hour			07:30	07:45	**07:45**			**PM Peak Hour**			17:00	15:00	**15:00**		
AM Pk Volume			357	314	**659**			**PM Pk Volume**			320	379	**676**		
Pk Hr Factor			0.819	0.863	**0.881**			**Pk Hr Factor**			0.860	0.902	**0.871**		
7 - 9 Volume	0	0	581	481	**1062**			**4 - 6 Volume**	0	0	620	564	**1184**		
7 - 9 Peak Hour			07:30	07:45	**07:45**			**4 - 6 Peak Hour**			17:00	16:00	**16:00**		
7 - 9 Pk Volume	0	0	357	314	**659**			**4 - 6 Pk Volume**	0	0	320	310	**610**		
Pk Hr Factor	0.000	0.000	0.819	0.863	**0.881**			**Pk Hr Factor**	0.000	0.000	0.860	0.852	**0.919**		

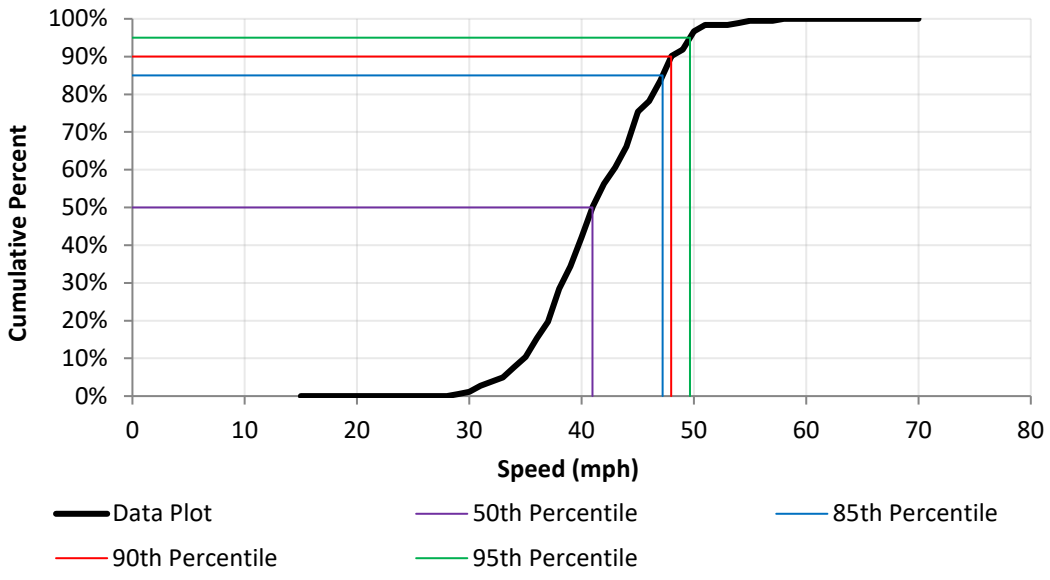
RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name:	Calzada Del Bosque	**From:**	Via De Sante Fe	**To:**	Via De La Valle
Position:	1000' E/O Via De La Valle			**Direction:**	EB/WB
Date:	04/04//2022	**Weather:**	Clear	**Project Number:**	0
Time Start:	11:05AM	**Road Condition:**	Dry	**Observer:**	Samuel Cecere
Time End:	12:05PM	**Posted Speed:**	50 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	1	0.5%
30	1	1.1%
31	3	2.7%
32	2	3.8%
33	2	4.9%
34	5	7.7%
35	5	10.4%
36	9	15.3%
37	8	19.7%
38	16	28.4%
39	11	34.4%
40	14	42.1%
41	15	50.3%
42	11	56.3%
43	8	60.7%
44	10	66.1%
45	17	75.4%
46	5	78.1%
47	10	83.6%
48	12	90.2%
49	3	91.8%
50	9	96.7%
51	3	98.4%
52		
53		
54	1	98.9%
55	1	99.5%
56		
57		
58	1	100.0%
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
Total	183	





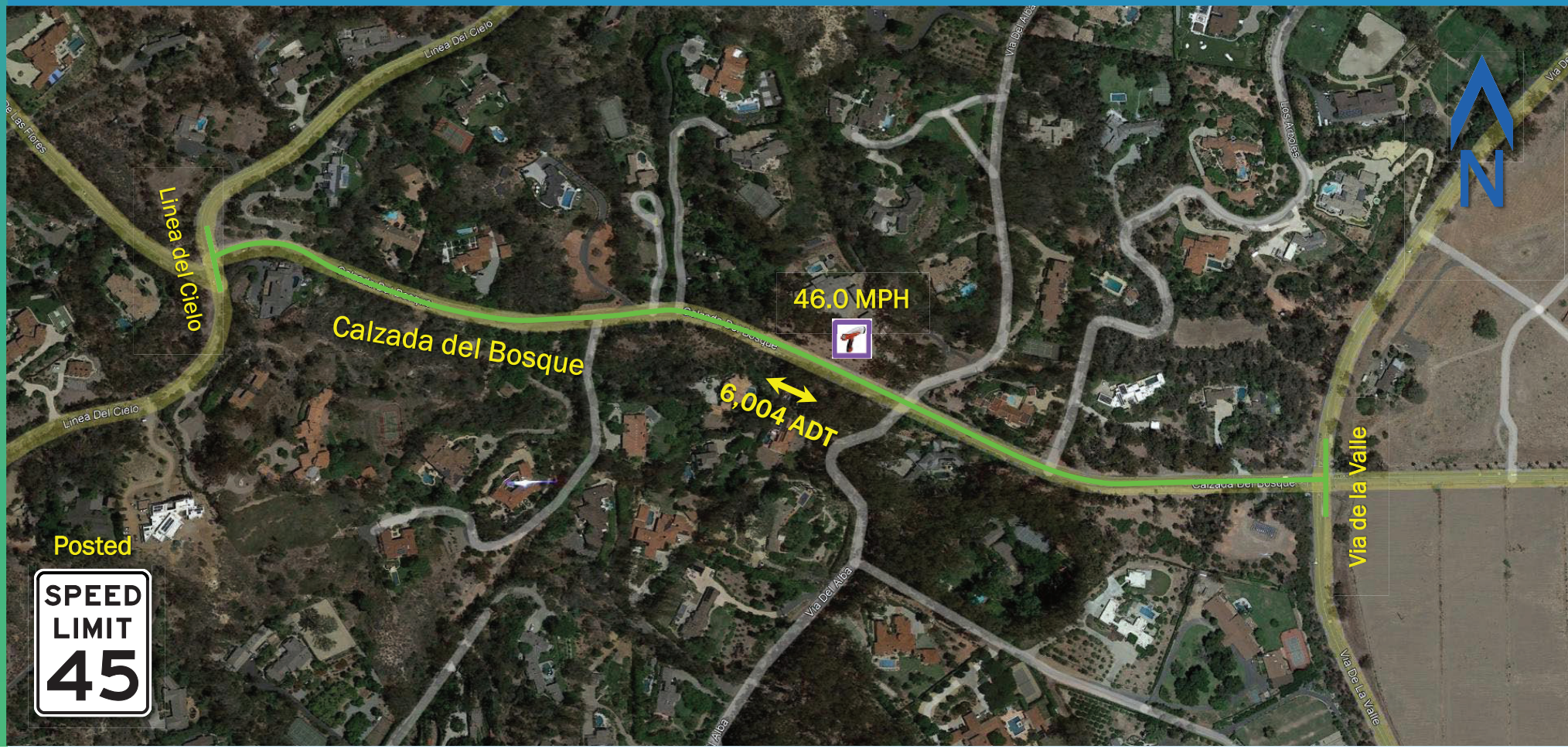
DATA ANALYSIS

Average Speed	41.9	Range	29 - 58
50th Percentile	41.0	10 mph Pace	36 - 45
85th Percentile	47.2	Number in Pace	119
90th Percentile	48.0	Percent in Pace	65%
95th Percentile	49.7		

3-B. Radar Certification

Calzada del Bosque

Via de la Valle to Linea del Cielo (0.64 miles)



SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: April 22, 2022 **Item 3-B**

SUPERVISORIAL DISTRICT: 3

SUBJECT: Radar Certification

LOCATION: Calzada del Bosque from Via de la Valle to Linea del Cielo (a distance of 0.64 miles) RANCHO SANTA FE (Thos. Bros. 1168-D5)

INITIATED BY: DPW Traffic Engineering

REQUEST: Radar Recertification

PROBLEM AS STATED BY REQUESTER:
Calzada del Bosque from Via de la Valle to Linea del Cielo is posted 45 MPH. A preliminary review of prevailing speeds and roadway conditions could support radar certification of a 40 MPH speed limit.

Existing Traffic Devices
Calzada del Bosque is a striped 2-lane undivided highway with a pavement width of 26 to 30 feet. The roadway is striped with no passing centerline and white edgeline. The road is posted with stop, signal, and intersection advisory signs. Calzada del Bosque is unclassified on the County General Plan Mobility Element Network. The road is posted 45 MPH/Radar Enforced.

Average Daily Traffic Volumes	**03/22**	**07/15**
Calzada del Bosque:		
150' W/o Via de Alba	6,004	4,830

Speed Data		**85th Percentile**	**10 MPH Pace**	**% in Pace**
Calzada del Bosque:				
150' W/o Via de Alba	(2022)	46.0 MPH	37-46	69.0%
	(2015)	48.0 MPH	38-47	72.0%

Collision Data
There have been 6 reported collisions, 2 of which involved injury, along this segment of roadway in a 3 year period (11-01-18 to 10-31-21). These collisions result in a segment accident rate of 1.43 collisions per million vehicle miles. The statewide average is 1.32 collisions per million vehicle miles for similar suburban 2 lanes or less with speeds 45 to 55 MPH.

Prepared by National Data & Surveying Services

VOLUME

Calzada Del Bosque 150' W/O Via Del Alba

Day: Tuesday
Date: 3/22/2022

City: Rancho Santa Fe
Project #: CA22_040044_005

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	3,249	2,755	6,004

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			3		2		5		12:00			51		49		100	
00:15			5		1		6		12:15			50		41		91	
00:30			3		0		3		12:30			51		31		82	
00:45			4	15	1	4	5	19	12:45			46	198	44	165	90	363
01:00			5		0		5		13:00			56		41		97	
01:15			1		0		1		13:15			42		55		97	
01:30			0		1		1		13:30			51		43		94	
01:45			0	6	0	1	0	7	13:45			35	184	43	182	78	366
02:00			0		0		0		14:00			42		39		81	
02:15			0		1		1		14:15			63		46		109	
02:30			0		0		0		14:30			59		43		102	
02:45			0		0	1	0	1	14:45			58	222	63	191	121	413
03:00			1		0		1		15:00			75		77		152	
03:15			1		0		1		15:15			64		83		147	
03:30			0		0		0		15:30			71		63		134	
03:45			0	2	4	4	4	6	15:45			65	275	65	288	130	563
04:00			1		1		2		16:00			78		92		170	
04:15			0		2		2		16:15			69		71		140	
04:30			0		0		0		16:30			65		52		117	
04:45			1	2	3	6	4	8	16:45			82	294	73	288	155	582
05:00			1		3		4		17:00			71		63		134	
05:15			5		3		8		17:15			73		46		119	
05:30			2		7		9		17:30			69		46		115	
05:45			7	15	8	21	15	36	17:45			69	282	59	214	128	496
06:00			20		8		28		18:00			54		45		99	
06:15			22		14		36		18:15			50		40		90	
06:30			19		19		38		18:30			49		37		86	
06:45			37	98	26	67	63	165	18:45			41	194	45	167	86	361
07:00			49		30		79		19:00			42		33		75	
07:15			53		35		88		19:15			39		35		74	
07:30			63		47		110		19:30			24		23		47	
07:45			87	252	65	177	152	429	19:45			22	127	12	103	34	230
08:00			92		64		156		20:00			16		14		30	
08:15			77		59		136		20:15			26		19		45	
08:30			57		68		125		20:30			10		10		20	
08:45			65	291	52	243	117	534	20:45			17	69	8	51	25	120
09:00			38		45		83		21:00			31		9		40	
09:15			67		53		120		21:15			27		4		31	
09:30			57		40		97		21:30			33		16		49	
09:45			30	192	36	174	66	366	21:45			24	115	3	32	27	147
10:00			36		46		82		22:00			15		9		24	
10:15			46		32		78		22:15			16		2		18	
10:30			38		44		82		22:30			12		2		14	
10:45			46	166	46	168	92	334	22:45			11	54	1	14	12	68
11:00			42		51		93		23:00			9		0		9	
11:15			41		43		84		23:15			7		6		13	
11:30			50		47		97		23:30			5		1		6	
11:45			35	168	46	187	81	355	23:45			7	28	0	7	7	35
TOTALS				1207		1053		**2260**	**TOTALS**				2042		1702		**3744**
SPLIT %				53.4%		46.6%		**37.6%**	**SPLIT %**				54.5%		45.5%		**62.4%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	3,249	2,755	6,004

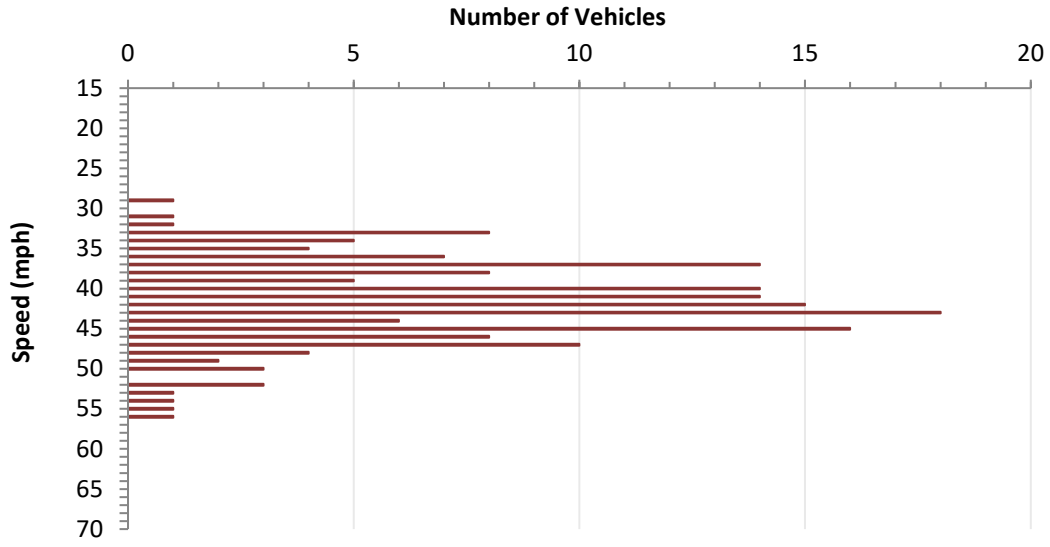
AM Peak Hour				07:30		07:45		**07:45**	**PM Peak Hour**				16:45		15:15		**16:00**
AM Pk Volume				319		256		**569**	**PM Pk Volume**				295		303		**582**
Pk Hr Factor				0.867		0.941		**0.912**	**Pk Hr Factor**				0.899		0.823		**0.856**
7 - 9 Volume	0	0		543		420		**963**	**4 - 6 Volume**	0	0		576		502		**1078**
7 - 9 Peak Hour				07:30		07:45		**07:45**	**4 - 6 Peak Hour**				16:45		16:00		**16:00**
7 - 9 Pk Volume	0	0		319		256		**569**	**4 - 6 Pk Volume**	0	0		295		288		**582**
Pk Hr Factor	0.000	0.000		0.867		0.941		**0.912**	**Pk Hr Factor**	0.000	0.000		0.899		0.783		**0.856**

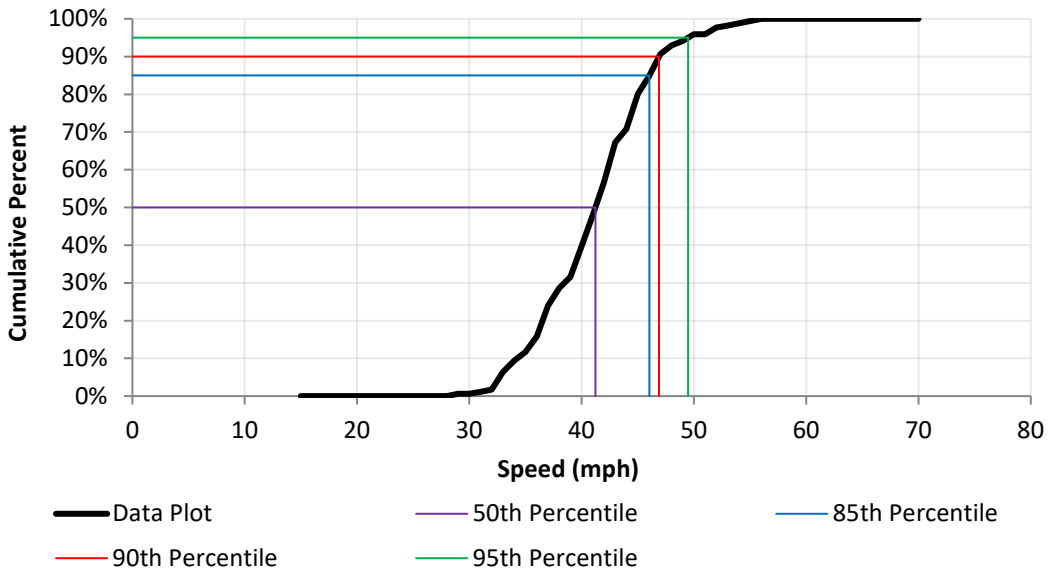
RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name:	Calzada Del Bosque	**From:**	Via Del Alba	**To:**	Linea Del Cielo
Position:	150' W/O Via Del Alba			**Direction:**	EB/WB
Date:	04/04//2022	**Weather:**	Clear	**Project Number:**	0
Time Start:	9:50AM	**Road Condition:**	Dry	**Observer:**	Samuel Cecere
Time End:	10:50AM	**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	1	0.6%
30		
31	1	1.2%
32	1	1.8%
33	8	6.4%
34	5	9.4%
35	4	11.7%
36	7	15.8%
37	14	24.0%
38	8	28.7%
39	5	31.6%
40	14	39.8%
41	14	48.0%
42	15	56.7%
43	18	67.3%
44	6	70.8%
45	16	80.1%
46	8	84.8%
47	10	90.6%
48	4	93.0%
49	2	94.2%
50	3	95.9%
51		
52	3	97.7%
53	1	98.2%
54	1	98.8%
55	1	99.4%
56	1	100.0%
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
Total	171	





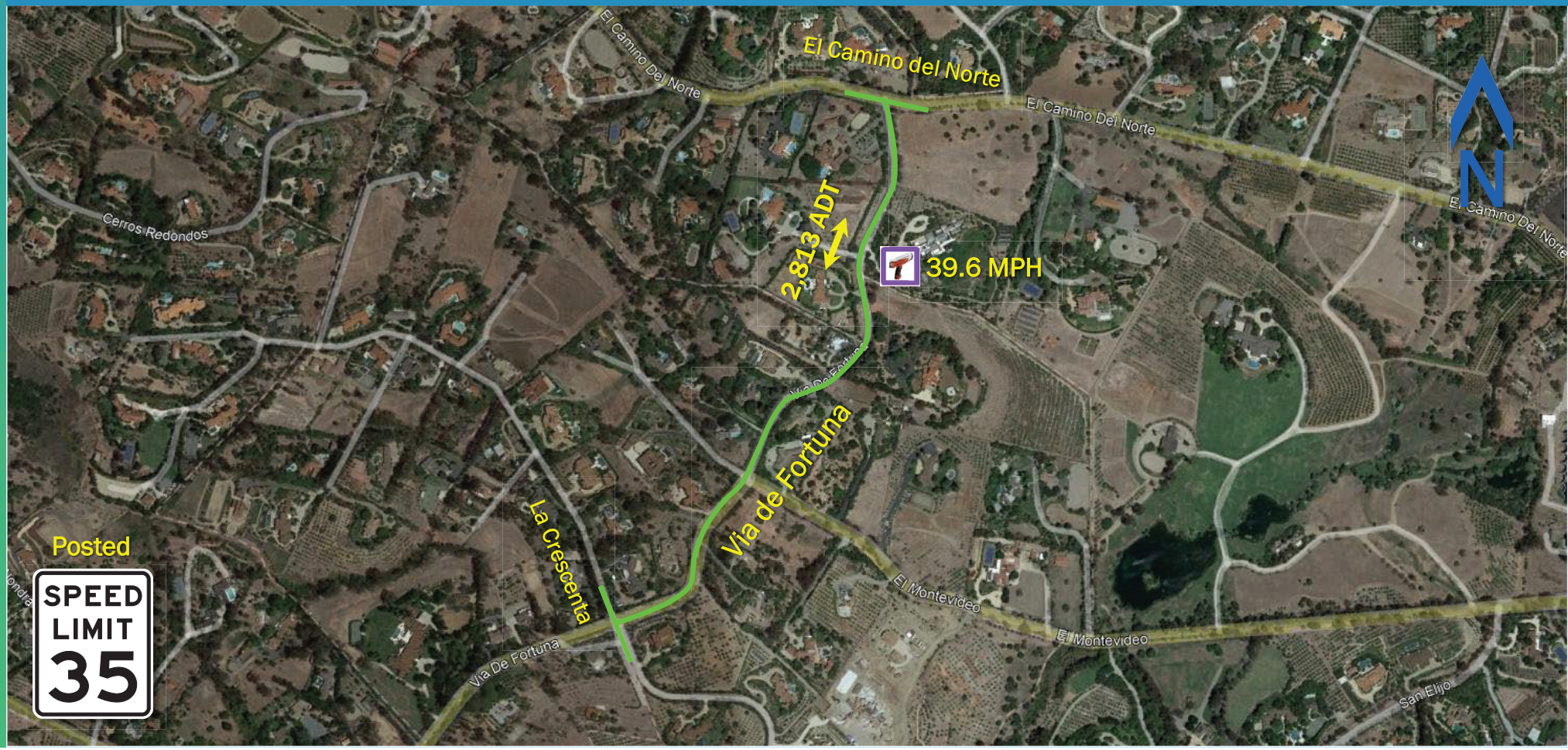
DATA ANALYSIS

Average Speed	41.6	Range	29 - 56
50th Percentile	41.2	10 mph Pace	37 - 46
85th Percentile	46.0	Number in Pace	118
90th Percentile	46.9	Percent in Pace	69%
95th Percentile	49.5		

3-C. Radar Certification

Via de Fortuna

El Camino del Norte to La Crescenta (0.64 miles)



SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: April 22, 2022 **Item 3-C**

SUPERVISORIAL DISTRICT: 3

SUBJECT: Radar Certification

LOCATION: Via de Fortuna from El Camino del Norte to La Crescenta (a distance of 0.64 miles) RANCHO SANTA FE (Thos. Bros. 1148-C7)

INITIATED BY: DPW Traffic Engineering

REQUEST: Radar Recertification

PROBLEM AS STATED BY REQUESTER:
Via de Fortuna from El Camino del Norte to La Crescenta is posted 35 MPH Radar Enforced. Preliminary review of prevailing speeds and roadway conditions could support radar certification of the existing 35 MPH speed limit.

Existing Traffic Devices
Via de Fortuna is a striped 2-lane undivided highway with a pavement width of 24 feet. The roadway is striped with no passing centerline and white edgeline. The highway is posted with equestrian advisories and 25 MPH speed advisory turns. Via de Fortuna is unclassified as on the County General Plan Mobility Element Network. The highway is a designated through highway. Via de Fortuna is posted 35 MPH/Radar Enforced.

Average Daily Traffic Volumes	**12/21**	**02/08**
Via de Fortuna:		
900' S/o El Camino del Norte	2,813	2,580

Speed Data		**85th Percentile**	**10 MPH Pace**	**% in Pace**
Via de Fortuna:				
900' S/o El Camino del Norte	(2022)	39.6 MPH	31-40	86.0%
	(2010)	37.0 MPH	30-39	71.0%

Collision Data
There have been 3 reported collisions along this segment of roadway in a 3 year period (11-01-18 to 10-31-21). These collisions result in a segment accident rate of 1.52 collisions per million vehicle miles. The statewide average is 1.60 collisions per million vehicle miles for similar suburban 2 lanes or less with speeds less than 45 MPH.

Prepared by National Data & Surveying Services

VOLUME

Via De Fortuna 900' S/O El Camino Del Norte

Day: Wednesday
Date: 12/8/2021

City: Rancho Santa Fe
Project #: CA21_040210_003

DAILY TOTALS	NB	SB	EB	WB	Total
	1,274	1,539	0	0	2,813

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	1		0						1		12:00	21		19						40	
00:15	0		2						2		12:15	15		28						43	
00:30	1		0						1		12:30	26		20						46	
00:45	0	2	0	2					0	4	12:45	16	78	16	83					32	161
01:00	0		0						0		13:00	17		13						30	
01:15	0		0						0		13:15	13		15						28	
01:30	0		0						0		13:30	19		24						43	
01:45	0		0						0		13:45	19	68	21	73					40	141
02:00	1		0						1		14:00	18		22						40	
02:15	1		0						1		14:15	24		32						56	
02:30	0		0						0		14:30	26		14						40	
02:45	0	2	0						0	2	14:45	31	99	26	94					57	193
03:00	0		0						0		15:00	52		31						83	
03:15	0		0						0		15:15	66		31						97	
03:30	0		0						0		15:30	62		38						100	
03:45	1	1	1	1					2	2	15:45	61	241	25	125					86	366
04:00	0		0						0		16:00	44		30						74	
04:15	0		0						0		16:15	59		24						83	
04:30	1		2						3		16:30	40		26						66	
04:45	0	1	1	3					1	4	16:45	39	182	18	98					57	280
05:00	0		1						1		17:00	54		26						80	
05:15	1		0						1		17:15	38		15						53	
05:30	0		0						0		17:30	27		14						41	
05:45	3	4	8	9					11	13	17:45	20	139	21	76					41	215
06:00	2		8						10		18:00	9		8						17	
06:15	5		18						23		18:15	19		8						27	
06:30	10		24						34		18:30	10		5						15	
06:45	7	24	36	86					43	110	18:45	6	44	5	26					11	70
07:00	15		44						59		19:00	11		6						17	
07:15	8		84						92		19:15	10		4						14	
07:30	9		72						81		19:30	12		6						18	
07:45	19	51	75	275					94	326	19:45	8	41	1	17					9	58
08:00	17		77						94		20:00	6		6						12	
08:15	12		57						69		20:15	4		6						10	
08:30	16		54						70		20:30	3		2						5	
08:45	20	65	50	238					70	303	20:45	3	16	1	15					4	31
09:00	13		38						51		21:00	4		6						10	
09:15	27		32						59		21:15	4		1						5	
09:30	19		20						39		21:30	3		0						3	
09:45	16	75	34	124					50	199	21:45	1	12	1	8					2	20
10:00	10		14						24		22:00	1		2						3	
10:15	13		21						34		22:15	1		1						2	
10:30	11		28						39		22:30	3		1						4	
10:45	10	44	27	90					37	134	22:45	0	5	1	5					1	10
11:00	16		19						35		23:00	1		1						2	
11:15	10		21						31		23:15	4		1						5	
11:30	17		22						39		23:30	0		1						1	
11:45	31	74	25	87					56	161	23:45	1	6	1	4					2	10
TOTALS		343		915						1258	TOTALS		931		624						1555
SPLIT %		27.3%		72.7%						44.7%	SPLIT %		59.9%		40.1%						55.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	1,274	1,539	0	0	2,813

AM Peak Hour	11:45	07:15			07:15	PM Peak Hour	15:00	14:45			15:00
AM Pk Volume	93	308			361	PM Pk Volume	241	126			366
Pk Hr Factor	0.750	0.917			0.960	Pk Hr Factor	0.913	0.829			0.915
7 - 9 Volume	116	513	0	0	629	4 - 6 Volume	321	174	0	0	495
7 - 9 Peak Hour	08:00	07:15			07:15	4 - 6 Peak Hour	16:15	16:00			16:15
7 - 9 Pk Volume	65	308	0	0	361	4 - 6 Pk Volume	192	98	0	0	286
Pk Hr Factor	0.813	0.917	0.000	0.000	0.960	Pk Hr Factor	0.814	0.817	0.000	0.000	0.861

