



Kimley-Horn  
and Associates, Inc.

September 3, 2008

■  
Suite 600  
401 B Street  
San Diego, California  
92101

Mr. Tom Harrington  
Morro Hills Community  
Service District  
P.O. Box 161  
Fallbrook, CA 92088-0161

Re: Morro Hills Community Speed Survey Study

Dear Mr. Harrington:

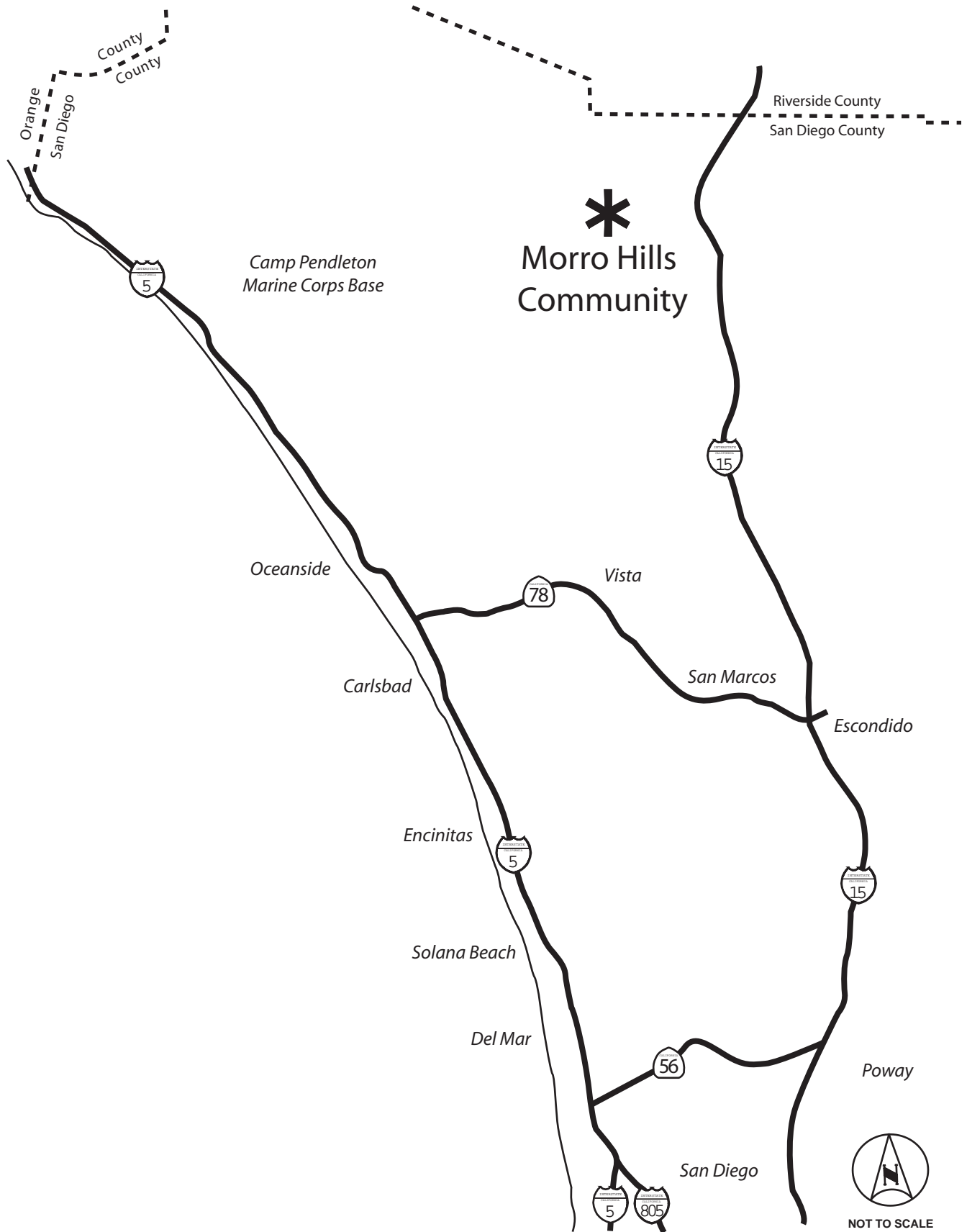
The Morro Hills Community Service District has been working closely with the County of San Diego and the California Highway Patrol to be able to receive traffic enforcement along the main roadway segments within their community. As a first step, the community was asked to prepare a traffic study that would document the prevailing speeds within the community as well as roadway conditions that would impact the determination of the correct speed limit to be posted within the Community.

