

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

Automobile Club of Southern
California
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
San Diego County Pacific Safety
Council
San Diego County
Sheriff's Department

August 31, 2018

TO: Community Planning/Sponsor Group Chairpersons

FROM: Secretary, Traffic Advisory Committee

MEETING NOTICE

Attached is the preliminary agenda for the September 14, 2018, meeting of the Traffic Advisory Committee (TAC). The meeting will begin at 9:00 AM in the following location:

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

Your community group may have previously provided formal input on these matters and your group's recommendations would be included as part of the Chief Administrative Officer's report to the Board of Supervisors along with TAC recommendations. The Board of Supervisors will make a final decision as to what action will be taken after reviewing TAC recommendations and community group input, when available.

If your community planning/sponsor group representative would like to attend the TAC meeting and participate in the discussion of an item on this agenda, or if you do have any questions or need additional information regarding this procedure, please contact me at (858) 694-3843. TAC staff is available to provide background information on items and to answer questions you may have.

Very truly yours,

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

KRJ:sh

Attachment



SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

September 14, 2018 ~ 9:00 AM

5510 Overland Ave, Room 271

San Diego CA, 92123

AGENDA

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

SUBJECT		LOCATION	AREA	PLANNING/ SPONSOR GROUP
<u>SUPERVISORIAL DISTRICT 2</u>				
2-A.	TEMPORARY ROAD CLOSURE	CAMINO MONTE SOMBRA	EL CAJON	CREST/DEHESA
2-B.	SPEED LIMIT	NOAKES STREET	HARBISON CANYON	CREST/DEHESA
2-C.	RADAR RECERTIFICATION	WILLOWS ROAD	ALPINE	ALPINE
2-D.	RADAR RECERTIFICATION	MAYA STREET	SPRING VALLEY	SPRING VALLEY
2-E.	INTERSECTION CONTROL	JULIAN AVENUE & CHANNEL ROAD	LAKESIDE	LAKESIDE
<u>SUPERVISORIAL DISTRICT 5</u>				
5-A.	SPEED LIMIT	SOUTH GRADE ROAD	PALOMAR MOUNTAIN	PALA-PAUMA
5-B.	SPEED LIMIT	EAST GRADE ROAD	PALOMAR MOUNTAIN	PALA-PAUMA

SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: September 14, 2018 **Item 2-A**

SUPERVISORIAL DISTRICT: 2

SUBJECT: Temporary Road Closure

LOCATION: Camino Monte Sombra, from a point 500 feet east of Calle de la Sierra easterly to the end of County maintenance, EL CAJON (Thos. Bros. 1252-E4)

INITIATED BY: Traffic Engineering

REQUEST: Extend the Temporary Road Closure

PROBLEM AS STATED BY REQUESTER:

In both 2001 and 2017, this segment of Camino Monte Sombra was identified by the Sheriff's Department and the California Highway Patrol (CHP) as a location where serious and violent criminal activity was occurring on a frequent basis. In 2001 and 2017, the Board of Supervisors approved a "temporary" 18-month road closure and subsequent extensions as a result of serious and continual criminal activity.

The resolution enacting the temporary road closure dictates this closure may be extended for a total of eight additional consecutive periods of not more than 18 months each. Also, prior to each extension, a public hearing is held and the same findings be made.

The Board of Supervisors, Law Enforcement Officials, Crest-Dehesa Community Planning Group and affected property owners have consistently supported previous extensions of Camino Monte Sombra's temporary road closure. This item would be the first proposed extension for an additional 18 months of the reestablished in 2017. The temporary road closure as a result of serious and continual criminal activity will expire at the end of this proposed 18 month extension.

DATA:

Existing Traffic Devices

Camino Monte Sombra is a 28-foot striped two-lane roadway with a parking prohibition along both sides in advance of the closed segment. The closed segment has a "\$1,000 Fine for Littering" sign in place. The roadway is unclassified on the County General Plan Mobility Element Network. The road does not have a posted speed limit.

2-A. Road Closure

Camino Monte Sombra from 275' East of Calle de la Sierra to the End of County Maintenance (465 feet)



SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: September 14, 2018 **Item 2-B**

SUPERVISORIAL DISTRICT: 2

SUBJECT: Speed Limit and Radar Certification

LOCATION: W. Noakes Street from Harbison Canyon Road to Editha Drive (0.33 miles) HARBISON CANYON (Thos. Bros. 1253-D1)

INITIATED BY: DPW Traffic Engineering

REQUEST: Speed Limit Review

PROBLEM AS STATED BY REQUESTER:

W. Noakes Street from Harbison Canyon Road to Editha Drive has an unposted 25MPH residence district. Preliminary review of prevailing speeds and roadway conditions could support a formal speed limit posting of 15 MPH.

Existing Traffic Devices

W. Noakes Street is a no striped residence roadway that varies from 18 to 20 feet in width. There is a stop control at the intersection of W. Noakes Street and Harbison Canyon Road.

Average Daily Traffic Volumes 12/17

W. Noakes Street:	
275' E/o Mildred Way	280

Speed Data 85th Percentile

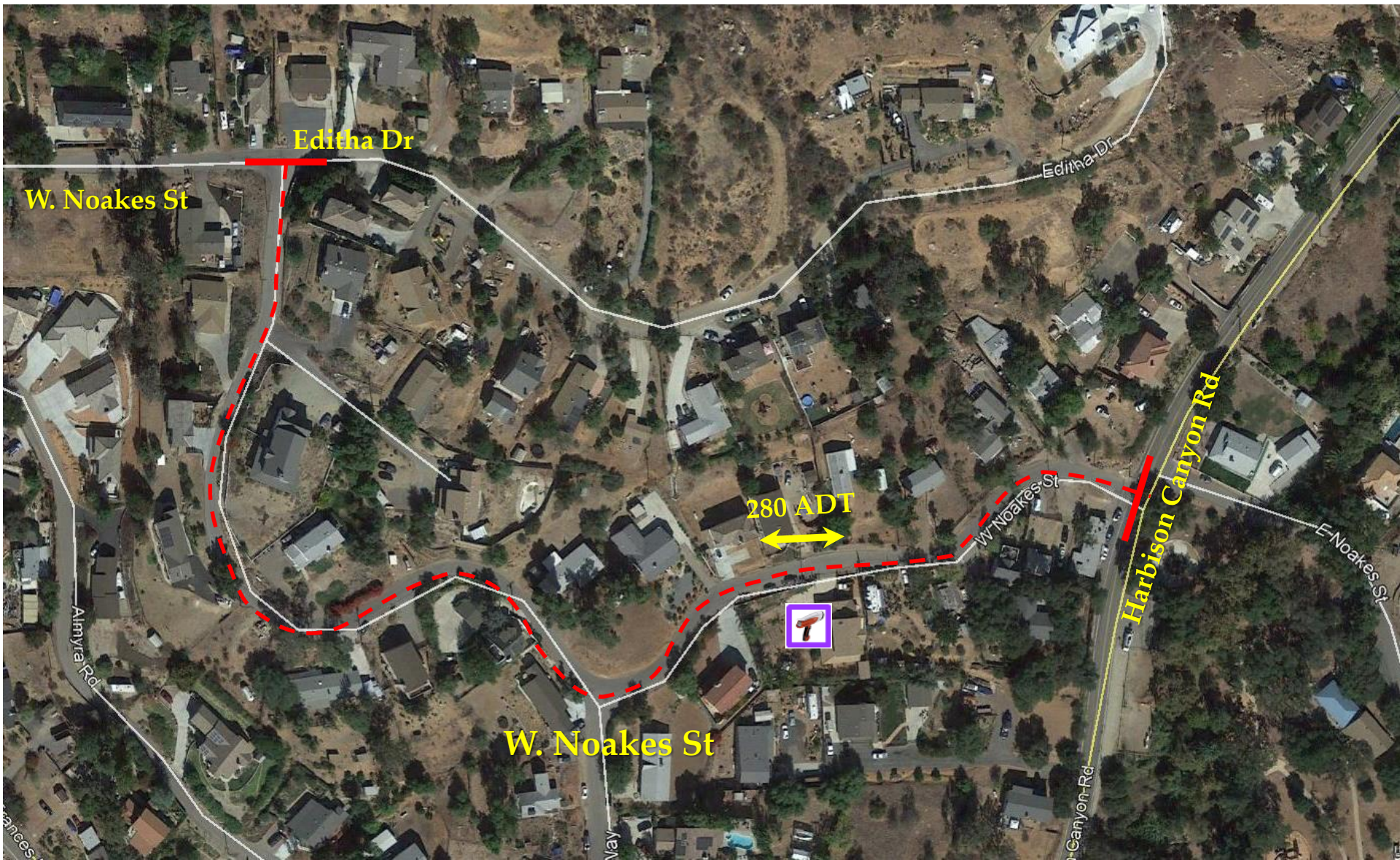
W. Noakes Street:		
275' E/o Mildred Way	(2018)	20.0 MPH*

*Tube count

Collision Data

There were no reported collision along this segment of roadway, in the last 5 year period (5-1-13 to 4-30-18).

2-B. Speed Limit/Radar Certification West Noakes Dr from Harbison Canyon Road to Editha Drive (0.33 miles)





County of San Diego

RICHARD E. CROMPTON
DIRECTOR

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

COUNTY TRAFFIC ENGINEER RECOMMENDATION

Date: August 22, 2018

Item Title: Speed Limit and Radar Certification

Location: Noakes Street from Harbison Canyon Road to Editha Drive

CTE Recommendation: **Establish a 15 MPH Radar Enforced Speed Limit**

Conditions:

- Section 22358.3 "Decrease on Narrow Street" of the California Vehicle Code (CVC) authorizes a local agency to determine upon the basis of an Engineering and Traffic (E&T) Survey that the prima facie speed limit of 25 mph on a street having a roadway not exceeding 25 feet in width is more than reasonable or safe, the local agency determine a prima facie speed limit of 20 or 15 mph, whichever is found most appropriate and is reasonable and safe.
- Section 2B.13 "Speed Limit Sign (R2-1)" of the California MUTCD, provides that an E&T Survey shall include a) prevailing speeds, b) collision records, and c) highway, traffic, and roadside conditions that are not apparent to a driver.
- Noakes Street is less than 25 feet in pavement width and even less than 20 feet in some section and very tight horizontal and vertical curves, residential driveways, and limited shoulder to pedestrian.
- Speed data collected on December 7, 2017 shows that the prevailing (85th %) speed is 20 mph over a 24 hour period and an ADT of 279 cars/day.
- Pursuant to CVC Section 22358.3 coupled with the above conditions on Noakes Drive and the guidance of the California MUTCD, a 15 mph radar enforced speed limit on Noakes Street from Harbison Canyon Road to Editha Drive is reasonable and safe.

VOLUME

W Noakes St 275' E/O Mildred Way

Day: Thursday
Date: 12/7/2017

City: El Cajon
Project #: CA17_4365_001

DAILY TOTALS					NB	SB						EB	WB	Total
					0	0						139	140	279
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
00:00	0	0	0	0			12:00	0	0	2	1	3		
00:15	0	0	0	0			12:15	0	0	2	1	3		
00:30	0	0	0	0			12:30	0	0	1	1	2		
00:45	0	0	0	0			12:45	0	0	1	6	3	6	12
01:00	0	0	0	0			13:00	0	0	3	3	6		
01:15	0	0	0	1	1		13:15	0	0	1	0	1		
01:30	0	0	0	0			13:30	0	0	0	4	4		
01:45	0	0	0	0	1	1	13:45	0	0	0	4	1	8	12
02:00	0	0	0	0			14:00	0	0	0	2	2		
02:15	0	0	0	0			14:15	0	0	3	2	5		
02:30	0	0	1	0	1		14:30	0	0	8	4	12		
02:45	0	0	0	1	0	1	14:45	0	0	2	13	3	11	24
03:00	0	0	0	0			15:00	0	0	1	5	6		
03:15	0	0	0	0			15:15	0	0	3	3	6		
03:30	0	0	0	0			15:30	0	0	0	5	5		
03:45	0	0	0	1	1	1	15:45	0	0	2	6	5	18	24
04:00	0	0	0	1	1		16:00	0	0	1	2	3		
04:15	0	0	0	0			16:15	0	0	2	4	6		
04:30	0	0	2	0	2		16:30	0	0	2	1	3		
04:45	0	0	4	6	0	1	16:45	0	0	1	6	2	9	15
05:00	0	0	2	0	2		17:00	0	0	1	2	3		
05:15	0	0	1	0	1		17:15	0	0	3	4	7		
05:30	0	0	2	0	2		17:30	0	0	0	2	2		
05:45	0	0	3	8	2	2	17:45	0	0	1	5	5	13	18
06:00	0	0	5	1	6		18:00	0	0	2	3	5		
06:15	0	0	1	2	3		18:15	0	0	0	3	3		
06:30	0	0	2	1	3		18:30	0	0	2	2	4		
06:45	0	0	1	9	0	4	18:45	0	0	1	5	4	12	17
07:00	0	0	5	0	5		19:00	0	0	1	0	1		
07:15	0	0	8	1	9		19:15	0	0	1	1	2		
07:30	0	0	3	2	5		19:30	0	0	1	1	2		
07:45	0	0	7	23	1	4	19:45	0	0	0	3	2	4	7
08:00	0	0	3	3	6		20:00	0	0	1	3	4		
08:15	0	0	2	1	3		20:15	0	0	0	1	1		
08:30	0	0	8	4	12		20:30	0	0	0	1	1		
08:45	0	0	3	16	2	10	20:45	0	0	0	1	1	6	7
09:00	0	0	2	0	2		21:00	0	0	0	1	1		
09:15	0	0	1	0	1		21:15	0	0	0	1	1		
09:30	0	0	2	5	7		21:30	0	0	0	2	2		
09:45	0	0	1	6	1	6	21:45	0	0	1	1	1	5	6
10:00	0	0	2	1	3		22:00	0	0	1	1	2		
10:15	0	0	3	1	4		22:15	0	0	0	0			
10:30	0	0	4	2	6		22:30	0	0	0	1	1		
10:45	0	0	1	10	2	6	22:45	0	0	0	1	1	3	4
11:00	0	0	4	2	6		23:00	0	0	0	0			
11:15	0	0	3	3	6		23:15	0	0	0	1	1		
11:30	0	0	2	1	3		23:30	0	0	0	1	1		
11:45	0	0	0	9	1	7	23:45	0	0	0	1	3		3
TOTALS	88 42				130		TOTALS	51 98				149		
SPLIT %	67.7% 32.3%				46.6%		SPLIT %	34.2% 65.8%				53.4%		

DAILY TOTALS					NB	SB						EB	WB	Total
					0	0						139	140	279
AM Peak Hour	07:00 08:00 07:45						PM Peak Hour	14:15 15:00 14:30						
AM Pk Volume	23 10 29						PM Pk Volume	14 18 29						
Pk Hr Factor	0.719 0.625 0.604						Pk Hr Factor	0.438 0.900 0.604						
7 - 9 Volume	0	0	39	14	53		4 - 6 Volume	0	0	11	22	33		
7 - 9 Peak Hour	07:00 08:00 07:45						4 - 6 Peak Hour	16:30 17:00 17:00						
7 - 9 Pk Volume	0	0	23	10	29		4 - 6 Pk Volume	0	0	7	13	18		
Pk Hr Factor	0.000	0.000	0.719	0.625	0.604		Pk Hr Factor	0.000	0.000	0.583	0.650	0.643		

SPEED

W Noakes St 275' E/O Mildred Way

Day: Thursday

Date: 12/7/2017

City: El Cajon

Project #: CA17_4365_001

Summary

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:00	0	6	1	0	0	0	0	0	0	0	0	0	0	7
05:00	5	4	1	0	0	0	0	0	0	0	0	0	0	10
06:00	6	7	0	0	0	0	0	0	0	0	0	0	0	13
07:00	13	12	2	0	0	0	0	0	0	0	0	0	0	27
08:00	7	14	5	0	0	0	0	0	0	0	0	0	0	26
09:00	5	6	1	0	0	0	0	0	0	0	0	0	0	12
10:00	5	7	4	0	0	0	0	0	0	0	0	0	0	16
11:00	4	11	1	0	0	0	0	0	0	0	0	0	0	16
12:00 PM	5	7	0	0	0	0	0	0	0	0	0	0	0	12
13:00	7	5	0	0	0	0	0	0	0	0	0	0	0	12
14:00	11	12	1	0	0	0	0	0	0	0	0	0	0	24
15:00	17	5	2	0	0	0	0	0	0	0	0	0	0	24
16:00	8	6	1	0	0	0	0	0	0	0	0	0	0	15
17:00	11	7	0	0	0	0	0	0	0	0	0	0	0	18
18:00	9	4	4	0	0	0	0	0	0	0	0	0	0	17
19:00	1	2	4	0	0	0	0	0	0	0	0	0	0	7
20:00	2	5	0	0	0	0	0	0	0	0	0	0	0	7
21:00	1	3	2	0	0	0	0	0	0	0	0	0	0	6
22:00	1	2	1	0	0	0	0	0	0	0	0	0	0	4
23:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
Totals	119	128	32											279
% of Totals	43%	46%	11%											100%

AM Volumes	46	67	17	0	0	0	0	0	0	0	0	0	0	130
% AM	16%	24%	6%											47%
AM Peak Hour	07:00	08:00	08:00											07:00
Volume	13	14	5											27
PM Volumes	73	61	15	0	0	0	0	0	0	0	0	0	0	149
% PM	26%	22%	5%											53%
PM Peak Hour	15:00	14:00	18:00											14:00
Volume	17	12	4											24
Directional Peak Periods				AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes				
All Speeds				Volume	%	Volume	%	Volume	%	Volume	%			
				53	↔ 19%	24	↔ 9%	33	↔ 12%	169	↔ 61%			

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
W Noakes St	Summary	9	16	15	20	23	279

SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: September 14, 2018

Item **2-C**

SUPERVISORIAL DISTRICT: 2

SUBJECT: Radar Recertification

LOCATION: Willows Road from the west line of Viejas Grade Road to a point 2,770 feet west of Mile Post 2 and from a point 850 feet west of Mile Post 2 to the north line of Alpine Boulevard (2.14 miles) ALPINE (Thos. Bros. 1234-G5)

INITIATED BY: DPW Traffic Engineering

REQUEST: Radar Recertification

PROBLEM AS STATED BY REQUESTER:

Willows Road from the west line of Viejas Grade Road to a point 2,770 feet west of Mile Post 2 and from a point 850 feet west of Mile Post 2 to the north line of Alpine Boulevard is posted 50 MPH Radar Enforced. Preliminary review of prevailing speeds and roadway conditions could support radar recertification.

Existing Traffic Devices

Willows Road is a striped two-lane roadway that varies from 28 feet to 32 feet in width. It has edge-striping along both sides of the roadway. Willows Road from Viejas Grade Road to a point 2,770 feet west of Mile Post 2 is classified as a Light Collector and from a point 850 feet west of Mile Post 2 to the north line of Alpine Boulevard is classified as a Major Road on the County General Plan Mobility Element Network and posted 50 MPH/Radar Certified.

Average Daily Traffic Volumes

	<u>4/18</u>	<u>01/11</u>
Willows Road:		
500' E/o MP 2	3,290	7,270

<u>Speed Data</u>	<u>85th Percentile</u>	<u>10 MPH Pace</u>	<u>% in Pace</u>
Willows Road:			
1,900' E/o Viejas Grade Rd (2018)	52.7 MPH	45-54	84.0%
(2011)	48.3 MPH	39-48	77.5%
280' W/o Viejas View Ln (2018)	50.8 MPH	43-52	68.0%
(2011)	51.0 MPH	43-52	61.2%
Speed Zone (2018)	51.8 MPH	44-53	76.0%

Collision Data

There have been 28 reported collisions along this segment of roadway, 15 of which involved injury, in a 5 year period (5-1-13 to 4-30-18). These collisions result in a segment accident rate of 6.15 collisions per million vehicle miles. The statewide average is 1.32 collisions per million vehicle miles for similar suburban conventional 2 lanes or less with speed limit between 45-55mph.