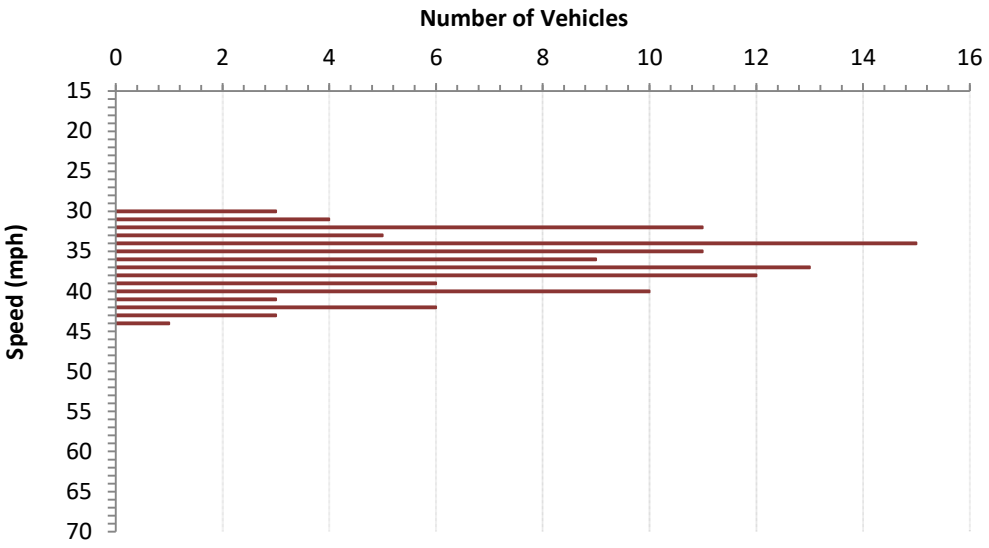
RADAR SPEED SURVEY

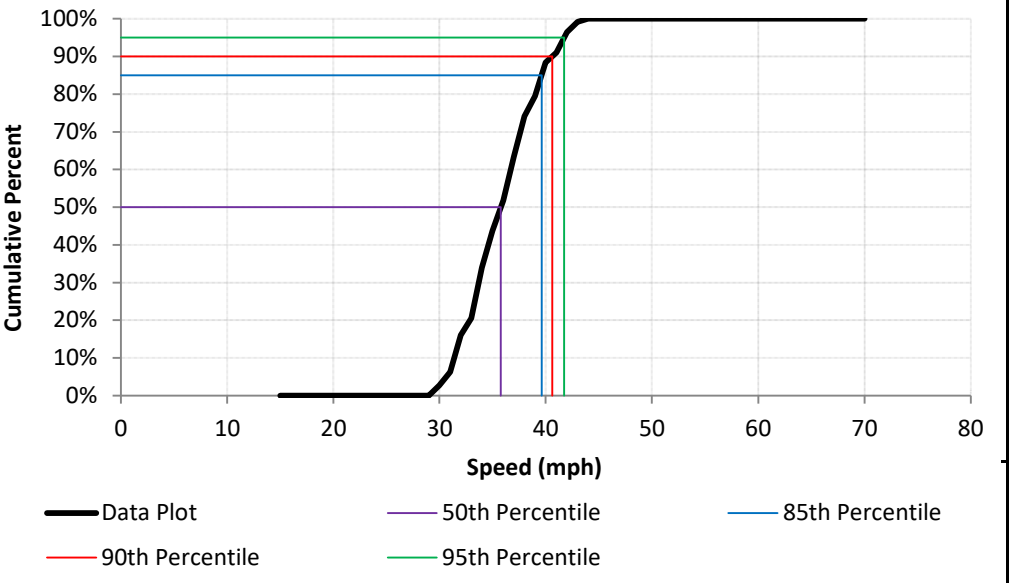
SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name:	Via De Fortuna	**From:**	El Camino Del Norte	**To:**	El Montevideo
Position:	Via De Fortuna @ 900' S/O El Camino Del Norte			**Direction:**	NBT/SBT

Date:	12/17/2021	**Weather:**	sunny	**Project Number:**	0
Time Start:	11:36am	**Road Condition:**	dry	**Observer:**	Samuel Cecere
Time End:	12:31pm	**Posted Speed:**	35mph	**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	3	2.7%
31	4	6.3%
32	11	16.1%
33	5	20.5%
34	15	33.9%
35	11	43.8%
36	9	51.8%
37	13	63.4%
38	12	74.1%
39	6	79.5%
40	10	88.4%
41	3	91.1%
42	6	96.4%
43	3	99.1%
44	1	100.0%
45		
46		
47		
48		
49		
50		
51		
52		
53		
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
Total	112	





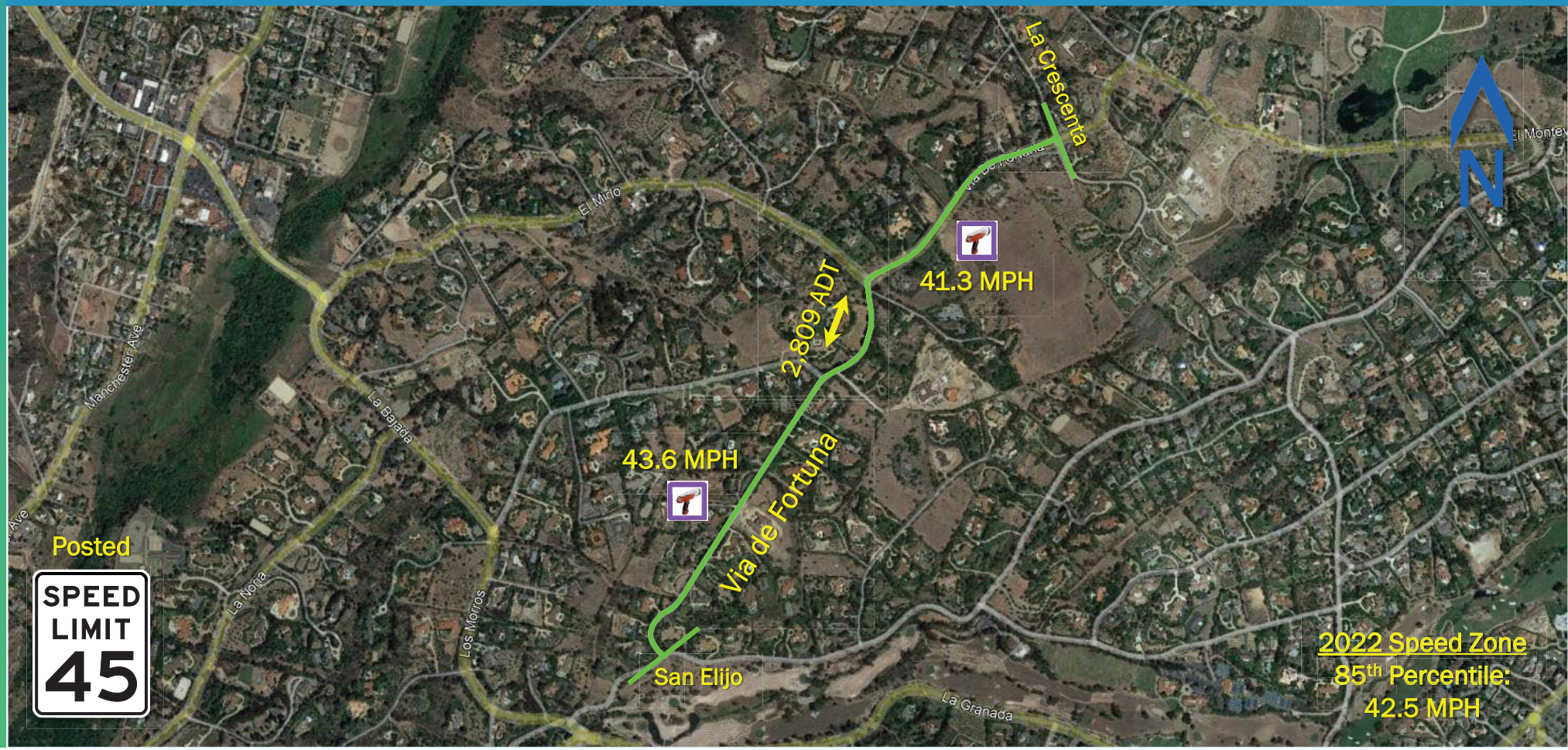
DATA ANALYSIS

Average Speed	36.3	Range	30 - 44
50th Percentile	35.8	10 mph Pace	31 - 40
85th Percentile	39.6	Number in Pace	96
90th Percentile	40.6	Percent in Pace	86%
95th Percentile	41.7		

3-D. Radar Certification

Via de Fortuna

La Crescenta to San Elijo (1.17 miles)



SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: April 22, 2022 **Item 3-D**

SUPERVISORIAL DISTRICT: 3

SUBJECT: Radar Certification

LOCATION: Via de Fortuna from La Crescenta to San Elijo (a distance of 1.17 miles) RANCHO SANTA FE (Thos. Bros. 1168-C1)

INITIATED BY: DPW Traffic Engineering

REQUEST: Radar Recertification

PROBLEM AS STATED BY REQUESTER:
Via de Fortuna from La Crescenta to San Elijo is posted 45 MPH Radar Enforced. Preliminary review of prevailing speeds and roadway conditions could support radar certification of the existing 40 MPH speed limit.

Existing Traffic Devices
Via de Fortuna is a striped 2-lane undivided highway with a pavement width of 24 feet. The roadway is striped with no passing centerline and white edgeline. The highway is posted with equestrian advisories, intersection advisories, and speed advisory turns and curves. Via de Fortuna is unclassified as on the County General Plan Mobility Element Network. The highway is a designated through highway. Via de Fortuna is posted 45 MPH/Radar Enforced.

Average Daily Traffic Volumes	**12/21**	**07/14**	**03/01**
Via de Fortuna:			
1,000' N/o El Mirlo	4,515	3,540	
1,500' N/o San Elijo Avenue	1,103		1,210

Speed Data		**85th Percentile**	**10 MPH Pace**	**% in Pace**
Via de Fortuna:				
1,000' N/o El Mirlo	(2022)	41.3 MPH	32-41	75.0%
	(2014)	42.0 MPH	33-42	74.0%
1,500' N/o San Elijo Avenue	(2022)	43.6 MPH	33-42	65.0%
	(2014)	46.0 MPH	35-44	62.0%
Speed Zone	(2022)	42.5 MPH	33-42	70.0%
	(2014)	44.0 MPH	34-43	68.0%

Collision Data

There have been 2 reported collisions, 1 of which involved injury, along this segment of roadway in a 3 year period (11-01-18 to 10-31-21). These collisions result in a segment accident rate of 0.56 collisions per million vehicle miles. The statewide average is 1.60 collisions per million vehicle miles for similar suburban 2 lanes or less with speeds less than 45 MPH.

Prepared by National Data & Surveying Services

VOLUME

Via De Fortuna 1000' N/O El Mirlo

Day: Wednesday
Date: 12/8/2021

City: Rancho Santa Fe
Project #: CA21_040210_002

DAILY TOTALS	NB	SB	EB	WB	Total
	2,251	2,264	0	0	4,515

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	2		0				2		12:00	26		24				50	
00:15	2		2				4		12:15	22		26				48	
00:30	2		0				2		12:30	29		38				67	
00:45	0	6	1	3			1	9	12:45	33	110	32	120			65	230
01:00	0		1				1		13:00	37		32				69	
01:15	2		1				3		13:15	40		36				76	
01:30	0		1				1		13:30	26		29				55	
01:45	0	2	0	3			0	5	13:45	48	151	34	131			82	282
02:00	1		1				2		14:00	31		24				55	
02:15	0		1				1		14:15	43		44				87	
02:30	0		0				0		14:30	49		37				86	
02:45	1	2	0	2			1	4	14:45	51	174	36	141			87	315
03:00	0		1				1		15:00	73		29				102	
03:15	0		0				0		15:15	82		49				131	
03:30	1		0				1		15:30	74		54				128	
03:45	1	2	1	2			2	4	15:45	74	303	53	185			127	488
04:00	1		0				1		16:00	74		42				116	
04:15	0		1				1		16:15	70		43				113	
04:30	3		1				4		16:30	63		37				100	
04:45	1	5	2	4			3	9	16:45	60	267	37	159			97	426
05:00	2		2				4		17:00	57		38				95	
05:15	5		6				11		17:15	61		44				105	
05:30	2		15				17		17:30	60		27				87	
05:45	7	16	17	40			24	56	17:45	47	225	27	136			74	361
06:00	8		22				30		18:00	21		32				53	
06:15	16		35				51		18:15	25		26				51	
06:30	27		39				66		18:30	31		14				45	
06:45	42	93	59	155			101	248	18:45	15	92	18	90			33	182
07:00	38		40				78		19:00	18		12				30	
07:15	34		57				91		19:15	20		12				32	
07:30	40		65				105		19:30	11		12				23	
07:45	37	149	67	229			104	378	19:45	20	69	5	41			25	110
08:00	37		71				108		20:00	15		6				21	
08:15	38		68				106		20:15	9		6				15	
08:30	36		57				93		20:30	10		4				14	
08:45	22	133	65	261			87	394	20:45	12	46	7	23			19	69
09:00	31		45				76		21:00	10		7				17	
09:15	35		40				75		21:15	7		6				13	
09:30	32		41				73		21:30	10		3				13	
09:45	27	125	49	175			76	300	21:45	4	31	6	22			10	53
10:00	34		37				71		22:00	5		2				7	
10:15	26		51				77		22:15	4		4				8	
10:30	25		41				66		22:30	3		3				6	
10:45	30	115	46	175			76	290	22:45	2	14	2	11			4	25
11:00	29		47				76		23:00	7		1				8	
11:15	25		34				59		23:15	11		1				12	
11:30	19		38				57		23:30	3		1				4	
11:45	25	98	31	150			56	248	23:45	2	23	3	6			5	29
TOTALS		746		1199				**1945**	**TOTALS**		1505		1065				**2570**
SPLIT %		38.4%		61.6%				**43.1%**	**SPLIT %**		58.6%		41.4%				**56.9%**

DAILY TOTALS	NB	SB	EB	WB	Total
	2,251	2,264	0	0	4,515

AM Peak Hour	06:45	07:30			**07:30**	**PM Peak Hour**	15:15	15:15			**15:15**
AM Pk Volume	154	271			**423**	**PM Pk Volume**	304	198			**502**
Pk Hr Factor	0.917	0.954			**0.979**	**Pk Hr Factor**	0.927	0.917			**0.958**
7 - 9 Volume	282	490	0	0	**772**	**4 - 6 Volume**	492	295	0	0	**787**
7 - 9 Peak Hour	07:30	07:30			**07:30**	**4 - 6 Peak Hour**	16:00	16:00			**16:00**
7 - 9 Pk Volume	152	271	0	0	**423**	**4 - 6 Pk Volume**	267	159	0	0	**426**
Pk Hr Factor	0.950	0.954	0.000	0.000	**0.979**	**Pk Hr Factor**	0.902	0.924	0.000	0.000	**0.918**

Prepared by National Data & Surveying Services

VOLUME

Via De Fortuna 1500' N/O San Elijo Ave

Day: Wednesday
Date: 12/8/2021

City: Rancho Santa Fe
Project #: CA21_040210_001

DAILY TOTALS	NB	SB	EB	WB	Total
	573	530	0	0	1,103

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0		12:00	11		8						19	
00:15	0		0						0		12:15	8		7						15	
00:30	0		0						0		12:30	4		7						11	
00:45	0		0						0		12:45	7	30	8	30					15	60
01:00	0		0						0		13:00	9		9						18	
01:15	0		0						0		13:15	15		12						27	
01:30	0		0						0		13:30	7		10						17	
01:45	0		0						0		13:45	8	39	9	40					17	79
02:00	0		0						0		14:00	10		8						18	
02:15	0		1						1		14:15	16		11						27	
02:30	0		0						0		14:30	21		16						37	
02:45	0		0		1				0	1	14:45	16	63	16	51					32	114
03:00	0		0						0		15:00	21		13						34	
03:15	0		0						0		15:15	15		14						29	
03:30	0		0						0		15:30	24		18						42	
03:45	0		0						0		15:45	24	84	10	55					34	139
04:00	0		0						0		16:00	13		11						24	
04:15	0		0						0		16:15	15		11						26	
04:30	0		0						0		16:30	12		7						19	
04:45	0		0						0		16:45	20	60	5	34					25	94
05:00	0		0						0		17:00	21		2						23	
05:15	1		0						1		17:15	14		7						21	
05:30	0		1						1		17:30	10		6						16	
05:45	3	4	2	3					5	7	17:45	8	53	10	25					18	78
06:00	1		0						1		18:00	3		4						7	
06:15	6		3						9		18:15	3		5						8	
06:30	6		3						9		18:30	1		3						4	
06:45	7	20	6	12					13	32	18:45	7	14	2	14					9	28
07:00	10		9						19		19:00	4		2						6	
07:15	9		9						18		19:15	1		0						1	
07:30	10		21						31		19:30	0		0						0	
07:45	19	48	31	70					50	118	19:45	2	7	2	4					4	11
08:00	11		15						26		20:00	5		1						6	
08:15	8		16						24		20:15	4		1						5	
08:30	4		11						15		20:30	1		0						1	
08:45	4	27	13	55					17	82	20:45	2	12	1	3					3	15
09:00	10		8						18		21:00	2		2						4	
09:15	13		5						18		21:15	0		0						0	
09:30	6		10						16		21:30	2		1						3	
09:45	13	42	13	36					26	78	21:45	1	5	0	3					1	8
10:00	5		19						24		22:00	0		1						1	
10:15	6		6						12		22:15	1		0						1	
10:30	8		7						15		22:30	1		0						1	
10:45	6	25	15	47					21	72	22:45	0	2	1	2					1	4
11:00	7		15						22		23:00	3		1						4	
11:15	3		9						12		23:15	1		0						1	
11:30	13		6						19		23:30	0		0						0	
11:45	10	33	14	44					24	77	23:45	1	5	0	1					1	6
TOTALS		199		268						467	TOTALS		374		262						636
SPLIT %		42.6%		57.4%						42.3%	SPLIT %		58.8%		41.2%						57.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	573	530	0	0	1,103

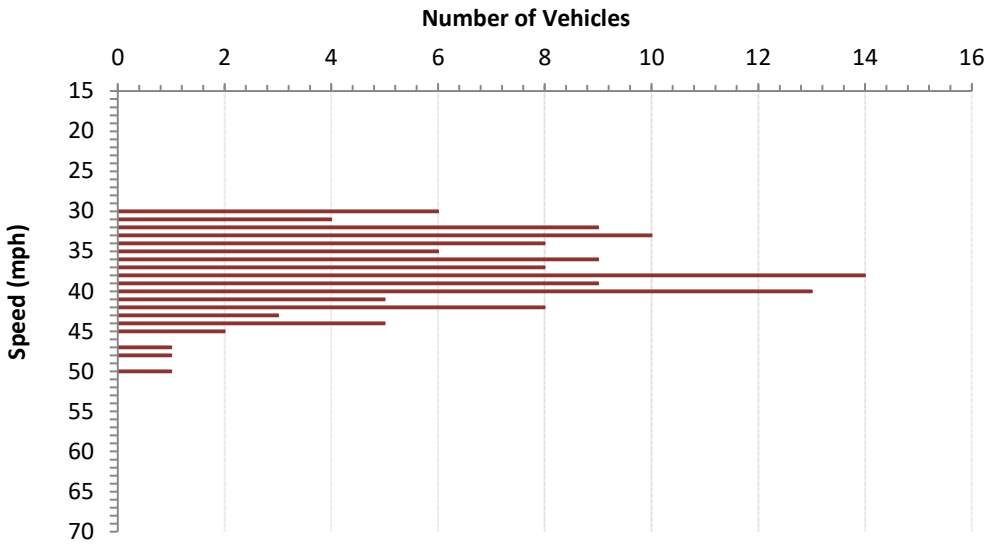
AM Peak Hour	07:15	07:30			07:30	PM Peak Hour	15:00	14:45			15:00
AM Pk Volume	49	83			131	PM Pk Volume	84	61			139
Pk Hr Factor	0.645	0.669			0.655	Pk Hr Factor	0.875	0.847			0.827
7 - 9 Volume	75	125	0	0	200	4 - 6 Volume	113	59	0	0	172
7 - 9 Peak Hour	07:15	07:30			07:30	4 - 6 Peak Hour	16:15	16:00			16:00
7 - 9 Pk Volume	49	83	0	0	131	4 - 6 Pk Volume	68	34	0	0	94
Pk Hr Factor	0.645	0.669	0.000	0.000	0.655	Pk Hr Factor	0.810	0.773	0.000	0.000	0.904

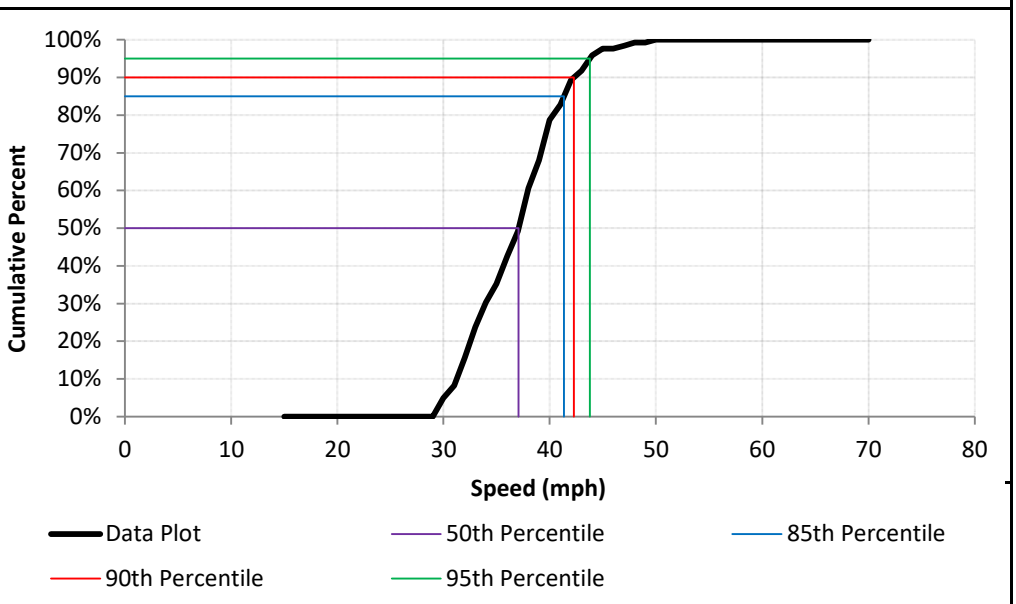
RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name:	Via De Fortuna	**From:**	El Mirlo	**To:**	La Crescenta Rd
Position:	1,000' N/o El Mirlo			**Direction:**	EBT/WBT
Date:	12/17/2021	**Weather:**	Clear	**Project Number:**	0
Time Start:	10:30AM	**Road Condition:**	Dry	**Observer:**	Samuel Cecere
Time End:	11:20AM	**Posted Speed:**	45 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	6	4.9%
31	4	8.2%
32	9	15.6%
33	10	23.8%
34	8	30.3%
35	6	35.2%
36	9	42.6%
37	8	49.2%
38	14	60.7%
39	9	68.0%
40	13	78.7%
41	5	82.8%
42	8	89.3%
43	3	91.8%
44	5	95.9%
45	2	97.5%
46		
47	1	98.4%
48	1	99.2%
49		
50	1	100.0%
51		
52		
53		
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
Total	122	





DATA ANALYSIS

Average Speed	37.3	Range	30 - 50
50th Percentile	37.1	10 mph Pace	32 - 41
85th Percentile	41.3	Number in Pace	91
90th Percentile	42.3	Percent in Pace	75%
95th Percentile	43.8		

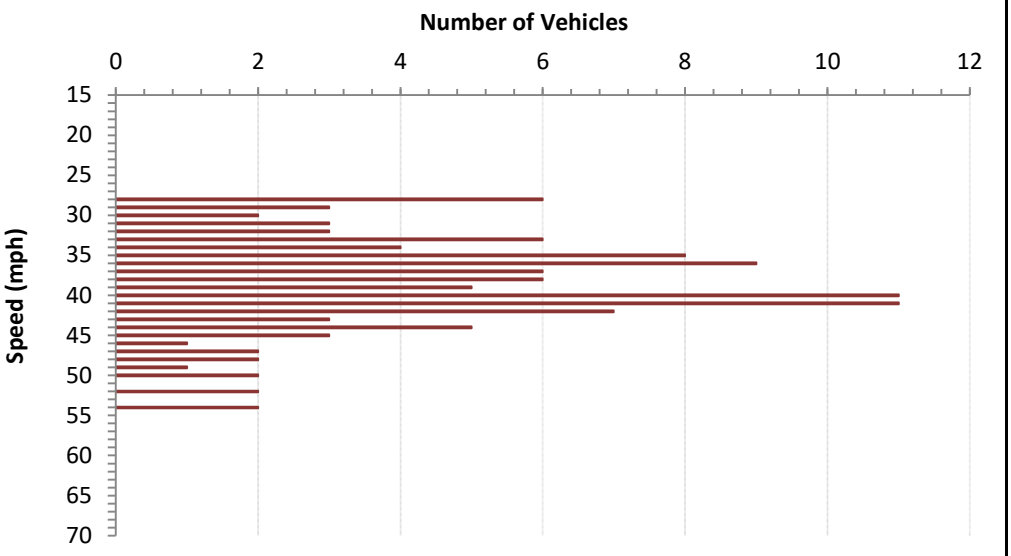
RADAR SPEED SURVEY

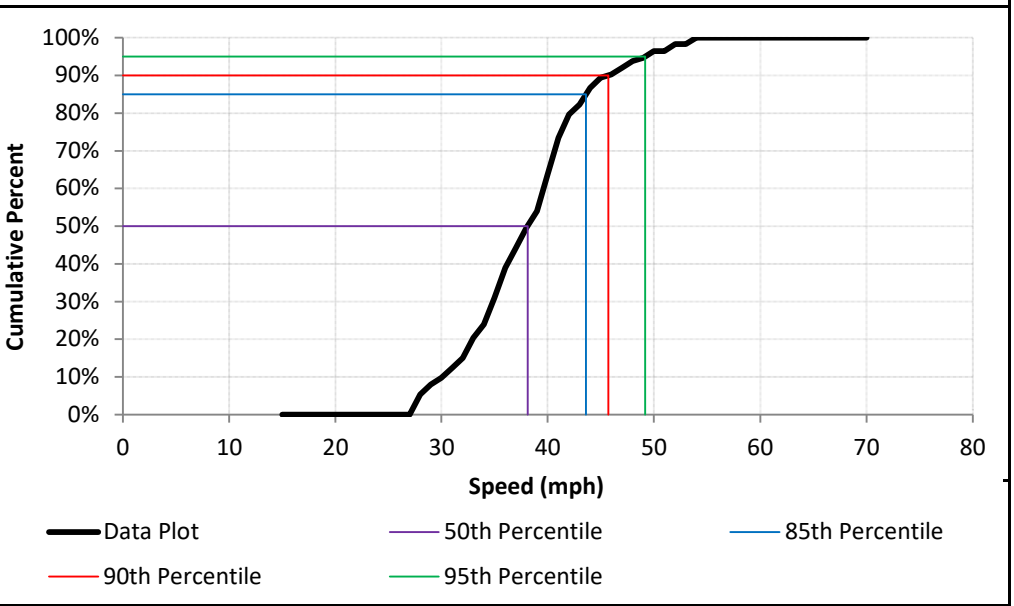
SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name:	Via de Fortuna	**From:**	San Elijo Ave	**To:**	Los Morros
Position:	Via de Fortuna @ 1500' N/O San Elijo Ave			**Direction:**	NBT/SBT

Date:	1/10/2022	**Weather:**	Partly Cloudy	**Project Number:**	0
Time Start:	12:44PM	**Road Condition:**	Dry	**Observer:**	Samuel Cecere
Time End:	2:45PM	**Posted Speed:**	45mph	**Calibration Test:**	0

Speed (mph)	Num. Veh.	Cum. Pct.
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28	6	5.3%
29	3	8.0%
30	2	9.7%
31	3	12.4%
32	3	15.0%
33	6	20.4%
34	4	23.9%
35	8	31.0%
36	9	38.9%
37	6	44.2%
38	6	49.6%
39	5	54.0%
40	11	63.7%
41	11	73.5%
42	7	79.6%
43	3	82.3%
44	5	86.7%
45	3	89.4%
46	1	90.3%
47	2	92.0%
48	2	93.8%
49	1	94.7%
50	2	96.5%
51		
52	2	98.2%
53		
54	2	100.0%
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
Total	113	





DATA ANALYSIS

Average Speed	38.5	Range	28 - 54
50th Percentile	38.1	10 mph Pace	33 - 42
85th Percentile	43.6	Number in Pace	73
90th Percentile	45.7	Percent in Pace	65%
95th Percentile	49.2		

Lamar Street
& Helix Street (east intersection)

SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: April 22, 2022 **Item 4-A**

SUPERVISORIAL DISTRICT: 4

SUBJECT: Intersection Control

LOCATION: Lamar Street & Helix Street (east intersection), SPRING VALLEY (Thos. Bros. 1271-B6)

INITIATED BY: DPW Traffic Engineering

REQUEST: All-Way Stop Control

PROBLEM AS STATED BY REQUESTER:
The east intersection of Lamar Street & Helix Street has been identified by Traffic Engineering as meeting Option C, an intersection where motorists are unable to see conflicting traffic to determine when it is safe to enter the intersection, and Option D, an intersection of two residential collectors of similar design and an all-way stop would enhance the traffic operations of said intersection, of the Multi-Way Stop Application optional criteria as described in the California Manual on Uniform Traffic Control Devices (CA MUTCD), Section 2B.07, therefore an all-way stop control should be considered.