In an effort to help the community meet its requirements, Kimley-Horn and Associates (KHA) has prepared this engineering and traffic speed survey study to determine the appropriate speed limit that should be enforced at various locations within the community. This letter report summarizes our findings and recommendations. **Figure 1** depicts the Morro Hills Community Service District location in a regional context. **Figure 2** shows a map of the Morro Hills community identifying the roadways segments included in the study.

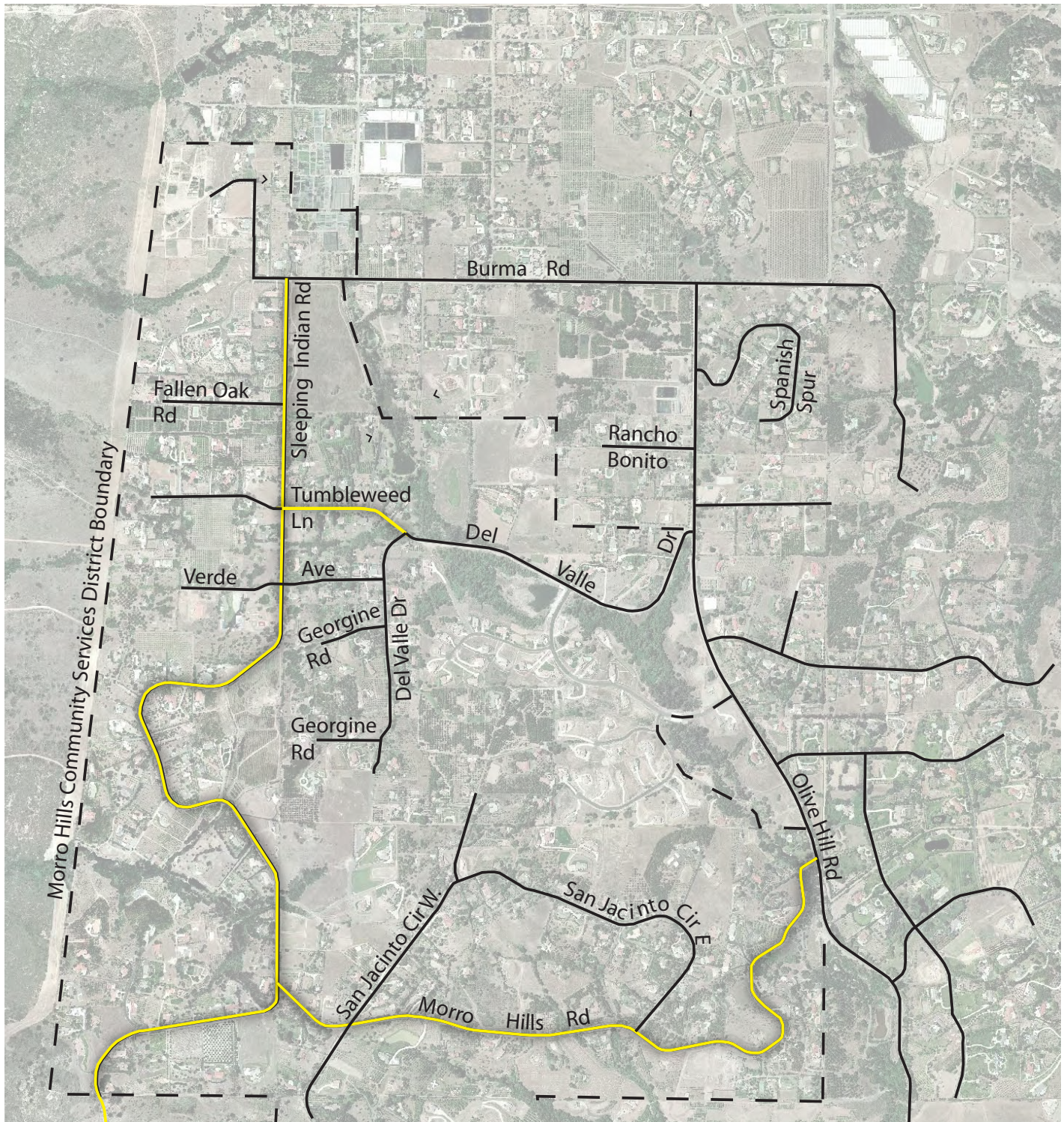
### **Purpose and Methodology of Speed Zone Establishment**