2-C. Radar Recertification

**Willows Road from Viejas Grade Road to a point 2,770' W/o MP 2
and from a point 850' W/o MP 2 to Alpine Boulevard (2.14 miles)**



VOLUME

Willows Rd 500' E/O Mile Post 2

Day: Wednesday
Date: 4/18/2018City: Alpine
Project #: CA18_4120_002

DAILY TOTALS					NB	SB						EB	WB	Total	
					0	0						1,563	1,726	3,289	
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL			
00:00			28	4	32		12:00			21	17	38			
00:15			20	8	28		12:15			13	13	26			
00:30			14	4	18		12:30			20	15	35			
00:45			15	77	4	20	12:45			15	69	21	66	36	135
01:00			14	2	16		13:00			19	23	42			
01:15			10	4	14		13:15			18	20	38			
01:30			9	2	11		13:30			13	23	36			
01:45			11	44	1	9	13:45			12	62	20	86	32	148
02:00			7	4	11		14:00			40	31	71			
02:15			2	2	4		14:15			19	30	49			
02:30			5	2	7		14:30			21	20	41			
02:45			1	15	3	11	14:45			20	100	22	103	42	203
03:00			5	4	9		15:00			49	25	74			
03:15			5	0	5		15:15			30	39	69			
03:30			2	1	3		15:30			28	51	79			
03:45			6	18	4	9	15:45			32	139	36	151	68	290
04:00			2	1	3		16:00			54	23	77			
04:15			3	6	9		16:15			46	29	75			
04:30			3	9	12		16:30			33	35	68			
04:45			1	9	9	25	16:45			24	157	32	119	56	276
05:00			1	10	11		17:00			54	18	72			
05:15			2	13	15		17:15			40	26	66			
05:30			1	20	21		17:30			48	33	81			
05:45			4	8	31	74	17:45			30	172	26	103	56	275
06:00			5	22	27		18:00			37	16	53			
06:15			5	29	34		18:15			38	25	63			
06:30			2	32	34		18:30			23	18	41			
06:45			9	21	24	107	18:45			20	118	17	76	37	194
07:00			13	19	32		19:00			25	14	39			
07:15			14	32	46		19:15			19	29	48			
07:30			7	58	65		19:30			14	12	26			
07:45			7	41	37	146	19:45			23	81	10	65	33	146
08:00			19	13	32		20:00			15	9	24			
08:15			18	28	46		20:15			18	11	29			
08:30			6	41	47		20:30			15	3	18			
08:45			16	59	47	129	20:45			12	60	6	29	18	89
09:00			8	38	46		21:00			20	4	24			
09:15			4	44	48		21:15			16	4	20			
09:30			14	24	38		21:30			9	7	16			
09:45			13	39	23	129	21:45			7	52	7	22	14	74
10:00			13	23	36		22:00			20	8	28			
10:15			11	18	29		22:15			19	9	28			
10:30			18	16	34		22:30			12	9	21			
10:45			11	53	17	74	22:45			9	60	9	35	18	95
11:00			9	19	28		23:00			23	8	31			
11:15			10	16	26		23:15			15	15	30			
11:30			17	17	34		23:30			12	23	35			
11:45			14	50	27	79	23:45			9	59	13	59	22	118
TOTALS			434	812	1246		TOTALS			1129	914	2043			
SPLIT %			34.8%	65.2%	37.9%		SPLIT %			55.3%	44.7%	62.1%			

DAILY TOTALS					NB	SB						EB	WB	Total	
					0	0						1,563	1,726	3,289	
AM Peak Hour					08:30	08:30	PM Peak Hour					17:00	15:00	15:30	
AM Pk Volume					77	204	PM Pk Volume					172	151	299	
Pk Hr Factor					0.688	0.904	Pk Hr Factor					0.796	0.740	0.946	
7 - 9 Volume	0	0			100	275	4 - 6 Volume	0	0			329	222	551	
7 - 9 Peak Hour					08:00	07:00	08:00	4 - 6 Peak Hour				17:00	16:00	16:00	
7 - 9 Pk Volume	0	0			59	146	188	4 - 6 Pk Volume	0	0		172	119	276	
Pk Hr Factor	0.000	0.000			0.776	0.629	0.746	Pk Hr Factor	0.000	0.000		0.796	0.850	0.896	



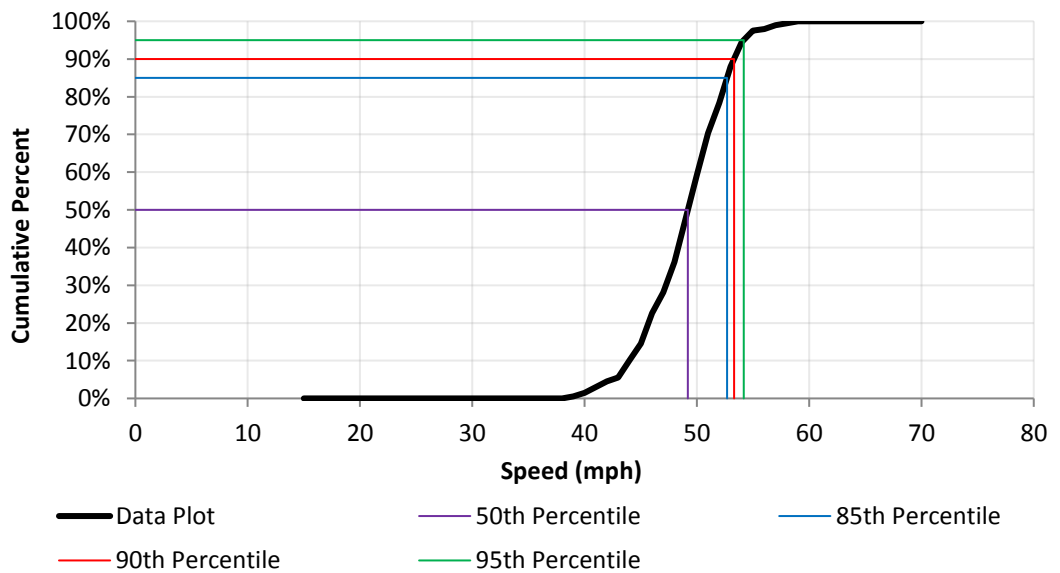
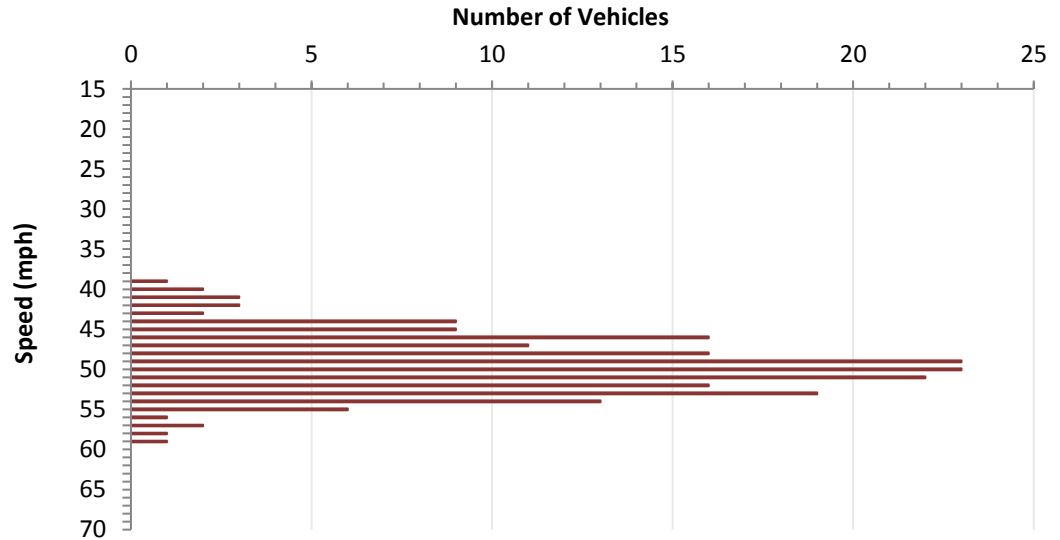
RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name:	Willows Rd	From:	Viejas Grade	To:	Alpine Blvd
Position:	1,900' EO Viejas Grade Road			Direction:	EB/WB

Date:	4/24/2018	Weather:	Clear	Project Number:	0
Time Start:	9:00 AM	Road Condition:	Dry	Observer:	Contractor
Time End:	11:00 AM	Posted Speed:	50 mph	Calibration Test:	0

Speed (mph)	Num. Veh.	Cum. Pct.
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		
36		
37		
38		
39	1	0.5%
40	2	1.5%
41	3	3.0%
42	3	4.5%
43	2	5.5%
44	9	10.1%
45	9	14.6%
46	16	22.6%
47	11	28.1%
48	16	36.2%
49	23	47.7%
50	23	59.3%
51	22	70.4%
52	16	78.4%
53	19	87.9%
54	13	94.5%
55	6	97.5%
56	1	98.0%
57	2	99.0%
58	1	99.5%
59	1	100.0%
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
Total	199	



DATA ANALYSIS

Average Speed	49.4	Range	39 - 59
50th Percentile	49.2	10 mph Pace	45 - 54
85th Percentile	52.7	Number in Pace	168
90th Percentile	53.3	Percent in Pace	84%
95th Percentile	54.2		



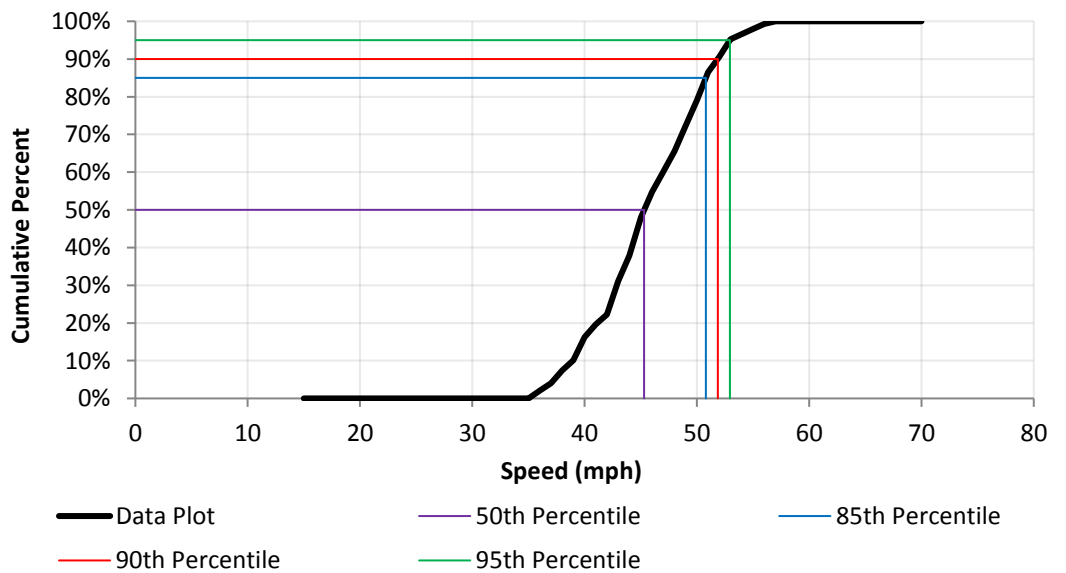
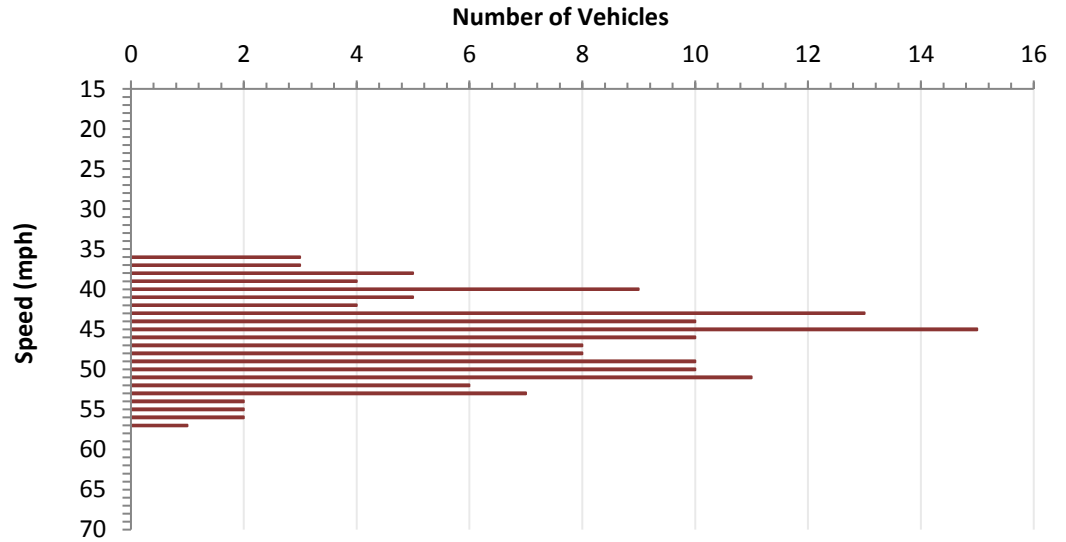
RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name:	Willows Rd	From:	Viejas Grade	To:	Alpine Blvd
Position:	280' WO Viejas View Ln			Direction:	EB/WB

Date:	4/24/2018	Weather:	Clear	Project Number:	0
Time Start:	11:10 AM	Road Condition:	Dry	Observer:	Contractor
Time End:	1:10 PM	Posted Speed:	50 mph	Calibration Test:	0

Speed (mph)	Num. Veh.	Cum. Pct.
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		
36	3	2.0%
37	3	4.1%
38	5	7.4%
39	4	10.1%
40	9	16.2%
41	5	19.6%
42	4	22.3%
43	13	31.1%
44	10	37.8%
45	15	48.0%
46	10	54.7%
47	8	60.1%
48	8	65.5%
49	10	72.3%
50	10	79.1%
51	11	86.5%
52	6	90.5%
53	7	95.3%
54	2	96.6%
55	2	98.0%
56	2	99.3%
57	1	100.0%
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
Total	148	



DATA ANALYSIS

Average Speed	46.0	Range	36 - 57
50th Percentile	45.3	10 mph Pace	43 - 52
85th Percentile	50.8	Number in Pace	101
90th Percentile	51.9	Percent in Pace	68%
95th Percentile	52.9		

SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: September 14, 2018

Item **2-D**

SUPERVISORIAL DISTRICT: 2

SUBJECT: Radar Recertification

LOCATION: Maya Street, County-maintained segment between Luther Drive and Jamacha Boulevard (0.49 miles)
SPRING VALLEY (Thos. Bros. 1291-C3)

INITIATED BY: DPW Traffic Engineering

REQUEST: Radar Recertification

PROBLEM AS STATED BY REQUESTER:

Maya Street, County-maintained segment between Luther Drive and Jamacha Boulevard is posted 40 MPH Radar Enforced. Preliminary review of prevailing speeds and roadway conditions could support radar recertification.

Existing Traffic Devices

Maya Street is a striped two-lane roadway that measures approximately 40 feet in width. This roadway is classified as a Light Collector Road on the County General Plan Mobility Element Network and posted 40 MPH/Radar Certified.

Average Daily Traffic Volumes

	<u>4/18</u>	<u>01/11</u>
Maya Street:		
600' E/o Luther Dr	2,735	2,550

<u>Speed Data</u>		<u>85th Percentile</u>	<u>10 MPH Pace</u>	<u>% in Pace</u>
Maya Street:				
750' E/o Luther Drive	(2018)	37.1 MPH	25-34	73.0%
	(2011)	41.4 MPH	31-40	63.1%

Collision Data

There have been 6 reported collisions along this segment of roadway, 1 of which involved injury, in a 5 year period (5-1-13 to 4-30-18). These collisions result in a segment accident rate of 2.46 collisions per million vehicle miles. The statewide average is 2.39 collisions per million vehicle miles for similar suburban conventional 2 lanes or less with speed limit less than 45 mph.

2-D. Radar Recertification

Maya Street, County Maintained Segment between Luther Drive and Jamacha Blvd (0.49 miles)



VOLUME

Maya St 600' E/O Luther Dr

Day: Tuesday
Date: 4/17/2018City: Spring Valley
Project #: CA18_4120_011

DAILY TOTALS					NB	SB						EB	WB	Total	
					0	0						1,465	1,272	2,737	
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL			
00:00			2	0	2		12:00			9	12	21			
00:15			3	6	9		12:15			17	18	35			
00:30			5	1	6		12:30			14	21	35			
00:45			1	11	0	7	12:45			28	68	19	70	47	138
01:00			1	1	2		13:00			21	21	42			
01:15			3	1	4		13:15			21	27	48			
01:30			1	2	3		13:30			24	21	45			
01:45			2	7	0	4	13:45			25	91	16	85	41	176
02:00			1	0	1		14:00			26	16	42			
02:15			2	2	4		14:15			28	34	62			
02:30			1	2	3		14:30			26	19	45			
02:45			2	6	2	6	14:45			25	105	17	86	42	191
03:00			0	0	0		15:00			24	29	53			
03:15			0	1	1		15:15			31	39	70			
03:30			0	2	2		15:30			20	23	43			
03:45			2	2	4	7	15:45			22	97	10	101	32	198
04:00			0	0	0		16:00			30	28	58			
04:15			0	1	1		16:15			16	31	47			
04:30			2	1	3		16:30			22	31	53			
04:45			5	7	1	3	16:45			38	106	22	112	60	218
05:00			4	1	5		17:00			20	23	43			
05:15			4	5	9		17:15			27	25	52			
05:30			3	5	8		17:30			18	28	46			
05:45			7	18	6	17	17:45			30	95	14	90	44	185
06:00			5	7	12		18:00			16	28	44			
06:15			14	9	23		18:15			18	16	34			
06:30			31	4	35		18:30			19	24	43			
06:45			54	104	19	39	18:45			19	72	16	84	35	156
07:00			52	24	76		19:00			21	18	39			
07:15			26	21	47		19:15			13	17	30			
07:30			53	21	74		19:30			16	23	39			
07:45			44	175	30	96	19:45			15	65	18	76	33	141
08:00			25	35	60		20:00			8	17	25			
08:15			26	18	44		20:15			7	17	24			
08:30			26	9	35		20:30			13	18	31			
08:45			27	104	13	75	20:45			9	37	14	66	23	103
09:00			34	11	45		21:00			12	2	14			
09:15			31	20	51		21:15			14	10	24			
09:30			15	15	30		21:30			9	9	18			
09:45			19	99	9	55	21:45			10	45	10	31	20	76
10:00			11	12	23		22:00			7	8	15			
10:15			9	13	22		22:15			6	5	11			
10:30			15	23	38		22:30			10	5	15			
10:45			19	54	18	66	22:45			4	27	3	21	7	48
11:00			13	21	34		23:00			2	3	5			
11:15			17	14	31		23:15			3	3	6			
11:30			14	14	28		23:30			4	4	8			
11:45			16	60	8	57	23:45			1	10	8	18	9	28
TOTALS			647	432	1079		TOTALS			818	840	1658			
SPLIT %			60.0%	40.0%	39.4%		SPLIT %			49.3%	50.7%	60.6%			

DAILY TOTALS					NB	SB						EB	WB	Total	
					0	0						1,465	1,272	2,737	
AM Peak Hour			06:45	07:15	07:00		PM Peak Hour			16:30	16:00	16:00			
AM Pk Volume			185	107	271		PM Pk Volume			107	112	218			
Pk Hr Factor			0.856	0.764	0.891		Pk Hr Factor			0.704	0.903	0.908			
7 - 9 Volume	0	0	279	171	450		4 - 6 Volume	0	0	201	202	403			
7 - 9 Peak Hour			07:00	07:15	07:00		4 - 6 Peak Hour			16:30	16:00	16:00			
7 - 9 Pk Volume	0	0	175	107	271		4 - 6 Pk Volume	0	0	107	112	218			
Pk Hr Factor	0.000	0.000	0.825	0.764	0.891		Pk Hr Factor	0.000	0.000	0.704	0.903	0.908			