Existing Traffic Devices
Lamar Street is a striped two-lane road with a 24 to 30-foot pavement width. The roadway is striped with a no passing centerline and has white edgeline on the north side of the roadway adjacent to the intersection with Helix Street. Lamar Street is a designated through highway. It is unclassified on the County General Plan Mobility Element Network. The roadway is a posted 25 MPH residence district.

Helix Street is a striped two-lane road with a 28-foot pavement width. The roadway is striped with a no passing centerline and white edgeline. The road is stop controlled in the southbound direction at Lamar Street. Helix Street is a designated through highway. It is unclassified on the County General Plan Mobility Element Network. The roadway is a posted 25 MPH residence district.

Average Daily Traffic Volumes	**09/21**
Lamar Street:	
W/o Helix Street	1,153 EB
E/o Helix Street	694 WB
Helix Street:	
N/o Lamar Street	1,032 SB

Collision Data
There have been 2 reported collisions, none of which involved an injury, at this

intersection, within a past 5-year period (11-01-2016 to 10-31-2021).

County of San Diego

JEFF MONEDA
DIRECTOR

DEPARTMENT OF PUBLIC WORKS
5510 OVERLAND AVENUE, SUITE 410
SAN DIEGO, CA 92123-1237
(858) 694-2212
www.sdcounty.ca.gov/dpw/

COUNTY TRAFFIC ENGINEER RECOMMENDATION

Date:	April 4, 2022
Item Title:	All-Way Stop Controls
Location:	Helix Street (east) and Lamar Street Intersection
Recommendation:	**Install All-Way Stop Controls**

Conditions:

- Section 21354 "Stop Signs on Local Highways" of the California Vehicle Code (CVC) authorizes local agencies to designate any intersection under its exclusive jurisdiction as a stop intersection.

- Section 2B.07 "Multi-Way Stop Applications" of the California MUTCD, provides four optional criteria that may be considered in an engineering study when evaluating an intersection for an all-way stop control.

- Section 2B.07 - Option C, lack of sight distance, indicates all-way stop controls can be considered when motorists are unable to see conflicting traffic to determine when it is safe to enter the intersection.

- Existing corner sight distance for Helix Street southbound approach is 325 feet looking west as measured in the field, whereas the required corner sight distance per County Public Road Standards is 350 feet or greater.

- Section 2B.07 - Option D, Intersection of two Residential Collectors, indicates all-way stop controls may be considered at an intersection of two residential collectors of similar design and the all-way stop control would enhance the traffic

operations of said intersection. Both Helix Street and Lamar Street are considered Residential Collectors with similar traffic operation.

- Pursuant to CVC section 21354 coupled with traffic conditions noted above, it is my recommendation that an All-Way Stop Control is appropriate and safe for the intersection of Helix Street and Lamar Street.

Zoubir A. Ouadah

Zoubir A. Ouadah, PE. TE.
County Traffic Engineer

04/06/2022

Date

Prepared by National Data & Surveying Services

VOLUME

Helix St & Lamar St

Day: Thursday
Date: 9/16/2021

City: Spring Valley
Project #: CA21_040159_004

DAILY TOTALS	NB	SB	EB	WB	Total
	0	1,032	1,153	694	2,879

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00		6	1	0	7	12:00		10	12	5	27
00:15		4	1	0	5	12:15		15	17	9	41
00:30		0	1	0	1	12:30		17	11	8	36
00:45		0	1	2	3	12:45		10	18	10	38
01:00		0	1	1	2	13:00		17	18	8	43
01:15		1	2	0	3	13:15		15	18	9	42
01:30		1	1	0	2	13:30		15	13	6	34
01:45		0	0	0	0	13:45		19	26	12	57
02:00		4	0	0	4	14:00		20	24	5	49
02:15		0	0	1	1	14:15		20	13	12	45
02:30		1	3	0	4	14:30		23	18	29	70
02:45		1	0	2	3	14:45		24	25	9	58
03:00		0	1	0	1	15:00		15	22	22	59
03:15		1	1	0	2	15:15		26	24	6	56
03:30		0	1	0	1	15:30		19	36	13	68
03:45		0	3	2	5	15:45		29	32	11	72
04:00		1	1	0	2	16:00		17	25	12	54
04:15		0	0	0	0	16:15		24	21	8	53
04:30		0	2	1	3	16:30		24	19	15	58
04:45		0	2	3	5	16:45		15	19	10	44
05:00		2	0	4	6	17:00		29	23	13	65
05:15		2	3	2	7	17:15		28	28	8	64
05:30		0	7	7	14	17:30		29	25	21	75
05:45		4	4	3	11	17:45		29	12	15	56
06:00		3	7	6	16	18:00		17	23	13	53
06:15		2	13	6	21	18:15		22	21	12	55
06:30		3	14	11	28	18:30		14	10	10	34
06:45		8	21	13	42	18:45		19	17	7	43
07:00		6	25	17	48	19:00		15	15	8	38
07:15		14	19	11	44	19:15		19	9	9	37
07:30		11	51	25	87	19:30		23	9	5	37
07:45		8	36	33	77	19:45		10	9	6	25
08:00		17	30	21	68	20:00		11	8	6	25
08:15		15	23	21	59	20:15		7	12	4	23
08:30		9	18	13	40	20:30		18	11	7	36
08:45		15	23	9	47	20:45		12	5	3	20
09:00		17	13	8	38	21:00		12	3	3	18
09:15		13	12	10	35	21:15		13	6	4	23
09:30		4	12	10	26	21:30		8	6	2	16
09:45		13	7	5	25	21:45		6	3	0	9
10:00		7	12	8	27	22:00		8	3	1	12
10:15		12	8	4	24	22:15		7	2	4	13
10:30		13	13	3	29	22:30		1	5	3	9
10:45		10	16	11	37	22:45		5	4	0	9
11:00		13	15	5	33	23:00		8	0	3	11
11:15		9	14	8	31	23:15		7	4	0	11
11:30		14	13	11	38	23:30		5	2	2	9
11:45		9	13	8	30	23:45		3	3	1	7
TOTALS		273	464	305	1042	TOTALS		759	689	389	1837
SPLIT %		26.2%	44.5%	29.3%	36.2%	SPLIT %		41.3%	37.5%	21.2%	63.8%

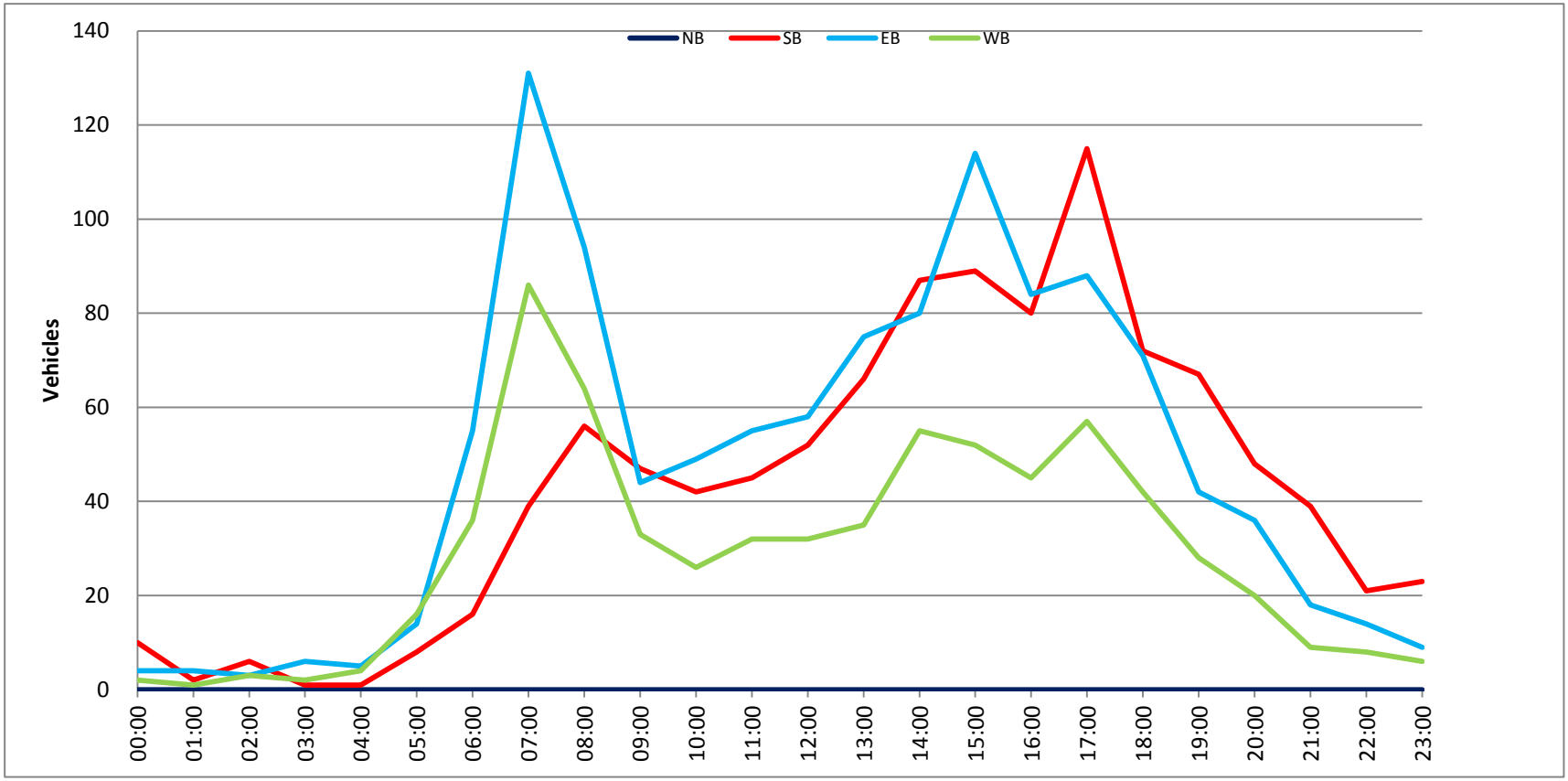
DAILY TOTALS	NB	SB	EB	WB	Total
	0	1,032	1,153	694	2,879

AM Peak Hour		08:00	07:30	07:30	07:30	PM Peak Hour		17:00	15:15	14:15	17:00
AM Pk Volume		56	140	100	291	PM Pk Volume		115	117	72	260
Pk Hr Factor		0.824	0.686	0.758	0.836	Pk Hr Factor		0.991	0.813	0.621	0.867
7 - 9 Volume	0	95	225	150	470	4 - 6 Volume	0	195	172	102	469
7 - 9 Peak Hour		08:00	07:30	07:30	07:30	4 - 6 Peak Hour		17:00	16:45	17:00	17:00
7 - 9 Pk Volume	0	56	140	100	291	4 - 6 Pk Volume	0	115	95	57	260
Pk Hr Factor	0.000	0.824	0.686	0.758	0.836	Pk Hr Factor	0.000	0.991	0.848	0.679	0.867

Prepared by National Data & Surveying Services

Project #: CA21_040159_004 **City:** Spring Valley

Location: Helix St & Lamar St **Date:** 9/16/2021



Lamar Street
& Helix Street (west intersection)

SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: April 22, 2022 **Item 4-B**

SUPERVISORIAL DISTRICT: 4

SUBJECT: Intersection Control

LOCATION: Lamar Street & Helix Street (west intersection), SPRING VALLEY (Thos. Bros. 1271-B6)

INITIATED BY: DPW Traffic Engineering

REQUEST: All-Way Stop Control

PROBLEM AS STATED BY REQUESTER:
The west intersection of Lamar Street & Helix Street has been identified by Traffic Engineering as meeting Option C, an intersection where motorists are unable to see conflicting traffic to determine when it is safe to enter the intersection, and Option D, an intersection of two residential collectors of similar design and an all-way stop would enhance the traffic operations of said intersection, of the Multi-Way Stop Application optional criteria as described in the California Manual on Uniform Traffic Control Devices (CA MUTCD), Section 2B.07, therefore an all-way stop control should be considered.

Existing Traffic Devices
Lamar Street is a striped two-lane road with a 24-foot pavement width. The roadway is striped with a no passing centerline and has white edgeline on the south side of the roadway adjacent to the intersection with Helix Street. Lamar Street is a designated through highway. It is unclassified on the County General Plan Mobility Element Network. The roadway is a posted 25 MPH residence district.

Helix Street is a striped two-lane road with a 28-foot pavement width. The roadway is striped with a no passing centerline and white edgeline. The road is stop controlled in the northbound direction at Lamar Street. Helix Street is a designated through highway. It is unclassified on the County General Plan Mobility Element Network. The roadway is a posted 25 MPH residence district.

Average Daily Traffic Volumes	**09/21**
Lamar Street:	
W/o Helix Street	1,064 EB
E/o Helix Street	1,083 WB
Helix Street:	
N/o Lamar Street	742 NB

Collision Data
There have been 3 reported collisions, 2 of which involved an injury, at this intersection,

within a past 5-year period (11-01-2016 to 10-31-2021).

County of San Diego

JEFF MONEDA
DIRECTOR

DEPARTMENT OF PUBLIC WORKS
5510 OVERLAND AVENUE, SUITE 410
SAN DIEGO, CA 92123-1237
(858) 694-2212
www.sdcounty.ca.gov/dpw/

COUNTY TRAFFIC ENGINEER RECOMMENDATION

Date:	April 4, 2022
Item Title:	All-Way Stop Controls
Location:	Helix Street (west) and Lamar Street Intersection
Recommendation:	**Install All-Way Stop Controls**
Conditions:	

- Section 21354 "Stop Signs on Local Highways" of the California Vehicle Code (CVC) authorizes local agencies to designate any intersection under its exclusive jurisdiction as a stop intersection.

- Section 2B.07 "Multi-Way Stop Applications" of the California MUTCD, provides four optional criteria that may be considered in an engineering study when evaluating an intersection for an all-way stop control.

- Section 2B.07 - Option C, lack of sight distance, indicates all-way stop controls can be considered when motorists are unable to see conflicting traffic to determine when it is safe to enter the intersection.

- Existing corner sight distance for Helix Street northbound approach is 330 feet looking east as measured in the field, whereas the required corner sight distance per County Public Road Standards is 350 feet or greater.

- Section 2B.07 - Option D, Intersection of two Residential Collectors, indicates all-way stop controls may be considered at an intersection of two residential collectors of similar design and the all-way stop control would enhance the traffic

operations of said intersection. Both Helix Street and Lamar Street are considered Residential Collectors with similar traffic operation.

- Pursuant to CVC section 21354 coupled with traffic conditions noted above, it is my recommendation that an All-Way Stop Control is appropriate and safe for the intersection of Helix Street and Lamar Street.

Zoubir A. Ouadah

Zoubir A. Ouadah, PE. TE.
County Traffic Engineer

04/06/2022

Date

Prepared by National Data & Surveying Services

VOLUME

Helix St & Lamar St

Day: Thursday
Date: 9/16/2021

City: Spring Valley
Project #: CA21_040159_001

DAILY TOTALS	NB	SB	EB	WB	Total
	742	0	1,064	1,083	2,889

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	1		0	6	7	12:00	11		11	10	32
00:15	0		1	2	3	12:15	7		11	18	36
00:30	0		2	0	2	12:30	11		18	15	44
00:45	1	2	0	3	1	9	2	14	12:45	9	38	21	61	14	57	44	156
01:00	2		0	1	3	13:00	10		19	17	46
01:15	0		2	1	3	13:15	11		16	12	39
01:30	0		1	1	2	13:30	10		19	11	40
01:45	1	3	0	3	0	3	1	9	13:45	14	45	20	74	25	65	59	184
02:00	0		2	2	4	14:00	14		24	17	55
02:15	0		0	1	1	14:15	9		10	22	41
02:30	1		2	0	3	14:30	8		22	36	66
02:45	0	1	0	4	2	5	2	10	14:45	13	44	21	77	24	99	58	220
03:00	1		0	0	1	15:00	14		24	21	59
03:15	2		1	1	4	15:15	11		34	28	73
03:30	3		0	0	3	15:30	23		30	16	69
03:45	1	7	1	2	2	3	4	12	15:45	14	62	35	123	29	94	78	279
04:00	1		0	1	2	16:00	14		20	15	49
04:15	0		0	0	0	16:15	8		25	19	52
04:30	7		0	0	7	16:30	11		17	29	57
04:45	4	12	3	3	0	1	7	16	16:45	15	48	20	82	17	80	52	210
05:00	2		0	0	2	17:00	13		24	30	67
05:15	10		0	1	11	17:15	6		28	22	56
05:30	8		3	2	13	17:30	16		22	32	70
05:45	8	28	2	5	5	8	15	41	17:45	10	45	18	92	27	111	55	248
06:00	9		6	3	18	18:00	10		22	20	52
06:15	13		7	4	24	18:15	10		21	20	51
06:30	13		10	5	28	18:30	8		14	11	33
06:45	17	52	11	34	13	25	41	111	18:45	7	35	16	73	16	67	39	175
07:00	17		18	12	47	19:00	7		12	11	30
07:15	18		9	13	40	19:15	3		18	16	37
07:30	25		36	16	77	19:30	12		11	18	41
07:45	13	73	24	87	25	66	62	226	19:45	2	24	14	55	14	59	30	138
08:00	20		22	22	64	20:00	9		9	13	31
08:15	11		11	31	53	20:15	5		18	10	33
08:30	10		10	15	35	20:30	7		13	14	34
08:45	14	55	18	61	17	85	49	201	20:45	7	28	8	48	9	46	24	122
09:00	10		9	15	34	21:00	4		5	10	19
09:15	11		10	13	34	21:15	3		6	10	19
09:30	7		9	12	28	21:30	1		6	10	17
09:45	6	34	11	39	11	51	28	124	21:45	3	11	6	23	5	35	14	69
10:00	12		5	12	29	22:00	4		2	9	15
10:15	12		4	9	25	22:15	4		5	6	15
10:30	9		10	8	27	22:30	0		7	3	10
10:45	6	39	16	35	11	40	33	114	22:45	1	9	7	21	4	22	12	52
11:00	10		17	10	37	23:00	1		2	9	12
11:15	12		7	9	28	23:15	6		2	1	9
11:30	4		14	10	28	23:30	1		3	4	8
11:45	12	38	11	49	8	37	31	124	23:45	1	9	3	10	1	15	5	34
TOTALS		344		325	333	1002	TOTALS		398		739	750	1887
SPLIT %		34.3%		32.4%	33.2%	34.7%	SPLIT %		21.1%		39.2%	39.7%	65.3%

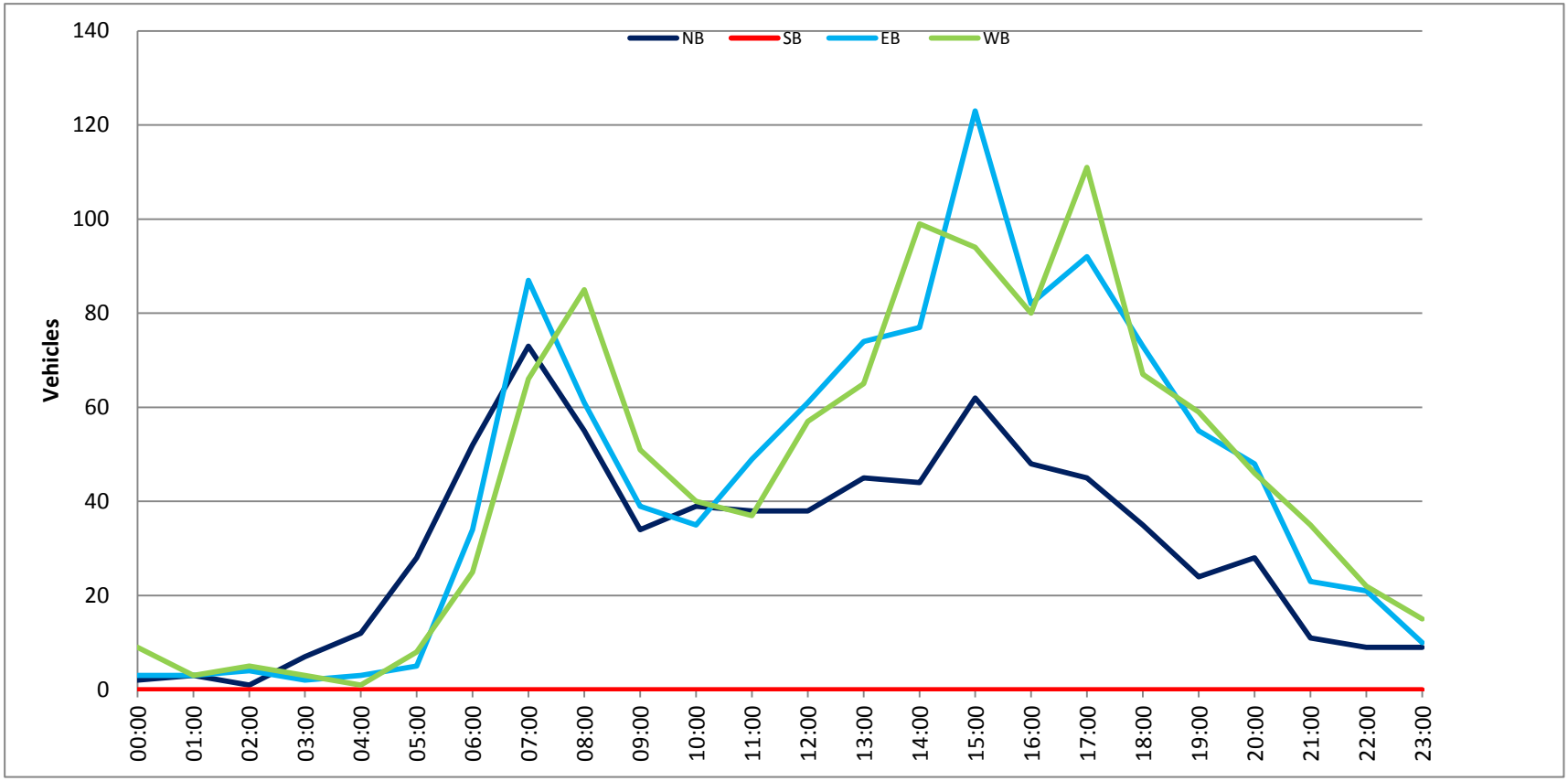
DAILY TOTALS	NB	SB	EB	WB	Total
	742	0	1,064	1,083	2,889

AM Peak Hour	06:45		07:30	07:30	07:30	PM Peak Hour	15:00		15:00	17:00	15:00
AM Pk Volume	77		93	94	256	PM Pk Volume	62		123	111	279
Pk Hr Factor	0.770		0.646	0.758	0.831	Pk Hr Factor	0.674		0.879	0.867	0.894
7 - 9 Volume	128	0	148	151	427	4 - 6 Volume	93	0	174	191	458
7 - 9 Peak Hour	07:15		07:30	07:30	07:30	4 - 6 Peak Hour	16:45		16:45	17:00	17:00
7 - 9 Pk Volume	76	0	93	94	256	4 - 6 Pk Volume	50	0	94	111	248
Pk Hr Factor	0.760	0.000	0.646	0.758	0.831	Pk Hr Factor	0.781	0.000	0.839	0.867	0.886

Prepared by National Data & Surveying Services

Project #: CA21_040159_001 **City:** Spring Valley

Location: Helix St & Lamar St **Date:** 9/16/2021



Lamar Street & Vista Drive

SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: April 22, 2022 **Item 4-C**

SUPERVISORIAL DISTRICT: 4

SUBJECT: Intersection Control

LOCATION: Lamar Street & Vista Drive, SPRING VALLEY (Thos. Bros. 1271-C6)

INITIATED BY: DPW Traffic Engineering

REQUEST: All-Way Stop Control

PROBLEM AS STATED BY REQUESTER:
The east intersection of Lamar Street & Vista Drive has been identified by Traffic Engineering as meeting Option D, an intersection of two residential collectors of similar design and an all-way stop would enhance the traffic operations of said intersection, of the Multi-Way Stop Application optional criteria as described in the California Manual on Uniform Traffic Control Devices (CA MUTCD), Section 2B.07, therefore an all-way stop control should be considered.

Existing Traffic Devices
Lamar Street is a striped two-lane road with a 24 to 26-foot pavement width. The roadway is striped with a no passing centerline. Lamar Street is a designated through highway. It is unclassified on the County General Plan Mobility Element Network. The road is a posted 25 MPH residence district west of the intersection with Vista Drive. Lamar Street is unposted north of the intersection.

Vista Drive is an unstriped two-lane road with a 22-foot pavement width. The road is stop controlled in the northbound direction at Lamar Street. It is unclassified on the County General Plan Mobility Element Network. The road has no posted speed limit.

Average Daily Traffic Volumes	**09/21**
Lamar Street:	
W/o Helix Street	419 EB
N/o Helix Street	303 SB
Vista Drive:	
S/o Lamar Street	94 NB

Collision Data
There have been 0 reported collisions, at this intersection, within a past 5-year period (11-01-2016 to 10-31-2021).

County of San Diego

DEPARTMENT OF PUBLIC WORKS
5510 OVERLAND AVENUE, SUITE 410
SAN DIEGO, CA 92123-1237
(858) 694-2212
www.sdcounty.ca.gov/dpw/

JEFF MONEDA
DIRECTOR

COUNTY TRAFFIC ENGINEER RECOMMENDATION

Date:	April 4, 2022
Item Title:	All-Way Stop Controls
Location:	Vista Drive and Lamar Street Intersection
Recommendation:	**Install All-Way Stop Controls**
Conditions:	

- Section 21354 "Stop Signs on Local Highways" of the California Vehicle Code (CVC) authorizes local agencies to designate any intersection under its exclusive jurisdiction as a stop intersection.
- Section 2B.07 "Multi-Way Stop Applications" of the California MUTCD, provides four optional criteria that may be considered in an engineering study when evaluating an intersection for an all-way stop control.
- Section 2B.07 - Option D, Intersection of two Residential Collectors, indicates all-way stop controls may be considered at an intersection of two residential collectors of similar design and the all-way stop control would enhance the traffic operations of said intersection. Both Vista Drive and Lamar Street are considered Residential Collectors with similar traffic operation.
- Pursuant to CVC section 21354 coupled with traffic conditions noted above, it is my recommendation that an All-Way Stop Control is appropriate and safe for the intersection of Helix Street and Lamar Street.