Engineering and traffic surveys for speed limits are regularly conducted once every five (5) years by governing municipalities for the purpose of complying with Section 40802(a) of the California Vehicle Code (CVC) and the California Manual on Uniform Traffic Control Devices for Streets and Highways as amended for use in California, September 2006. Engineering and traffic surveys may be conducted every seven (7) years if criteria is met, or every ten (10) years if a registered engineer evaluates the section of the highway and determines that no significant changes in roadway or traffic conditions have occurred as specified in Section 40802c of the California Vehicle Code (CVC).

# Morro Hills Community Service District Speed Study







Studied Roadway Segment



NOT TO SCALE





The law requires that speed surveys must be performed with the use of radar or other electronic devices at locations where speed limits are to be enforced. The current survey must be completed within five years as specified in Section 40802a; seven years as specified in Section 40802c, or ten years as specified in Section 40802c, of the date of the preceding survey.

Speed zones are primarily established to protect the general public from the unreasonable behavior of reckless, unreliable, or otherwise dangerous drivers. Speed limits are generally established at or near the 85th percentile speed, which is defined as the speed at or below which 85 percent of traffic is moving. Speed limits established on this basis conform to the consensus of those who drive on the highways as to what speed is reasonable and safe, and are not dependent on the judgment of one or a few individuals.

The Engineering and Traffic Survey, as defined in Section 627 of the CVC, shall include the prevailing speeds, collision records, residential density, pedestrian and bicycle activity, and roadway traffic and roadside conditions not readily apparent to the driver. For this reason, a field review of related road/traffic variables is conducted which is considered in combination with the statistical data and collision history of a particular roadway segment to determine a safe and reasonable speed limit. The specific procedures used in the conduct of the Engineering and Traffic Study are outlined in the California Manual on Uniform Traffic Control Devices for Streets and Highways as amended for use in California, September 2006.

### **Field Review of Existing Conditions**

KHA conducted a field review of the site to document the nature of the existing conditions. Examples of the field data collected for the purposes of analyzing related roadway characteristics as they pertain to the determination of appropriate speed limits are listed below:

- Segment length, width and alignment;
- Level of pedestrian and bicycle activity;
- Traffic flow characteristics;
- Number of lanes and other channelization/stripping factors;
- Frequency of intersections, driveways and on-street parking;
- Locations of stop signs, traffic signals, and other regulatory traffic control devices;
- Roadway condition, bumps and dips;
- Obstructions to driver/pedestrian visibility;
- Land use and proximity of schools;
- Uniformity with existing speed zones in adjacent jurisdictions; and,
- Any other unusual conditions or hazards not readily apparent to the driver.



The following is a description of the major circulation facilities within the community included in this study:

**Sleeping Indian Road:** This roadway segment extends between Burma Road and City of Oceanside city limits, and is approximately 6,900 feet in length running primarily in the north/south direction. Within the community, Sleeping Indian Road is characterized for having multiple horizontal and vertical curves. The pavement width along Sleeping Indian Road is 24 feet. There is a single 12 foot travel lane in each direction, and provides no improved shoulder or sidewalk. The current posted speed limit is 35 miles per hour. Warning signing for approaching curves and speed reductions are posted through the roadway segment. There are approximately 1,200 vehicles traveling along this roadway on an average day. This segment of Sleeping Indian Road has a total of 59 entrances (22 on the east side and 29 on the west side). Although the land use on both sides of the roadway is estate residential, the roadway segment does not meet the minimum requirement to be considered a residential district with a prima facie speed of 25 miles per hour due to the low density of driveway entrances. No major pedestrian or bicycle activity was observed along the roadway segment.