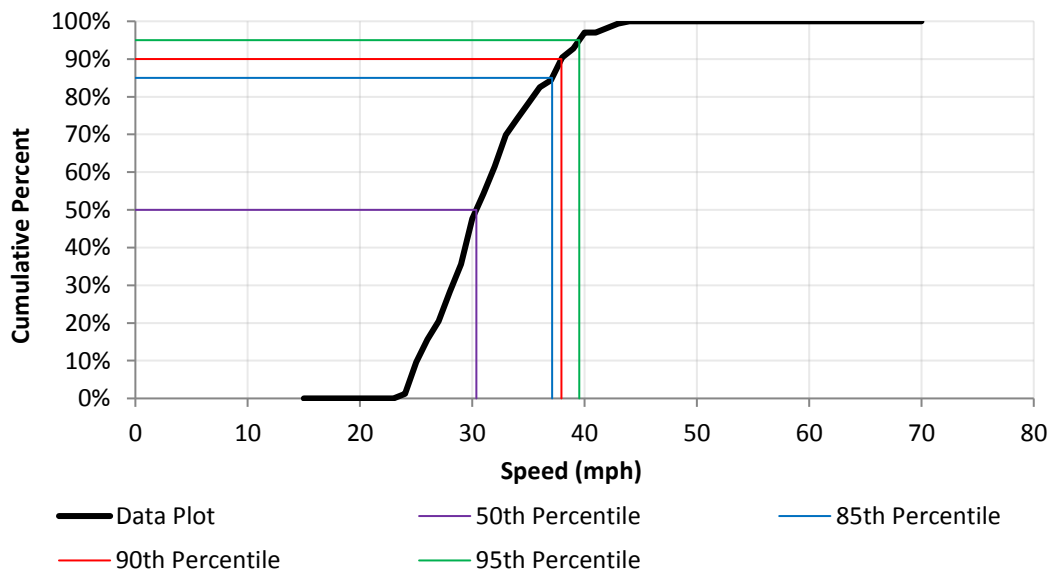
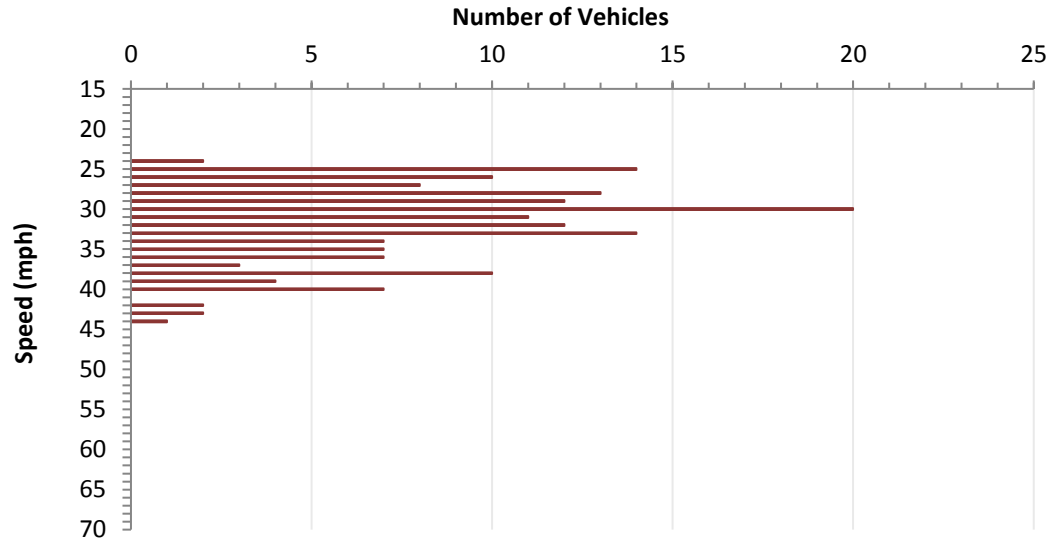
RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name:	Maya St	From:	Luther Drive	To:	Jamacha Blvd
Position:	750' EO Luther Drive	Direction:	EB/WB		

Date:	4/11/2018	Weather:	Clear	Project Number:	0
Time Start:	9:00 AM	Road Condition:	Dry	Observer:	Contractor
Time End:	11:00 AM	Posted Speed:	40 mph	Calibration Test:	0

Speed (mph)	Num. Veh.	Cum. Pct.
15		
16		
17		
18		
19		
20		
21		
22		
23		
24	2	1.2%
25	14	9.6%
26	10	15.7%
27	8	20.5%
28	13	28.3%
29	12	35.5%
30	20	47.6%
31	11	54.2%
32	12	61.4%
33	14	69.9%
34	7	74.1%
35	7	78.3%
36	7	82.5%
37	3	84.3%
38	10	90.4%
39	4	92.8%
40	7	97.0%
41		
42	2	98.2%
43	2	99.4%
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	166	



DATA ANALYSIS

Average Speed	31.6	Range	24 - 44
50th Percentile	30.4	10 mph Pace	25 - 34
85th Percentile	37.1	Number in Pace	121
90th Percentile	37.9	Percent in Pace	73%
95th Percentile	39.5		

SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: September 14, 2018 **Item 2-E**

SUPERVISORIAL DISTRICT: 2

SUBJECT: Intersection Control

LOCATION: Julian Avenue at Channel Road, LAKESIDE (Thos. Bros.1232-A4)

INITIATED BY: DPW Traffic Engineering

REQUEST: All-Way Stop Control

PROBLEM AS STATED BY REQUESTER:

The intersection of Julian Avenue and Channel Road meet California MUTCD, Section 2B.07, optional criteria B, C.1, and C.2, therefore an all-way stop control could be considered.

Existing Traffic Devices

Channel Road is a striped two-lane roadway with bike lanes that intersects Julian Avenue, runs north/south and measures 56 feet wide. It is stop controlled in the southbound direction at Julian Avenue. The road is classified as a Light Collector on the County General Plan Mobility Element Network and posted 35 MPH.

Julian Avenue is a roadway that runs east/west and measures 36 feet wide. It is a striped two-lane roadway. The road is classified as a Light Collector on the County General Plan Mobility Element Network and posted 35 MPH/Radar Enforced.

Average Daily Traffic Volumes Approach **6/18**

Channel Road	
At 200' N/o Julian Ave	4,135
Julian Avenue	
60' E/o Channel Rd	5,960
60' W/o Channel Rd	3,875

Collision Data

There have been six reported collisions at this intersection, neither of which involved injury in the last 5 year period (2-1-13 to 1-31-18). These collisions result in an intersection accident rate of 0.44 collisions per million vehicle entering. The statewide average is 0.14 collisions per million vehicle entering for similar intersection.

2-E. Intersection Control Julian Ave and Channel Rd





County of San Diego

RICHARD E. CROMPTON
DIRECTOR

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: August 28, 2018

Item Title: All-Way Stop Control

Location: Julian Avenue and Channel Road Intersection, Lakeside

CTE Recommendation: **Install an All-Way Stop Control** *JAO*

Conditions:

- Section 22354 "Stop Signs on Local Highways" of the California Vehicle Code authorizes a local agency to designate any intersection under its exclusive jurisdiction as a stop intersection and erect stop signs at one or more entrances thereto.
- Section 2B.07 "Multi-Way Stop Applications" of the California Manual on Uniform Traffic Control Devices (MUTCD) provides optional criteria that may be considered in an engineering study when evaluating an intersection for an all-way stop control.
- Option D of Section 2B.07 notes that an All-Way Stop Control may be appropriate at an intersection of two residential neighborhood collector streets with similar design and operating characteristics to improve the safety and traffic operational characteristics of the intersection.
- Both Julian Avenue east of Channel Road and Channel Road north of Julian Avenue have the same Mobility Element classification as Light Collector (2.2C) with the same design and operating characteristics and a posted speed limits of 35 mph on both streets.
- Traffic data collected on June 26, 2018 shows an ADT of 5,960, 3,870 and 4,130 vehicles per day (vpd) on Julian Avenue east and west of Channel Road and Channel Road north of Julian Avenue, respectively.

- A review of the intersection collision data for a five-year period (Feb 2013 to Jan 2018) shows a total of 7 collisions with a collision rate of 0.51 collisions per million-vehicle (c/mv) compared to a state average of 0.14 c/mv for similar intersections.
- Pursuant to CVC section 22354 coupled with intersection collision rate above state average and traffic volumes within the range of residential neighborhood collectors (light collectors), it is my recommendation that an All-Way Stop Control is appropriate and safe at the intersection of Julian Avenue and Channel Road.

VOLUME

Channel Rd 200' N/O Julian Ave

Day: Tuesday
Date: 6/26/2018City: Lakeside
Project #: CA18_4233_003

DAILY TOTALS					NB	SB						EB	WB						Total
					2,324	1,810						0	0						4,134
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							TOTAL
00:00	5	2			7		12:00	20	26			46							46
00:15	0	8			8		12:15	48	19			67							67
00:30	0	0			0		12:30	38	26			64							64
00:45	3	8	1	11	4	19	12:45	26	132	33	104	59	236						236
01:00	2	6			8		13:00	24	13			37							37
01:15	5	1			6		13:15	24	16			40							40
01:30	2	0			2		13:30	24	23			47							47
01:45	2	11	2	9	4	20	13:45	29	101	18	70	47	171						171
02:00	0	2			2		14:00	40	20			60							60
02:15	2	0			2		14:15	26	27			53							53
02:30	3	3			6		14:30	24	24			48							48
02:45	3	8	0	5	3	13	14:45	33	123	43	114	76	237						237
03:00	3	6			9		15:00	29	29			58							58
03:15	2	0			2		15:15	41	28			69							69
03:30	0	0			0		15:30	39	37			76							76
03:45	2	7	0	6	2	13	15:45	32	141	47	141	79	282						282
04:00	2	0			2		16:00	48	50			98							98
04:15	6	0			6		16:15	42	48			90							90
04:30	2	2			4		16:30	27	49			76							76
04:45	1	11	2	4	3	15	16:45	41	158	43	190	84	348						348
05:00	15	4			19		17:00	41	54			95							95
05:15	20	5			25		17:15	19	40			59							59
05:30	24	6			30		17:30	31	73			104							104
05:45	29	88	4	19	33	107	17:45	35	126	53	220	88	346						346
06:00	28	7			35		18:00	30	47			77							77
06:15	36	9			45		18:15	33	50			83							83
06:30	53	7			60		18:30	52	27			79							79
06:45	60	177	10	33	70	210	18:45	52	167	30	154	82	321						321
07:00	40	10			50		19:00	36	35			71							71
07:15	45	18			63		19:15	73	16			89							89
07:30	50	12			62		19:30	39	23			62							62
07:45	35	170	31	71	66	241	19:45	59	207	24	98	83	305						305
08:00	22	40			62		20:00	43	22			65							65
08:15	50	26			76		20:15	23	21			44							44
08:30	33	12			45		20:30	16	32			48							48
08:45	46	151	29	107	75	258	20:45	16	98	25	100	41	198						198
09:00	18	23			41		21:00	21	12			33							33
09:15	29	16			45		21:15	16	15			31							31
09:30	37	17			54		21:30	0	30			30							30
09:45	47	131	11	67	58	198	21:45	15	52	16	73	31	125						125
10:00	39	12			51		22:00	8	11			19							19
10:15	20	20			40		22:15	8	12			20							20
10:30	15	21			36		22:30	4	5			9							9
10:45	26	100	21	74	47	174	22:45	5	25	9	37	14	62						62
11:00	34	11			45		23:00	1	11			12							12
11:15	37	25			62		23:15	0	4			4							4
11:30	23	25			48		23:30	1	5			6							6
11:45	29	123	20	81	49	204	23:45	7	9	2	22	9	31						31
TOTALS	985	487			1472		TOTALS	1339	1323			2662							2662
SPLIT %	66.9%	33.1%			35.6%		SPLIT %	50.3%	49.7%			64.4%							64.4%

DAILY TOTALS					NB	SB						EB	WB						Total
					2,324	1,810						0	0						4,134
AM Peak Hour	06:30	07:30			07:30		PM Peak Hour	19:15	17:30			17:30							17:30
AM Pk Volume	198	109			266		PM Pk Volume	214	223			352							352
Pk Hr Factor	0.825	0.681			0.875		Pk Hr Factor	0.733	0.764			0.846							0.846
7 - 9 Volume	321	178	0	0	499		4 - 6 Volume	284	410	0	0	694							694
7 - 9 Peak Hour	07:00	07:30			07:30		4 - 6 Peak Hour	16:00	17:00			16:00							16:00
7 - 9 Pk Volume	170	109	0	0	266		4 - 6 Pk Volume	158	220	0	0	348							348
Pk Hr Factor	0.850	0.681	0.000	0.000	0.875		Pk Hr Factor	0.823	0.753	0.000	0.000	0.888							0.888

VOLUME

Julian Ave 60' E/O Channel Rd

Day: Tuesday
Date: 6/26/2018City: Lakeside
Project #: CA18_4233_002

DAILY TOTALS					NB	SB	EB					WB	Total
					0	0	2,451					3,511	5,962
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00			3	14	17		12:00			31	54	85	
00:15			6	2	8		12:15			41	77	118	
00:30			1	1	2		12:30			46	56	102	
00:45			2	12	8	25	12:45			38	156	47	234
					10	37						85	390
01:00			4	3	7		13:00			24	42	66	
01:15			1	9	10		13:15			37	35	72	
01:30			1	2	3		13:30			36	45	81	
01:45			2	8	5	19	13:45			44	141	52	174
					7	27						96	315
02:00			3	3	6		14:00			39	57	96	
02:15			0	2	2		14:15			46	59	105	
02:30			5	6	11		14:30			35	43	78	
02:45			0	8	7	18	14:45			53	173	61	220
					7	26						114	393
03:00			5	8	13		15:00			48	48	96	
03:15			1	2	3		15:15			49	62	111	
03:30			0	0	0		15:30			65	50	115	
03:45			1	7	3	13	15:45			75	237	60	220
					4	20						135	457
04:00			2	5	7		16:00			79	63	142	
04:15			1	6	7		16:15			81	75	156	
04:30			1	5	6		16:30			86	51	137	
04:45			1	5	6	21	16:45			62	308	60	249
					6	26						122	557
05:00			5	15	20		17:00			58	84	142	
05:15			2	22	24		17:15			88	60	148	
05:30			3	24	27		17:30			83	63	146	
05:45			6	16	37	98	17:45			51	280	60	267
					43	114						111	547
06:00			7	30	37		18:00			47	51	98	
06:15			13	47	60		18:15			45	50	95	
06:30			12	62	74		18:30			39	41	80	
06:45			22	54	59	198	18:45			38	169	62	204
					81	252						100	373
07:00			12	43	55		19:00			45	44	89	
07:15			23	59	82		19:15			31	70	101	
07:30			23	53	76		19:30			25	45	70	
07:45			16	74	57	212	19:45			33	134	55	214
					73	286						88	348
08:00			40	48	88		20:00			32	45	77	
08:15			22	70	92		20:15			33	34	67	
08:30			19	57	76		20:30			33	32	65	
08:45			26	107	57	232	20:45			28	126	27	138
					83	339						55	264
09:00			32	40	72		21:00			24	26	50	
09:15			26	43	69		21:15			15	32	47	
09:30			24	51	75		21:30			22	20	42	
09:45			16	98	65	199	21:45			15	76	24	102
					81	297						39	178
10:00			17	39	56		22:00			14	13	27	
10:15			25	57	82		22:15			9	17	26	
10:30			33	30	63		22:30			11	10	21	
10:45			18	93	49	175	22:45			3	37	14	54
					67	268						17	91
11:00			24	49	73		23:00			7	6	13	
11:15			28	67	95		23:15			3	7	10	
11:30			32	42	74		23:30			6	7	13	
11:45			28	112	42	200	23:45			4	20	5	25
					70	312						9	45
TOTALS			594	1410	2004		TOTALS			1857	2101	3958	
SPLIT %			29.6%	70.4%	33.6%		SPLIT %			46.9%	53.1%	66.4%	

DAILY TOTALS					NB	SB						EB	WB						Total
					0	0						2,451	3,511						5,962
AM Peak Hour			11:45	07:45	11:45		PM Peak Hour			15:45	16:15	15:45							
AM Pk Volume			146	232	375		PM Pk Volume			321	270	570							
Pk Hr Factor			0.793	0.829	0.794		Pk Hr Factor			0.933	0.804	0.913							
7 - 9 Volume	0	0	181	444	625		4 - 6 Volume	0	0	588	516	1104							
7 - 9 Peak Hour			08:00	07:45	08:00		4 - 6 Peak Hour			16:00	16:15	16:45							
7 - 9 Pk Volume	0	0	107	232	339		4 - 6 Pk Volume	0	0	308	270	558							
Pk Hr Factor	0.000	0.000	0.669	0.829	0.921		Pk Hr Factor	0.000	0.000	0.895	0.804	0.943							

VOLUME

Julian Ave 60' W/O Channel Rd

Day: Tuesday
Date: 6/26/2018City: Lakeside
Project #: CA18_4233_001

DAILY TOTALS					NB	SB						EB	WB						Total
					0	0						2,206	1,668						3,874
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							TOTAL
00:00			2	6	8		12:00			22	29	51							
00:15			2	1	3		12:15			33	19	52							
00:30			1	1	2		12:30			42	26	68							
00:45			0	5	1	9	12:45			28	125	30	104	58	229				
01:00			2	4	6		13:00			24	22	46							
01:15			0	1	1		13:15			31	12	43							
01:30			1	0	1		13:30			32	18	50							
01:45			0	3	1	6	13:45			41	128	22	74	63	202				
02:00			1	1	2		14:00			45	33	78							
02:15			0	0	0		14:15			38	36	74							
02:30			0	2	2		14:30			31	21	52							
02:45			0	1	3	6	14:45			45	159	35	125	80	284				
03:00			1	3	4		15:00			44	31	75							
03:15			1	0	1		15:15			54	34	88							
03:30			0	0	0		15:30			61	21	82							
03:45			1	3	1	4	15:45			59	218	33	119	92	337				
04:00			2	3	5		16:00			69	43	112							
04:15			3	2	5		16:15			69	46	115							
04:30			0	1	1		16:30			68	36	104							
04:45			1	6	4	10	16:45			49	255	38	163	87	418				
05:00			8	2	10		17:00			51	49	100							
05:15			6	5	11		17:15			72	32	104							
05:30			10	11	21		17:30			53	37	90							
05:45			9	33	10	28	17:45			45	221	43	161	88	382				
06:00			15	9	24		18:00			40	29	69							
06:15			15	9	24		18:15			34	27	61							
06:30			19	10	29		18:30			40	22	62							
06:45			38	87	14	42	18:45			39	153	36	114	75	267				
07:00			23	17	40		19:00			40	31	71							
07:15			22	14	36		19:15			35	35	70							
07:30			33	18	51		19:30			23	18	41							
07:45			15	93	18	67	19:45			29	127	26	110	55	237				
08:00			25	15	40		20:00			29	20	49							
08:15			20	17	37		20:15			24	22	46							
08:30			19	11	30		20:30			26	26	52							
08:45			28	92	18	61	20:45			23	102	20	88	43	190				
09:00			20	17	37		21:00			20	16	36							
09:15			39	29	68		21:15			10	15	25							
09:30			27	19	46		21:30			11	15	26							
09:45			24	110	19	84	21:45			11	52	11	57	22	109				
10:00			25	9	34		22:00			10	9	19							
10:15			16	31	47		22:15			7	12	19							
10:30			35	22	57		22:30			10	8	18							
10:45			12	88	22	84	22:45			1	28	8	37	9	65				
11:00			26	22	48		23:00			1	2	3							
11:15			25	28	53		23:15			2	6	8							
11:30			28	29	57		23:30			4	6	10							
11:45			29	108	22	101	23:45			2	9	0	14	2	23				
TOTALS			629	502	1131		TOTALS			1577	1166	2743							
SPLIT %			55.6%	44.4%	29.2%		SPLIT %			57.5%	42.5%	70.8%							

DAILY TOTALS					NB	SB						EB	WB						Total
					0	0						2,206	1,668						3,874
AM Peak Hour			11:45	11:15	11:45		PM Peak Hour			15:45	16:15	15:45							
AM Pk Volume			126	108	222		PM Pk Volume			265	169	423							
Pk Hr Factor			0.750	0.931	0.816		Pk Hr Factor			0.960	0.862	0.920							
7 - 9 Volume	0	0	185	128	313		4 - 6 Volume	0	0	476	324	800							
7 - 9 Peak Hour			07:15	07:30	07:30		4 - 6 Peak Hour			16:00	16:15	16:00							
7 - 9 Pk Volume	0	0	95	68	161		4 - 6 Pk Volume	0	0	255	169	418							
Pk Hr Factor	0.000	0.000	0.720	0.944	0.789		Pk Hr Factor	0.000	0.000	0.924	0.862	0.909							

SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: September 14, 2018 **Item 5-A**

SUPERVISORIAL DISTRICT: 5

SUBJECT: Speed Limit/Radar Certification

LOCATION: South Grade Road from SR 76 to East Grade Road/Canfield Road (6.78 miles) PALOMAR MOUNTAIN (Thos. Bros. 1052-B6)

INITIATED BY: DPW Traffic Engineering

REQUEST: Speed Limit Review

PROBLEM AS STATED BY REQUESTER:

South Grade Road from SR 76 to East Grade Road/Canfield Road. Preliminary review of prevailing speeds and roadway conditions could support a formal speed limit posting of 30 MPH.