Zoubir A. Ouadah

Zoubir A. Ouadah, PE. TE.
County Traffic Engineer

04/06/2022

Date

Prepared by National Data & Surveying Services

VOLUME

Vista Dr & Lamar St

Day: Thursday
Date: 9/23/2021

City: Spring Valley
Project #: CA21_040163_001

DAILY TOTALS	NB	SB	EB	WB	Total
	94	303	419	0	816

AM Period	NB		SB		EB		WB	TOTAL		PM Period	NB		SB		EB		WB	TOTAL	
00:00	0		2		3		0	5		12:00	2		0		5		0	7	
00:15	0		0		0		0	0		12:15	3		5		4		0	12	
00:30	1		0		0		0	1		12:30	2		3		2		0	7	
00:45	1	2	1	3	3	6	0	5	11	12:45	3	10	1	9	1	12	0	5	31
01:00	0		0		2		0	2		13:00	0		2		5		0	7	
01:15	0		1		0		0	1		13:15	2		4		4		0	10	
01:30	0		0		0		0	0		13:30	1		1		7		0	9	
01:45	0		0	1	2	4	0	2	5	13:45	0	3	3	10	8	24	0	11	37
02:00	0		0		0		0	0		14:00	1		5		10		0	16	
02:15	0		1		0		0	1		14:15	2		12		10		0	24	
02:30	0		0		0		0	0		14:30	1		16		8		0	25	
02:45	0		0	1	0		0	0	1	14:45	1	5	4	37	9	37	0	14	79
03:00	0		0		2		0	2		15:00	0		9		6		0	15	
03:15	0		0		0		0	0		15:15	2		5		10		0	17	
03:30	0		1		0		0	1		15:30	2		7		6		0	15	
03:45	0		0	1	0	2	0	0	3	15:45	0	4	2	23	6	28	0	8	55
04:00	0		1		1		0	2		16:00	2		12		10		0	24	
04:15	0		0		0		0	0		16:15	2		7		10		0	19	
04:30	0		0		0		0	0		16:30	0		1		5		0	6	
04:45	0		0	1	1	2	0	1	3	16:45	2	6	6	26	11	36	0	19	68
05:00	1		1		1		0	3		17:00	2		2		10		0	14	
05:15	3		1		0		0	4		17:15	2		6		11		0	19	
05:30	1		0		0		0	1		17:30	2		5		9		0	16	
05:45	0	5	3	5	2	3	0	5	13	17:45	1	7	5	18	9	39	0	15	64
06:00	0		0		2		0	2		18:00	2		13		5		0	20	
06:15	2		0		1		0	3		18:15	1		5		6		0	12	
06:30	2		5		5		0	12		18:30	0		3		6		0	9	
06:45	2	6	1	6	8	16	0	11	28	18:45	2	5	7	28	4	21	0	13	54
07:00	2		8		4		0	14		19:00	2		1		6		0	9	
07:15	1		7		5		0	13		19:15	2		3		8		0	13	
07:30	7		3		18		0	28		19:30	2		2		7		0	11	
07:45	4	14	21	39	14	41	0	39	94	19:45	0	6	1	7	5	26	0	6	39
08:00	1		13		7		0	21		20:00	0		2		4		0	6	
08:15	1		8		14		0	23		20:15	1		3		3		0	7	
08:30	0		4		2		0	6		20:30	0		0		5		0	5	
08:45	1	3	9	34	7	30	0	17	67	20:45	0	1	1	6	4	16	0	5	23
09:00	3		4		7		0	14		21:00	1		0		1		0	2	
09:15	0		4		9		0	13		21:15	0		1		1		0	2	
09:30	2		3		1		0	6		21:30	0		1		2		0	3	
09:45	3	8	0	11	2	19	0	5	38	21:45	0	1	0	2	4	8	0	4	11
10:00	1		1		3		0	5		22:00	0		2		0		0	2	
10:15	1		7		3		0	11		22:15	0		0		0		0	0	
10:30	2		3		4		0	9		22:30	0		0		1		0	1	
10:45	1	5	3	14	5	15	0	9	34	22:45	0		1	3	2	3	0	3	6
11:00	0		3		3		0	6		23:00	1		0		1		0	2	
11:15	0		4		11		0	15		23:15	0		1		2		0	3	
11:30	2		6		9		0	17		23:30	0		2		0		0	2	
11:45	0	2	2	15	5	28	0	7	45	23:45	0	1	0	3	0	3	0	0	7
TOTALS	45		131		166				342	TOTALS	49		172		253				474
SPLIT %	13.2%		38.3%		48.5%				41.9%	SPLIT %	10.3%		36.3%		53.4%				58.1%

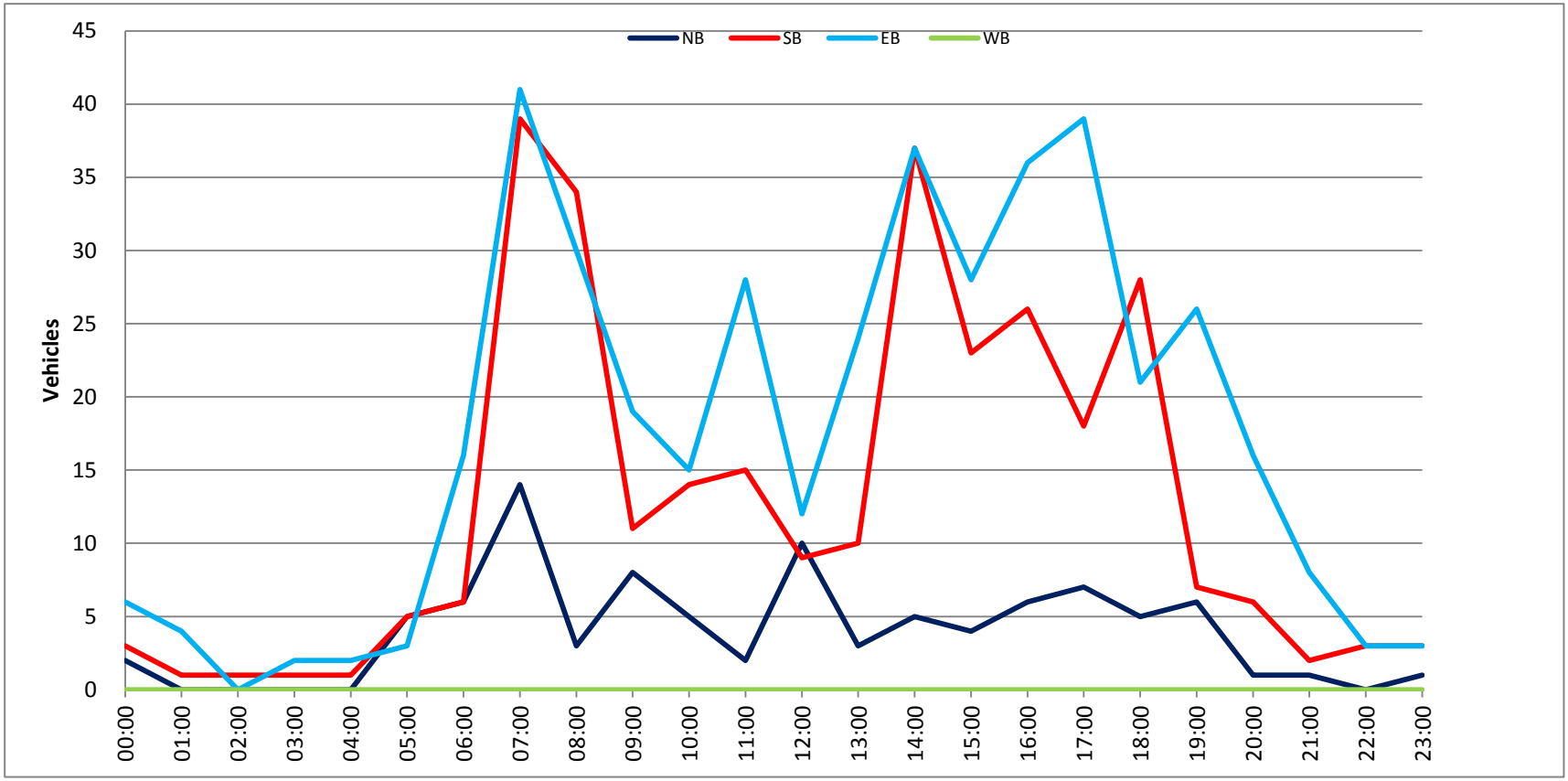
DAILY TOTALS	NB	SB	EB	WB	Total
	94	303	419	0	816

AM Peak Hour	07:00	07:45	07:30		07:30	PM Peak Hour	12:00	14:15	16:45		14:00
AM Pk Volume	14	46	53		111	PM Pk Volume	10	41	41		79
Pk Hr Factor	0.500	0.548	0.736		0.712	Pk Hr Factor	0.833	0.641	0.932		0.790
7 - 9 Volume	17	73	71	0	161	4 - 6 Volume	13	44	75	0	132
7 - 9 Peak Hour	07:00	07:45	07:30		07:30	4 - 6 Peak Hour	16:45	16:00	16:45		16:00
7 - 9 Pk Volume	14	46	53	0	111	4 - 6 Pk Volume	8	26	41	0	68
Pk Hr Factor	0.500	0.548	0.736	0.000	0.712	Pk Hr Factor	1.000	0.542	0.932	0.000	0.708

Prepared by National Data & Surveying Services

Project #: CA21_040163_001 **City:** Spring Valley

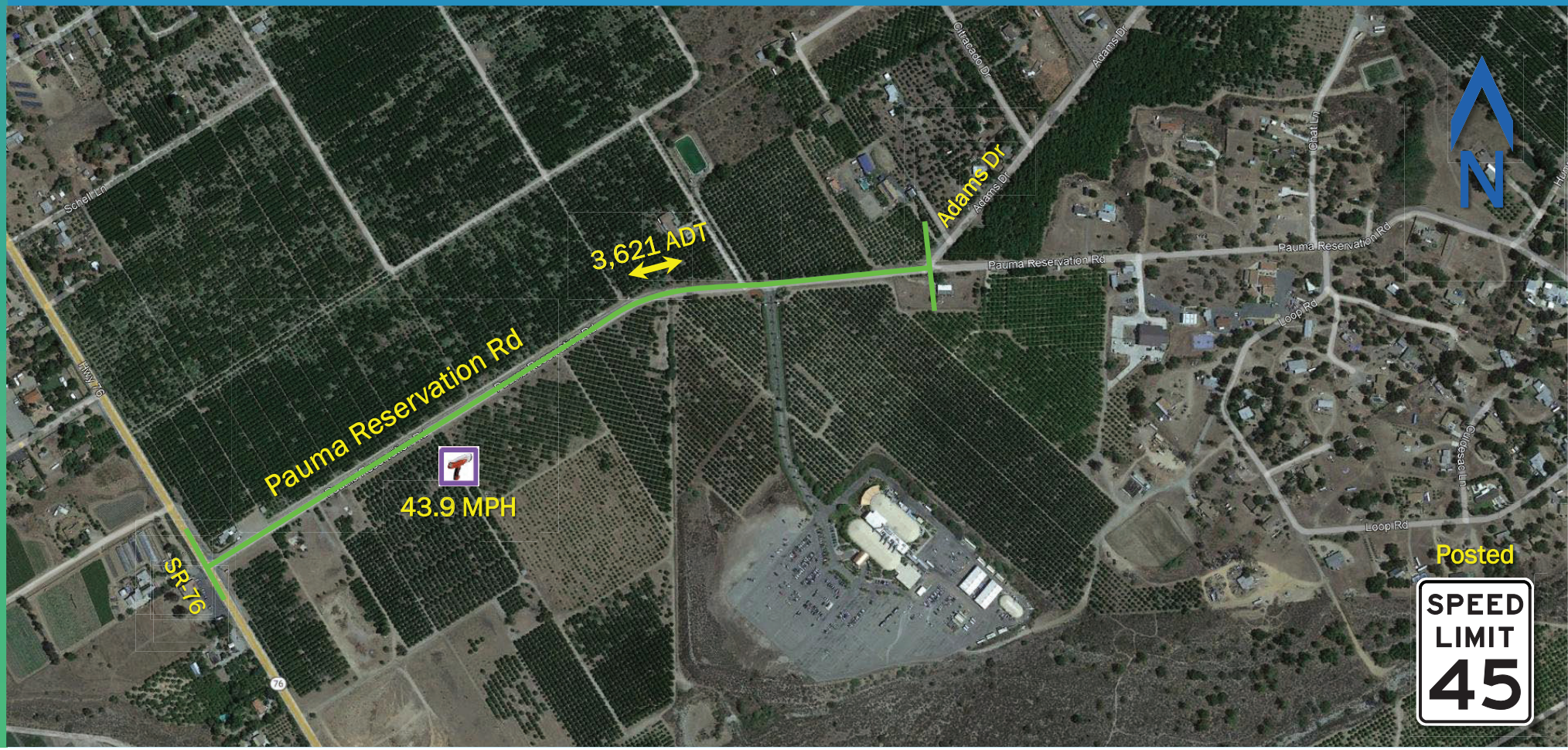
Location: Vista Dr & Lamar St **Date:** 9/23/2021



5-A. Radar Certification

Pauma Reservation Road

State Route 67 to Adams Drive (0.65 miles)



SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: April 22, 2022 **Item 5-A**

SUPERVISORIAL DISTRICT: 5

SUBJECT: Radar Certification

LOCATION: Pauma Reservation Road from State Route 76 to Adams Drive (PRD 6) (a distance of 0.65 miles) PAUMA (Thos. Bros. 1050-H2)

INITIATED BY: DPW Traffic Engineering

REQUEST: Radar Recertification

PROBLEM AS STATED BY REQUESTER:
Pauma Reservation Road from State Route 76 to Adams Drive (PRD 6) is posted 45 MPH. A preliminary review of prevailing speeds and roadway conditions could support radar certification of a 40 MPH speed limit.

Existing Traffic Devices
Pauma Reservation Road is a striped 2-lane undivided highway with a pavement width of 21 feet. The roadway is striped with no passing centerline and white edgeline. The road is posted with signal, curve, and intersection advisory signs. Pauma Reservation Road is unclassified on the County General Plan Mobility Element Network. The road is posted 45 MPH/Radar Enforced.

Average Daily Traffic Volumes	**03/22**	**12/14**
Pauma Reservation Road:		
150' W/o Casino Pauma Entrance	3,621	3,615

Speed Data		**85th Percentile**	**10 MPH Pace**	**% in Pace**
Pauma Reservation Road:				
1,450' E/o State Route 76	(2022)	43.9 MPH	30-39	64.0%
	(2014)	47.0 MPH	37-46	61.0%

Collision Data
There have been 0 reported collisions, along this segment of roadway in a 3 year period (11-01-18 to 10-31-21).

Prepared by National Data & Surveying Services

VOLUME

Pauma Reservation Rd 150' W/O Casino Pauma Entrance

Day: Tuesday
Date: 3/22/2022

City: Pauma Valley
Project #: CA22_040044_006

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,808	1,813	3,621

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			9	24	33	12:00			31	25	56
00:15			2	10	12	12:15			24	28	52
00:30			3	11	14	12:30			21	25	46
00:45			7	21 12 57	19 78	12:45			23	99 26 104	49 203
01:00			7	12	19	13:00			26	11	37
01:15			5	10	15	13:15			28	24	52
01:30			3	4	7	13:30			32	20	52
01:45			8	23 9 35	17 58	13:45			28	114 24 79	52 193
02:00			2	5	7	14:00			23	28	51
02:15			1	3	4	14:15			40	30	70
02:30			5	9	14	14:30			32	28	60
02:45			6	14 6 23	12 37	14:45			38	133 31 117	69 250
03:00			2	15	17	15:00			41	45	86
03:15			2	6	8	15:15			31	26	57
03:30			1	10	11	15:30			30	31	61
03:45			10	15 11 42	21 57	15:45			28	130 31 133	59 263
04:00			2	6	8	16:00			32	34	66
04:15			1	5	6	16:15			36	34	70
04:30			4	8	12	16:30			34	28	62
04:45			2	9 6 25	8 34	16:45			22	124 24 120	46 244
05:00			2	4	6	17:00			31	40	71
05:15			5	6	11	17:15			37	24	61
05:30			15	7	22	17:30			37	28	65
05:45			18	40 11 28	29 68	17:45			35	140 23 115	58 255
06:00			8	13	21	18:00			39	43	82
06:15			18	7	25	18:15			33	22	55
06:30			12	11	23	18:30			34	20	54
06:45			18	56 10 41	28 97	18:45			34	140 17 102	51 242
07:00			11	15	26	19:00			31	26	57
07:15			11	16	27	19:15			26	27	53
07:30			14	19	33	19:30			27	23	50
07:45			32	68 25 75	57 143	19:45			32	116 23 99	55 215
08:00			19	16	35	20:00			21	37	58
08:15			14	6	20	20:15			14	28	42
08:30			25	9	34	20:30			20	29	49
08:45			27	85 22 53	49 138	20:45			17	72 21 115	38 187
09:00			17	10	27	21:00			9	33	42
09:15			16	13	29	21:15			10	22	32
09:30			28	7	35	21:30			10	25	35
09:45			32	93 16 46	48 139	21:45			13	42 21 101	34 143
10:00			16	19	35	22:00			16	21	37
10:15			26	17	43	22:15			14	22	36
10:30			28	18	46	22:30			18	17	35
10:45			24	94 14 68	38 162	22:45			13	61 31 91	44 152
11:00			14	22	36	23:00			8	23	31
11:15			27	13	40	23:15			10	21	31
11:30			23	14	37	23:30			9	15	24
11:45			22	86 16 65	38 151	23:45			6	33 20 79	26 112
TOTALS				604	558 1162	TOTALS				1204	1255 2459
SPLIT %				52.0%	48.0% 32.1%	SPLIT %				49.0%	51.0% 67.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,808	1,813	3,621

AM Peak Hour				11:15	11:45	11:45	PM Peak Hour			14:15	14:15	14:15
AM Pk Volume				103	94	192	PM Pk Volume			151	134	285
Pk Hr Factor				0.831	0.839	0.857	Pk Hr Factor			0.921	0.744	0.828
7 - 9 Volume	0	0		153	128	281	4 - 6 Volume	0	0	264	235	499
7 - 9 Peak Hour				07:45	07:15	07:15	4 - 6 Peak Hour			17:00	16:15	17:00
7 - 9 Pk Volume	0	0		90	76	152	4 - 6 Pk Volume	0	0	140	126	255
Pk Hr Factor	0.000	0.000		0.703	0.760	0.667	Pk Hr Factor	0.000	0.000	0.946	0.788	0.898

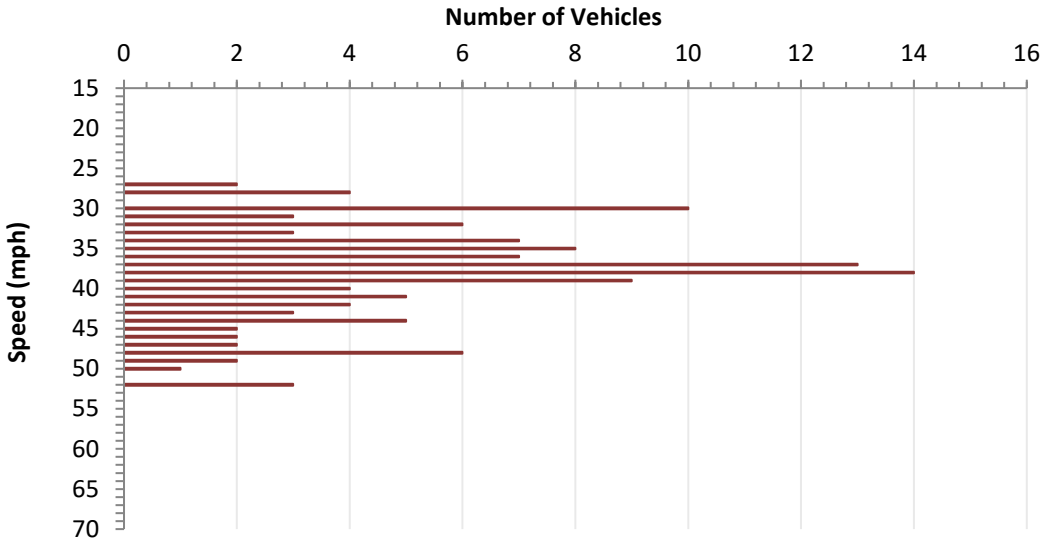
RADAR SPEED SURVEY

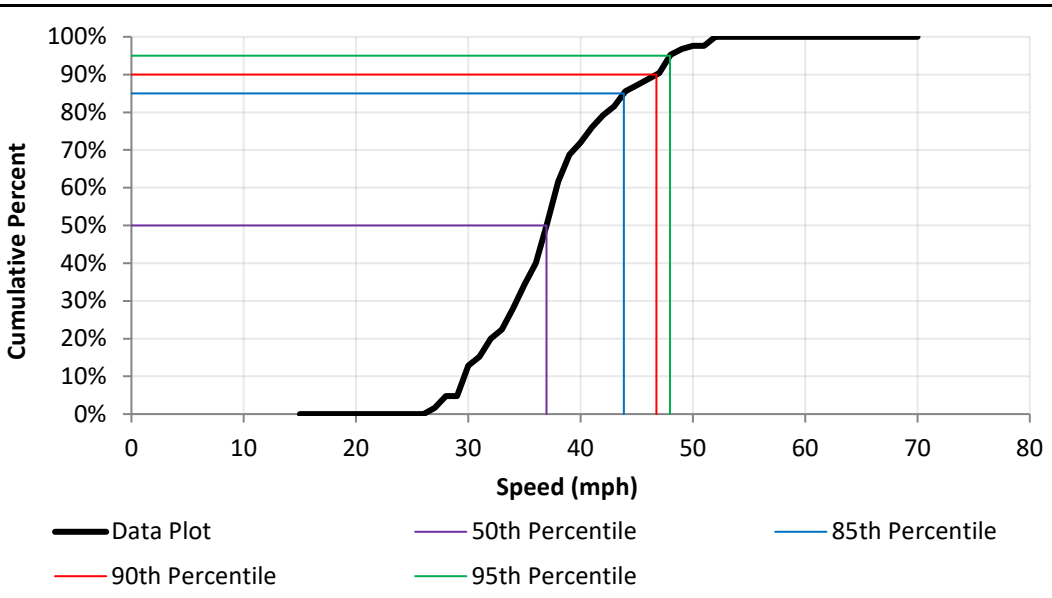
SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name:	Pauma Reservation R	**From:**	HWY 76	**To:**	Adams Dr
Position:	1,450' E/O Hwy 76			**Direction:**	EB/WB

Date:	3/25/2022	**Weather:**	Clear	**Project Number:**	0
Time Start:	12:00PM	**Road Condition:**	Dry	**Observer:**	Samuel Cecere
Time End:	1:03PM	**Posted Speed:**	N/A	**Calibration Test:**	Y

Speed (mph)	Num. Veh.	Cum. Pct.
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27	2	1.6%
28	4	4.8%
29		
30	10	12.8%
31	3	15.2%
32	6	20.0%
33	3	22.4%
34	7	28.0%
35	8	34.4%
36	7	40.0%
37	13	50.4%
38	14	61.6%
39	9	68.8%
40	4	72.0%
41	5	76.0%
42	4	79.2%
43	3	81.6%
44	5	85.6%
45	2	87.2%
46	2	88.8%
47	2	90.4%
48	6	95.2%
49	2	96.8%
50	1	97.6%
51		
52	3	100.0%
53		
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
Total	125	





DATA ANALYSIS

Average Speed	37.9	Range	27 - 52
50th Percentile	37.0	10 mph Pace	30 - 39
85th Percentile	43.9	Number in Pace	80
90th Percentile	46.8	Percent in Pace	64%
95th Percentile	48.0		

SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE
Informational Item A

COMMITTEE REPORT OF: April 22, 2022

SUPERVISORIAL DISTRICT: All

SUBJECT: Local Roadway Safety Plan (LRSP)

LOCATION: COUNTYWIDE

Project update on the Local Roadway Safety Plan (LRSP).

The County's first Local Roadway Safety Plan (LRSP) has been completed and has created a framework to identify, analyze, and prioritize roadway safety improvements on local County maintained roadway segments and intersections. The LRSP's mission is to prevent death and severe injuries on County roadways, and considered the following when prioritizing locations: 1) Community Representation; 2) Collision Rate/Frequency; 3) Health and Equity; and 4) Severity. The first LRSP has prioritized 65 intersections and 60 roadway segments for targeted assessments and improvements throughout the County unincorporated area to enhance safety on the County roadway network. The LRSP will be advantageous in securing future grant funds, and it is also a future requirement of Highway Safety Improvement Program (HSIP). The LRSP is a living document that will be updated periodically to reflect new collision data, trends, and updated recommendations.

Included in this report is the executive summary of the LRSP, list of 65 priority intersections identified in the LRSP, list of 60 priority road segments identified in the LRSP, and a draft copy of the LRSP Report.

A video summarizing the LRSP can be found at the link below:
San Diego County Local Roadway Safety Plan - YouTube

County of San Diego

DEPARTMENT OF PUBLIC WORKS
5510 OVERLAND AVENUE, SUITE 410
SAN DIEGO, CA 92123-1237
(858) 694-2212
www.sdcounty.ca.gov/dpw/

JEFF MONEDA
DIRECTOR

COUNTY TRAFFIC ENGINEER RECOMMENDATION

Date:	April 7, 2022
Item Title:	Local Roadway Safety Plan, April 7, 2022
Location:	Countywide
Recommendation:	**Approved the Report**
Conditions:	

- In the past, the County of San Diego was awarded numerous Highway Safety Improvement grants (HSIP) to enhance the safety of the County roadways.
- Starting in 2023, the County will not be able to apply or receive an HISP grant unless the County has an approved Local Roadways Safety Plan (LRSP).
- The State and the Federal Highway Administration (FHWA) has provided guidelines in preparing an LRSP, and the County's report has been prepared following those guidelines.
- An in-depth analysis of the County roadway and intersection collision data for a period of five years was performed and roadway and intersection rankings are documented in the LRSP report.
- The LRSP report ranked the top 60 roadway segments and 65 intersections based on collision records using three factors: number of fatal and severe injury collisions, total number of collisions, and location of collisions with respect to underserved communities.

- The LRSP sets a framework to ensure future roadway projects are focused on locations in most need of safety improvements and encourages community and stakeholder input.

- It is my recommendation that the TAC approve the LRSP report, dated April 7, 2022.

Zoubir A. Ouadah

Zoubir A. Ouadah, PE. TE.
County Traffic Engineer

04/06/2022

Date

COUNTY OF SAN DIEGO LOCAL ROADWAY SAFETY PLAN

EXECUTIVE SUMMARY

The County of San Diego (County) and Linscott, Law & Greenspan, Engineers is pleased to present the Local Roadway Safety Plan (LRSP). This LRSP provides the framework and process for analyzing, identifying, and prioritizing roadway safety improvements to reduce severe injury and fatal collisions on County roadways. The LRSP helps communities and stakeholders understand the types of collisions occurring and helps the County make informed, proactive, and prioritized roadway infrastructure safety decisions. Additional benefits of the LRSP include:

- Coordination and partnership between various agencies within the County
- Use of the findings and recommendations to leverage and apply for outside funding

To help guide the development of the LRSP the following guiding principles were established:

- **GOAL:** Implement a multidisciplinary holist approach to improve transportation safety in each challenge area.
- **MISSION:** Strive for zero deaths and severe injuries on County Roadways by promoting safe, healthy, and equitable mobility for all.
- **VISION:** Every life counts.

Between 2015 and 2019, a total of 16,452 transportation-related collisions have occurred – 683 of which were severe injury collisions and 160 of which were fatal collisions. The collision data was analyzed to understand collision trends, types, locations, and potential contributing factors.

Based on the collision analysis, sixteen (16) challenge areas were identified. A challenge area is an area of opportunity to improve transportation safety. It helps focus the recommendations/countermeasures to provide the greatest opportunity for reducing fatal and severe injury collisions. Additionally, using a ranking system that factors the collision rate, collision severity, and health/equity metrics, a list, which prioritized 65 intersections and 60 ~~ranked~~ segments was created for targeted assessments and improvements to enhance the County roadway infrastructure safety.

The LRSP is living documents that will be updated periodically to reflect new collision data, trends, and updated recommendations. The real work in achieving the LRSP's goal, mission, and vision is in the successful implementation of this plan, which depends on everyone.

County of San Diego

Local Roadway Safety Plan

April 7, 2022

REPORT INFORMATION

Project: County of San Diego Local Roadway Safety Plan

Date: April 7, 2022

LLG Ref.: 3-19-3236

Prepared For:

County of San Diego, Department of Public Works
5510 Overland Avenue
San Diego, CA 92123

Derek Gade, PE
Assistant Director
Date

Murali Pasumarthi
Traffic Engineering Manager
Date

Zoubir Ouadah, PE, TE
County Traffic Engineer
04/07/2022
Date

Richard Chin
Public Works Project Manager
04/07/2022
Date

Prepared By:

Linscott, Law & Greenspan, Engineer
4542 Ruffner Street, Suite 100
San Diego, CA 92111

K.C. Yellapu, PE, TE
Principal
4/7/22
Date

Erika Carino, PE, RSP
Transportation Engineer III
4/7/22
Date

TABLE OF CONTENTS

TABLE OF CONTENTS, CONTINUED

APPENDICES

LIST OF FIGURES

LIST OF TABLES

LIST OF ACRONYMS

(ALPHABETICAL ORDER)

CA SHSP	California Strategic Highway Safety Plan
CVC	California Vehicle Code
F	Fatal
FHWA	Federal Highway Safety Administration
F+SI	Fatal plus Severe Injuries
GIS	Geographic Information System
HHSA	Health and Human Services Agency
HPI	Healthy Places Index
HSIP	Highway Safety Improvement Program
ITS	Intelligent Transportation System
LLG	Linscott, Law and Greenspan
LRSP	Local Roadway Safety Plan
PE	Professional Engineer
RSA	Road Safety Audit
SI	Severe Injuries
TAC	Traffic Advisory Committee
TE	Transportation Engineer
TSM&O	Transportation System Management and Operations

INTRODUCTION

1.0 INTRODUCTION

The County of San Diego (herein referred to as the County) is committed to improving the transportation system to enhance the safety of all roadway users. As part of an ongoing effort to enhance the transportation system safety, this Local Roadway Safety Plan (LRSP) was developed as a step towards this commitment. In addition, an LRSP is now required to apply for future Highway Safety Improvement Program (HSIP) funding.

What is an LRSP?

An LRSP provides a framework for analyzing, identifying, and prioritizing roadway safety improvements to reduce severe injury and fatal collisions on local roadways. It is a living document that should be continually reviewed and updated to reflect changing local needs and priorities.

This report documents the process used to collect and analyze collision data on County maintained roadways and identifies recommendations that the County should implement. The LRSP development process is shown in **Figure 1-1**.

Figure 1-1

LRSP Development Process

The Benefits of an LRSP?

According to Federal Highway Safety Administration's (FHWA) *Developing Safety Plans: A Manual for Local Rural Road Owners*, there are several benefits of a local road safety plan. These benefits are detailed in **Table 1-1**.

TABLE 1–1
BENEFITS OF AN LRSP

Benefits	Detail
Proactive Approach	An LRSP offers a proactive approach for local road agencies to address safety issues. An LRSP can show the public and policymakers that something is being done to systematically reduce severe crashes, thereby building trust with local government officials, key stakeholders, and the general public.
Develop Partnerships	An LRSP provides local agencies with an opportunity to improve relationships with the public, stakeholders, and governmental agencies by working through a collaborative process. Improving road safety is a benefit for everyone involved.
Multi-Disciplinary Cooperation	An LRSP is a multi-disciplinary approach to addressing safety. Agencies can develop more effective solutions and leverage resources by considering and coordinating engineering, enforcement, education, and emergency service strategies.
Safer Roadways	An LRSP facilitates a comprehensive approach to addressing road safety that–if successfully implemented–can lead to projects that reduce severe crashes.
Safety Funding	An LRSP with a prioritized list of improvements can help agencies better justify funding requests by documenting specific needs, particularly if they are consistent with emphasis/challenge areas and strategies identified in the State's SHSP. An LRSP also shows that an agency has done its due diligence and can help an agency compete more effectively for limited funds.
Managing Liability	An LRSP is one of several proactive risk management techniques that demonstrate an agency's responsiveness to the safety needs of the public.