**Photo 1, Sleeping Indian Road south of Burma Road**





**Morro Hills Road:** The segment is approximately 5,950 feet in length between Olive Hill Road and Sleeping Indian Road extending in the east/west direction. Morro Hills Road is characterized for having multiple vertical and horizontal curves. The pavement width along Morro Hills Road is 24 feet. There is a single 12 foot travel lane in each direction, and provides no improved shoulder or sidewalk. The current posted speed limit along Morro Hills Road is 30 miles per hour. Warning signing for approaching curves and speed reductions are posted through the segment. There are approximately 450 vehicles traveling along this segment on an average weekday. This segment of Morro Hills Road has a total of 39 entrances (20 on the north side and 19 on the south side). Although the land use at both sides of the roadway is estate residential, the roadway segment does not meet the minimum requirement to be considered a residential district with a prima facie speed of 25 miles per hour due to the low density of driveway entrances. No major pedestrian or bicycle activity was observed along the roadway segment.

**Photo 2, Morro Hills Road between San Jacinto Circle (E) and Olive Hill Road**





**Photo 3. Morro Hills Road between San Jacinto Circle (E) and Sleeping Indian Road**



**Tumbleweed Lane:** The segment is approximately 1,000 feet in length extending in the east/west direction between Del Valle Drive and Sleeping Indian Road. There is a single 12 foot travel lane in each direction, and provides no improved shoulder or sidewalk. There is a posted speed limit of 25 miles per hour in both directions. This segment of Tumbleweed Lane has a total of 12 entrances (6 on the north side and 6 on the south side). Although the land use at both sides of the roadway is estate residential, the roadway segment does not meet the minimum requirement to be considered a residential district with a prima facie speed of 25 miles per hour due to the low density of driveway entrances. No major pedestrian or bicycle activity was observed along the roadway segment.