Existing Traffic Devices

South Grade Road from SR 76 to East Grade Road/Canfield Road is curvilinear throughout this unposted segment that varies from 26 to 30 feet wide. This segment is centerline striped, posted with windy roadway advisory warning sign at the beginning of the segment near SR 76 and is yield controlled for eastbound traffic at East Grade Road/Canfield Road. The road is classified as a Minor Collector on the County General Plan Mobility Element Network.

<u>Average Daily Traffic Volumes</u>	<u>05/18</u>
South Grade Road:	
At MP 43.8	630*

*Average of 7 days

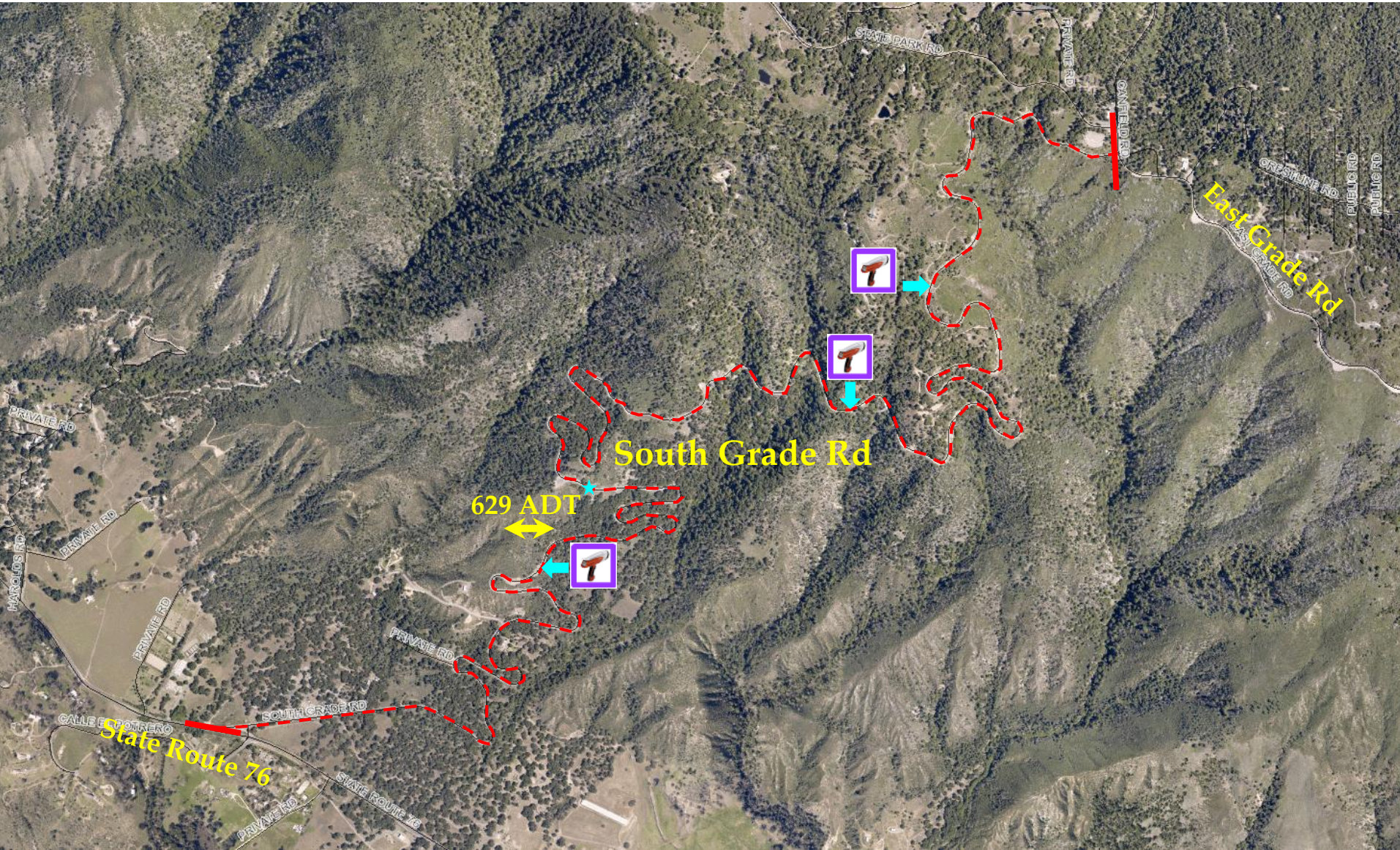
<u>Speed Data</u>		<u>85th Percentile</u>	<u>10 MPH Pace</u>	<u>% in Pace</u>
South Grade Road:				
550' N/o MP 42.8	(2018)	35.0 MPH	27-36	85.0%
180' S/o MP 45.4	(2018)	35.0 MPH	26-35	82.0%
420' S/o MP 47.0	(2018)	37.0 MPH	28-37	77.0%
Speed Zone	(2018)	34.8 MPH	26-35	79.0%

Collision Data

There have been 75 reported collisions along this segment of roadway, 62 of which involved injury, in a five year period (5-1-13 to 4-30-18). These collisions result in a segment accident rate of 9.65 collisions per million vehicle miles. The statewide average is 2.05 collisions per million vehicle miles for similar roadways.

5-A. Speed Limit/Radar Certification

South Grade Rd from State Route 76 to East Grade Rd (6.78 miles)





County of San Diego

RICHARD E. CROMPTON
DIRECTOR

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(858) 694-2212 FAX: (858) 694-3597
Web Site: www.sdcounty.ca.gov/dpw/

COUNTY TRAFFIC ENGINEER RECOMMENDATION

Date: August 24, 2018

Item Title: Speed Limit and Radar Certification

Location: South Grade Road from SR-76 to E. Grade Rd/Canfield Rd

CTE Recommendation: **Establish 30 MPH Radar Enforced Speed Limit** *Jdo*

Conditions:

- Section 22358 of the California Vehicle Code authorizes a local agency to determine upon the basis of an Engineering and Traffic Survey (E&TS) that the speed limit of 65 miles per hour (mph) is more than is reasonable or safe, the agency may declare a prima facie speed limit of 60, 55, 50, 45, 40, 35, 30, or 25 mph, whichever is found most appropriate and is reasonable and safe.
- Section 2B.13 "Speed Limit Sign (R2-1)" of the California MUTCD, provides that an E&TS shall include a) prevailing speeds, b) collision records, and c) highway, traffic and roadside conditions that are not apparent to a driver.
- The California Manual on Uniform Traffic Control Devices stipulates that speed limits are usually set at the 5 mph increment above or below the prevailing (85th percentile) speed of motorists.
- South Grade Road is a two-lane roadway, mountainous and curvilinear with tight horizontal and vertical curves and limited shoulder throughout its length of 6.78 miles. Its pavement width varies between 28' and 32 feet in width with a striped center line and edge lines on both sides of the roadway.
- Recent speed surveys on South Grade Road taken in April 2018 resulted in an overall prevailing speed of 34.8 mph, which supports a speed limit of 30 mph using radar for speed enforcement.

- A review of the roadway collision data for a five-year period (May 2013 to April 2018) shows a total of 75 collisions on South Grade Road with a collision rate of 9.65 collisions per million-vehicle-mile (c/mvm) compared to a state average of 2.05 c/mvm for similar roadway. (It is worth noting that 63 of the 75 collisions happened during the weekend).
- Pursuant to CVC section 22358 coupled with above conditions on South Grade Road and the guidance of the CA MUTCD section 2B.13, a 30 mph radar enforced speed limit on South Grade Road from SR 76 to East Grade Road/Canfield Road is reasonable and safe.

VOLUME

S Grade Rd @ Mile Post 43.8

Day: Tuesday
Date: 5/1/2018City: Palomar Mountain
Project #: CA18_4117_002

DAILY TOTALS					NB	SB	EB					WB	Total
					174	160						0	0
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00	0	0	0	0	1	1	12:00	2	2	0	0	4	
00:15	0	0	0	0			12:15	2	1	0	0	3	
00:30	0	1	0	0			12:30	6	1	0	0	7	
00:45	0	0	1	0			12:45	4	14	0	4	0	0
01:00	0	1	0	0	1	1	13:00	1	3	0	0	4	
01:15	0	0	0	0			13:15	3	2	0	0	5	
01:30	0	0	0	0			13:30	7	4	0	0	11	
01:45	0	0	1	0			13:45	6	17	4	13	0	0
02:00	1	0	0	0	1	1	14:00	4	4	0	0	8	
02:15	0	0	0	0			14:15	5	4	0	0	9	
02:30	0	0	0	0			14:30	2	3	0	0	5	
02:45	0	1	0	0			14:45	3	14	4	15	0	0
03:00	0	0	0	0	2	2	15:00	4	4	0	0	8	
03:15	1	1	0	0			15:15	5	5	0	0	10	
03:30	0	0	0	0			15:30	4	3	0	0	7	
03:45	0	1	0	1			15:45	3	16	3	15	0	0
04:00	0	1	0	0	3	3	16:00	4	2	0	0	6	
04:15	3	0	0	0			16:15	5	2	0	0	7	
04:30	0	0	0	0			16:30	2	3	0	0	5	
04:45	2	5	0	1			16:45	3	14	2	9	0	0
05:00	2	0	0	0	2	2	17:00	2	2	0	0	4	
05:15	1	1	0	0			17:15	1	5	0	0	6	
05:30	1	0	0	0			17:30	0	3	0	0	3	
05:45	4	8	1	2			17:45	1	4	4	14	0	0
06:00	2	2	0	0	4	4	18:00	1	3	0	0	4	
06:15	2	1	0	0			18:15	0	1	0	0	1	
06:30	1	4	0	0			18:30	0	6	0	0	6	
06:45	3	8	3	10			18:45	1	2	0	10	0	0
07:00	3	2	0	0	5	5	19:00	2	6	0	0	8	
07:15	2	3	0	0			19:15	3	0	0	0	3	
07:30	3	2	0	0			19:30	1	5	0	0	6	
07:45	4	12	1	8			19:45	0	6	6	17	0	0
08:00	1	2	0	0	3	3	20:00	0	2	0	0	2	
08:15	2	3	0	0			20:15	0	0	0	0		
08:30	5	1	0	0			20:30	0	0	0	0		
08:45	6	14	3	9			20:45	0	0	2	0	0	2
09:00	3	2	0	0	2	2	21:00	0	5	0	0	5	
09:15	2	0	0	0			21:15	0	0	0	0		
09:30	3	0	0	0			21:30	1	0	0	0	1	
09:45	1	9	2	4			21:45	0	1	1	6	0	0
10:00	1	3	0	0	4	4	22:00	0	1	0	0	1	
10:15	5	0	0	0			22:15	0	1	0	0	1	
10:30	3	0	0	0			22:30	1	0	0	0	1	
10:45	4	13	0	3			22:45	0	1	1	3	0	0
11:00	6	3	0	0	8	8	23:00	0	0	0	0		
11:15	4	4	0	0			23:15	0	1	0	0	1	
11:30	3	1	0	0			23:30	0	0	0	0		
11:45	1	14	1	9			23:45	0	2	3	0	0	3
TOTALS	85	49			134	TOTALS	89	111				200	
SPLIT %	63.4%	36.6%			40.1%	SPLIT %	44.5%	55.5%				59.9%	

DAILY TOTALS					NB	SB					EB	WB	Total
					174	160					0	0	334
AM Peak Hour	10:15	06:30			08:15		PM Peak Hour	13:30	19:00			13:30	
AM Pk Volume	18	12			25		PM Pk Volume	22	17			38	
Pk Hr Factor	0.750	0.750			0.694		Pk Hr Factor	0.786	0.708			0.864	
7 - 9 Volume	26	17			43		4 - 6 Volume	18	23			41	
7 - 9 Peak Hour	08:00	08:00					4 - 6 Peak Hour	16:00	17:00			16:00	
7 - 9 Pk Volume	14	9			23		4 - 6 Pk Volume	14	14			23	
Pk Hr Factor	0.583	0.750			0.639		Pk Hr Factor	0.700	0.700			0.821	

DAILY TOTALS			NB	SB	EB			WB	Total		
			163	157				0			
AM Peak Hour	09:30	08:15			09:00	PM Peak Hour	14:45	13:00			14:30
AM Pk Volume	23	17			30	PM Pk Volume	21	18			32
Pk Hr Factor	0.719	0.708			0.750	Pk Hr Factor	0.656	0.750			0.727
7 - 9 Volume	17	16	0	0	33	4 - 6 Volume	22	25	0	0	47
7 - 9 Peak Hour	07:45	08:00			08:00	4 - 6 Peak Hour	16:00	16:00			16:00
7 - 9 Pk Volume	12	14	0	0	24	4 - 6 Pk Volume	17	14	0	0	31
Pk Hr Factor	0.600	0.583	0.000	0.000	0.857	Pk Hr Factor	0.607	0.700	0.000	0.000	0.646

VOLUME
S Grade Rd @ Mile Post 43.8

Day: Thursday
Date: 5/3/2018

City: Palomar Mountain
Project #: CA18_4117_002

DAILY TOTALS					NB	SB					Total
					207	232					439
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	0	0	0	0		12:00	3	5	0	0	8
00:15	0	2	0	0	2	12:15	4	4	0	0	8
00:30	0	0	0	0		12:30	6	2	0	0	8
00:45	0	0	2	0	2	12:45	4	17	5	16	33
01:00	0	0	0	0		13:00	6	3	0	0	9
01:15	0	0	0	0		13:15	4	8	0	0	12
01:30	0	0	0	0		13:30	8	8	0	0	16
01:45	0	0	0	0		13:45	4	22	5	24	46
02:00	0	0	0	0		14:00	4	5	0	0	9
02:15	0	0	0	0		14:15	3	8	0	0	11
02:30	0	0	0	0		14:30	2	2	0	0	4
02:45	0	0	0	0		14:45	4	13	5	20	33
03:00	0	0	0	0		15:00	4	6	0	0	10
03:15	0	0	0	0		15:15	10	4	0	0	14
03:30	1	0	0	0	1	15:30	6	2	0	0	8
03:45	1	2	0	0	1 2	15:45	7	27	6	18	45
04:00	1	0	0	0	1	16:00	5	1	0	0	6
04:15	1	1	0	0	2	16:15	3	3	0	0	6
04:30	0	1	0	0	1	16:30	5	4	0	0	9
04:45	1	3	0	2	1 5	16:45	3	16	6	14	30
05:00	0	1	0	0	1	17:00	5	1	0	0	6
05:15	0	0	0	0		17:15	1	2	0	0	3
05:30	3	1	0	0	4	17:30	0	4	0	0	4
05:45	0	3	0	2	5	17:45	1	7	9	16	23
06:00	4	0	0	0	4	18:00	3	5	0	0	8
06:15	2	3	0	0	5	18:15	6	4	0	0	10
06:30	0	5	0	0	5	18:30	1	3	0	0	4
06:45	3	9	2	10	5 19	18:45	3	13	1	13	26
07:00	0	3	0	0	3	19:00	0	1	0	0	1
07:15	8	3	0	0	11	19:15	1	0	0	0	1
07:30	1	5	0	0	6	19:30	2	0	0	0	2
07:45	1	10	1	12	2 22	19:45	4	7	3	4	11
08:00	2	2	0	0	4	20:00	2	0	0	0	2
08:15	3	4	0	0	7	20:15	1	0	0	0	1
08:30	1	4	0	0	5	20:30	0	2	0	0	2
08:45	2	8	5	15	7 23	20:45	2	5	2	4	9
09:00	3	3	0	0	6	21:00	0	2	0	0	2
09:15	2	0	0	0	2	21:15	0	2	0	0	2
09:30	5	4	0	0	9	21:30	1	2	0	0	3
09:45	3	13	1	8	4 21	21:45	0	1	3	9	10
10:00	3	2	0	0	5	22:00	0	1	0	0	1
10:15	2	3	0	0	5	22:15	1	2	0	0	3
10:30	4	6	0	0	10	22:30	0	1	0	0	1
10:45	5	14	5	16	10 30	22:45	0	1	2	6	7
11:00	3	5	0	0	8	23:00	1	1	0	0	2
11:15	3	7	0	0	10	23:15	0	1	0	0	1
11:30	3	2	0	0	5	23:30	0	1	0	0	1
11:45	6	15	3	17	9 32	23:45	0	1	1	4	5
TOTALS	77	84			161	TOTALS	130	148			278
SPLIT %	47.8%	52.2%			36.7%	SPLIT %	46.8%	53.2%			63.3%

DAILY TOTALS					NB	SB					Total
					207	232					439
AM Peak Hour	11:45	10:30		10:30	PM Peak Hour	15:15	13:15			12:45	
AM Pk Volume	19	23		38	PM Pk Volume	28	26			46	
Pk Hr Factor	0.792	0.821		0.950	Pk Hr Factor	0.700	0.813			0.719	
7 - 9 Volume	18	27	0	0	45	4 - 6 Volume	23	30	0	0	53
7 - 9 Peak Hour	07:15	08:00		07:15	4 - 6 Peak Hour	16:00	17:00			16:00	
7 - 9 Pk Volume	12	15	0	0	23	4 - 6 Pk Volume	16	16	0	0	30
Pk Hr Factor	0.375	0.750	0.000	0.000	0.523	Pk Hr Factor	0.800	0.444	0.000	0.000	0.833

DAILY TOTALS			NB	SB	EB			WB	Total		
			298	469				0			
AM Peak Hour	10:45	11:00			10:15	PM Peak Hour	14:00	14:45			14:45
AM Pk Volume	32	37			62	PM Pk Volume	37	47			80
Pk Hr Factor	0.444	0.578			0.738	Pk Hr Factor	0.771	0.904			0.909
7 - 9 Volume	26	22	0	0	48	4 - 6 Volume	35	70	0	0	105
7 - 9 Peak Hour	07:30	07:00			07:15	4 - 6 Peak Hour	16:15	16:00			17:00
7 - 9 Pk Volume	15	12	0	0	26	4 - 6 Pk Volume	20	35	0	0	54
Pk Hr Factor	0.750	1.000	0.000	0.000	0.813	Pk Hr Factor	0.500	0.673	0.000	0.000	0.844