Source: FHWA's *Developing Safety Plans - A Manual for Local Rural Road Owners*

WORKING GROUP AND STAKEHOLDERS

2.0 WORKING GROUP AND STAKEHOLDERS

A key component to the success of an LRSP is the establishment of a collaborative partnership with stakeholders. Traffic Advisory Committee (TAC) meetings were determined to be the means by which open communication between the working group and stakeholders was established to support, develop, and implement the LRSP. **Table 2-1** tabulates the working group and stakeholders that collaborated on this LRSP.

TABLE 1–1
WORKING GROUP AND STAKEHOLDERS

WORKING GROUP	• County of San Diego, Public Works • Linscott, Law & Greenspan, Engineer
STAKEHOLDERS	• County of San Diego Departments: – Health & Human Services Agency – Sheriff – Ethics & Compliance – District Attorney – Planning and Development Services – Fire Authority • California Highway Patrol • Planning Communities: – Alpine, Bonsall, Central Mountain, County Islands, Crest-Dehesa, Desert, Fallbrook, Jamul/Dulzura, Julian, Lakeside, Mountain Empire, North County Metro, North Mountain, Otay, Pala/Pauma, Pendleton-De Luz, Rainbow, Ramona, San Dieguito, Spring Valley, Sweetwater, Valle De Oro and Valley Center

GUIDING PRINCIPLES

3.0 GUIDING PRINCIPLES

Vision, Mission, and Goal

To guide the development of the LRSP, a clear vision was established to describe the long-term outcome that is desired. Mission and goal statements were also developed to provide support and direction to achieve the LRSP vision.

Transportation, Health, and Equity

There is a direct relationship between health, equity, and the built environment. Although many factors affect equity, research shows that there is a direct link between transportation and equity. Unfortunately, in the past, some federal, state, and local policies implemented have not succeeded in providing everyone with access to affordable, safe, convenient, and reliable transportation options, leading to socioeconomic and racial disparities. The County of San Diego is committed to being a part of the solution to tackle the challenges of dismantling the injustices in the transportation system and is working towards providing equal access to healthy, reliable, and practical transportation to all.

The first step towards social justice and equity in transportation is acknowledging the existing disparities, inequalities, and roots to establish a clear understanding of both the underlying and explicit issues. In January 2021, the Board of Supervisors voted to declare racism a public health crisis. In doing so, the County acknowledges that racism underpins health inequities and has a substantial correlation to poor outcomes in multi-facets of life. The measures proposed will ensure that the County is making substantive changes to County operations to transform values, policies, and practices to promote equity based on data and community engagement. **Appendix A** contains the resolution.

The County of San Diego is making strides to ensure equity by incorporating public health metrics as an additional facet in the data-driven approach of the LRSP. This differs from the traditional method by accounting for collisions in underserved areas. The Healthy Places Index (HPI) tool was utilized in the priority location assessment in **Chapter 7**. HPI is an online data-mapping tool developed by the Public Health Alliance of Southern California that weighs eight (8) policy action areas to determine a score for each census tract.

Healthy Places Index	1) Economic 2) Social 3) Education 4) Transportation 5) Neighborhood 6) Housing 7) Clean Environment 8) Healthcare Access

HPI is being used at the state, regional, and local levels in equitable grantmaking, assessment, decision-making, planning guidance, prioritizing investments, and many more. The HPI and collision data were utilized to provide a holistic and equitable approach to roadway safety in this Local Roadway Safety Plan. Additional information on each policy action area is provided in **Appendix B**.

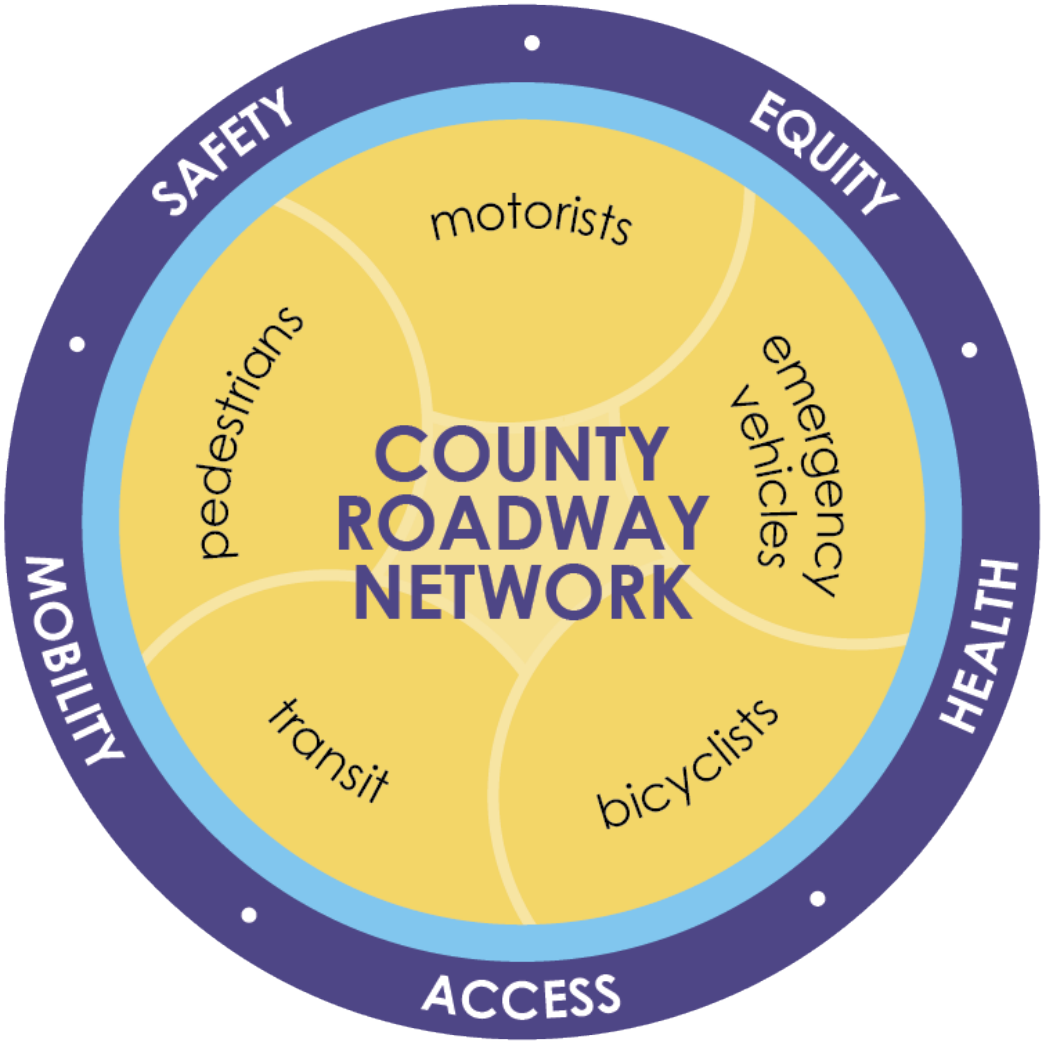
SAFE SYSTEM PRINCIPLES

1) Fatal/Serious Injury is Unacceptable
2) Responsibility is Shared
3) Humans make Mistakes
4) Safety is Proactive
5) Humans are Vulnerable
6) Redundance is Crucial

Road safety is a complex public health issue that requires a multi-disciplinary holistic approach. The California Highway Safety Plan integrates this multi-disciplinary approach through the four (4) Es of roadway safety. This approach involves roadway design (**Engineering**), changing user behavior and culture through institutionalized practices (**Enforcement** of traffic laws and **Education**), and improving emergency services (**Emergency Response**). Also incorporated in the LRSP

development process are the six (6) safe systems principles to help us work towards the County of San Diego's vision, mission, and goal.

The County of San Diego recognizes that there is more work left to do and looks forwards to being a part of the solution in applying these guiding principles and taking a holistic approach on the County roadway network and its users through the lens of safety, equity, health, mobility, and access.



DATA RESOURCES

4.0 DATA RESOURCES

A Geographic Information System (GIS) database was developed, containing the roadway network, community planning areas, HPI and collision information.

Roadway Network and Planning Communities

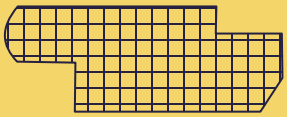
Using County GIS files of the roadway network and community planning areas, the collision data was spatially plotted. The post-processing of the collision data is further detailed in the next sub-chapter.

The analyses included in this report are of county-maintained roadways and intersections within the planning community areas listed below. This list is consistent with the County of San Diego General Plan Mobility Element. **Figure 4-1** shows the County of San Diego Planning communities. This LRSP does not include analyses of private roadways and freeways/state routes within Caltrans's right-of-way.

1. Alpine
2. Bonsall
3. Central Mountain
4. County Islands
5. Crest-Dehesa
6. Desert
7. Fallbrook
8. Jamul/Dulzura
9. Julian
10. Lakeside
11. Mountain Empire
12. North County Metro
13. North Mountain
14. Otay
15. Pala/Pauma
16. Pendleton-De Luz
17. Rainbow
18. Ramona
19. San Dieguito
20. Spring Valley
21. Sweetwater
22. Valle De Oro
23. Valley Center

UNINCORPORATED COUNTY OF SAN DIEGO

23
Communities



3,569
Square Miles

514,643
Residents

2,089
Miles of County Maintained Roads

Collision Data

The data contained in this report was obtained from the County of San Diego's collisions database. The database is a compilation of anonymized collision report information from law enforcement agencies that includes but are not limited to the following collision details:

- Date/Time/Location
- Severity
- CVC Violation
- Roadway Condition
- Weather
- Safety Equipment
- Collision Type
- Party Information
- Victim Information

CASE ID	YEAR	DATE	TIME	DAY OF WEEK
6735593	2015	20150101	840	4
6781275	2015	20150101	1053	4
6782303	2015	20150101	300	4
6782306	2015	20150101	500	4
6785310	2015	20150101	1045	4
6789197	2015	20150101	753	4
6798405	2015	20150101	1735	4
6775159	2015	20150102	1600	5
6782194	2015	20150102	1412	5
6782305	2015	20150102	1540	5
6782550	2015	20150102	2310	5
6799409	2015	20150102	1040	5
6782195	2015	20150103	1358	6

COLLISION_DATE	COLLISION_TIME	DAY_OF_WEEK	CHP_SHIFT	SPECIAL_COND	BEAT_TYPE	CHP_BEAT_TYPE	CHP_BEAT_CLASS	BEAT_NUMBER	
20150101	840	4	1	0	3	5	2	213	RICE CANYON RD
20150101	1053	4	1	0	3	5	1	212	W OAK GLEN RD
20150101	300	4	3	0	2	4	1	96	HIGHLAND VALLE
20150101	500	4	3	0	2	4	1	26	JAMACHA BL
20150101	1045	4	1	0	3	5	2	211	MOUNTAIN LILAC
20150101	753	4	1	0	3	5	2	213	PALA TEMECULA
20150101	1735	4	2	0	2	4	1	12	LAKE JENNINGS
20150102	1600	5	2	0	3	5	2	1	PEPPER DR
20150102	1412	5	2	0	3	5	2	2	ESTRELLA DR
20150102	1540	5	2	0	2	4	1	21	WILLOW GLEN DR
20150102	2310	5	3	0	3	5	2	6	N MAIN ST
20150102	1040	5	1	0	3	5	2	1	PINEHURST RD
20150103	1358	6	1	0	2	4	1	20	CALLE VERDE
20150103	1140	6	1	0	3	5	2	9	BOUNDARY AV
20150103	1639	6	2	0	3	5	2	230	DEL DIOS HWY
20150103	146	6	3	0	3	5	2	211	PARADISE MOUN
20150103	2325	6	3	0	3	5	2	2	HIDDEN MESA RD
20150104	1331	7	1	0	3	5	2	231	BEAR VALLEY PK
20150104	1754	7	2	0	3	5	2	2	PORTOLA AV
20150104	48	7	3	0	3	5	2	211	PARADISE MOUN
20150104	1545	7	2	0	3	5	2	24	BERNARDO CENT
20150104	1409	7	2	0	3	5	2	70	RAMBLA DE LAS
20150105	640	1	1	0	2	4	2	61	EAST MISSION RD
20150105	740	1	1	0	2	4	1	21	WILLOW GLEN DR
20150105	1841	1	2	0	3	5	2	70	EL CAMINIO DEL
20150105	1750	1	2	0	1	1	2	84	OLDE HIGHWAY 8
20150105	1455	1	2	0	3	5	2	6	AMMUNITION RD
20150106	815	2	1	0	3	5	2	170	SOUTH SANTA FE
20150106	1422	2	2	1	3	5	2	230	VIA RANCHO PKW
20150106	1615	2	2	0	3	5	2	3	ARNOLD WY
20150106	215	2	3	0	3	5	2	211	WOODS VALLEY
20150106	1625	2	2	0	2	4	1	20	AVOCADO AV
20150106	1815	2	2	0	2	4	1	95	SAN VICENTE RD
20150106	2210	2	3	0	3	5	2	24	ALVA RD
20150107	1915	3	2	0	2	4	2	63	RECHE RD

This database is continuously updated and maintained by the County of San Diego Public Works Department. The timeline selected for the analyses is the five years from January 1, 2015 to December 31, 2019. The obtained data set was processed further to create a final data set of collisions for the analyses. This post-processing included the following:

- Removing collisions that occurred in incorporated areas.
- Removing collisions that occurred in Caltrans's right-of-way, such as freeway, on-ramps and off-ramps, and state routes (freeway or conventional types).
- Removing collisions that occurred at Caltrans-controlled intersections.
- Removing collisions that occurred on private roadways.

Utilizing the latitude and longitude information provided in the data set, the collisions were spatially mapped using GIS software. It should be noted that the latitude and longitude coordinates were utilized as-is and were not further validated due to the magnitude of the data set.

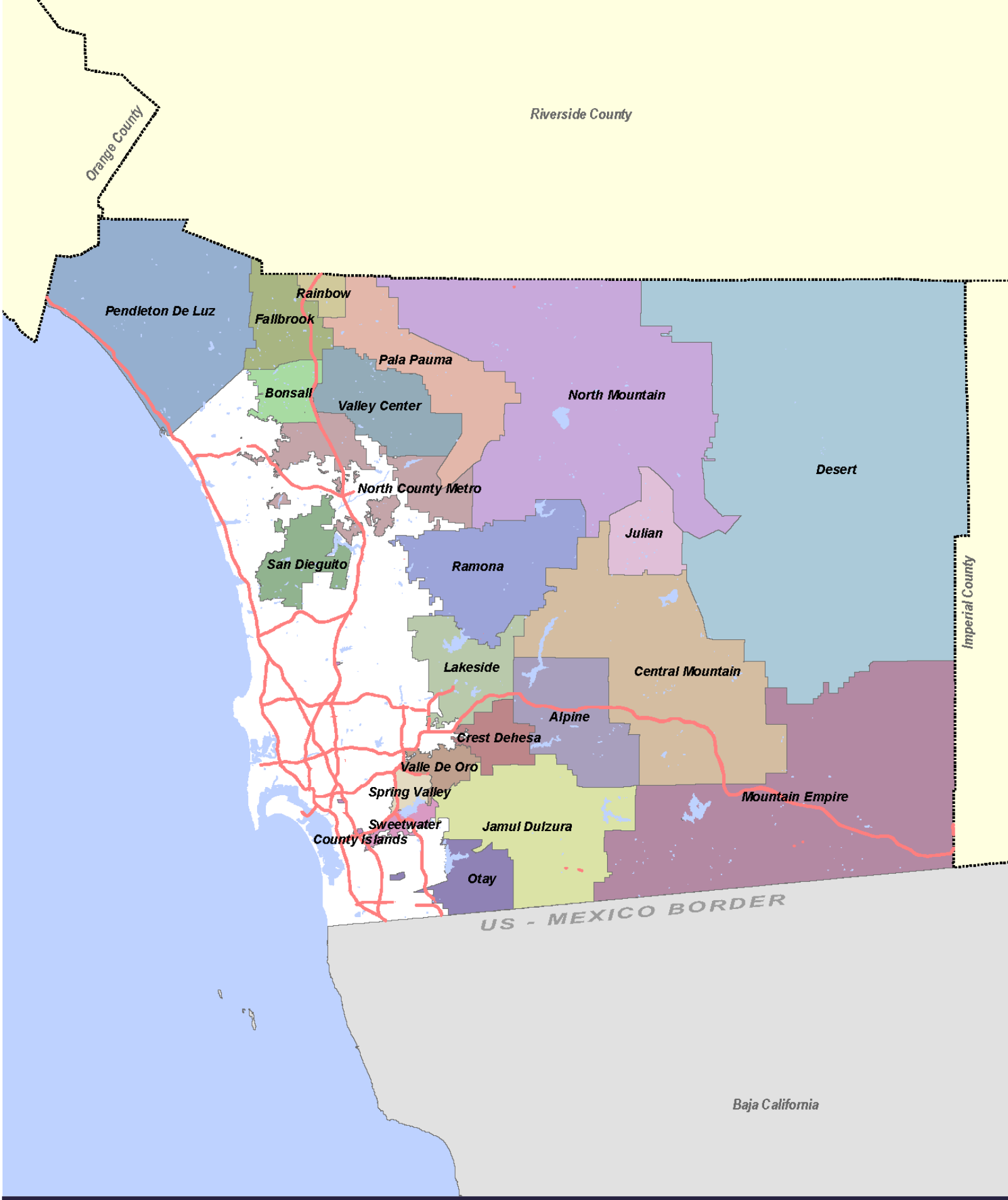


Figure 4-1
County of San Diego Planning Communities

COLLISION ANALYSIS

5.0 COLLISION ANALYSIS

The analysis presented in this chapter is a summary of the collision trends between January 1, 2015, to December 31, 2019.

Total Collisions

Over the five years between 2015-2019, a total of 16,245 collisions have occurred. The number of collisions had steadily increased over the first four years but declined in 2019. The highest occurrence of collisions was recorded in 2018 and the lowest in 2015. Over the five years, collisions increased by approximately 18%. See **Figure 5-1**.

Severe Injury Collision

Over the five years between 2015-2019, a total of 683 severe injury collisions have occurred. Severe injury collisions are collisions that result in broken bones, dislocated or distorted limbs, and other severe characteristics. It has steadily increased over the five years. The highest occurrence of collisions was recorded in 2019 and the lowest in 2015. Over the five years, severe injury collisions increased by approximately 22%. See **Figure 5-2**.

Fatal Collisions

Over the five years between 2015-2019, a total of 160 fatal collisions have occurred. Fatal collisions are collisions that result in a victim's death. It has held steady over the five years. The highest occurrence of fatal collisions was recorded in 2017 and the lowest in 2016. Over the five years, fatal collisions increased by approximately 20%. See ***Figure 5-2***.

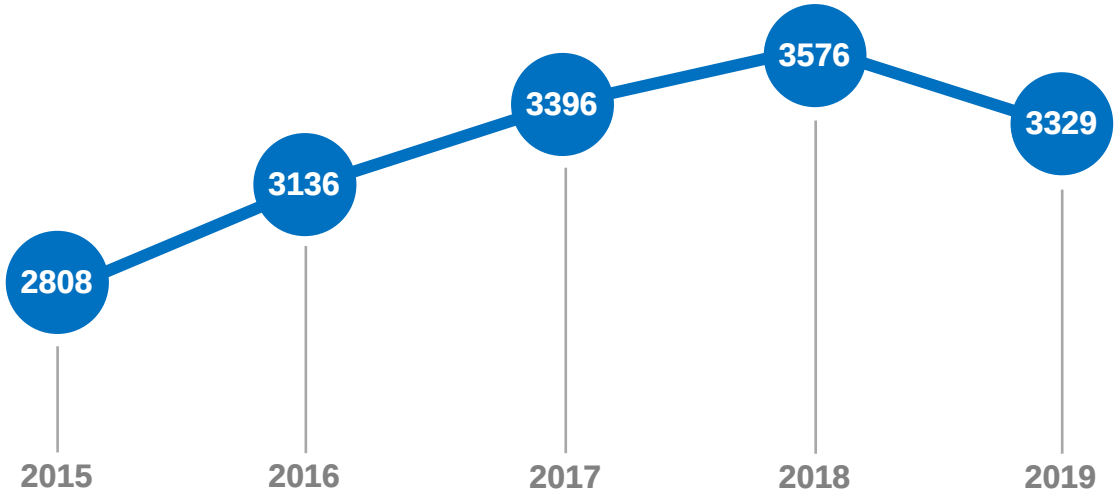


Figure 5–1 Five-Year Total Collision Trend

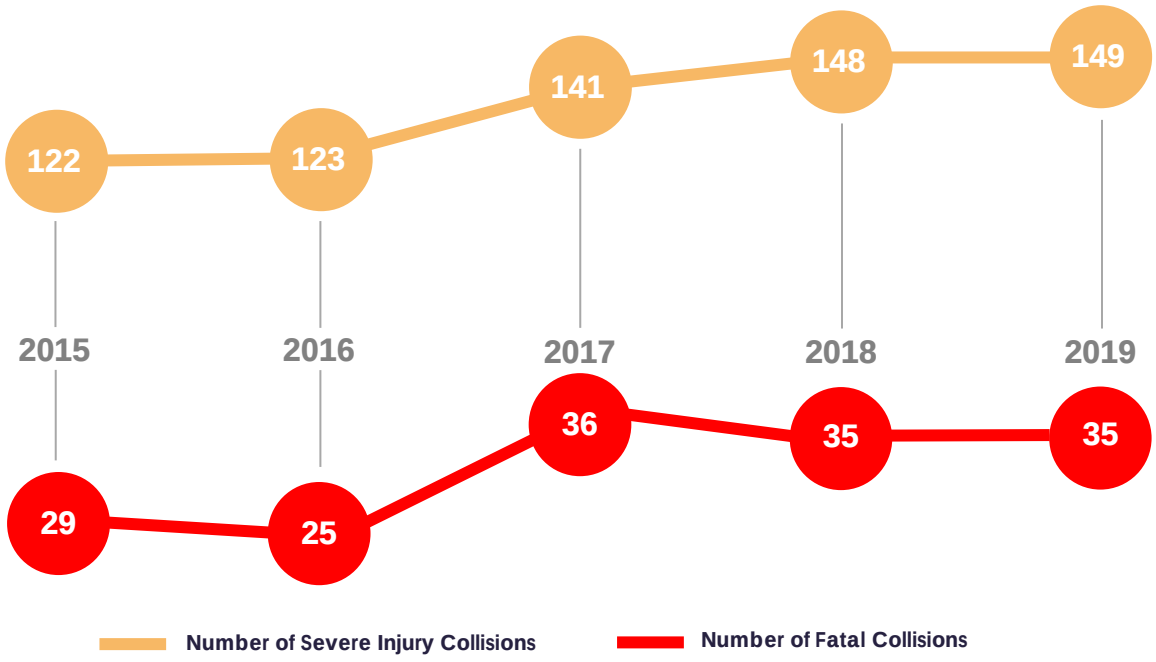


Figure 5–2 Five-Year Fatal and Severe Injury Trends

Specific Collision Trends

An in-depth review of the collision data revealed the following insights on the collisions that occurred over the five years.

- Collision occurrences tend to be higher on Friday and Saturday.
- Nearly 22% of the collisions occurred between 3:00-6:00 PM.
- Nearly 60% of the collisions were property damage only.
- Nearly 53% of the collision involved another motor vehicle and nearly 29% of the collisions involved a fixed object.
- Nearly 97% of the collisions were a result of a California Vehicle Code violation.
- The top primary collision factor of the collisions are the following:
  - Improper turning (29.7%)
  - Unsafe speeds (22.2%)
  - Automobile right-of-way (15.8%)
  - Operating under the influence (11.8%)
- Nearly 85% of the collision comprise the following types of collisions:
  - Hit object (30.0%)
  - Broadside (20.9%)
  - Rear-end (19.9%)

- Sideswipe (19.9%)

- Nearly 21% of collisions involved an older driver (65 years or older).
- Approximately 13% of collisions involved a younger driver (15 to 20 years old).
- Approximately 2% of collisions involved a pedestrian.
- Nearly 2% of collisions involved a bicyclist.
- Nearly 18% of collisions occurred at an intersection. These are collisions that occurred within the intersection footprint or occurred within the intersection influence area of 100 feet.

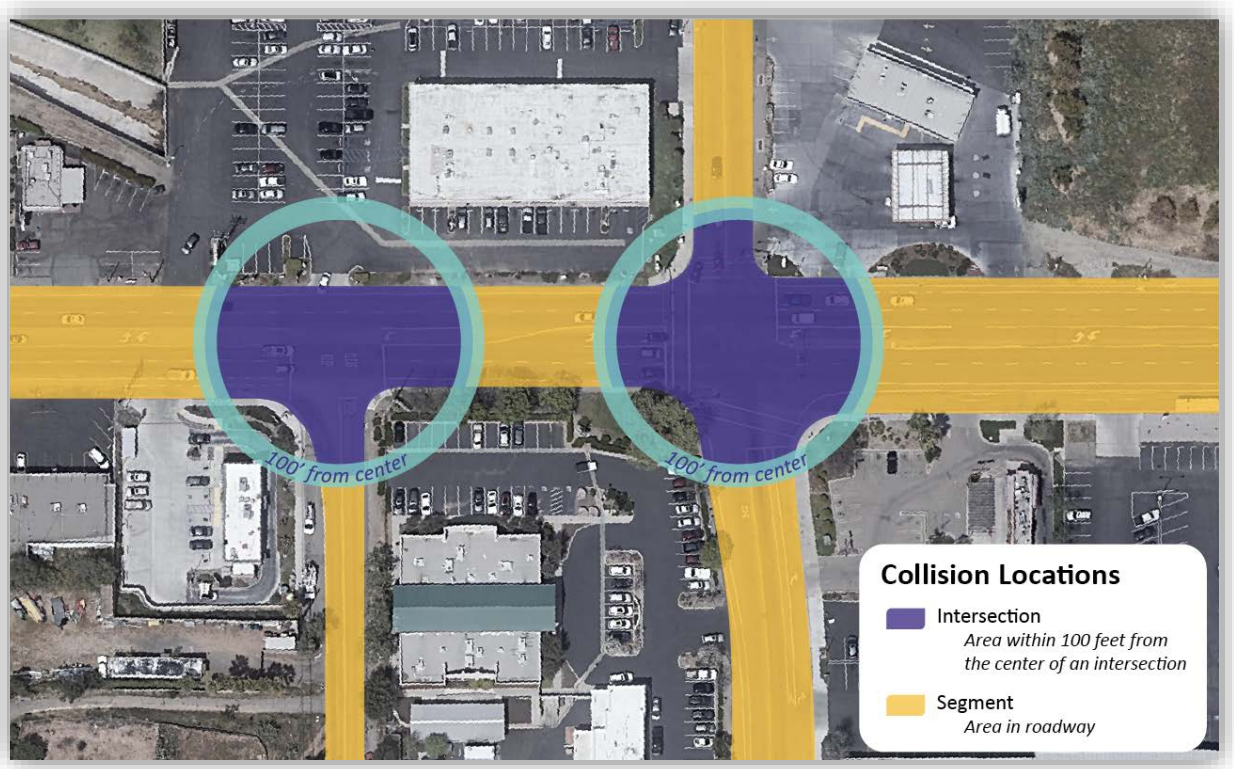
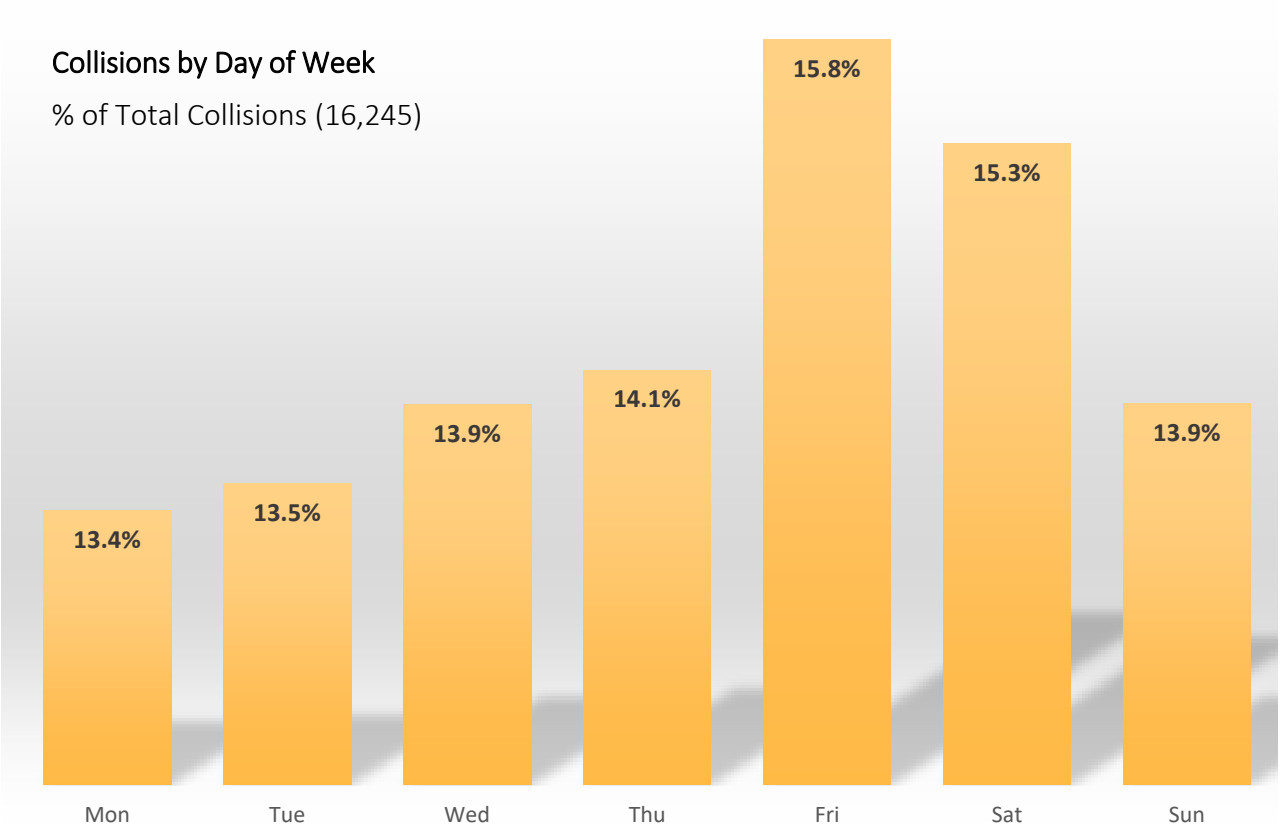


Figure 5-4 graphically details the trends above. Additional queries were also conducted and summarized in **Appendix C**.

Collision Overview for Communities

Figure 5-5 summarizes the collision overview for each of the 23 community planning areas. **Appendix D** contains a more detailed collision analysis for each community.



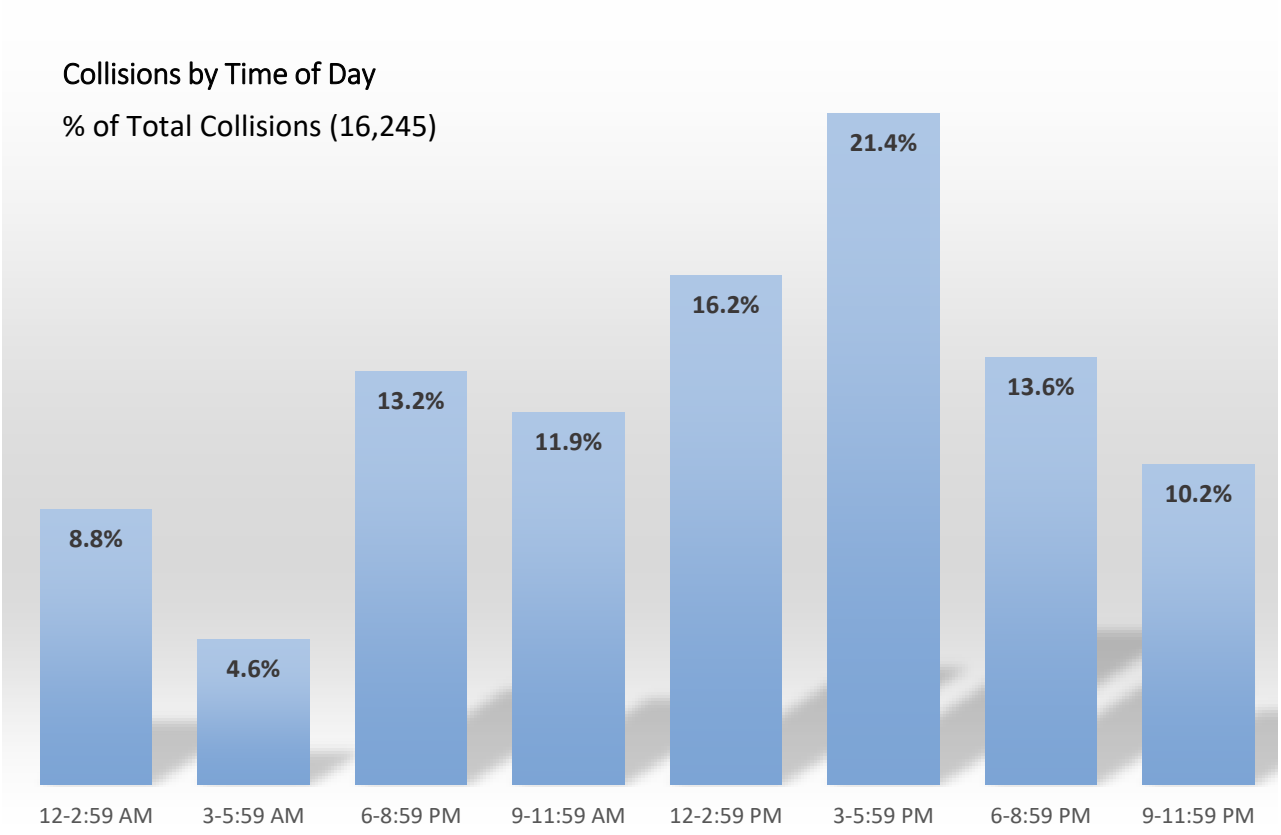
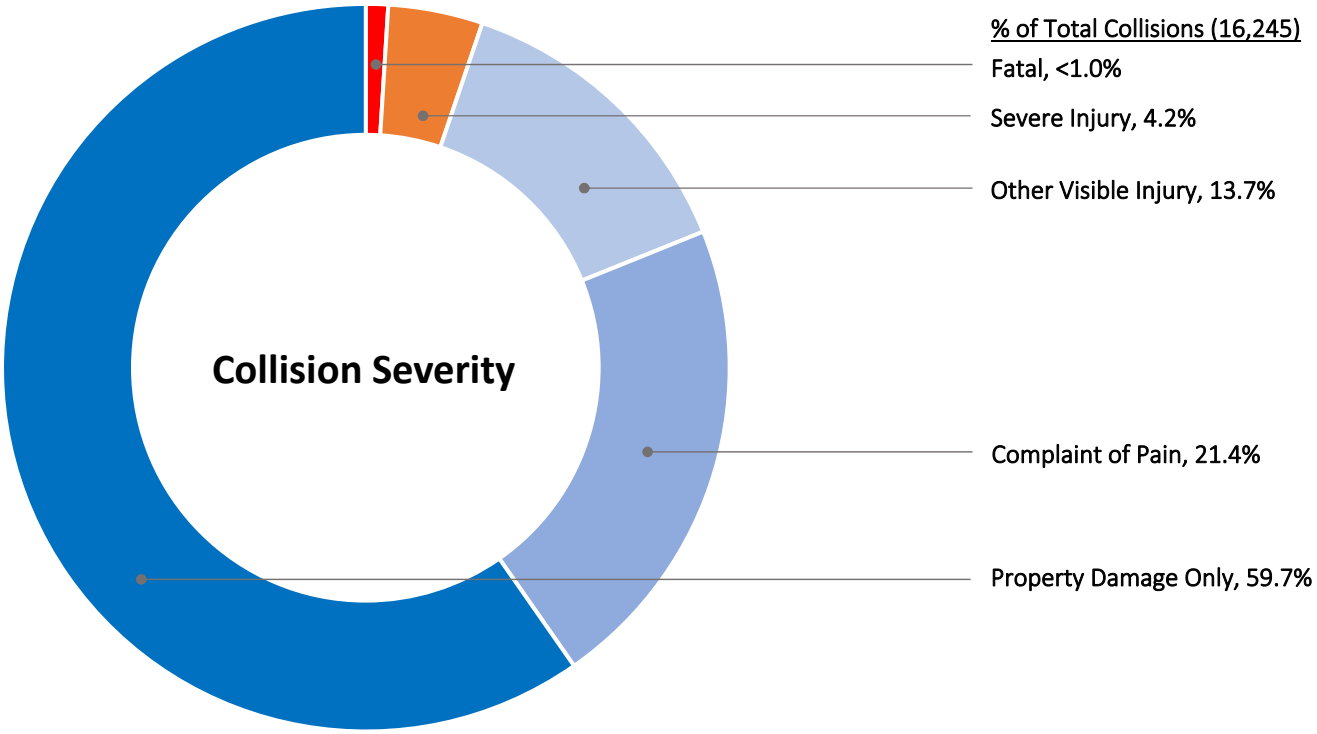


Figure 5-4
Specific Collision Trends (1 of 4)



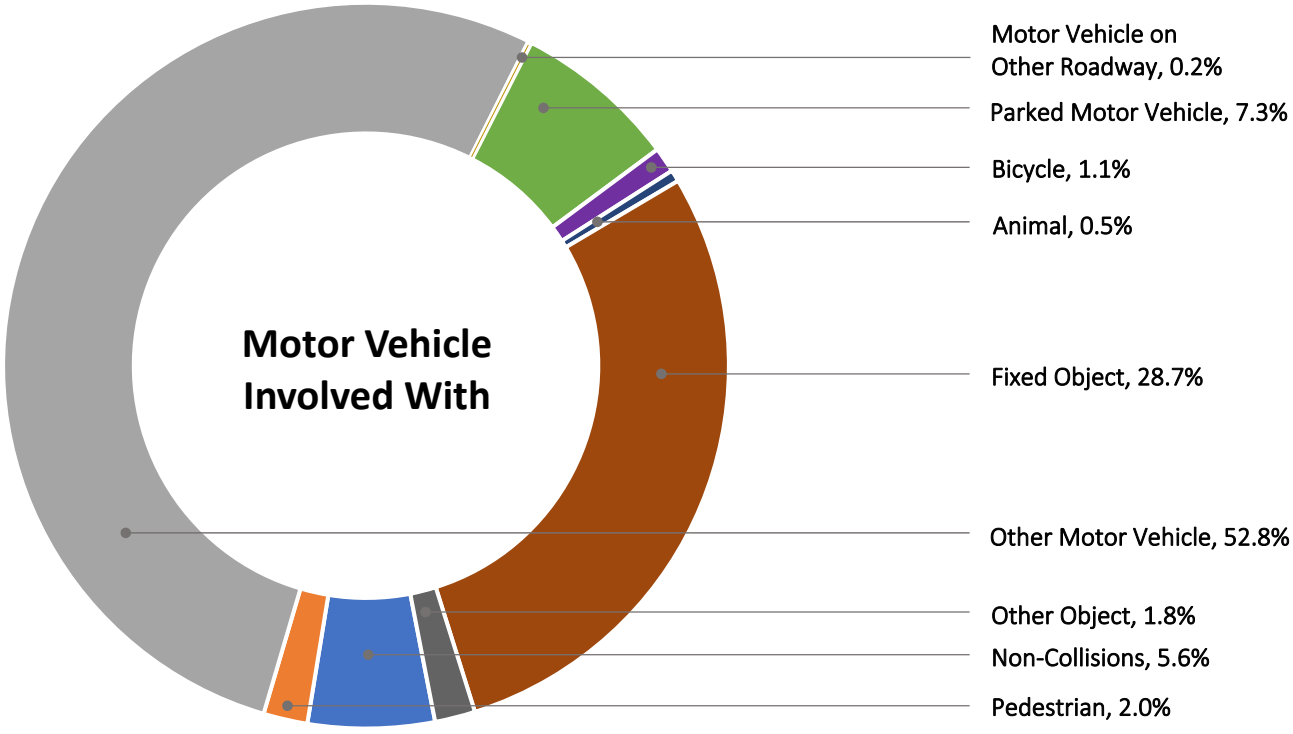
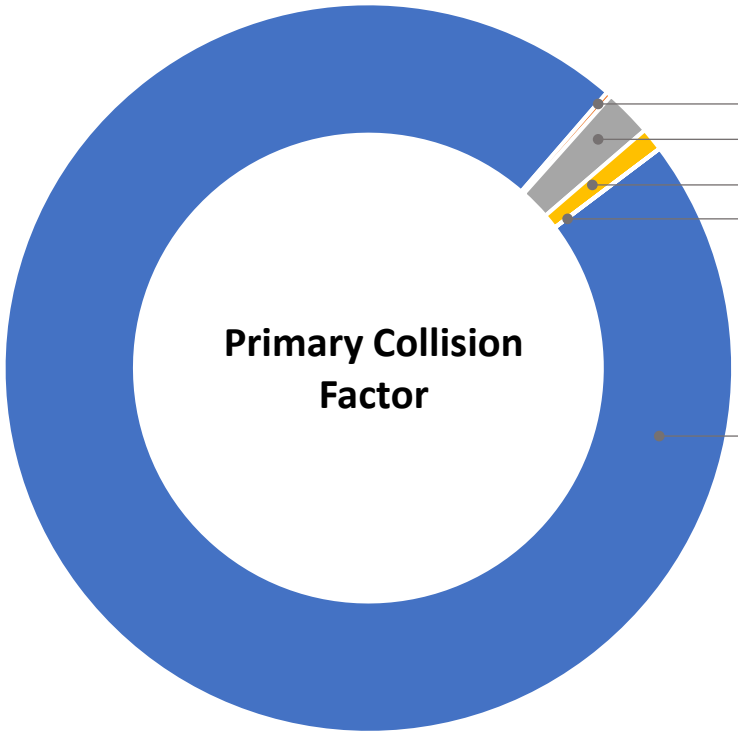
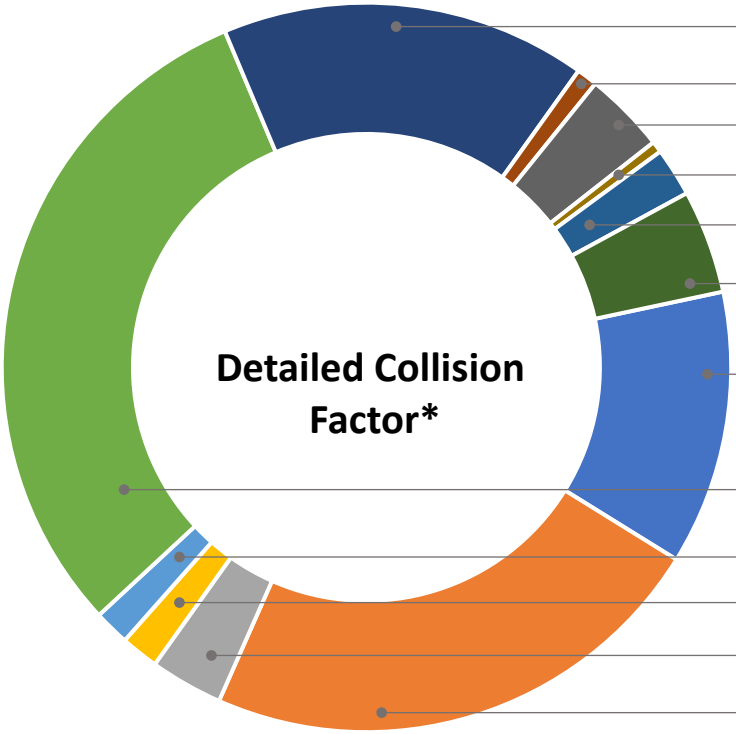


Figure 5-4
Specific Collision Trends (2 of 4)



% of Total Collisions (16,245)

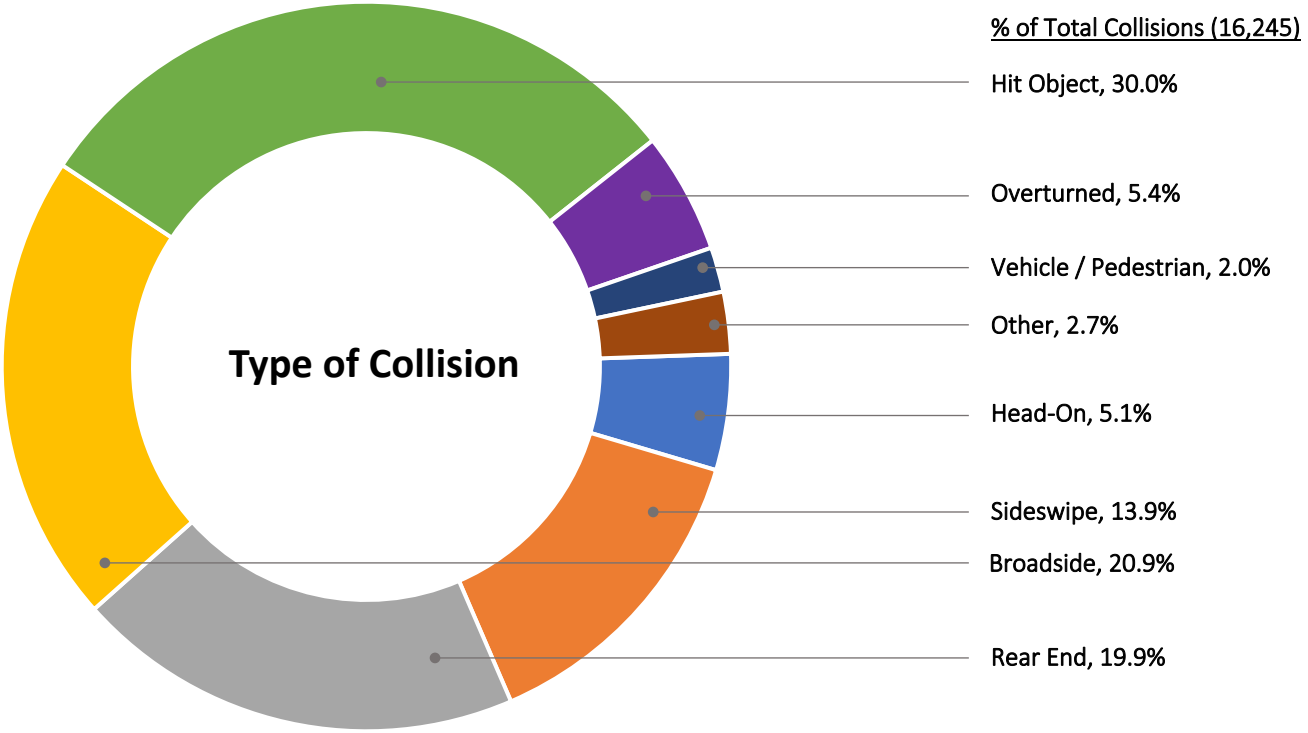
Other Improper Driving, 0.23%
Other Than Driver, 2.10%
Unknown, 1.03%
Not Stated, 0.01%
Code Violation, 96.63%



Automobile ROW, 15.8%
Pedestrian Violation, 0.9%
Traffic Signals & Signs, 3.5%
Other Hazardous Violation, 0.5%
Other Than Driver, 2.1%
Unsafe Starting or Backing, 4.5%
DUI / BUI, 11.8%
Improper Turning, 29.7%
Unsafe Lane Change, 1.5%
Improper Passing, 1.6%
Wrong Side of Road, 3.1%
Unsafe Speed, 22.2%

*Collision factors with <0.5% are not shown

Figure 5-4
Specific Collision Trends (3 of 4)



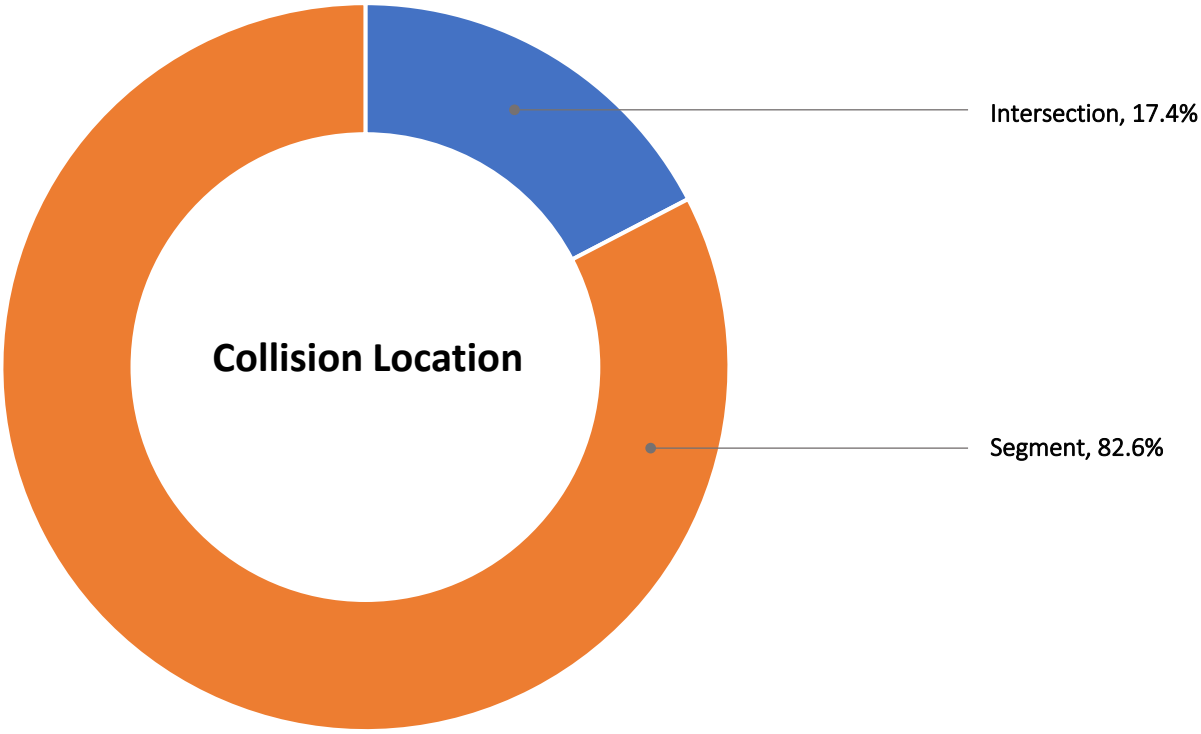


Figure 5-4
Specific Collision Trends (4 of 4)

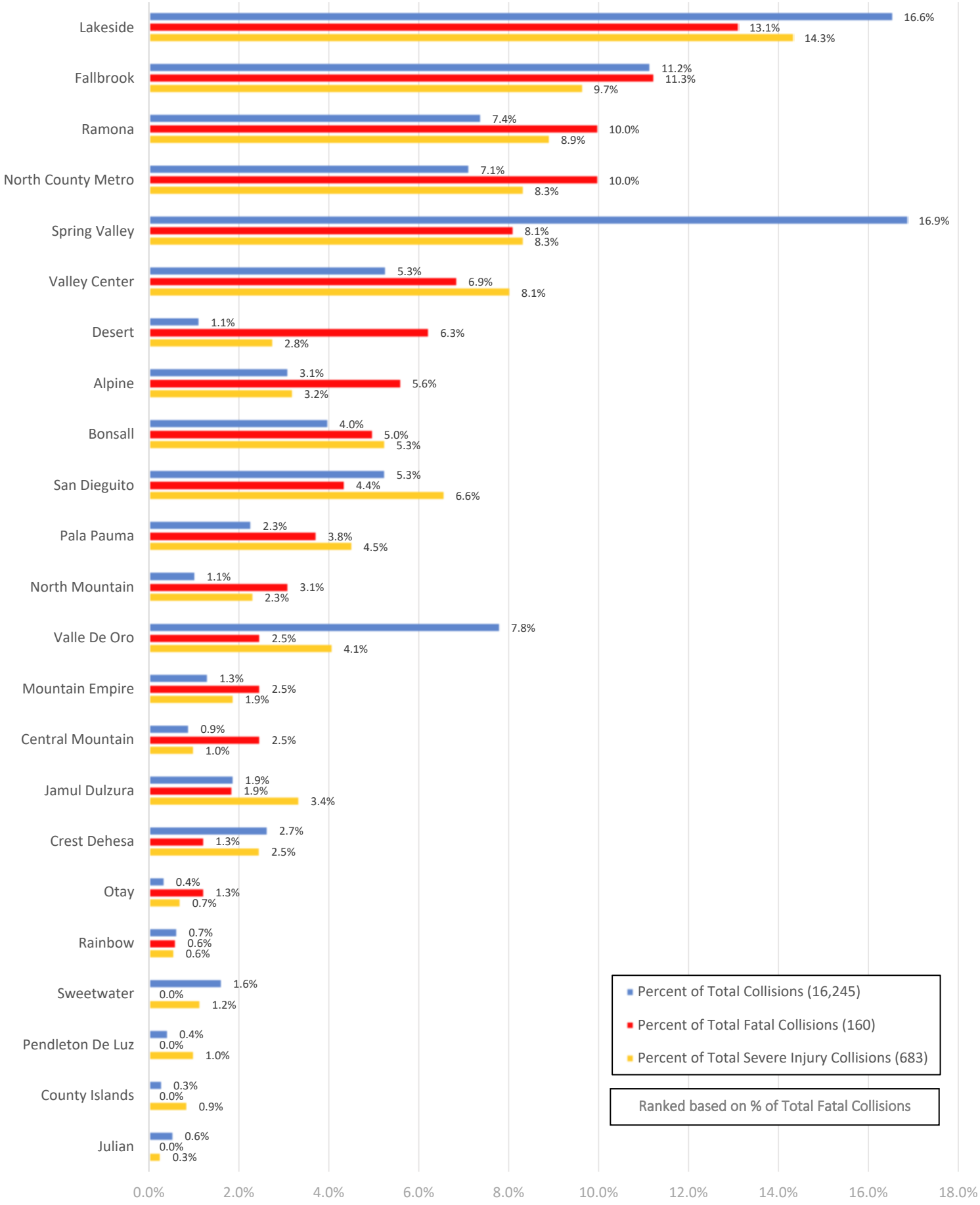


Figure 5-5
Collision Overview by Community Planning Areas

CHALLENGE AREAS & RECOMMENDATIONS

6.0 CHALLENGE AREAS & RECOMMENDATIONS

Challenge Areas

A challenge area (also known as an emphasis area) is an area of opportunity to improve transportation safety. Identification of a challenge area helps focus the recommendations/countermeasures to provide the greatest opportunity for reducing fatal and severe injury collisions. Based on the collision analysis and other metrics, below is a list of the sixteen (16) challenge areas that have been identified specific to the County of San Diego. Each challenge area is described further at the end of the chapter.

County Local Roadway Challenge Areas

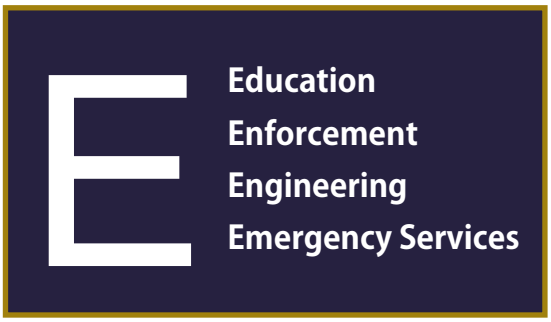
- Emerging Technologies
- Impaired Drivers
- Aggressive Driving
- Motorcyclists
- Lane Departure
- Emergency Response
- Intersections
- Public Health/Equity
- Occupant Protection
- Pedestrians
- Aging Drivers
- Young Drivers
- Bicyclists
- Commercial Vehicles
- Keeping Drivers Alert
- Work Zones

Table 6-1 tabulates the collision data by challenge areas. **Figure 6-1** graphically illustrates the collision data by challenge areas and is ranked from highest to lowest based on the total number of fatal and severe injury collisions.

Relationship to the California Strategic Highway Safety Plan (CA SHSP)

The most current CA SHSP is in effect until 2024. The CA SHSP identifies 16 challenge areas. See **Appendix E** for more information on the CA SHSP's challenge areas. The County's challenge areas align with CA SHSP in all but two categories – Driver Licensing, which is a challenge area identified in the CA SHSP, and Public Health/Equity, which is a challenge area identified in the County LRSP.