VOLUME

S Grade Rd @ Mile Post 43.8

Day: Saturday
Date: 5/5/2018

City: Palomar Mountain
Project #: CA18_4117_002

DAILY TOTALS						NB	SB	EB						WB	Total	
						434	483							0		
AM Period	NB	SB		EB	WB	TOTAL	PM Period	NB	SB		EB	WB	TOTAL			
00:00	1	1		0	0	2	12:00	13	22		0	0	35			
00:15	3	1		0	0	4	12:15	13	10		0	0	23			
00:30	0	1		0	0	1	12:30	11	13		0	0	24			
00:45	0	4	1	4	0	1	12:45	19	56	11	56	0	30			
01:00	1		0		0	1	13:00	11		18		0	29			
01:15	0		0		0		13:15	14		11		0	25			
01:30	1		0		0	1	13:30	11		5		0	16			
01:45	0	2	0		0	2	13:45	5	41	10	44	0	15			
02:00	0		1		0	1	14:00	7		9		0	16			
02:15	0		0		0		14:15	19		9		0	28			
02:30	1		0		0	1	14:30	12		5		0	17			
02:45	0	1	0	1	0	2	14:45	14	52	13	36	0	27			
03:00	0		0		0		15:00	11		10		0	21			
03:15	0		1		0	1	15:15	11		8		0	19			
03:30	0		3		0	3	15:30	12		10		0	22			
03:45	0		0	4	0	4	15:45	10	44	12	40	0	22			
04:00	1		0		0	1	16:00	9		7		0	16			
04:15	2		0		0	2	16:15	12		5		0	17			
04:30	0		0		0		16:30	6		0		0	6			
04:45	4	7	0		0	4	16:45	4	31	2	14	0	6			
05:00	0		0		0		17:00	5		3		0	8			
05:15	0		1		0	1	17:15	7		12		0	19			
05:30	0		1		0	1	17:30	4		5		0	9			
05:45	0		0	2	0	2	17:45	7	23	4	24	0	11			
06:00	0		1		0	1	18:00	11		5		0	16			
06:15	2		0		0	2	18:15	3		3		0	6			
06:30	0		4		0	4	18:30	5		7		0	12			
06:45	2	4	3	8	0	5	18:45	6	25	7	22	0	13			
07:00	2		2		0	4	19:00	5		2		0	7			
07:15	3		6		0	9	19:15	7		3		0	10			
07:30	2		4		0	6	19:30	2		6		0	8			
07:45	2	9	6	18	0	8	19:45	3	17	3	14	0	6			
08:00	5		7		0	12	20:00	2		2		0	4			
08:15	4		4		0	8	20:15	7		2		0	9			
08:30	4		7		0	11	20:30	1		3		0	4			
08:45	0	13	5	23	0	5	20:45	1	11	3	10	0	4			
09:00	4		11		0	15	21:00	1		2		0	3			
09:15	7		11		0	18	21:15	0		0		0				
09:30	4		14		0	18	21:30	4		1		0	5			
09:45	3	18	7	43	0	10	21:45	1	6	0	3	0	1			
10:00	5		20		0	25	22:00	4		2		0	6			
10:15	2		12		0	14	22:15	0		2		0	2			
10:30	12		14		0	26	22:30	0		0		0				
10:45	5	24	7	53	0	12	22:45	0	4	0	4	0	8			
11:00	9		10		0	19	23:00	0		4		0	4			
11:15	13		14		0	27	23:15	1		2		0	3			
11:30	7		11		0	18	23:30	0		0		0				
11:45	12	41	18	53	0	30	23:45	0	1	1	7	0	1			
TOTALS	123		209			332	TOTALS	311		274			585			
SPLIT %	37.0%		63.0%			36.2%	SPLIT %	53.2%		46.8%			63.8%			

DAILY TOTALS			NB	SB	EB			WB	Total		
			434	483				0			
AM Peak Hour	11:45	11:15			11:45	PM Peak Hour	12:00	12:00			12:00
AM Pk Volume	49	65			112	PM Pk Volume	56	56			112
Pk Hr Factor	0.942	0.739			0.800	Pk Hr Factor	0.737	0.636			0.800
7 - 9 Volume	22	41	0	0	63	4 - 6 Volume	54	38	0	0	92
7 - 9 Peak Hour	07:45	07:45			07:45	4 - 6 Peak Hour	16:00	17:00			17:00
7 - 9 Pk Volume	15	24	0	0	39	4 - 6 Pk Volume	31	24	0	0	47
Pk Hr Factor	0.750	0.857	0.000	0.000	0.813	Pk Hr Factor	0.646	0.500	0.000	0.000	0.618

DAILY TOTALS			NB	SB	EB			WB	Total
			656	508	0			0	1,164
AM Peak Hour	11:15	11:00	11:00			PM Peak Hour	12:15	12:30	12:30
AM Pk Volume	103	78	179			PM Pk Volume	98	84	176
Pk Hr Factor	0.696	0.609	0.861			Pk Hr Factor	0.721	0.955	0.830
7 - 9 Volume	36	29	0	0	65	4 - 6 Volume	74	47	121
7 - 9 Peak Hour	08:00	08:00	08:00			4 - 6 Peak Hour	16:15	16:15	16:15
7 - 9 Pk Volume	23	18	0	0	41	4 - 6 Pk Volume	43	35	78
Pk Hr Factor	0.719	0.563	0.000	0.000	0.788	Pk Hr Factor	0.672	0.625	0.750

VOLUME
S Grade Rd @ Mile Post 43.8

Day: Monday
Date: 5/7/2018

City: Palomar Mountain
Project #: CA18_4117_002

DAILY TOTALS					NB	SB						EB	WB						Total
					224	241						0	0						465
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	0	0	0	0	1	1	12:00	1	9	0	0	10							
00:15	0	0	0	0			12:15	4	3	0	0	7							
00:30	0	1	0	0			12:30	3	5	0	0	8							
00:45	0	0	1	0			12:45	2	10	6	23	0	0	8	33				
01:00	0	0	0	0			13:00	12	6	0	0	18							
01:15	0	0	0	0			13:15	9	3	0	0	12							
01:30	0	0	0	0			13:30	7	6	0	0	13							
01:45	0	0	0	0			13:45	10	38	6	21	0	0	16	59				
02:00	0	1	0	0	1		14:00	3	4	0	0	7							
02:15	0	0	0	0			14:15	3	3	0	0	6							
02:30	0	0	0	0			14:30	7	5	0	0	12							
02:45	0	1	2	0			14:45	2	15	1	13	0	0	3	28				
03:00	0	0	0	0	1		15:00	4	2	0	0	6							
03:15	1	0	0	0			15:15	6	5	0	0	11							
03:30	0	0	0	0			15:30	6	4	0	0	10							
03:45	1	2	0	0			15:45	0	16	4	15	0	0	4	31				
04:00	1	0	0	0	1	2	16:00	5	4	0	0	9							
04:15	0	0	0	0			16:15	3	5	0	0	8							
04:30	1	0	0	0			16:30	4	4	0	0	8							
04:45	0	2	0	0			16:45	5	17	7	20	0	0	12	37				
05:00	0	0	0	0	6		17:00	3	3	0	0	6							
05:15	4	2	0	0			17:15	4	3	0	0	7							
05:30	4	0	0	0			17:30	4	3	0	0	7							
05:45	2	10	2	4			17:45	1	12	2	11	0	0	3	23				
06:00	0	0	0	0	6		18:00	9	3	0	0	12							
06:15	4	2	0	0			18:15	0	5	0	0	5							
06:30	2	5	0	0			18:30	1	0	0	0	1							
06:45	3	9	1	8			18:45	1	11	1	9	0	0	2	20				
07:00	2	3	0	0	5		19:00	1	4	0	0	5							
07:15	2	2	0	0			19:15	1	3	0	0	4							
07:30	3	1	0	0			19:30	1	1	0	0	2							
07:45	3	10	2	8			19:45	1	4	1	9	0	0	2	13				
08:00	1	1	0	0	2		20:00	0	4	0	0	4							
08:15	2	2	0	0			20:15	1	2	0	0	3							
08:30	5	4	0	0			20:30	1	4	0	0	5							
08:45	3	11	2	9			20:45	0	2	1	11	0	0	1	13				
09:00	5	6	0	0	11		21:00	1	1	0	0	2							
09:15	5	6	0	0			21:15	1	1	0	0	2							
09:30	5	4	0	0			21:30	0	1	0	0	1							
09:45	4	19	6	22			21:45	0	2	0	3	0	0		5				
10:00	4	6	0	0	10		22:00	0	3	0	0	3							
10:15	1	2	0	0			22:15	0	0	0	0	0							
10:30	4	4	0	0			22:30	1	0	0	0	1							
10:45	2	11	5	17			22:45	1	2	1	4	0	0	2	6				
11:00	4	11	0	0	15		23:00	0	0	0	0	0							
11:15	7	5	0	0			23:15	0	1	0	0	1							
11:30	6	8	0	0			23:30	0	0	0	0	0							
11:45	3	20	6	30			23:45	1	1	0	1	0	0	1	2				
TOTALS	94	101				195	TOTALS	130	140							270			
SPLIT %	48.2%	51.8%				41.9%	SPLIT %	48.1%	51.9%							58.1%			

DAILY TOTALS					NB	SB						EB	WB						Total
					224	241						0	0						465
AM Peak Hour	11:00	11:00			11:00		PM Peak Hour	13:00	12:00			13:00							
AM Pk Volume	20	30			50		PM Pk Volume	38	23			59							
Pk Hr Factor	0.714	0.682			0.833		Pk Hr Factor	0.792	0.639			0.819							
7 - 9 Volume	21	17	0	0	38		4 - 6 Volume	29	31	0	0	60							
7 - 9 Peak Hour	07:45	07:45			07:45		4 - 6 Peak Hour	16:00	16:00			16:00							
7 - 9 Pk Volume	11	9	0	0	20		4 - 6 Pk Volume	17	20	0	0	37							
Pk Hr Factor	0.550	0.563	0.000	0.000	0.556		Pk Hr Factor	0.850	0.714	0.000	0.000	0.771							

Spot Speed Study

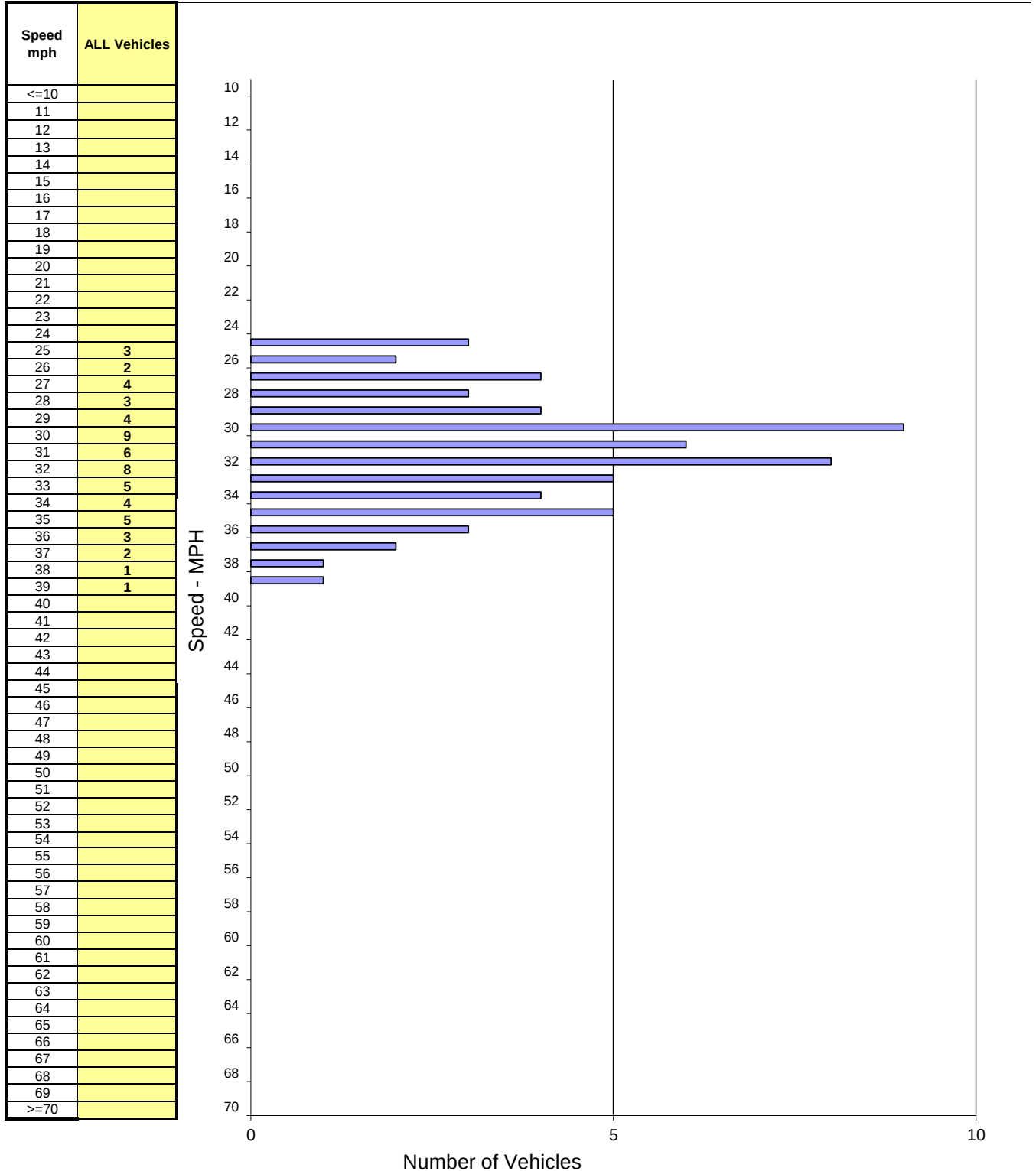
Prepared by: National Data & Surveying Services

City of Palomar Mountain

DATE: 4/17/2018
TIME: 11:10-13:10

Location: S Grade Rd 550' N/O Mile Post 42.8
Posted Speed: None Clear/Dry Project #: 18-4121-014

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	60	25 - 39	31 mph	35 mph	27 - 36	51	85%	8% / 5	7% / 4

Spot Speed Study

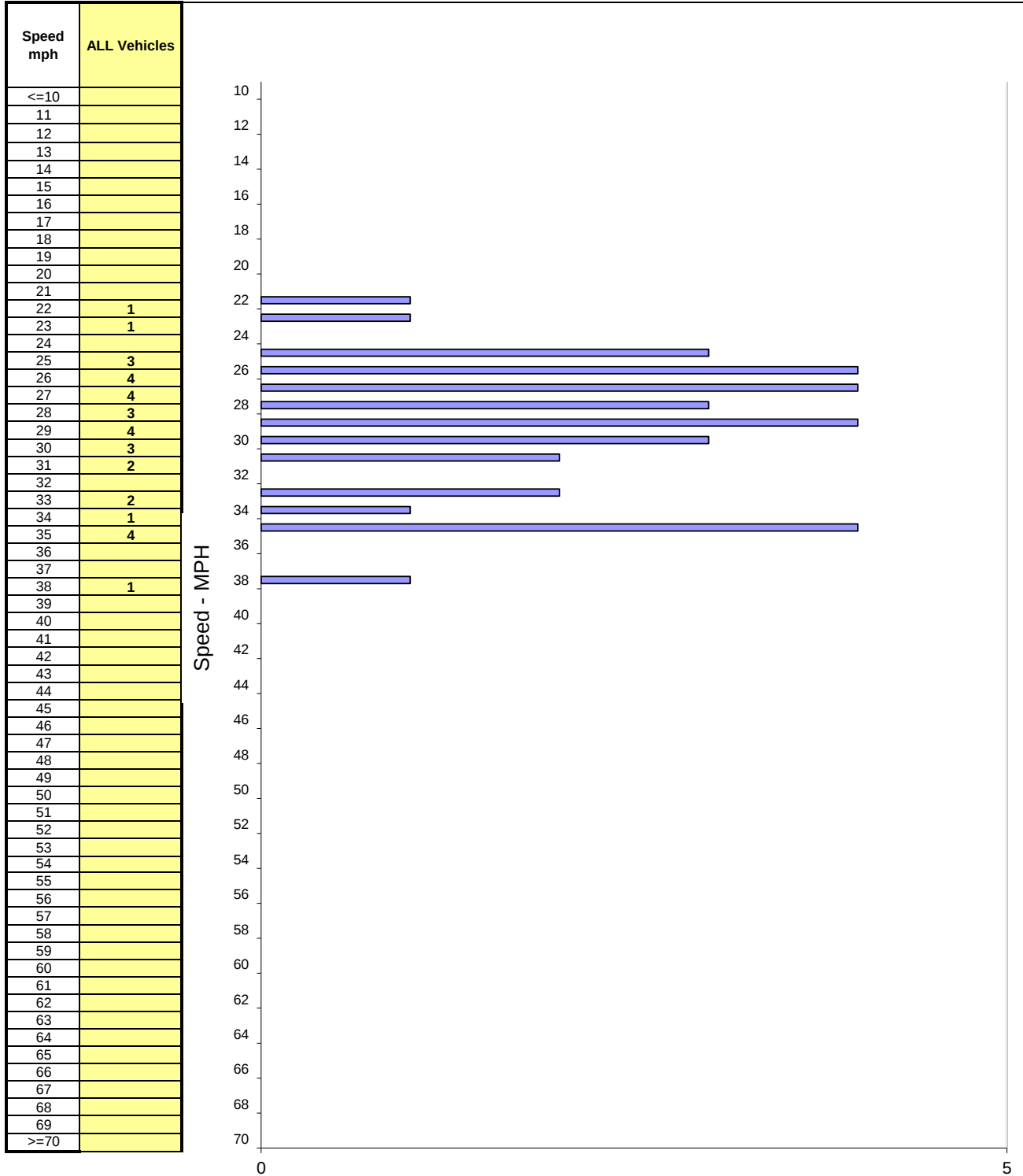
Prepared by: National Data & Surveying Services

City of Palomar Mountain

DATE: 4/17/2018
TIME: 09:00-11:00

Location: S Grade Rd 180' S/O Mile Post 45.4
Posted Speed: None Clear/Dry Project #: 18-4121-016

Northbound & Southbound Spot Speeds



Number of Vehicles

SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	33	22 - 38	29 mph	35 mph	26 - 35	27	82%	15% / 5	4% / 1

Spot Speed Study

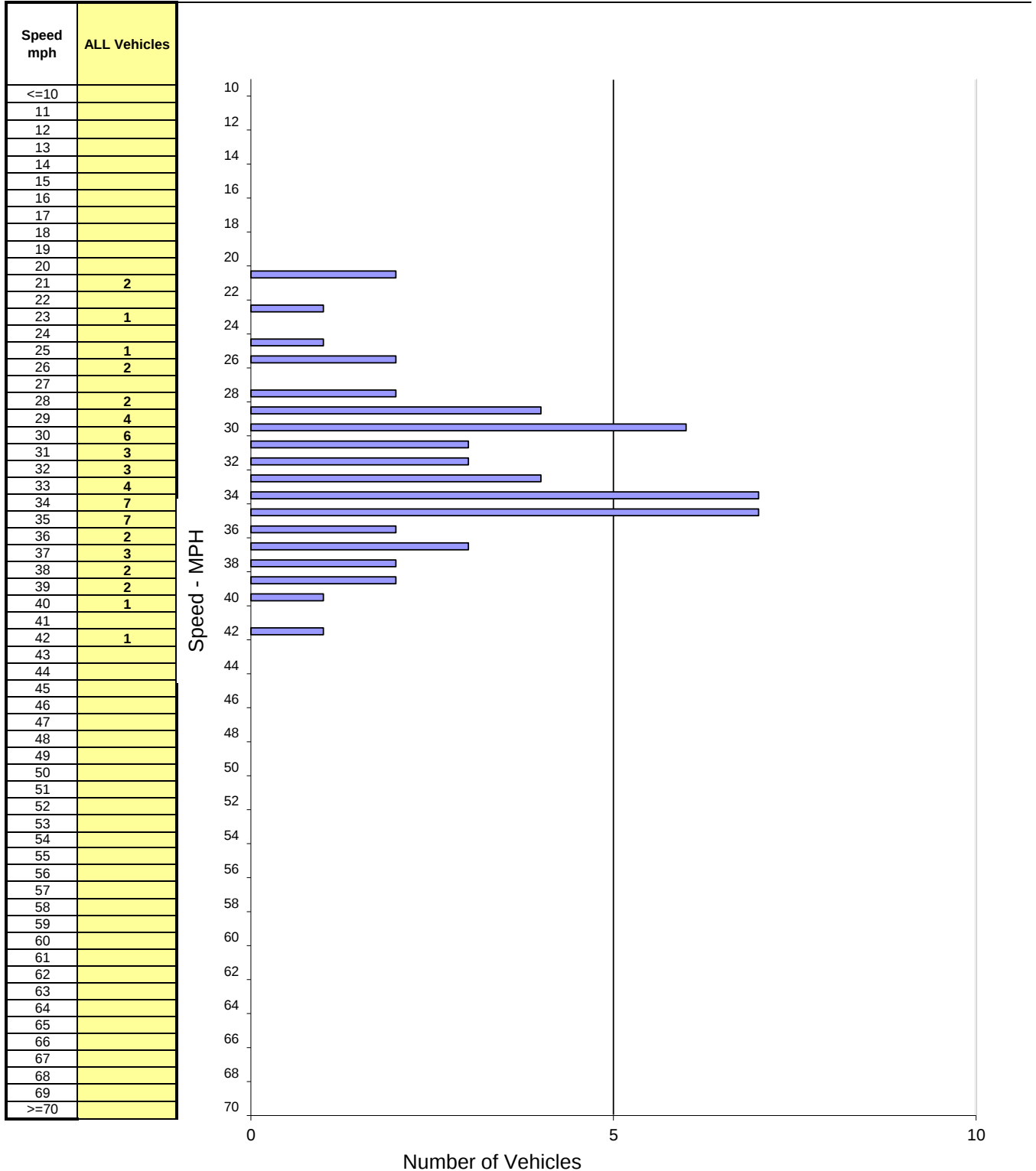
Prepared by: National Data & Surveying Services