The 4 Es of Safety



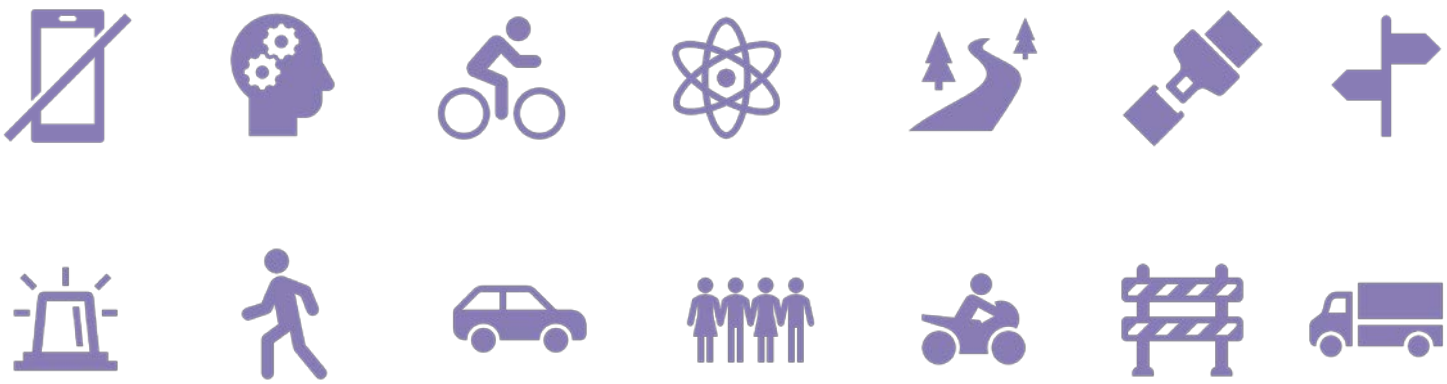
In line with the CA SHSP, there are four Es to traffic safety. Education provides roadway users information about making good choices and about the rules of the road. Enforcement involves officers engaging with the general public to help prevent and deter roadway users from unsafe behaviors and uphold roadway safety laws. Engineering addresses roadway infrastructure and elements to prevent crashes or reduce the severity of collisions when they occur. Emergency Response can make all the difference in saving the lives of crash victims through rapid response, securing the collision site, and quality of care.

What is a Countermeasure?

Drawing from the 4Es of safety, a countermeasure is a specific action to improve transportation safety and therefore help decrease the number of fatal and severe injury collisions. A comprehensive approach utilizing the 4 E's of Safety was applied in determining the appropriate countermeasures for each challenge area. This approach recognizes that not all collisions can be addressed solely by infrastructure improvements. Countermeasures can also be behavioral and programmatic/policy changes, such as a public campaign such as "Click it or Ticket."

TABLE 6–1
COLLISION DATA BY CHALLENGE AREAS

Challenge Area	Number of Collisions							
	Total		Fatal (F)		Severe Injury (SI)		F+SI	
Total Collisions	**16245**		**160**		**683**		**843**	
Emerging Technologies								
Unsafe Speed	3603	22.2%	22	13.8%	141	20.6%	163	19.3%
Ran off the Road	1395	8.6%	24	15.0%	46	6.7%	70	8.3%
Rear End	3232	19.9%	6	3.8%	38	5.6%	44	5.2%
Unsafe Lane Change	249	1.5%	0	0.0%	1	0.1%	1	0.1%
Collision with Other Object	292	1.8%	0	0.0%	7	1.0%	7	0.8%
Crossed Into Opposing Lane	523	3.2%	26	16.3%	59	8.6%	85	10.1%
TOTAL	*9294*	*57.2%*	*78*	*48.8%*	*292*	*42.8%*	*370*	*43.9%*
Impaired Drivers	*1923*	*11.8%*	*50*	*31.3%*	*163*	*23.9%*	*213*	*25.3%*
Aggressive Driving								
Unsafe Speed	3603	22.2%	22	13.8%	141	20.6%	163	19.3%
Following Too Closely	45	0.3%	0	0.0%	1	0.1%	1	0.1%
Traffic Signals and Signs	571	3.5%	2	1.3%	18	2.6%	20	2.4%
TOTAL	*4219*	*26.0%*	*24*	*15.0%*	*160*	*23.4%*	*184*	*21.8%*
Motorcyclists	1007	6.2%	50	31.3%	120	17.6%	170	20.2%
Intersections	2820	17.4%	14	8.8%	104	15.2%	118	14.0%
Occupant Protection								
Unrestrained Occupants	298	1.8%	25	15.6%	29	4.2%	54	6.4%
Helmet Not Used	128	0.8%	6	3.8%	12	1.8%	18	2.1%
TOTAL	*426*	*2.6%*	*31*	*19.4%*	*41*	*6.0%*	*72*	*8.5%*
Lane Departure								
Crossed Into Opposing Lane	523	3.2%	26	16.3%	*59*	8.6%	85	10.1%
Ran off the Road	1395	8.6%	24	15.0%	46	6.7%	70	8.3%
TOTAL	*1918*	*11.8%*	*50*	*31.3%*	*105*	*15.4%*	*155*	*18.4%*
Pedestrians	341	2.1%	30	18.8%	35	5.1%	65	7.7%
Aging Drivers	3336	20.5%	21	13.1%	42	6.1%	63	7.5%
Young Drivers	2112	13.0%	15	9.4%	30	4.4%	45	5.3%
Bicyclists	267	1.6%	8	5.0%	22	3.2%	30	3.6%
Commercial Trucks	389	2.4%	1	0.6%	12	1.8%	13	1.5%
Keeping Drivers Alert								
Fell Asleep	0	0.0%	0	*0.0%*	0	0.0%	0	0.0%
Distracted	559	3.4%	0	*0.0%*	6	0.9%	6	0.7%
TOTAL	*559*	*3.4%*	*0*	*0.0%*	*6*	*0.9%*	*6*	*0.7%*
Work Zones	103	0.6%	1	0.6%	3	0.4%	4	0.5%
Emergency Response	1204	7.4%	28	17.5%	101	14.8%	129	15.3%
Public Health/Equity	1678	10.3%	17	10.6%	77	11.3%	94	11.2%



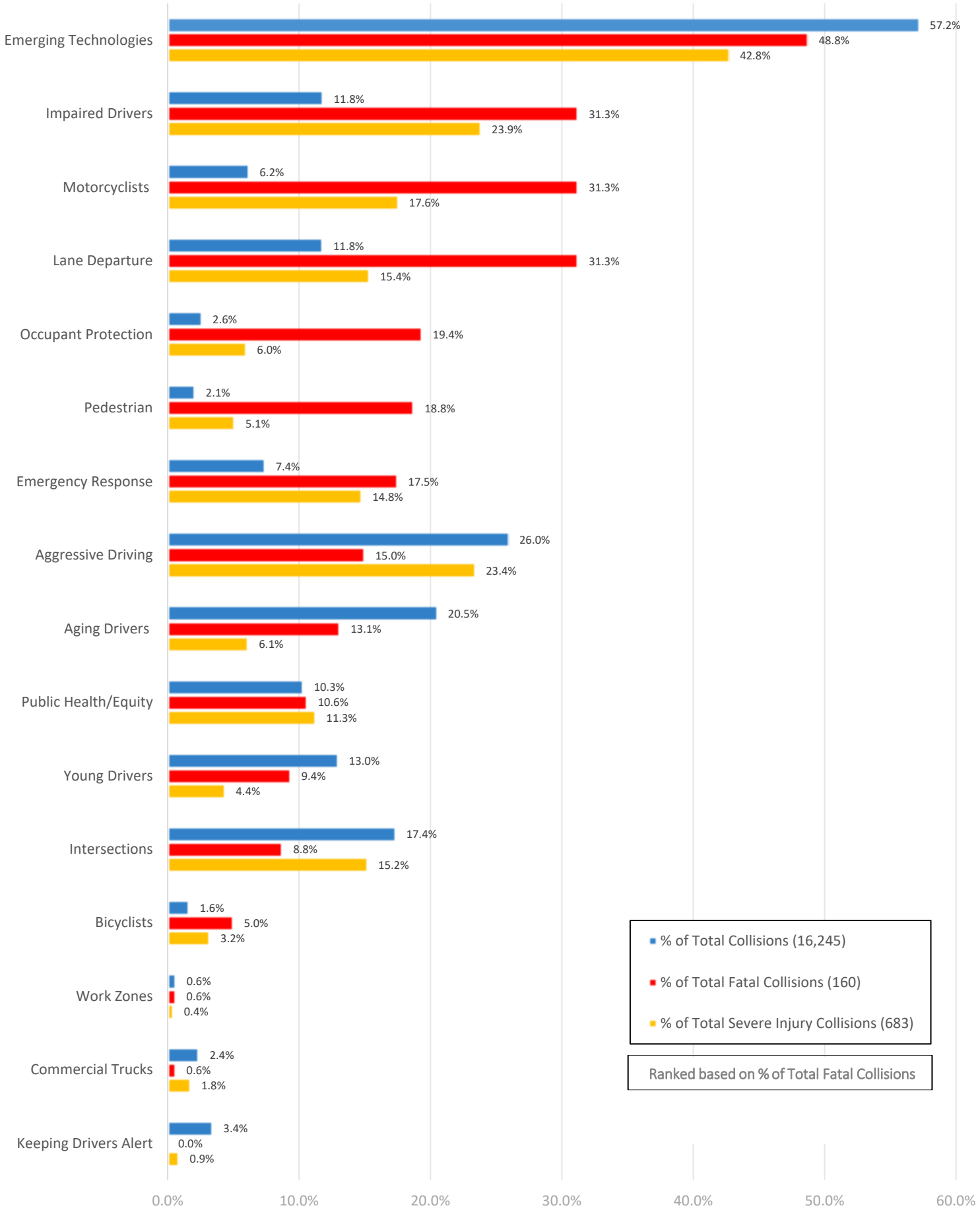
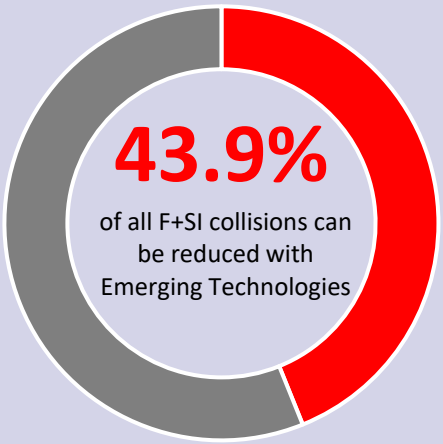


Figure 6-1
Ranked Challanege Areas

Emerging Technologies

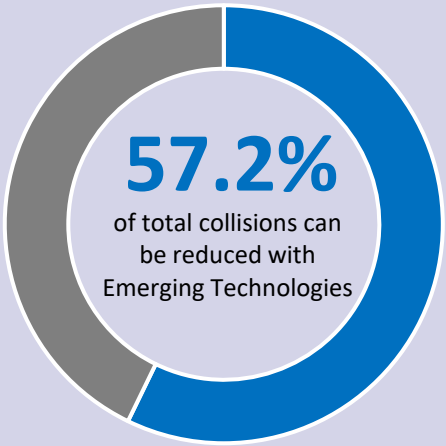
Emerging Technologies is a County of San Diego Local Roadway Safety Plan challenge area that focuses on in-roadway technologies and the infrastructure to support advancing technologies to prevent collisions. Collisions caused by drivers traveling at unsafe speeds, running off the roadway, rear-ending other vehicles, making unsafe lane changes, colliding with roadside objects, and crossing into opposing lanes are collision types that can be reduced with emerging technologies. See **Appendix J** for more information on Emerging Technologies.

Percent & Number of Fatalities + Severe Injuries



370 of all F+SI collisions could be reduced with Emerging Technologies

Percent & Number of Total

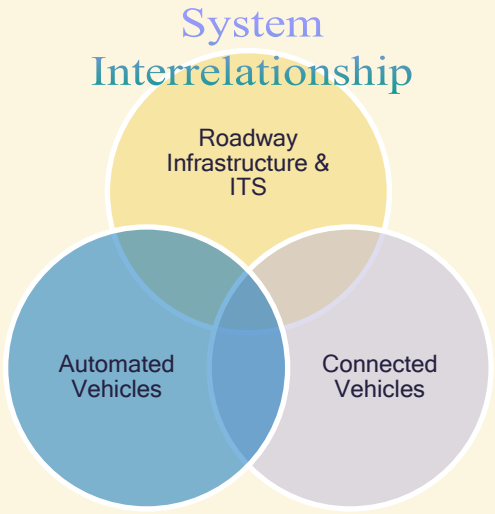


9,294 of total collisions could be reduced with Emerging Technologies

Recommendations:

- Develop an Intelligent Transportation System/Transportation System Management and Operations (ITS/TSM&O) master plan that details how emerging technologies can be integrated into the roadway network to communicate to drivers or automated/connected vehicles to help motorists travel safely on County roads.
- Identify implementable best practices to support emerging technologies and ensure that they are reflected in roadway design processes, standards, and guidelines.
- Pursue grant funding to develop the ITS/TSM&O Master Plan as well as grant funding to identify specific corridors as ITS opportunity area

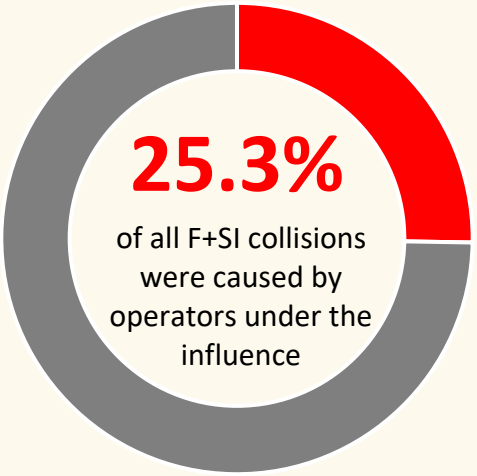
See **Appendix F** of the LRSP report for more information.



Impaired Drivers

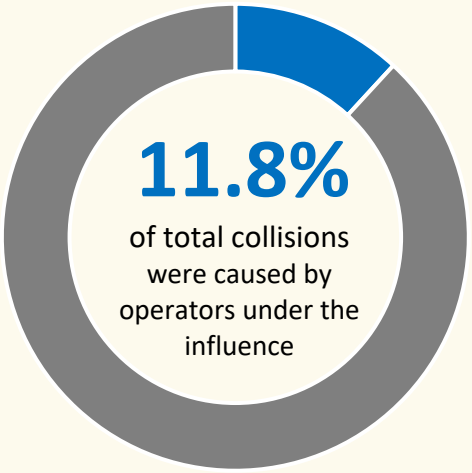
Impaired Drivers is a County of San Diego Local Roadway Safety Plan challenge area that focuses on collisions where the operator of a motor vehicle or bicycle was under the influence of alcohol or drugs.

Percent & Number of Fatalities + Severe Injuries



213 of all F+SI collisions were caused by operators under the influence

Percent & Number of Total



1,923 of total collisions were caused by operators under the influence

Recommendations:

Continue to monitor, invest, and assess effective ways to prevent driving under the influence and repeat offenders, such as the following:

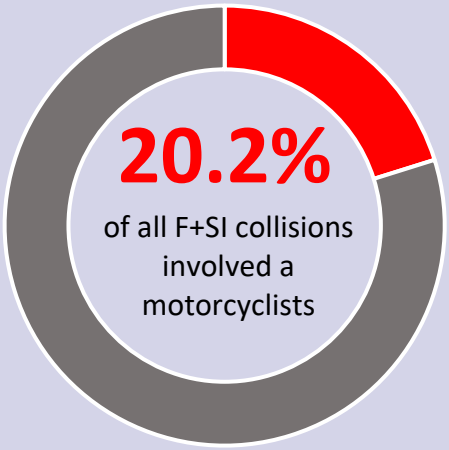
- High visibility patrol, targeted saturation patrols, and checkpoints
- Training/classes for patrol offices
- Educational, public awareness, outreach efforts
- Assessment, intervention, and treatment programs
- Collaboration efforts
- Alcohol/cannabis sales compliance and service training
- Laws and consequences

See **Appendix F** of the LRSP report for more information.

Motorcyclists

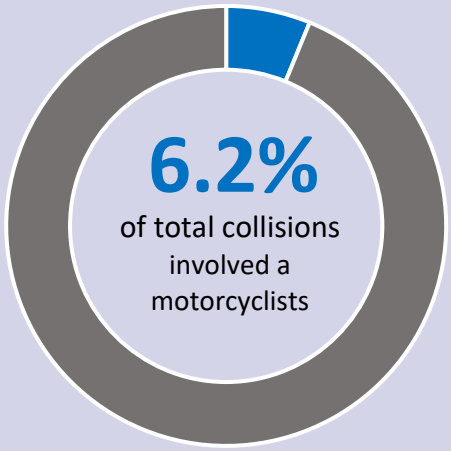
Motorcyclists is a County of San Diego Local Roadway Safety Plan challenge area that focuses on collisions involving a motorcyclist.

Percent & Number of Fatalities + Severe Injuries



170 of all F+SI collisions were caused by operators under the influence

Percent & Number of Total



1,007 of total collisions were caused by operators under the influence

Recommendations:

- Continue to monitor, invest, and assess effective law enforcement efforts to prevent motorcycle collisions.
- Assess and evaluate effective ways to enhance awareness and deter behaviors on the road, such as the following:
  - Educational, public awareness, and outreach efforts
  - Partnerships and programs
- Conduct an engineering study to further assess and identify issues related to this challenge area. The study should establish a framework to apply appropriate countermeasures for the study segment and proactively along segments with similar characteristics throughout the County.

See **Appendix F** of the LRSP report for more information

Lane Departure

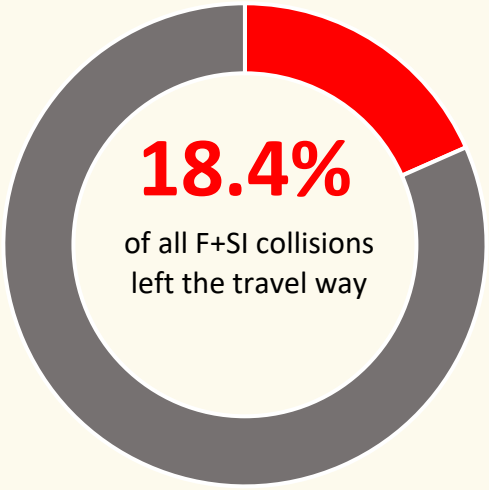
Lane Departure is a County of San Diego Local Roadway Safety Plan challenge area that focuses on collisions involving vehicles leaving the travel way. Collisions preceded by drivers crossing into the opposing lane or running off the roadway are types of lane departures.

Recommendations:

- Develop an Intelligent Transportation System/Transportation System Management and Operations (ITS/TSM&O) master plan that details how emerging technologies can be integrated into the roadway network to communicate to drivers or automated/connected vehicles of potential lane departure hazards.
- Conduct an engineering study for several segments to further assess and identify issues related to this challenge area. Establish a framework to apply appropriate countermeasures for the segments and proactively throughout the County.

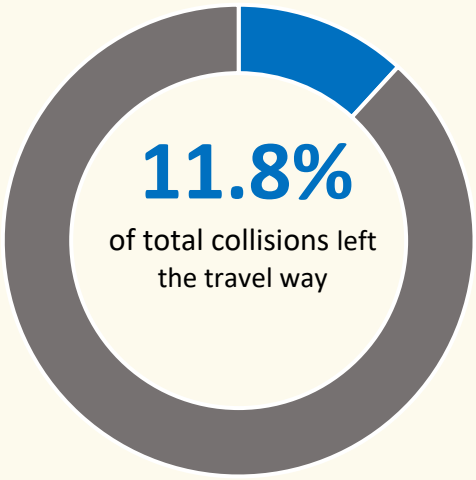
See **Appendix F** of the LRSP report for more information

Percent & Number of Fatalities + Severe Injuries



155 of all F+SI collisions were lane departures

Percent & Number of Total



1,918 of total collisions were lane departures

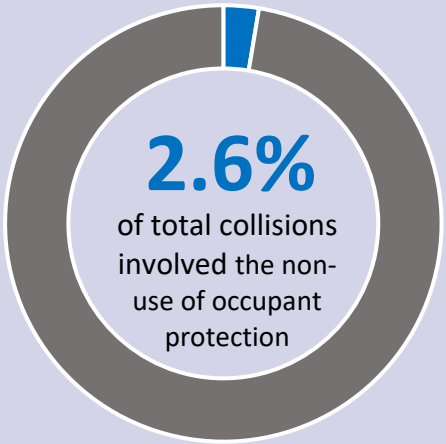
Occupant Protection

Occupant Protection is a County of San Diego Local Roadway Safety Plan challenge area that focuses on collisions involving the non-use or lack of safety equipment – particularly restraints in vehicles and helmets for bicyclists and motorcyclists.

Percent & Number of Fatalities + Severe Injuries

72 of all F+SI collisions involved the use of non-use of occupant protection

Percent & Number of Total



426 of total collisions involved the use of non-use of occupant protection

Recommendations:

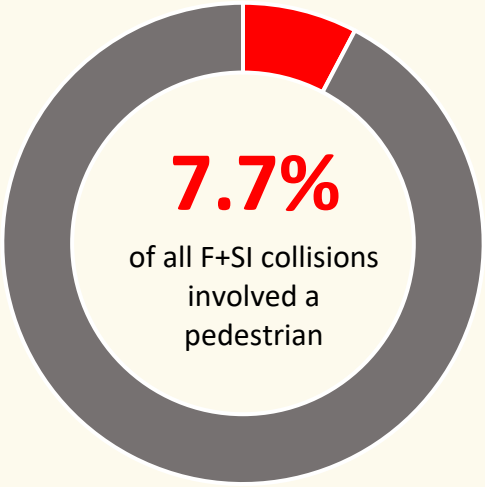
- Assess and evaluate effective ways to enhance awareness and deter behaviors, such as the following:
  - Educational, public awareness, outreach efforts
  - Partnerships and programs
- Continue to monitor, invest, and assess effective ways to increase California Vehicle Code compliance, prevent collisions, and deter behaviors associated with this challenge area.

See **Appendix F** of the LRSP report for more information

Pedestrians

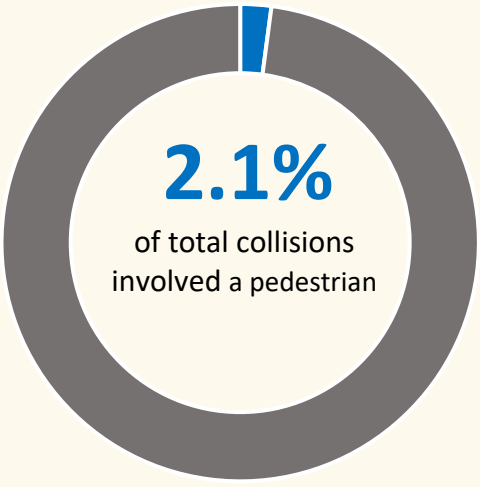
Pedestrians is a County of San Diego Local Roadway Safety Plan challenge area that focuses on motor vehicles involved in a collision with a pedestrian.

Percent & Number of Fatalities + Severe Injuries



65 of all F+SI collisions involved a pedestrian

Percent & Number of Total



341 of total collisions involved a pedestrian

Recommendations:

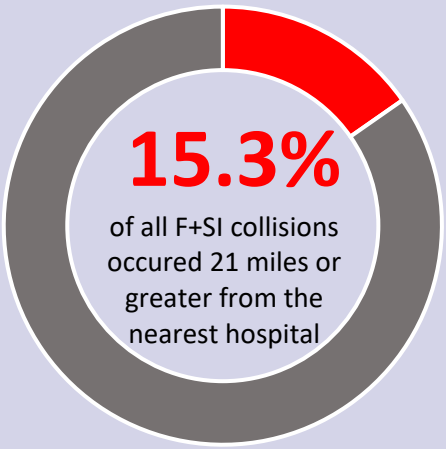
- Develop and implement a complete streets checklist to ensure that pedestrian standards, goals, objectives, guidelines, and actions are implemented.
- Conduct an engineering study to further assess and identify issues related to this challenge area. Establish a framework to apply appropriate countermeasures proactively throughout the County.
- Assess and evaluate effective ways to enhance awareness and deter behaviors on the road, such as the following:
  - Educational, public awareness, outreach efforts
  - Partnerships and programs

See **Appendix F** of the LRSP report for more information

Emergency Response

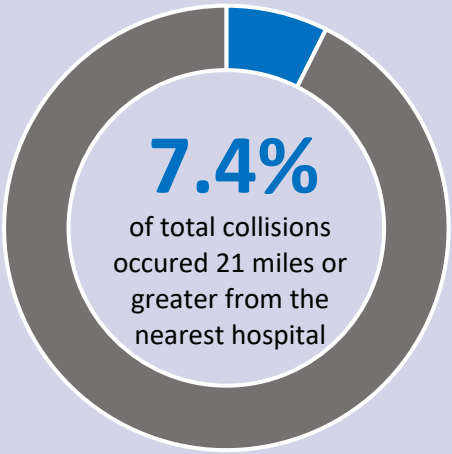
Emergency Response is a County of San Diego Local Roadway Safety Plan challenge area that focuses on rapid transportation of victims to a hospital/trauma center. This challenge area pertains to collisions occurring 21 miles or further from the nearest hospital.

Percent & Number of Fatalities + Severe Injuries



129 of all F+SI collisions occurred 21 miles or greater from the nearest hospital

Percent & Number of Total



1,204 of total collisions 21 miles or greater from the nearest hospital

Recommendations:

- Develop an Intelligent Transportation System/Transportation System Management and Operations (ITS/TSM&O) master plan that details how emerging technologies can be integrated into the roadway network to communicate with motorists in the event of emergency response conditions on the road.
- Identify best practices to help reduce emergency response times and ensure that they are reflected in emergency response operations or roadway design processes, standards, and guidelines.
- Incorporate roadway design processes and ITS/TSM&O elements in a future County of San Diego/Community level evacuation plan.
- Implement existing County policies related to emergency response and hospital facility locations such as policies in the General Plan Safety Element

See **Appendix F** of the LRSP report for more information.

Aggressive Driving

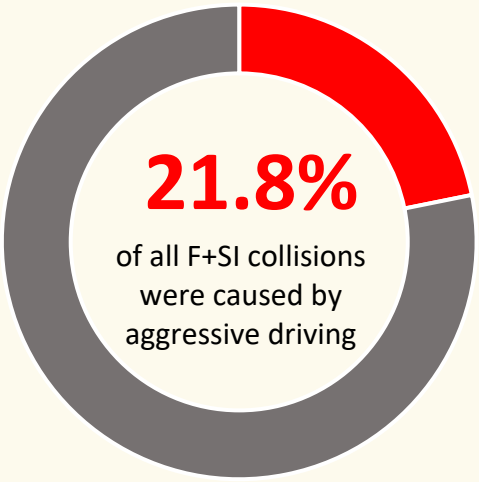
Aggressive Driving is a County of San Diego Local Roadway Safety Plan challenge area that focuses on aggressive driving behaviors such as unsafe speeds, following too closely, and failure to heed traffic control devices.

Recommendations:

- Develop an Intelligent Transportation System/Transportation System Management and Operations (ITS/TSM&O) master plan that details how emerging technologies can be integrated into the roadway network to communicate to drivers or automated/connected vehicles to help reduce aggressive driving.
- Assess and evaluate effective ways to enhance awareness and deter behaviors on the road, such as the following:
    - Engage with law enforcement officers on implementing best practices.
    - Educational, public awareness, outreach efforts
    - Partnerships and programs
    - Law and consequences
- Conduct an engineering study for several segments to further assess and identify issues related to this challenge area. Establish a framework to apply appropriate countermeasures for the segments and proactively throughout the County.

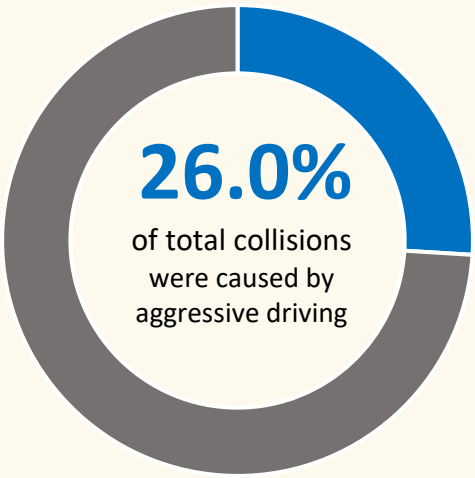
See **Appendix F** of the LRSP report for more information.

Percent & Number of Fatalities + Severe Injuries



184 of all F+SI collisions were caused by aggressive driving370 of all F+SI

Percent & Number of Total

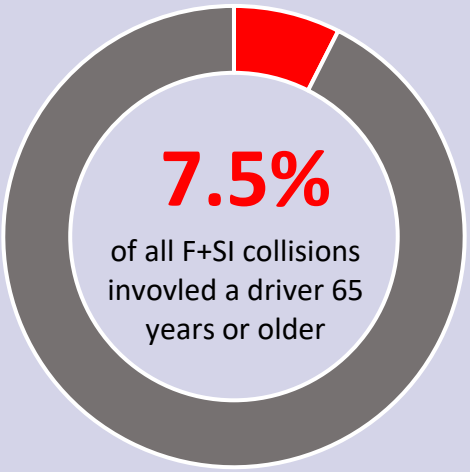


4,219 of total collisions were caused by aggressive driving

Aging Drivers

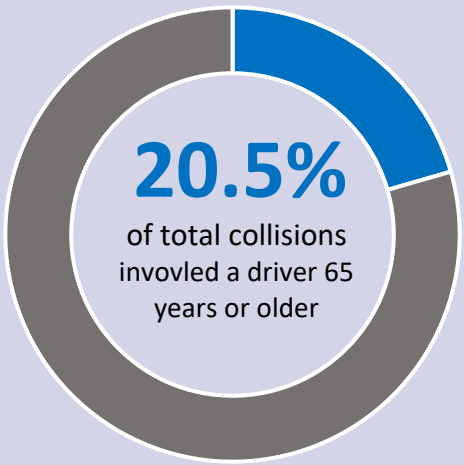
Aging Drivers is a County of San Diego Local Roadway Safety Plan challenge area that focuses on collisions that involve a driver 65 years or older.

Percent & Number of Fatalities + Severe Injuries



63 of all F+SI collisions involved a driver 65 years or older

Percent & Number of Total



3,336 of total collisions involved a driver 65 years or older

Recommendations:

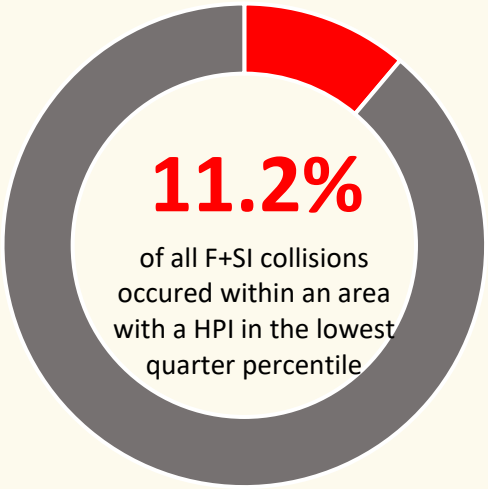
- Identify best practices to help reduce aging driving-related collisions and ensure that they are reflected in the roadway design processes, standards, and guidelines.
- Assess the need for partnership between County departments and/or private organizations to expand communications, outreach, educational programs, and mobility options for aging drivers.
- Consider safety in ongoing and existing planning efforts and implement existing County policies.

See **Appendix F** of the LRSP report for more information.

Public Health/Equity

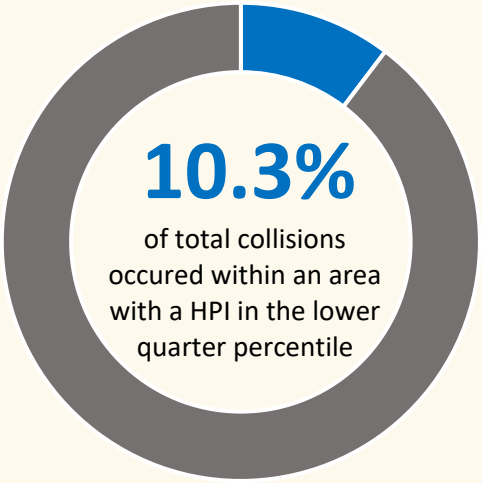
Public Health/Equity is a County of San Diego Local Roadway Safety Plan challenge area that focuses on improving transportation safety for areas in underserved areas. This challenge area pertains to collisions that occurred in areas with a Healthy Places Index in the lower quarter percentile.

Percent & Number of Fatalities + Severe Injuries



94 of all F+SI collisions occurred within an area with a HPI in the lower quarter percentile

Percent & Number of Total



1,678 of total collisions occurred within an area with a HPI in the lower quarter percentile

Recommendation:

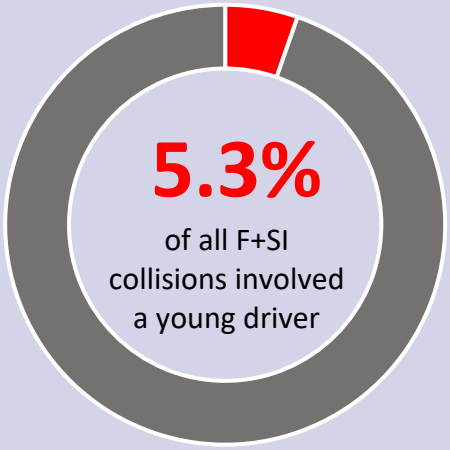
- Continue to utilize the Healthy Places Index in making transportation engineering and planning-related decisions for underserved areas of the County of San Diego.

Appendix F of the LRSP report for more information.

Younger Drivers

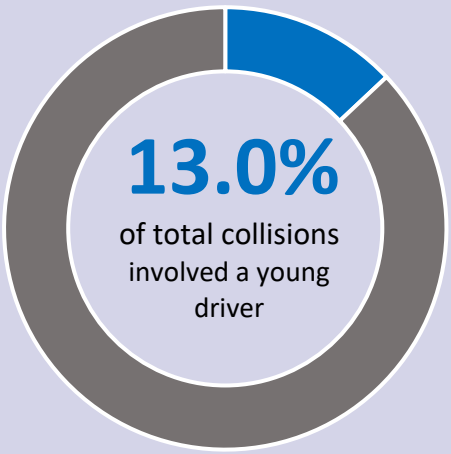
Younger Drivers is a County of San Diego LRSP challenge area that focuses on collisions that involve a driver 15 to 20 years of age.

Percent & Number of Fatalities + Severe Injuries



45 of all F+SI collisions involved a young driver

Percent & Number of Total



2,112 of total collisions involved a young driver

Recommendations:

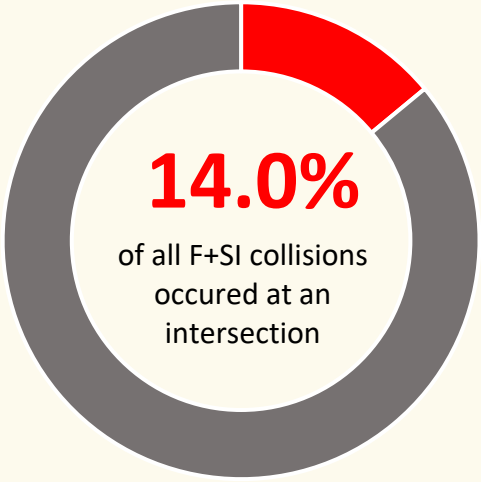
- Research, assess, and evaluate effective ways to enhance awareness, increase California Vehicle Code compliance, and deter behaviors on the road, such as the following:
  - Educational, public awareness, outreach efforts
  - Partnerships and programs
  - Laws and consequences

See **Appendix F** of the LRSP report for more information.

Intersections

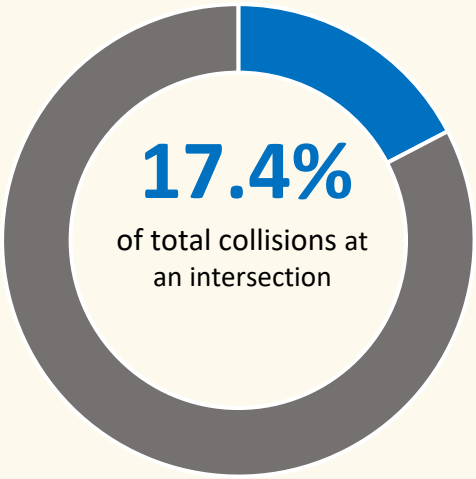
Intersections is a County of San Diego Local Roadway Safety Plan challenge area that focuses on collisions within or the sphere of influence of an intersection.

Percent & Number of Fatalities + Severe Injuries



118 of all F+SI collisions occurred at an intersection

Percent & Number of Total



2,820 of total collisions occurred at an intersection

Recommendations:

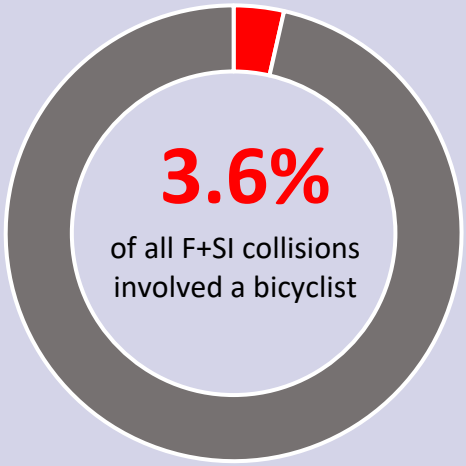
- Develop an ITS/TSM&O master plan that details how emerging technologies can be integrated into the roadway network to communicate to drivers or automated/connected vehicles of conflict areas at intersections.
- Apply for grants to complete roadway safety assessments, such as road safety audits, in a systematic way using the ranked list provided in **Appendix G**.

Appendix F of the LRSP report for more information.

Bicyclists

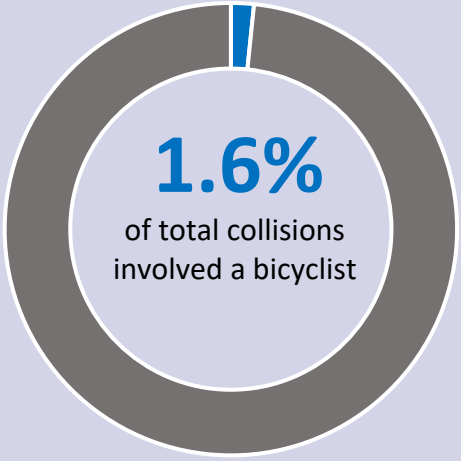
Bicyclists is a County of San Diego LRSP challenge area that focuses on motor vehicles involved in a collision with a bicyclist.

Percent & Number of Fatalities + Severe Injuries



30 of all F+SI collisions involved a bicyclist

Percent & Number of Total



267 of total collisions involved a bicyclist

Recommendations:

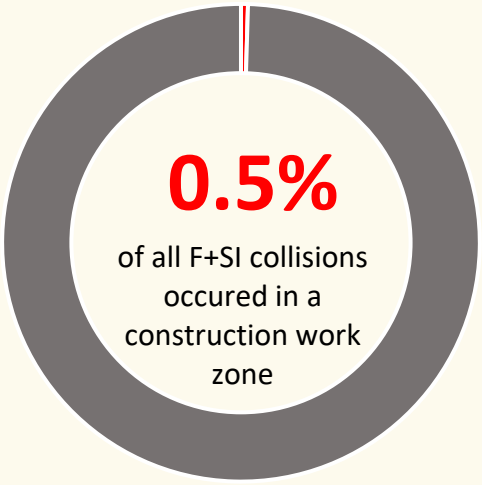
- Develop and implement a complete streets checklist to ensure that bicyclist standards, goals, objectives, guidelines, and actions are implemented.
- Conduct an engineering study to further assess and identify issues related to this challenge area. Establish a framework to apply appropriate countermeasures proactively throughout the County.
- Assess and evaluate effective ways to enhance awareness, increase California Vehicle Code compliance, and deter behaviors on the road, such as the following:
    - Educational, public awareness, outreach efforts
    - Engaging with law enforcement officers
    - Partnerships and programs

See **Appendix F** of the LRSP report for more information.

Work Zones

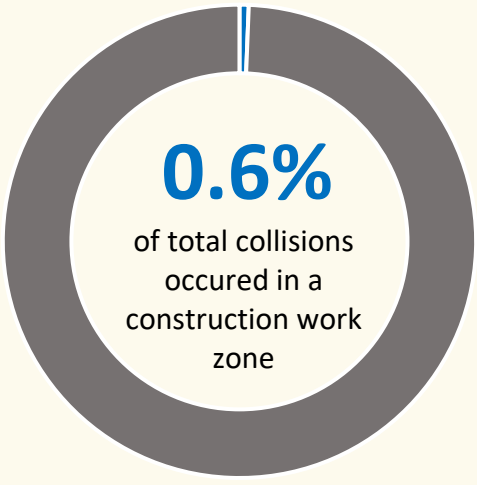
Work Zones is a County of San Diego Local Roadway Safety Plan challenge area that focuses on collisions that occur in a construction zone.

Percent & Number of Fatalities + Severe Injuries



4 of all F+SI collisions occurred within a construction work zone

Percent & Number of Total



103 of total collisions occurred within a construction work zone

Recommendations:

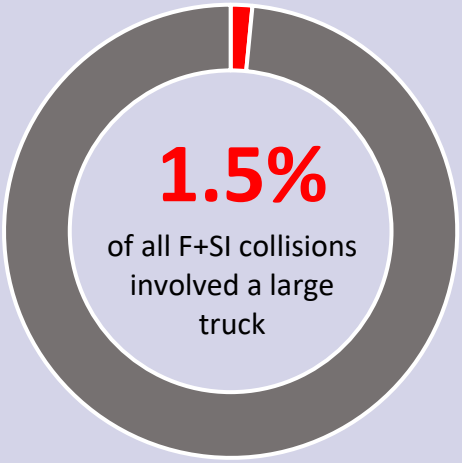
- Identify implementable best practices to reduce collisions within work zones and ensure that they are reflected in traffic control design processes, standards, and guidelines.
- Continue to monitor and invest in effective ways to increase California Vehicle Code compliance, prevent collisions, and deter undesirable behaviors within the work zone.

Appendix F of the LRSP report for more information.

Commercial Trucks

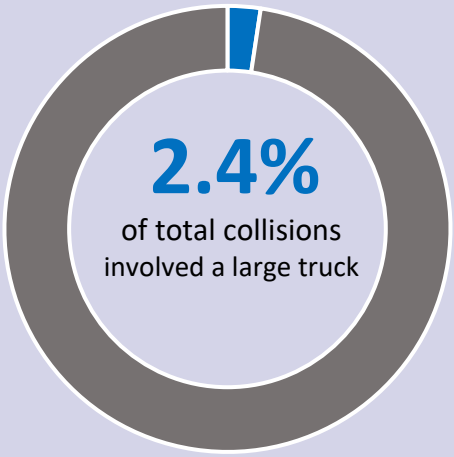
Commercial Trucks is a County of San Diego Local Roadway Safety Plan challenge area that focuses on motor vehicles involved in a collision with a large truck.

Percent & Number of Fatalities + Severe Injuries



13 of all F+SI collisions involved a large truck

Percent & Number of Total



389 of total collisions involved a large truck

Recommendations:

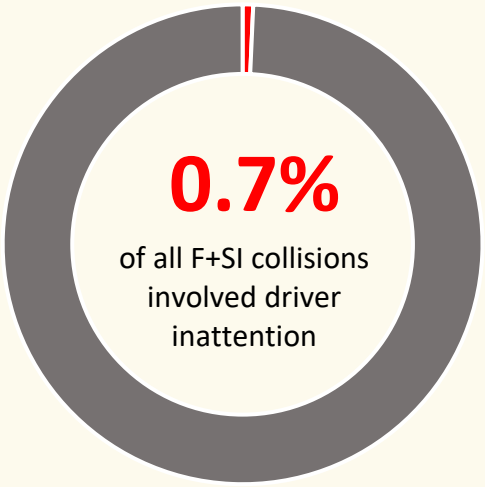
- Identify implementable best practices for the County to help reduce commercial truck collisions and ensure that they are reflected in roadway design processes, standards, and guidelines.
- Assess and evaluate effective ways to enhance awareness and deter behaviors on the road, such as the following:
    - Educational, public awareness, outreach efforts
    - Partnerships and programs

See **Appendix F** of the LRSP report for more information.

Keeping Drivers Alert

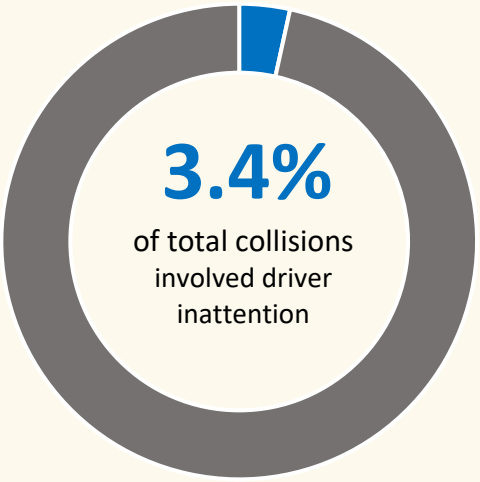
Keeping Drivers Alert is a County of San Diego Local Roadway Safety Plan challenge area that focuses on collisions involving driver inattention. This challenge area pertains to collisions of distracted drivers and drivers who fell asleep.

Percent & Number of Fatalities + Severe Injuries



6 of all F+SI collisions involved driver inattention

Percent & Number of Total



559 of total collisions involved driver inattention

Recommendations:

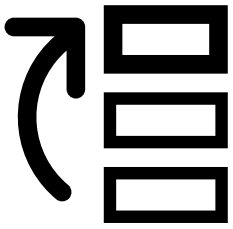
Continue to monitor, evaluate and invest in effected ways to increase California Vehicle Code compliance, enhance awareness, prevent collisions, and deter behavior, such as the following:

- Educational, public awareness, outreach efforts
- Engage with law enforcement officers
- Partnerships and programs
- Laws and consequences

Appendix F of the LRSP report for more information.

PRIORITY INTERSECTION/SEGMENT SELECTION

7.0 PRIORITY INTERSECTION/SEGMENT SELECTION



A typical approach to determining the priority intersection and segment locations for targeted assessment and improvements to enhance transportation safety is to determine high-risk locations based on a criterion, such as intersections or segments with the highest collision frequency. A more encompassing approach was taken by developing a method that accounts for the collision rate, collision severity, and Healthy Places Index. Each is briefly described below.

Collision Rate

The collision rate is defined as the number of collisions that occur at a determined intersection or segment over a specified time (i.e., collision frequency) and dividing it by a measure of exposure. For collision rates, the measure of exposure is in terms of traffic volumes for intersections and traffic volumes and length for segments.

Collision Severity

The collision severity is the classification of the collision based on the highest injury severity for any person involved in the crash. Each collision is classified as Fatal, Severe Injury, Other Injury, or Property Damage Only.

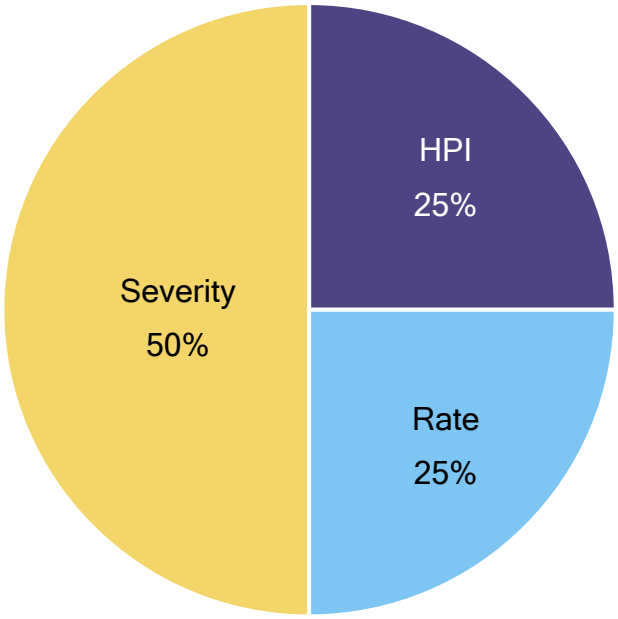
Healthy Places Index

The Healthy Places Index (HPI) is an additional facet in the data-driven approach for the LRSP. This criterion helps ensure equitability and other public health elements are accounted for in the selection process. **Attachment B** contains more information on HPI.

Appendix G contains a technical memorandum that further details this priority project selection process.

Weightage

A weighted average was utilized to calculate the final ranking score for both intersections and segments. This weighted average considers the varying degrees of importance to each score. Based on collaboration with County staff, the weightage for each score is shown below.



Ranked Intersections and Segments

Based on the priority project selection process, a list of 65 ranked intersections and the 60 ranked segments were compiled for targeted assessments and improvements to enhance transportation safety. **Table 7-1** and **Table 7-2** lists the ranked intersections and segments, respectively. See **Appendix G** for more information. See **Appendix H** for location maps.

Priority Intersection/Segment Recommendations

As a result of developing this recommended process for ranking intersections and segments, it was observed that collisions are more frequent and severe along roadway segments when compared to intersections. This is partly due to the rural settings of County roadways, the geometrics, and the exposure. Therefore, it is recommended that the County apply for grants to complete roadway safety assessments such as road safety audits, in a systematic way, using the ranked list provided in **Appendix G**. A road safety audit (RSA) is a formal safety performance examination of an existing or future road. A RSA should consider all potential roadway users and intersections along the segment and should consider crash prediction model evaluations.

TABLE 7–1
RANKED INTERSECTION LOCATIONS

Priority Rank	Intersection (Major/Minor)
1	Main Avenue / Aviation Road
2	Jamacha Boulevard / Grand Avenue
3	Green Canyon Road / Sycamore Drive
4	Sweetwater Road / Troy Street
5	Sweetwater Road / Jamacha Road
6	Jamacha Road / Darby Street
7	Old Highway 395 / Dulin Road (North)
8	Bear Valley Parkway / Bear Valley Road
9	Valley Center Road / Lilac Road
10	Old Highway 395 / W. Lilac Road
11	Green Canyon Road / S. Mission Road
12	Valley Center Road / Cole Grade Road
13	Campo Road / Conrad Drive
14	Jamacha Boulevard / Felicita Avenue
15	Bancroft Drive / Valencia Street
16	Magnolia Avenue / Cypress Lane
17	Woodside Avenue / Riverview Avenue
18	Main Avenue / Lakeshore Drive
19	Winter Gardens Boulevard / Winter Gardens Drive
20	Winter Gardens Boulevard / Winter Crest Drive
21	Fallbrook Street / Heald Lane
22	2nd Street / Pepper Drive
23	Estrelita Drive / Palmyra Drive
24	San Vicente Road / Green Haven Lane
25	Dye Road / Ramona Street
26	Wildcat Canyon Road / Dump Road

Continued on Next Page

TABLE 7–1
RANKED INTERSECTION LOCATIONS

Priority Rank	Intersection (Major/Minor)
27	Hi Ridge Road / Valle Vista Road
28	Campo Road / Kenwood Drive
29	Victoria Park Terrace / Tavern Road
30	South Santa Fe Avenue / Montgomery Drive
31	Dehesa Road / Harbison Canyon Rd Road
32	Fallbrook Street / S. Mission Road
33	Jamacha Boulevard / Whitestone Road
34	San Vicente Road / Vista Vicente Drive
35	Paradise Valley Road / Elkelton Boulevard
36	Highland Valley Road / Sky Valley Road
37	Woodside Avenue / Winter Gardens Boulevard
38	Camino Del Rey / Camino Del Cielo
39	Mapleview Street / Ashwood Street
40	Winter Gardens Boulevard / Lemon Crest Drive
41	Warnock Drive / Ramona Street
42	Pepper Drive / Peerless Drive
43	Mission Road / Willow Glen Road
44	Olive Vista Drive / Jefferson Road
45	Deer Springs Road / Champagne Boulevard
46	Deer Springs Road / Sarver Lane
47	Old Highway 395 / Dulin Road (South)
48	Osborne Street / Hutchinson Street
49	Lilac Road / Old Castle Road
50	Willow Glen Drive / Medinah Drive
51	Rock Springs Road / Nordahl Road
52	Paradise Valley Road / Worthington Street

Continued on Next Page

TABLE 7–1
RANKED INTERSECTION LOCATIONS

Priority Rank	Intersection (Major/Minor)
53	Linea Del Cielo / Calzada Del Bosque
54	South Santa Fe Avenue / Azalea Drive
55	Del Dios Highway / El Camino Del Norte
56	Bancroft Drive / Campo Road
57	Valley Center Road / Woods Valley Road
58	Linea Del Cielo / Rambla De Las Flores
59	Bear Valley Parkway / Idaho Avenue
60	Via De La Valle / Calzada Del Bosque
61	S. Mission Road / Olive Hill Road
62	Buena Creek Road / Monte Vista Drive
63	East Vista Way / Gopher Canyon Road
64	Avocado Boulevard / Fuerte Drive
65	El Camino Real / Linea Del Cielo
End of Table	
General Note: -See **Appendix H** for location maps	

TABLE 7–2
RANKED SEGMENT LOCATIONS

Priority Rank	Segment	From	To
1	Woodside Avenue	Winter Gardens Boulevard	Prospect Avenue
2	Mesa Grande Road	Cattle Guard	Mile Post 8.0
3	Jamacha Road	Sweetwater Road	Helix Street
4	Sweetwater Road	Jamacha Road	Saint George Street
5	Jamacha Boulevard	Sweetwater Road	Park Access
6	Campo Road	Conrad Drive	Bonita Street
7	Pala Temecula Road	Mile Post 4.0	Temepa Road
8	Buckman Springs Road	Lake Morena Drive	Mile Post 1.0
9	Champagne Boulevard	Deer Springs Road	Champagne Village Drive
10	Otay Lakes Road	Mile Post 6.0	Mile Post 5.0
11	South Santa Fe Avenue	Woodland Drive	Robelini Drive
12	South Santa Fe Avenue	Poinsettia Avenue	Smilax Road
13	South Santa Fe Avenue	Montgomery Drive	Woodland Drive
14	Winter Gardens Boulevard	Winter Crest Drive	Woodside Avenue
15	Willows Road	Mile Post 2.0	Viejas Grade Road
16	Pala Temecula Road	Mile Post 3.0	Mile Post 4.0
17	Olde Highway 80	Soldin Lane	Flinn Crest Street
18	Highland Valley Road	Adrienne Way	Traylor Road
19	Old Highway 395	2nd Street	Rainbow Valley Boulevard
20	Wildcat Canyon Road	Barona Driveway	Mile Post 7.0
21	Rice Canyon Road	Mile Post 4.0	Rainbow Heights Road
22	Bear Valley Parkway	Bear Valley Road	SR-78
23	Old Highway 395	Rainbow Glen Road	5th Street
24	Ammunition Road	S. Mission Road	Altura Street
25	Valley Center Road	Miller Road	Cole Grade Road
26	Pala Temecula Road	Mile Post 2.0	Mile Post 3.0

Continued on Next Page

TABLE 7–2
RANKED SEGMENT LOCATIONS

Priority Rank	Segment	From	To
27	Old Highway 395	West Lilac Road	Dulin Road
28	Ashwood Street	Mapleview Street	Willow Road
29	S. Mission Road	Green Canyon Road	Quail Knoll Road
30	Olive Vista Drive	Lyons Valley Road	Jefferson Road
31	Old Highway 80	Mile Post 22.0	Royal Drive
32	Alpine Boulevard	Vista Alpine Road	Bay Meadows Drive
33	San Vicente Road	Arena Drive	Wildcat Canyon Road
34	Jamacha Boulevard	Trace Road	SR-94
35	S. Mission Road	SR-76	La Canada Road
36	Ammunition Road	Alturas Street	End of County Maintained Road
37	Buckman Springs Road	Corral Canyon Trail	Mile Post 6.0
38	Dehesa Road	Harbison Canyon Road	Mile Post 6.0
39	East Vista Way	Gopher Canyon Road	Mason Road
40	Buckman Springs Road	Mile Post 6.0	Oak Drive
41	Ridgeway Drive	Euclid Avenue	Gwynne Avenue
42	Alpine Boulevard	Tavern Road	Victoria Drive
43	Mission Road	Davis Drive	Hamilton Lane
44	De Luz Road	Mile Post 5.0	Green Valley Road
45	Camino Del Norte	County/City of San Diego Limit	Camino San Bernardo Ramps
46	Lilac Road	Anthony Road	Mile Post 11.0
47	Wildcat Canyon Road	Mile Post 5.0	Mile Post 6.0
48	Old Castle Road	Mile Post 8.0	Pamoosa Lane
49	Deer Springs Road	Mesa Rock Road	Sarver Lane
50	Avocado Boulevard	Fuerte Drive	Puebla Drive
51	Dehesa Road	Singing Vista Drive	Willow Glen Drive
52	Dehesa Road	Mile Post 3.0	Mile Post 4.0

Continued on Next Page

TABLE 7–2
RANKED SEGMENT LOCATIONS

Priority Rank	Segment	From	To
53	Bonita Road	Acacia Avenue	Central Avenue
54	El Camino Del Norte	Del Dios Highway	Aliso Canyon Road
55	Gopher Canyon Road	El Paseo	Disney Lane
56	Bonita Road	Randy Lane	County Limit
57	Lyons Valley Road	SR-94	Olive Vista Drive
58	Del Dios Highway	El Camino Del Norte	Via Cuatro Camino
59	Del Dios Highway	Mile Post 10.0	Mile Post 11.0
60	Skyline Truck Trail	Hidden Trail Drive	Lawson Valley Road
End of Table			

General Note:
-See **Appendix H** for location maps

IMPLEMENTATION APPROACH

8.0 IMPLEMENTATION APPROACH

The County's Local Roadway Safety Plan is a critical tool to proactively implement safety countermeasures by systematically requesting funding to complete transportation safety assessment and improvement projects. The recommendations provided in **Chapter 7** provide the framework to achieve the County of San Diego's Local Roadway Safety Plan Vision, Mission, and Goal. The real work in achieving the LRSP mission is in the **successful implementation of this plan, which depends on everyone**.

In addition to the recommendations provided in **Chapter 7**, a toolbox of engineering safety countermeasures is provided in **Appendix I.** This toolbox can be utilized when funding is secured to implement systemic countermeasures or to help determine potential solutions as part of future transportation safety engineering studies.

Since the LRSP utilizes a multi-disciplinary holistic approach, it is critical to continue to foster collaboration and cooperation between various County departments and stakeholders. The LRSP is living documents that should be updated periodically to reflect new collision data, trends, and updated recommendations.

WORKS CITED

9.0 WORKS CITED

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