City of Palomar Mountain

DATE: 4/12/2018
TIME: 09:00-11:00

Location: S Grade Rd 420' S/O Mile Post 47.0
Posted Speed: None Clear/Dry Project #: 18-4121-015

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	53	21 - 42	33 mph	37 mph	28 - 37	41	77%	11% / 6	12% / 6



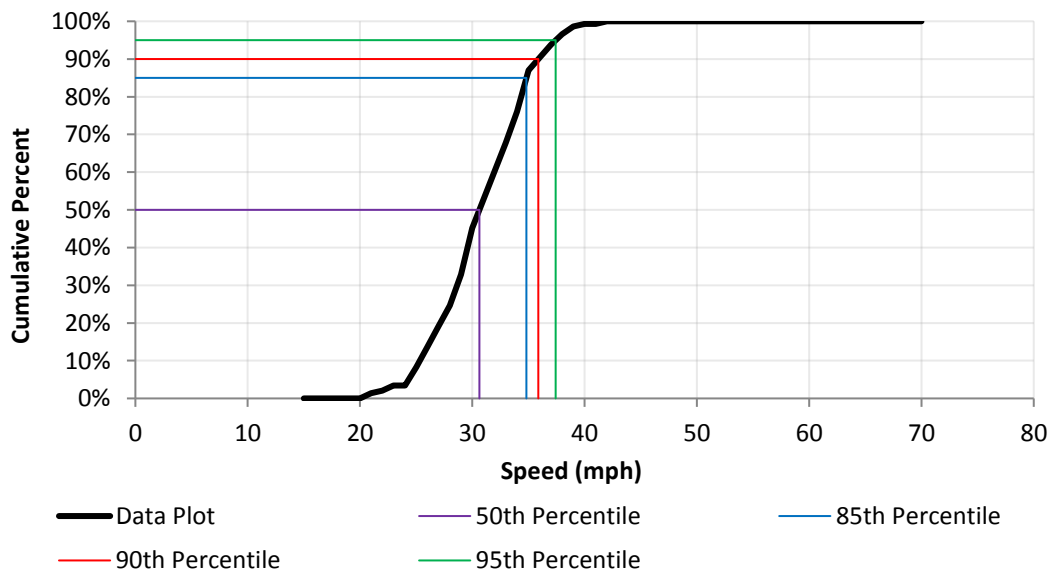
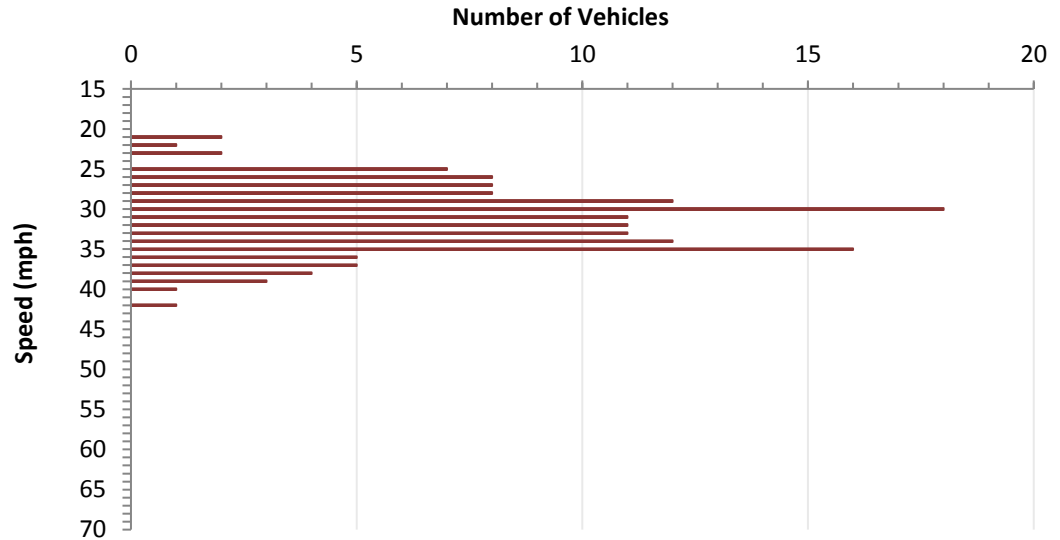
RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name:	South Grade Rd	From:	SR-78	To:	East Grade Rd
Position:	Speed Zone	Direction:	NB/SB		

Date:	8/10/2018	Weather:	Clear	Project Number:	0
Time Start:	12:00 AM	Road Condition:	Dry	Observer:	Contractor
Time End:	12:00 AM	Posted Speed:	N/A	Calibration Test:	0

Speed (mph)	Num. Veh.	Cum. Pct.
15		
16		
17		
18		
19		
20		
21	2	1.4%
22	1	2.1%
23	2	3.4%
24		
25	7	8.2%
26	8	13.7%
27	8	19.2%
28	8	24.7%
29	12	32.9%
30	18	45.2%
31	11	52.7%
32	11	60.3%
33	11	67.8%
34	12	76.0%
35	16	87.0%
36	5	90.4%
37	5	93.8%
38	4	96.6%
39	3	98.6%
40	1	99.3%
41		
42	1	100.0%
43		
44		
45		
46		
47		
48		
49		
50		
51		
52		
53		
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
Total	146	



DATA ANALYSIS

Average Speed	31.2	Range	21 - 42
50th Percentile	30.6	10 mph Pace	26 - 35
85th Percentile	34.8	Number in Pace	115
90th Percentile	35.9	Percent in Pace	79%
95th Percentile	37.4		

SAN DIEGO COUNTY TRAFFIC ADVISORY COMMITTEE

COMMITTEE REPORT OF: September 14, 2018

Item 5-B

SUPERVISORIAL DISTRICT: 5

SUBJECT: Speed Limit and Radar Certification

LOCATION: East Grade Road from SR 76 to South Grade Road/Canfield Road (11.28 miles) PALOMAR MOUNTAIN (Thos. Bros. 1073-J6)

INITIATED BY: DPW Traffic Engineering

REQUEST: Speed Limit Review

PROBLEM AS STATED BY REQUESTER:

East Grade Road from SR 76 to South Grade Road/Canfield Road. Preliminary review of prevailing speeds and roadway conditions could support a formal speed limit posting of 40 MPH.

Existing Traffic Devices

East Grade Road from SR 76 to South Grade Road/Canfield Road is curvilinear throughout this unposted segment that varies from 26 to 30 feet wide. This segment is centerline striped, posted with windy roadway advisory warning sign at the beginning of the segment near SR 76 and is stop controlled for eastbound traffic at SR 76. The road is classified as a Minor Collector on the County General Plan Mobility Element Network.

Average Daily Traffic Volumes **5/18**

East Grade Road:
At Mile Post 7.6 195*

*Average of 7 days

<u>Speed Data</u>		<u>85th Percentile</u>	<u>10 MPH Pace</u>	<u>% in Pace</u>
East Grade Road:				
270' W/o MP 3.2	(2018)	41.0 MPH	33-42	87.0%
170' E/o MP 5.4	(2018)	48.0 MPH	39-48	70.0%
500' E/o MP 8.2	(2018)	49.0 MPH	40-49	71.0%
Speed Zone	(2018)	47.4 MPH	36-45	63.0%

Collision Data

There have been 30 reported collisions along this segment of roadway, 27 of which involved injury, in a five year period (5-1-13 to 4-30-18). These collisions result in a segment accident rate of 7.41 collisions per million vehicle miles. The statewide average is 3.44 collisions per million vehicle miles for similar roadways.

5-B. Speed Limit/Radar Certification

East Grade Rd from State Route 76 to South Grade Rd (11.28 miles)





County of San Diego

RICHARD E. CROMPTON
DIRECTOR

DEPARTMENT OF PUBLIC WORKS
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SAN DIEGO, CALIFORNIA 92123-1237
(858) 694-2212 FAX: (858) 694-3597
Web Site: www.sdcounty.ca.gov/dpw/

COUNTY TRAFFIC ENGINEER RECOMMENDATION

Date: August 24, 2018

Item Title: Speed Limit and Radar Certification

Location: East Grade Road from SR-76 to S. Grade Rd/Canfield Rd

CTE Recommendation: **Establish 40 MPH Radar Enforced Speed Limit** *ZAO*

Conditions:

- Section 22358 of the California Vehicle Code authorizes a local agency to determine upon the basis of an Engineering and Traffic Survey (E&TS) that the speed limit of 65 miles per hour (mph) is more than is reasonable or safe, the agency may declare a prima facie speed limit of 60, 55, 50, 45, 40, 35, 30, or 25 mph, whichever is found most appropriate and is reasonable and safe.
- Section 2B.13 "Speed Limit Sign (R2-1)" of the California MUTCD, provides that an E&TS shall include a) prevailing speeds, b) collision records, and c) highway, traffic and roadside conditions that are not apparent to a driver.
- The California Manual on Uniform Traffic Control Devices stipulates that speed limits are usually set at the 5 mph increment above or below the prevailing (85th percentile) speed of motorists.
- East Grade Road is a two-lane roadway, mountainous and curvilinear with tight horizontal and vertical curves and limited shoulder throughout its length of 11.28 miles. Its pavement width varies between 28' and 32 feet in width with a striped center line and edge lines on both sides of the roadway.
- Recent speed surveys on East Grade Road taken in April 2018 resulted in an overall prevailing speed of 47.4 mph, which supports a speed limit of 45 mph using radar for speed enforcement.

- A review of the roadway collision data for a five-year period (May 2013 to April 2018) shows a total of 30 collisions on East Grade Road with a collision rate of 7.41 collisions per million-vehicle-mile (c/mvm) compared to a state average of 3.44 c/mvm for similar roadway. (It is worth noting that 18 of the 30 collisions happened during the weekend).
- Pursuant to CVC section 22358 coupled with above conditions on East Grade Road and the guidance of the CA MUTCD section 2B.13, a 40 mph radar enforced speed limit on East Grade Road from SR 76 to South Grade Road/Canfield Road is reasonable and safe based on prevailing speed and collision rate.

VOLUME

E Grade Rd @ Mile Post 7.6

Day: Tuesday
Date: 5/1/2018

City: Palomar Mountain
Project #: CA18_4117_001

DAILY TOTALS					NB	SB						EB	WB	Total	
					0	0						38	37	75	
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL			
00:00	0	0	0	0			12:00	0	0	4	2	6			
00:15	0	0	0	0			12:15	0	0	4	1	5			
00:30	0	0	0	0			12:30	0	0	0	1	1			
00:45	0	0	0	0			12:45	0	0	3	11	0	4	3	15
01:00	0	0	0	0			13:00	0	0	1	0	1			
01:15	0	0	0	0			13:15	0	0	0	0				
01:30	0	0	0	0			13:30	0	0	1	3	4			
01:45	0	0	0	0			13:45	0	0	1	3	2	5	3	8
02:00	0	0	0	0			14:00	0	0	0	2	2			
02:15	0	0	0	0			14:15	0	0	0	2	2			
02:30	0	0	0	0			14:30	0	0	0	0				
02:45	0	0	0	0			14:45	0	0	1	1	0	4	1	5
03:00	0	0	0	0			15:00	0	0	0	0				
03:15	0	0	0	0			15:15	0	0	1	1	2			
03:30	0	0	0	0			15:30	0	0	0	4	4			
03:45	0	0	0	0			15:45	0	0	0	1	0	5		6
04:00	0	0	0	0			16:00	0	0	0	2	2			
04:15	0	0	0	0			16:15	0	0	1	1	2			
04:30	0	0	0	0			16:30	0	0	0	1	1			
04:45	0	0	0	0			16:45	0	0	1	2	2	6	3	8
05:00	0	0	0	0			17:00	0	0	1	0	1			
05:15	0	0	0	0			17:15	0	0	0	0				
05:30	0	0	0	0			17:30	0	0	0	0				
05:45	0	0	0	0			17:45	0	0	2	3	0		2	3
06:00	0	0	1	0	1		18:00	0	0	0	0				
06:15	0	0	1	0	1		18:15	0	0	0	0				
06:30	0	0	0	0			18:30	0	0	0	0				
06:45	0	0	2	4	1	1	18:45	0	0	0	0				
07:00	0	0	0	2	2		19:00	0	0	2	0	2			
07:15	0	0	2	1	3		19:15	0	0	0	0				
07:30	0	0	1	1	2		19:30	0	0	0	0				
07:45	0	0	0	3	0	4	19:45	0	0	0	2	0			2
08:00	0	0	2	3	5		20:00	0	0	0	0				
08:15	0	0	2	1	3		20:15	0	0	0	0				
08:30	0	0	0	0			20:30	0	0	0	0				
08:45	0	0	1	5	0	4	20:45	0	0	0	0				
09:00	0	0	0	0			21:00	0	0	0	0				
09:15	0	0	0	0			21:15	0	0	0	0				
09:30	0	0	0	0			21:30	0	0	0	0				
09:45	0	0	0	1	1	1	21:45	0	0	0	0				
10:00	0	0	0	0			22:00	0	0	0	0				
10:15	0	0	1	0	1		22:15	0	0	0	0				
10:30	0	0	0	0			22:30	0	0	0	1	1			
10:45	0	0	0	1	0	1	22:45	0	0	0	0	1			1
11:00	0	0	1	0	1		23:00	0	0	0	0				
11:15	0	0	1	1	2		23:15	0	0	0	0				
11:30	0	0	0	1	1		23:30	0	0	0	0				
11:45	0	0	0	2	0	2	23:45	0	0	0	0				
TOTALS	15			12	27		TOTALS	23			25	48			
SPLIT %	55.6%			44.4%	36.0%		SPLIT %	47.9%			52.1%	64.0%			

DAILY TOTALS					NB	SB						EB	WB	Total	
					0	0						38	37	75	
AM Peak Hour					11:30	06:45	11:30	PM Peak Hour					12:00	13:30	12:00
AM Pk Volume					8	5	12	PM Pk Volume					11	9	15
Pk Hr Factor					0.500	0.625	0.500	Pk Hr Factor					0.688	0.750	0.625
7 - 9 Volume	0	0	8	8	16	4 - 6 Volume					0	0	5	6	11
7 - 9 Peak Hour			07:15	07:15	07:15	4 - 6 Peak Hour							16:15	16:00	16:00
7 - 9 Pk Volume	0	0	5	5	10	4 - 6 Pk Volume					0	0	3	6	8
Pk Hr Factor	0.000	0.000	0.625	0.417	0.500	Pk Hr Factor					0.000	0.000	0.750	0.750	0.667

VOLUME

E Grade Rd @ Mile Post 7.6

Day: Wednesday
Date: 5/2/2018

City: Palomar Mountain
Project #: CA18_4117_001

DAILY TOTALS					NB	SB	EB					WB	Total				
					0	0						40					
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL					
00:00	0	0	0	0			12:00	0	0	1	1	2					
00:15	0	0	0	0			12:15	0	0	0	0						
00:30	0	0	0	0			12:30	0	0	2	1						
00:45	0	0	0	0			12:45	0	0	2	5			0	2		
01:00	0	0	0	0			13:00	0	0	3	2	5					
01:15	0	0	0	0			13:15	0	0	2	0						
01:30	0	0	0	0			13:30	0	0	0	0						
01:45	0	0	0	0			13:45	0	0	2	7			1	3		
02:00	0	0	0	0			14:00	0	0	1	3	4					
02:15	0	0	0	0			14:15	0	0	0	2						
02:30	0	0	0	0			14:30	0	0	0	1						
02:45	0	0	0	0			14:45	0	0	0	1			0	6		
03:00	0	0	1	0	1		15:00	0	0	0	0	4					
03:15	0	0	0	0			15:15	0	0	1	3						
03:30	0	0	0	0			15:30	0	0	0	1						
03:45	0	0	0	1			1	1	15:45	0	0			0	1	0	4
04:00	0	0	0	0			16:00	0	0	0	0	1					
04:15	0	0	0	0			16:15	0	0	1	0						
04:30	0	0	0	0			16:30	0	0	0	0						
04:45	0	0	0	0			16:45	0	0	1	2			0			
05:00	0	0	0	0			17:00	0	0	0	2	2					
05:15	0	0	0	0			17:15	0	0	0	1						
05:30	0	0	0	0			17:30	0	0	0	0						
05:45	0	0	1	1			0	17:45	0	0	0			1	4		
06:00	0	0	0	0			18:00	0	0	1	0	1					
06:15	0	0	0	0			18:15	0	0	0	0						
06:30	0	0	0	3			18:30	0	0	0	0						
06:45	0	0	1	1			0	18:45	0	0	0			1	1	1	
07:00	0	0	0	0			19:00	0	0	0	0						
07:15	0	0	2	0			19:15	0	0	0	0						
07:30	0	0	1	1			19:30	0	0	0	0						
07:45	0	0	0	3			0	1	0	1	1			0			
08:00	0	0	0	0			20:00	0	0	0	0						
08:15	0	0	1	2			20:15	0	0	0	0						
08:30	0	0	0	0			20:30	0	0	0	0						
08:45	0	0	2	3			0	2	0	0	0						
09:00	0	0	1	1			21:00	0	0	0	0						
09:15	0	0	0	1			21:15	0	0	0	0						
09:30	0	0	2	0			21:30	0	0	0	0						
09:45	0	0	2	5			0	2	0	0	0						
10:00	0	0	1	2			22:00	0	0	0	0	1					
10:15	0	0	1	0			22:15	0	0	1	0						
10:30	0	0	0	1			22:30	0	0	1	0						
10:45	0	0	0	2			1	4	0	0	0			2	0		
11:00	0	0	1	0			23:00	0	0	0	0						
11:15	0	0	1	2			23:15	0	0	0	0						
11:30	0	0	2	0			23:30	0	0	0	0						
11:45	0	0	0	4			0	2	0	0	0						
TOTALS	20				15	35	TOTALS	20				20	40				
SPLIT %	57.1%				42.9%	46.7%	SPLIT %	50.0%				50.0%	53.3%				

DAILY TOTALS			NB	SB	EB			WB	Total				
			0	0				40				35	75
AM Peak Hour			09:30	10:00	09:15	PM Peak Hour			12:30	13:45	12:30		
AM Pk Volume			6	4	8	PM Pk Volume			9	7	12		
Pk Hr Factor			0.750	0.500	0.667	Pk Hr Factor			0.750	0.583	0.600		
7 - 9 Volume	0	0	6	3	9	4 - 6 Volume			0	0	6		
7 - 9 Peak Hour			07:00	07:30	07:30	4 - 6 Peak Hour					16:00	17:00	16:15
7 - 9 Pk Volume	0	0	3	3	5	4 - 6 Pk Volume			0	0	4		
Pk Hr Factor	0.000	0.000	0.375	0.375	0.417	Pk Hr Factor			0.000	0.000	0.500	0.500	0.500

VOLUME

E Grade Rd @ Mile Post 7.6

Day: Thursday
Date: 5/3/2018

City: Palomar Mountain
Project #: CA18_4117_001

DAILY TOTALS					NB	SB	EB					WB	Total	
					0	0						63		
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
00:00	0	0	0	0			12:00	0	0	2	2	4		
00:15	0	0	0	0			12:15	0	0	4	5			9
00:30	0	0	0	0			12:30	0	0	0	2			2
00:45	0	0	0	0			12:45	0	0	2	8			1
01:00	0	0	0	0			13:00	0	0	1	3	4		
01:15	0	0	0	0			13:15	0	0	3	4			7
01:30	0	0	0	0			13:30	0	0	2	2			4
01:45	0	0	0	0			13:45	0	0	2	8			2
02:00	0	0	0	0			14:00	0	0	2	1	3		
02:15	0	0	0	0			14:15	0	0	2	6			8
02:30	0	0	0	0			14:30	0	0	1	5			6
02:45	0	0	0	0			14:45	0	0	2	7			2
03:00	0	0	0	0			15:00	0	0	0	3	3		
03:15	0	0	0	0			15:15	0	0	1	3			4
03:30	0	0	0	0			15:30	0	0	2	2			4
03:45	0	0	0	0			15:45	0	0	2	5			3
04:00	0	0	0	0			16:00	0	0	0	0	5		
04:15	0	0	0	0			16:15	0	0	1	4			1
04:30	0	0	0	0			16:30	0	0	1	0			
04:45	0	0	0	0			16:45	0	0	0	2			0
05:00	0	0	0	0	1		17:00	0	0	0	0	1		
05:15	0	0	0	1			17:15	0	0	0	1			
05:30	0	0	0	0			17:30	0	0	0	0			
05:45	0	0	1	1			0	1	2	2	1			2
06:00	0	0	0	0	1		18:00	0	0	1	1	2		
06:15	0	0	1	0			18:15	0	0	1	2			3
06:30	0	0	0	1			18:30	0	0	0	1			1
06:45	0	0	2	3			0	1	3	1	5			2
07:00	0	0	0	0	1		19:00	0	0	0	0	3		
07:15	0	0	0	1			19:15	0	0	0	0			
07:30	0	0	0	0			19:30	0	0	2	1			1
07:45	0	0	0	0			1	19:45	0	0	0			2
08:00	0	0	3	0	3		20:00	0	0	0	0	1		
08:15	0	0	1	1			20:15	0	0	1	0			
08:30	0	0	1	1			20:30	0	0	0	1			1
08:45	0	0	0	5			1	3	1	2	0			1
09:00	0	0	2	0	2		21:00	0	0	0	0	1		
09:15	0	0	0	1			21:15	0	0	0	0			
09:30	0	0	0	0			21:30	0	0	0	1			1
09:45	0	0	0	2			1	2	1	1	2			1
10:00	0	0	0	0	4		22:00	0	0	0	0			
10:15	0	0	4	0			22:15	0	0	0	0			
10:30	0	0	2	0			22:30	0	0	0	0			
10:45	0	0	2	8			0	2	8					
11:00	0	0	0	1	1		23:00	0	0	0	0			
11:15	0	0	1	1			23:15	0	0	0	0			
11:30	0	0	2	0			23:30	0	0	0	0			
11:45	0	0	2	5			1	3	8					
TOTALS	24				11	35	TOTALS	39				62	101	
SPLIT %	68.6%				31.4%	25.7%	SPLIT %	38.6%				61.4%	74.3%	

DAILY TOTALS					NB	SB						EB	WB						Total
					0	0						63	73						136
AM Peak Hour					11:30	11:45	11:30	PM Peak Hour					13:15	14:15	13:45				
AM Pk Volume					10	10	18	PM Pk Volume					9	16	21				
Pk Hr Factor					0.625	0.500	0.500	Pk Hr Factor					0.750	0.667	0.656				
7 - 9 Volume					0	0	9	4 - 6 Volume					0	0	10				
7 - 9 Peak Hour					07:45	08:00	08:00	4 - 6 Peak Hour					16:00	16:00	16:00				
7 - 9 Pk Volume					0	0	8	4 - 6 Pk Volume					0	0	6				
Pk Hr Factor					0.000	0.000	0.667	Pk Hr Factor					0.000	0.000	0.300				

VOLUME

E Grade Rd @ Mile Post 7.6

Day: Friday
Date: 5/4/2018

City: Palomar Mountain
Project #: CA18_4117_001

DAILY TOTALS					NB	SB	EBWB					Total		
					0	0						94	93	187
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00	0	0	0	0		12:00	0	0	2	3	5			
00:15	0	0	0	0		12:15	0	0	0	5	5			
00:30	0	0	0	0		12:30	0	0	8	5	13			
00:45	0	0	0	0		12:45	0	0	1	11	1	14	2	25
01:00	0	0	0	0		13:00	0	0	0	5	5			
01:15	0	0	0	0		13:15	0	0	7	8	15			
01:30	0	0	0	0		13:30	0	0	1	3	4			
01:45	0	0	0	0		13:45	0	0	2	10	0	16	2	26
02:00	0	0	0	0	1	14:00	0	0	2	1	3			
02:15	0	0	1	0		14:15	0	0	6	1	7			
02:30	0	0	0	0		14:30	0	0	4	3	7			
02:45	0	0	0	1		0	14:45	0	0	3	15	2	7	5
03:00	0	0	0	0		15:00	0	0	0	3	3			
03:15	0	0	0	0		15:15	0	0	6	4	10			
03:30	0	0	0	0		15:30	0	0	1	2	3			
03:45	0	0	0	0		15:45	0	0	2	9	0	9	2	18
04:00	0	0	0	0		16:00	0	0	3	3	6			
04:15	0	0	0	0		16:15	0	0	1	0	1			
04:30	0	0	0	0		16:30	0	0	1	3	4			
04:45	0	0	0	0		16:45	0	0	0	5	3	9	3	14
05:00	0	0	0	0		17:00	0	0	0	1	1			
05:15	0	0	0	0		17:15	0	0	1	3	4			
05:30	0	0	0	0		17:30	0	0	3	1	4			
05:45	0	0	0	0		17:45	0	0	0	4	1	6	1	10
06:00	0	0	0	1	1	18:00	0	0	1	2	3			
06:15	0	0	1	0	1	18:15	0	0	1	1	2			
06:30	0	0	0	0	2	18:30	0	0	3	2	5			
06:45	0	0	0	1		0	1	18:45	0	0	0	5	0	5
07:00	0	0	1	1	2	19:00	0	0	1	2	3			
07:15	0	0	0	2	2	19:15	0	0	1	0	1			
07:30	0	0	1	0	1	19:30	0	0	1	0	1			
07:45	0	0	2	4	0	3	19:45	0	0	0	3	1	3	6
08:00	0	0	0	1	1	20:00	0	0	0	0	1			
08:15	0	0	0	0	20:15	0	0	0	0	1				
08:30	0	0	1	1	20:30	0	0	1	0					
08:45	0	0	0	1	0	2	20:45	0	0			0	1	0
09:00	0	0	0	1	1	21:00	0	0	0	0				
09:15	0	0	0	3	3	21:15	0	0	0	0				
09:30	0	0	1	1	2	21:30	0	0	0	0				
09:45	0	0	2	3	1	6	3	9	21:45	0		0	0	0
10:00	0	0	2	1	3	22:00	0	0	0	0				
10:15	0	0	3	0	3	22:15	0	0	0	0				
10:30	0	0	2	1	3	22:30	0	0	0	0				
10:45	0	0	4	11	3	5	7	16	22:45	0		0	0	0
11:00	0	0	2	0	2	23:00	0	0	0	0				
11:15	0	0	1	3	4	23:15	0	0	0	0				
11:30	0	0	4	0	4	23:30	0	0	0	0				
11:45	0	0	3	10	4	7	17	23:45	0	0		0	0	
TOTALS	3124				55	TOTALS	6369				132			
SPLIT %	56.4%43.6%				29.4%	SPLIT %	47.7%52.3%				70.6%			

DAILY TOTALS					NB	SB						EB	WB	Total	
					0	0						94	93	187	
AM Peak Hour					11:45	11:45	11:45	PM Peak Hour					12:30	12:30	12:30
AM Pk Volume					13	17	30	PM Pk Volume					16	19	35
Pk Hr Factor					0.406	0.850	0.577	Pk Hr Factor					0.500	0.594	0.583
7 - 9 Volume	0	0	5	5	10	4 - 6 Volume					0	0	9	15	24
7 - 9 Peak Hour	07:00				07:00	07:00	07:00	4 - 6 Peak Hour				16:00	16:30	16:00	
7 - 9 Pk Volume	0	0	4	3	7	4 - 6 Pk Volume					0	0	5	10	14
Pk Hr Factor	0.000	0.000	0.500	0.375	0.875	Pk Hr Factor					0.000	0.000	0.417	0.833	0.583

VOLUME

E Grade Rd @ Mile Post 7.6

Day: Saturday
Date: 5/5/2018

City: Palomar Mountain
Project #: CA18_4117_001

DAILY TOTALS					NB	SB	EB					WB	Total				
					0	0						162	218	380			
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL					
00:00	0	0	0	0			12:00	0	0	4	4	8					
00:15	0	0	0	0			12:15	0	0	0	14	14					
00:30	0	0	0	0			12:30	0	0	4	6	10					
00:45	0	0	0	0			12:45	0	0	7	15	9	33	16	48		
01:00	0	0	0	0			13:00	0	0	0	3	3					
01:15	0	0	0	0			13:15	0	0	6	11	17					
01:30	0	0	0	0			13:30	0	0	6	16	22					
01:45	0	0	0	0			13:45	0	0	6	18	7	37	13	55		
02:00	0	0	0	0			14:00	0	0	5	16	21					
02:15	0	0	0	0			14:15	0	0	8	2	10					
02:30	0	0	0	0			14:30	0	0	2	3	5					
02:45	0	0	1	1			0	14:45	0	0	3	18	0	21	3	39	
03:00	0	0	1	0	1		15:00	0	0	2	6	8					
03:15	0	0	0	0			15:15	0	0	0	4	4					
03:30	0	0	0	0			15:30	0	0	6	3	9					
03:45	0	0	0	1			1	1	15:45	0	0	1	9	2	15	3	24
04:00	0	0	0	2			2		16:00	0	0	0	2	2			
04:15	0	0	0	0			16:15	0	0	0	5	5					
04:30	0	0	0	0			16:30	0	0	1	5	6					
04:45	0	0	0	1			3	16:45	0	0	2	3	4	16	6	19	
05:00	0	0	0	0					17:00	0	0	2	0	2			
05:15	0	0	0	0	17:15	0			0	0	2	2					
05:30	0	0	0	0	17:30	0			0	1	3	4					
05:45	0	0	1	1	0	17:45			0	0	1	4	1	6	2	10	
06:00	0	0	1	0	1		18:00	0	0	2	1	3					
06:15	0	0	0	0			18:15	0	0	2	2	4					
06:30	0	0	0	1			18:30	0	0	2	0	2					
06:45	0	0	0	1			1	2	18:45	0	0	0	6	1	4	1	10
07:00	0	0	1	1			2		19:00	0	0	1	4	5			
07:15	0	0	0	1			19:15	0	0	0	0						
07:30	0	0	0	0			19:30	0	0	1	1	2					
07:45	0	0	0	1			1	3	19:45	0	0	0	2	1	6	1	8
08:00	0	0	0	2			2		20:00	0	0	0	0				
08:15	0	0	1	2			20:15	0	0	0	0						
08:30	0	0	1	0			20:30	0	0	0	1	1					
08:45	0	0	1	3			4	8	20:45	0	0	1	1	0	1	1	2
09:00	0	0	6	1			7		21:00	0	0	1	0	1			
09:15	0	0	5	3			21:15	0	0	1	0	1					
09:30	0	0	3	2			21:30	0	0	0	0						
09:45	0	0	2	16			4	10	21:45	0	0	0	2	0	2		
10:00	0	0	2	6			8		22:00	0	0	0	0				
10:15	0	0	2	10			22:15	0	0	0	0						
10:30	0	0	14	9			22:30	0	0	0	0						
10:45	0	0	4	22			1	26	22:45	0	0	0	0				
11:00	0	0	7	6			13		23:00	0	0	0	0				
11:15	0	0	8	9			23:15	0	0	0	0						
11:30	0	0	5	5			23:30	0	0	0	0						
11:45	0	0	18	38			6	26	23:45	0	0	0	0				
TOTALS	84						79	163	TOTALS	78				139	217		
SPLIT %	51.5%				48.5%	42.9%	SPLIT %	35.9%				64.1%	57.1%				

DAILY TOTALS				NB	SB	EB				WB	Total
				0	0					162	218
AM Peak Hour		11:00	11:45	11:00	PM Peak Hour		13:30	13:15	13:15		
AM Pk Volume		38	30	64	PM Pk Volume		25	50	73		
Pk Hr Factor		0.528	0.536	0.667	Pk Hr Factor		0.781	0.781	0.830		
7 - 9 Volume	0	0	4	11	15	4 - 6 Volume	0	0	7	22	29
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			16:15	16:00	16:00
7 - 9 Pk Volume	0	0	3	8	11	4 - 6 Pk Volume	0	0	5	16	19
Pk Hr Factor	0.000	0.000	0.750	0.500	0.550	Pk Hr Factor	0.000	0.000	0.625	0.800	0.792

VOLUME

E Grade Rd @ Mile Post 7.6

Day: Sunday
Date: 5/6/2018

City: Palomar Mountain
Project #: CA18_4117_001

DAILY TOTALS					NB	SB	EB					WB	Total	
					0	0						132	230	362
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00	0	0	0	0		12:00	0	0	4	14	18			
00:15	0	0	0	0		12:15	0	0	3	15	18			
00:30	0	0	0	0		12:30	0	0	5	14	19			
00:45	0	0	0	0		12:45	0	0	4	16	8	51	12	67
01:00	0	0	0	0	1	13:00	0	0	0	3	3	12	15	
01:15	0	0	1	0		13:15	0	0	9	3	15			
01:30	0	0	0	0		13:30	0	0	3	12	12			
01:45	0	0	0	1		0	13:45	0	0	9	21	3	21	12
02:00	0	0	0	0		14:00	0	0	5	8	13			
02:15	0	0	0	0		14:15	0	0	7	5	12			
02:30	0	0	0	0		14:30	0	0	6	11	17			
02:45	0	0	0	0		14:45	0	0	3	21	7	31	10	52
03:00	0	0	0	0		15:00	0	0	8	2	10			
03:15	0	0	0	0		15:15	0	0	1	6	7			
03:30	0	0	0	0		15:30	0	0	3	3	6			
03:45	0	0	0	0		15:45	0	0	1	13	2	13	3	26
04:00	0	0	0	0		16:00	0	0	2	4	6			
04:15	0	0	0	0		16:15	0	0	1	4	5			
04:30	0	0	0	0		16:30	0	0	7	4	11			
04:45	0	0	0	0		16:45	0	0	3	13	3	15	6	28
05:00	0	0	0	0		17:00	0	0	2	2	4			
05:15	0	0	0	0		17:15	0	0	2	7	9			
05:30	0	0	0	0		17:30	0	0	1	4	5			
05:45	0	0	0	0		17:45	0	0	0	5	0	13	18	
06:00	0	0	0	1	1	18:00	0	0	0	1	1			
06:15	0	0	0	0		18:15	0	0	1	1	2			
06:30	0	0	0	0		18:30	0	0	0	2	2			
06:45	0	0	0	0		1	18:45	0	0	0	1	1	5	1
07:00	0	0	0	0		19:00	0	0	0	1	1			
07:15	0	0	0	0		19:15	0	0	0	2	2			
07:30	0	0	0	0		19:30	0	0	0	0	3			
07:45	0	0	1	1		0	19:45	0	0	0	0	3		
08:00	0	0	0	0		20:00	0	0	0	0	1			
08:15	0	0	1	1		2	20:15	0	0	1	0	1		
08:30	0	0	2	1		3	20:30	0	0	0	0			
08:45	0	0	0	3		1	3	20:45	0	0	0	1	0	1
09:00	0	0	3	1		21:00	0	0	0	0	1			
09:15	0	0	2	2		4	21:15	0	0	0	0			
09:30	0	0	1	4		5	21:30	0	0	0	1	1		
09:45	0	0	4	10		4	11	8	21	21:45	0	0	0	1
10:00	0	0	2	4		22:00	0	0	0	0				
10:15	0	0	1	1		2	22:15	0	0	0	0			
10:30	0	0	2	8		10	22:30	0	0	0	0			
10:45	0	0	3	8		5	18	8	26	22:45	0	0	0	0
11:00	0	0	0	7		23:00	0	0	0	0				
11:15	0	0	7	21		28	23:15	0	0	0	0			
11:30	0	0	4	4		8	23:30	0	0	0	0			
11:45	0	0	7	18		12	44	19	62	23:45	0	0	0	0
TOTALS	41				77	118	TOTALS	91				153	244	
SPLIT %	34.7%				65.3%	32.6%	SPLIT %	37.3%				62.7%	67.4%	

DAILY TOTALS			NB	SB	EB			WB	Total					
			0	0				132			230	362		
AM Peak Hour			11:15	11:45	11:45	PM Peak Hour			13:45	12:00	12:00			
AM Pk Volume			22	55	74	PM Pk Volume			27	51	67			
Pk Hr Factor			0.786	0.917	0.974	Pk Hr Factor			0.750	0.850	0.882			
7 - 9 Volume	0	0	4	3	7	4 - 6 Volume		0	0	18	28	46		
7 - 9 Peak Hour			07:45	08:00	07:45	4 - 6 Peak Hour			16:30	16:30	16:30			
7 - 9 Pk Volume			0	0	4	3	6	4 - 6 Pk Volume		0	0	14	16	30
Pk Hr Factor			0.000	0.000	0.500	0.750	0.500	Pk Hr Factor		0.000	0.000	0.500	0.571	0.682

VOLUME

E Grade Rd @ Mile Post 7.6

Day: Monday
Date: 5/7/2018

City: Palomar Mountain
Project #: CA18_4117_001

DAILY TOTALS					NB	SB	EB					WB	Total		
					0	0						79			86
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL			
00:00	0	0	0	0			12:00	0	0	0	2	2			
00:15	0	0	0	0			12:15	0	0	1	2	3			
00:30	0	0	0	0			12:30	0	0	2	2	4			
00:45	0	0	0	0			12:45	0	0	7	10	3	9	10	19
01:00	0	0	0	0			13:00	0	0	1	3	4			
01:15	0	0	0	0			13:15	0	0	4	0	4			
01:30	0	0	0	0			13:30	0	0	8	2	10			
01:45	0	0	0	0			13:45	0	0	1	14	2	7	3	21
02:00	0	0	0	0			14:00	0	0	2	1	3			
02:15	0	0	0	0			14:15	0	0	2	4	6			
02:30	0	0	0	0			14:30	0	0	1	2	3			
02:45	0	0	0	0			14:45	0	0	0	5	5	12	5	17
03:00	0	0	0	0			15:00	0	0	1	4	5			
03:15	0	0	0	0			15:15	0	0	3	3	6			
03:30	0	0	0	0			15:30	0	0	1	0	1			
03:45	0	0	0	0			15:45	0	0	2	7	3	10	5	17
04:00	0	0	0	0			16:00	0	0	0	0	2			
04:15	0	0	0	0			16:15	0	0	0	2	4			
04:30	0	0	0	0			16:30	0	0	0	4	4			
04:45	0	0	0	1			1	16:45	0	0	1	1	3	9	4
05:00	0	0	0	0			17:00	0	0	0	1	1			
05:15	0	0	0	0			17:15	0	0	0	2	2			
05:30	0	0	0	0			17:30	0	0	1	2	3			
05:45	0	0	0	0			17:45	0	0	0	1	2	7	2	8
06:00	0	0	1	0	1		18:00	0	0	1	1	2			
06:15	0	0	1	0	1		18:15	0	0	1	0	1			
06:30	0	0	0	0	0		18:30	0	0	1	0	1			
06:45	0	0	2	4	2		2	18:45	0	0	1	4	1	2	2
07:00	0	0	0	0			19:00	0	0	0	0	1			
07:15	0	0	0	1			1	19:15	0	0	0	1	1		
07:30	0	0	1	1			2	19:30	0	0	0	0			
07:45	0	0	2	3			0	2	19:45	0	0	0	0	1	
08:00	0	0	0	0			20:00	0	0	1	1	2			
08:15	0	0	4	2			6	20:15	0	0	0	0			
08:30	0	0	0	0			0	20:30	0	0	0	0			
08:45	0	0	1	5			1	3	20:45	0	0	0	1	0	1
09:00	0	0	0	0			21:00	0	0	0	0				
09:15	0	0	2	1			3	21:15	0	0	0	0			
09:30	0	0	1	1			2	21:30	0	0	0	0			
09:45	0	0	2	5			3	5	21:45	0	0	0	0		
10:00	0	0	4	2	6		22:00	0	0	0	0				
10:15	0	0	1	2	3		22:15	0	0	0	0				
10:30	0	0	0	1	1		22:30	0	0	0	0				
10:45	0	0	4	9	0		5	22:45	0	0	0	0			
11:00	0	0	2	2	4		23:00	0	0	0	0				
11:15	0	0	2	2	4		23:15	0	0	0	0				
11:30	0	0	3	2	5		23:30	0	0	0	2	2			
11:45	0	0	3	10	2		8	23:45	0	0	0	0	2		2
TOTALS	36				26	62	TOTALS	43				60	103		
SPLIT %	58.1%				41.9%	37.6%	SPLIT %	41.7%				58.3%	62.4%		

DAILY TOTALS					NB	SB						EB	WB	Total	
					0	0						79	86	165	
AM Peak Hour					10:45	09:30	11:00	PM Peak Hour					12:45	14:15	12:45
AM Pk Volume					11	8	18	PM Pk Volume					20	15	28
Pk Hr Factor					0.688	0.667	0.900	Pk Hr Factor					0.625	0.750	0.700
7 - 9 Volume	0	0	8	5	13	4 - 6 Volume					0	0	2	16	18
7 - 9 Peak Hour	07:30				07:30	07:30	07:30	4 - 6 Peak Hour				16:45	16:15	16:15	
7 - 9 Pk Volume	0	0	7	3	10	4 - 6 Pk Volume					0	0	2	10	11
Pk Hr Factor	0.000	0.000	0.438	0.375	0.417	Pk Hr Factor					0.000	0.000	0.500	0.625	0.688



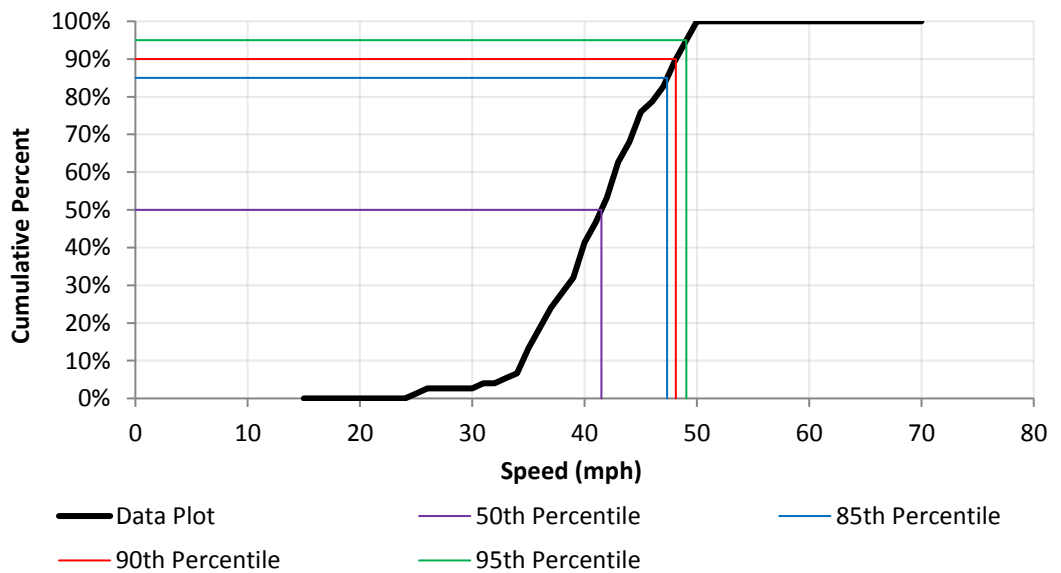
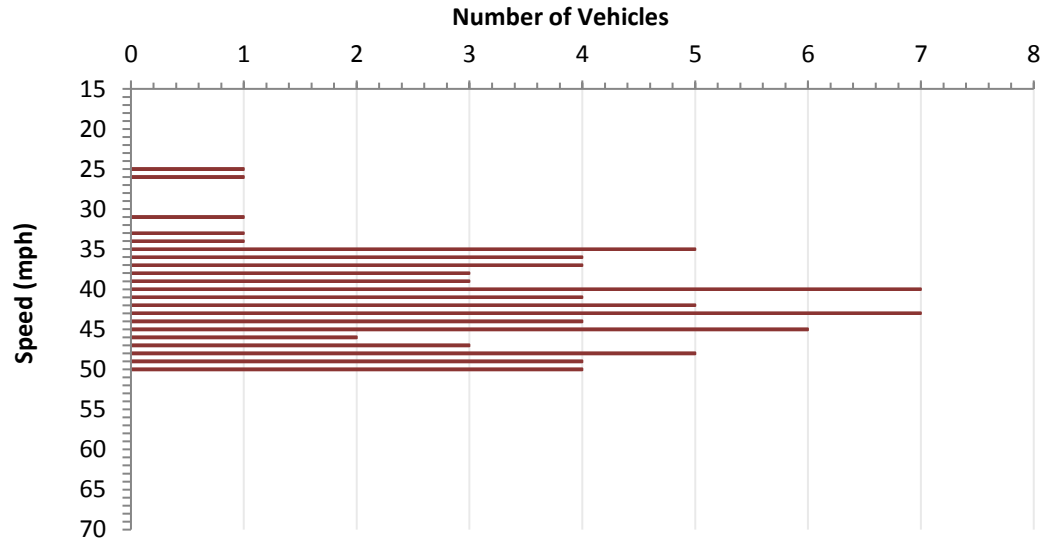
RADAR SPEED SURVEY

SAN DIEGO COUNTY DEPT OF PUBLIC WORKS

Road Name:	East Grade Rd	From:	SR-78	To:	South Grade Rd
Position:	Speed Zone	Direction:	NB/SB		

Date:	8/10/2018	Weather:	Clear	Project Number:	0
Time Start:	12:00 AM	Road Condition:	Dry	Observer:	Contractor
Time End:	12:00 AM	Posted Speed:	N/A	Calibration Test:	0

Speed (mph)	Num. Veh.	Cum. Pct.
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25	1	1.3%
26	1	2.7%
27		
28		
29		
30		
31	1	4.0%
32		
33	1	5.3%
34	1	6.7%
35	5	13.3%
36	4	18.7%
37	4	24.0%
38	3	28.0%
39	3	32.0%
40	7	41.3%
41	4	46.7%
42	5	53.3%
43	7	62.7%
44	4	68.0%
45	6	76.0%
46	2	78.7%
47	3	82.7%
48	5	89.3%
49	4	94.7%
50	4	100.0%
51		
52		
53		
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
Total	75	



DATA ANALYSIS

Average Speed	41.6	Range	25 - 50
50th Percentile	41.5	10 mph Pace	36 - 45
85th Percentile	47.4	Number in Pace	47
90th Percentile	48.1	Percent in Pace	63%
95th Percentile	49.1		

Spot Speed Study

Prepared by: National Data & Surveying Services

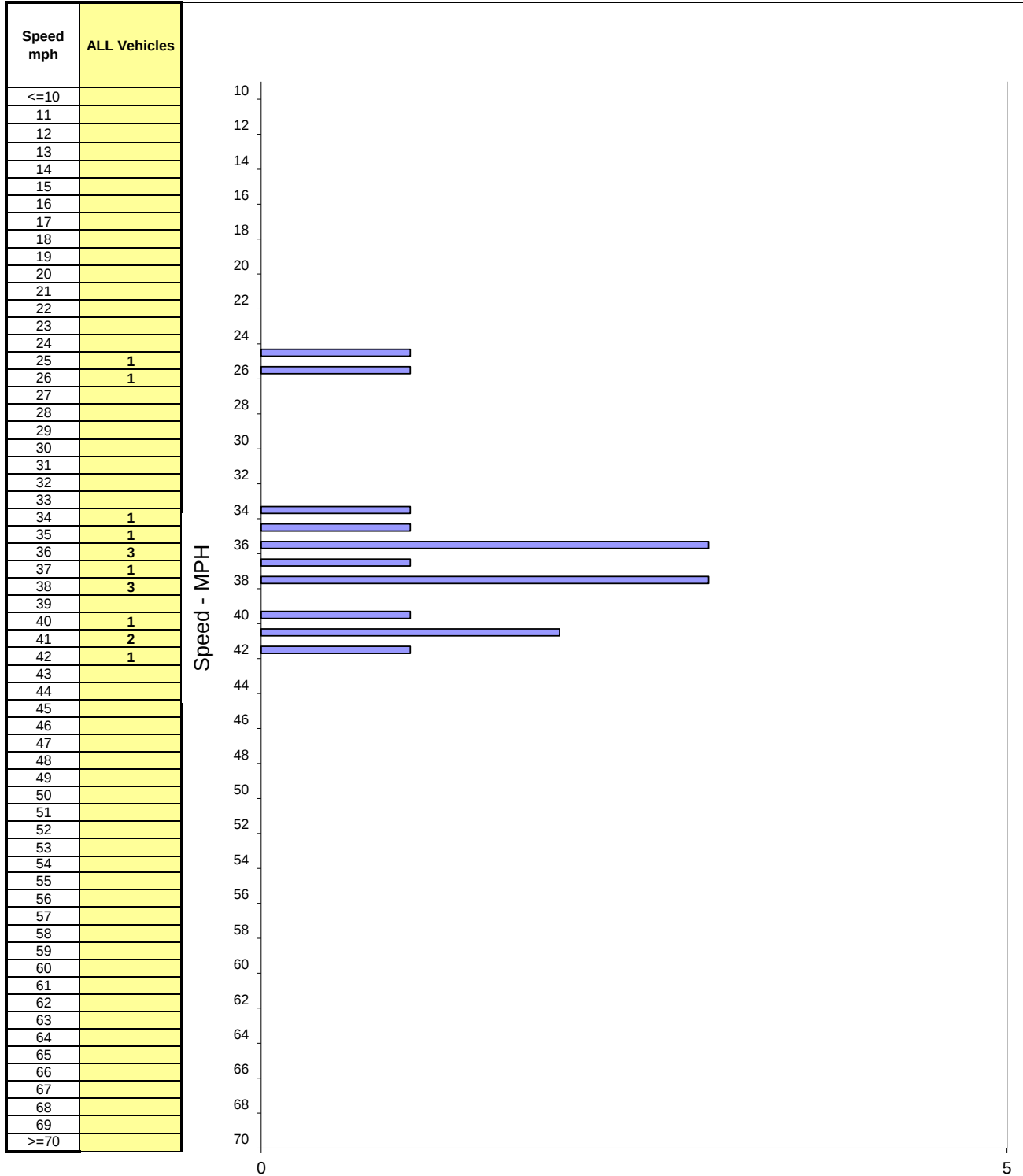
City of Palomar Mountain

DATE: 4/18/2018
TIME: 09:00-11:00

Location: E Grade Rd 270' W/O Mile Post 3.2
Posted Speed: None Clear/Dry

Project #: 18-4121-032

Eastbound & Westbound Spot Speeds



Number of Vehicles

SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	15	25 - 42	37 mph	41 mph	33 - 42	13	87%	13% / 2	0% / 0

Spot Speed Study

Prepared by: National Data & Surveying Services

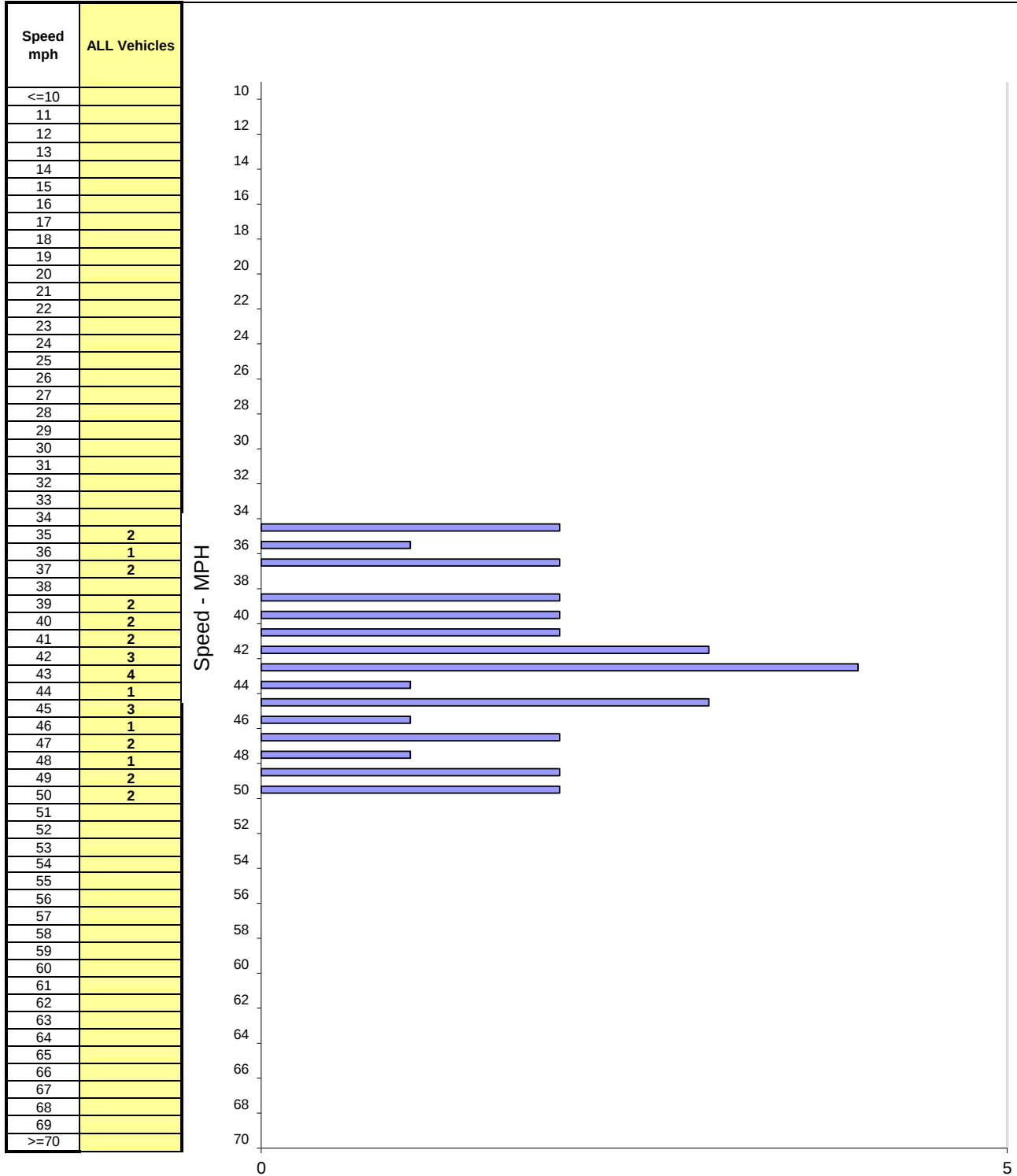
City of 4S Ranch

DATE: 4/18/2018
TIME: 11:00-13:00

Location: E Grade Rd 170' E/O Mile Post 5.4
Posted Speed: None Clear/Dry

Project #: 18-4121-035

Eastbound & Westbound Spot Speeds



Number of Vehicles

SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	30	35 - 50	43 mph	48 mph	39 - 48	21	70%	16% / 5	14% / 4

Spot Speed Study

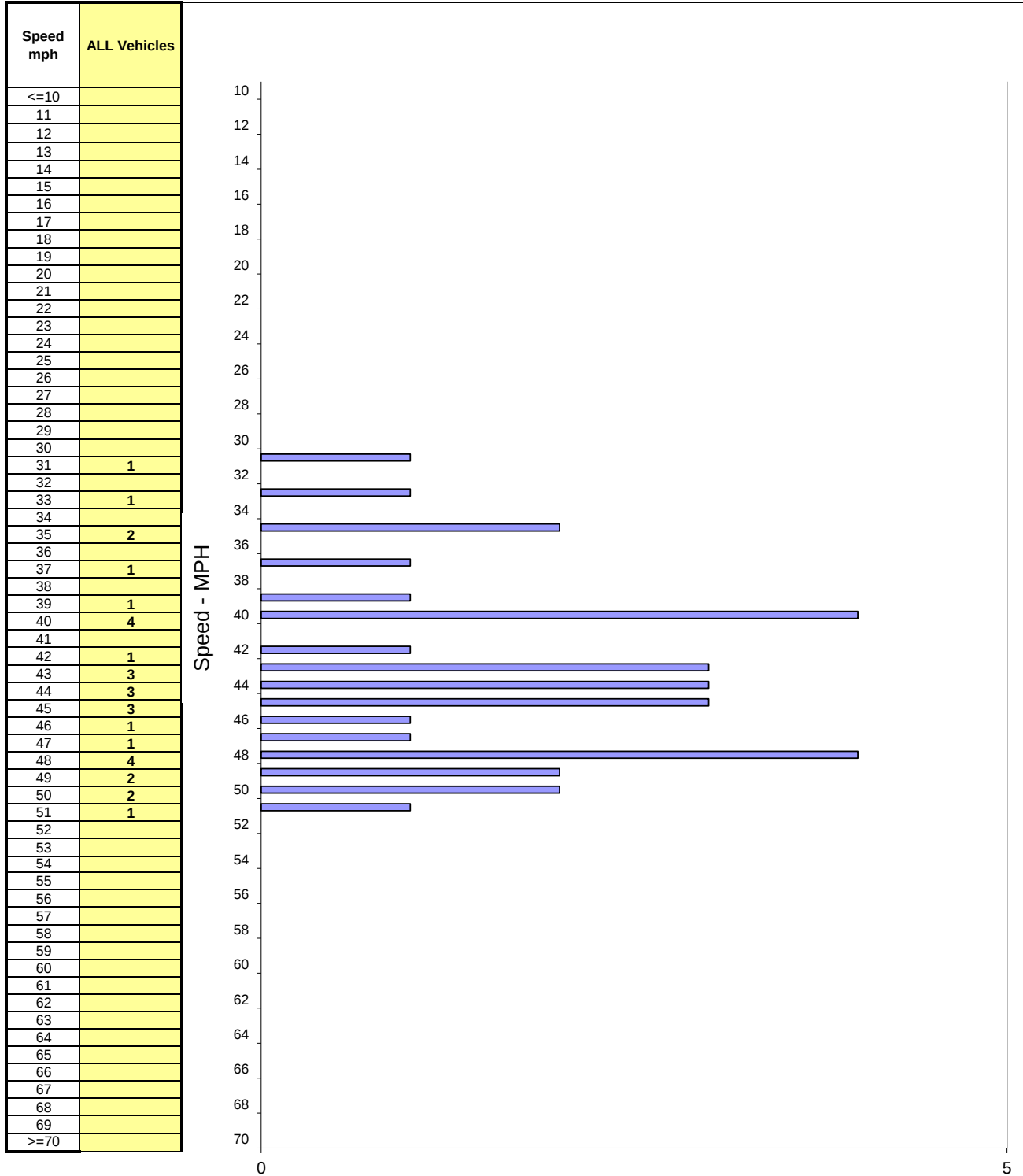
Prepared by: National Data & Surveying Services

City of Palomar Mountain

DATE: 4/18/2018
TIME: 13:10-15:10

Location: E Grade Rd 500' E/O Mile Post 8.2
Posted Speed: None Clear/Dry Project #: 18-4121-033

Eastbound & Westbound Spot Speeds



Number of Vehicles

SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	31	31 - 51	44 mph	49 mph	40 - 49	22	71%	19% / 6	10% / 3