**Photo 4, Tumbleweed Lane**

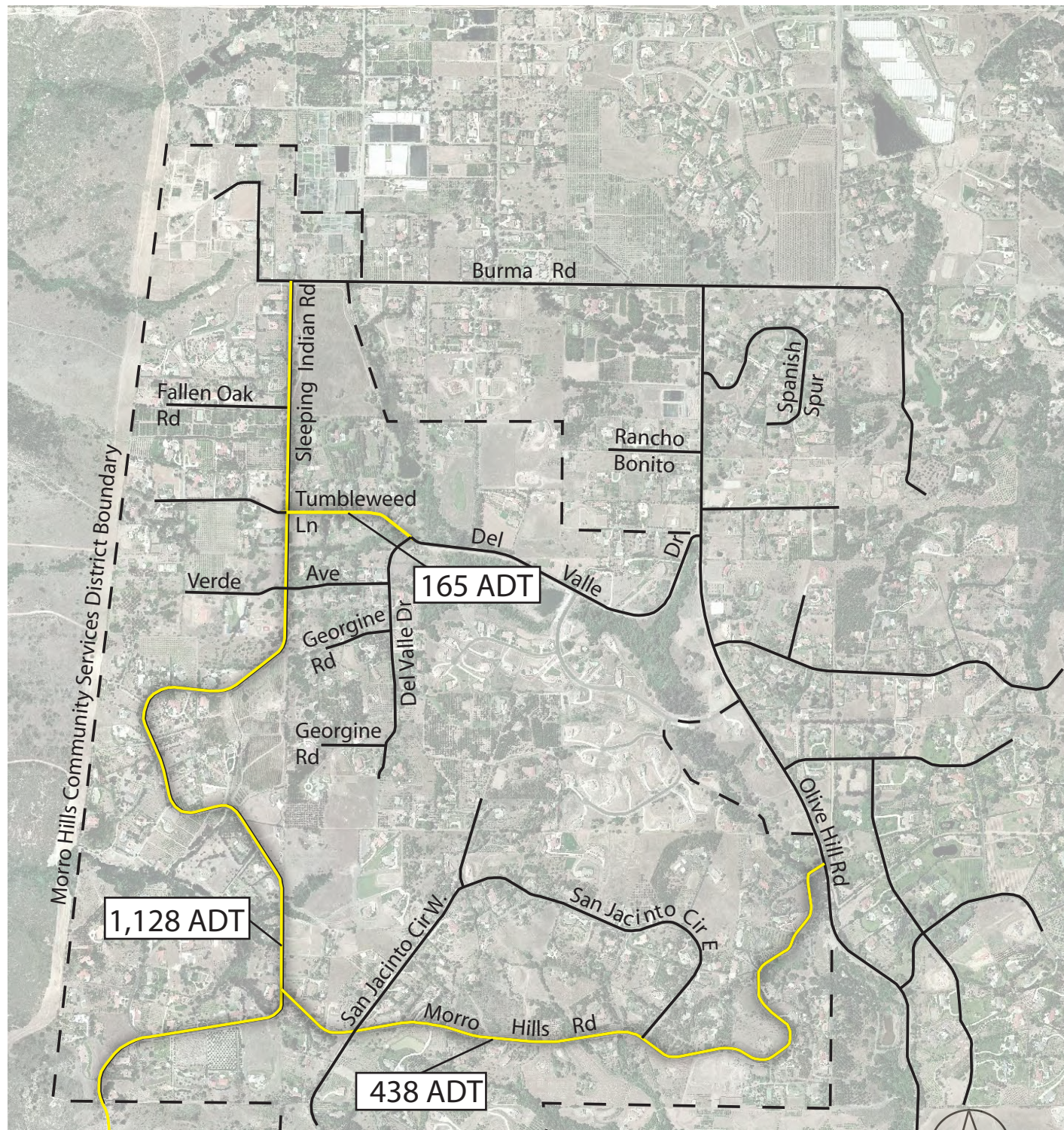


Traffic volume counts were collected by National Data Services along all three roadway segments and measured on April 24, 2008. **Figure 3** show the approximate location of the traffic counts and the daily traffic counts results. A copy of the traffic counts data can be found in the appendix.

Along Sleeping Indian Road, the traffic volume data was collected at the mid-segment between Morro Hills Road and Lower Springs Road. The data collected indicated that 1,128 vehicles travel along Sleeping Indian Road on a typical weekday. The data also indicated that approximately 44 percent of the total vehicular trips occur during the typical commuter peak-hours periods. For Sleeping Indian Road the morning peak-hours occur between 6:15 to 8:15 while the afternoon peak-hours occur between 3:45 to 5:45. During the morning peak-hour, the majority of the traffic travels in the southbound direction while in the afternoon peak-hour, the majority of the traffic travels in the northbound direction.

Along Morro Hills Road, the traffic volume data was collected at the mid-segment between San Jacinto Circle East and San Jacinto Circle West. The data collected indicated that approximately 438 vehicles travel along Morro Hills Road on a typical weekday. The data also indicated that approximately 30 percent of the total vehicular trips occur during the typical commuter peak-hour periods. For Morro Hills Road the morning peak-hours occur between 6:00 to 8:00 while the afternoon peak-hours occur between 4:00 to 6:00. During both





ADT= Average Daily Trips







peak-hour periods, the direction of traffic flow is evenly distributed between the eastbound and westbound direction.

Along Tumbleweed Lane, the traffic volume data was collected at the mid-segment between Sleeping Indian Road and Del Valle Drive. The data collected indicated that approximately 165 vehicles travel along Tumbleweed Lane on a typical weekday. The data also indicated that approximately 25 percent of the total vehicular trips occur during the typical commuter peak-hour periods. For Tumbleweed Lane the morning peak-hours occur between 6:00 to 8:00 while the afternoon peak-hours occur between 4:00 to 6:00. During both peak-hour periods, the direction of traffic flow is evenly distributed between the eastbound and westbound direction.

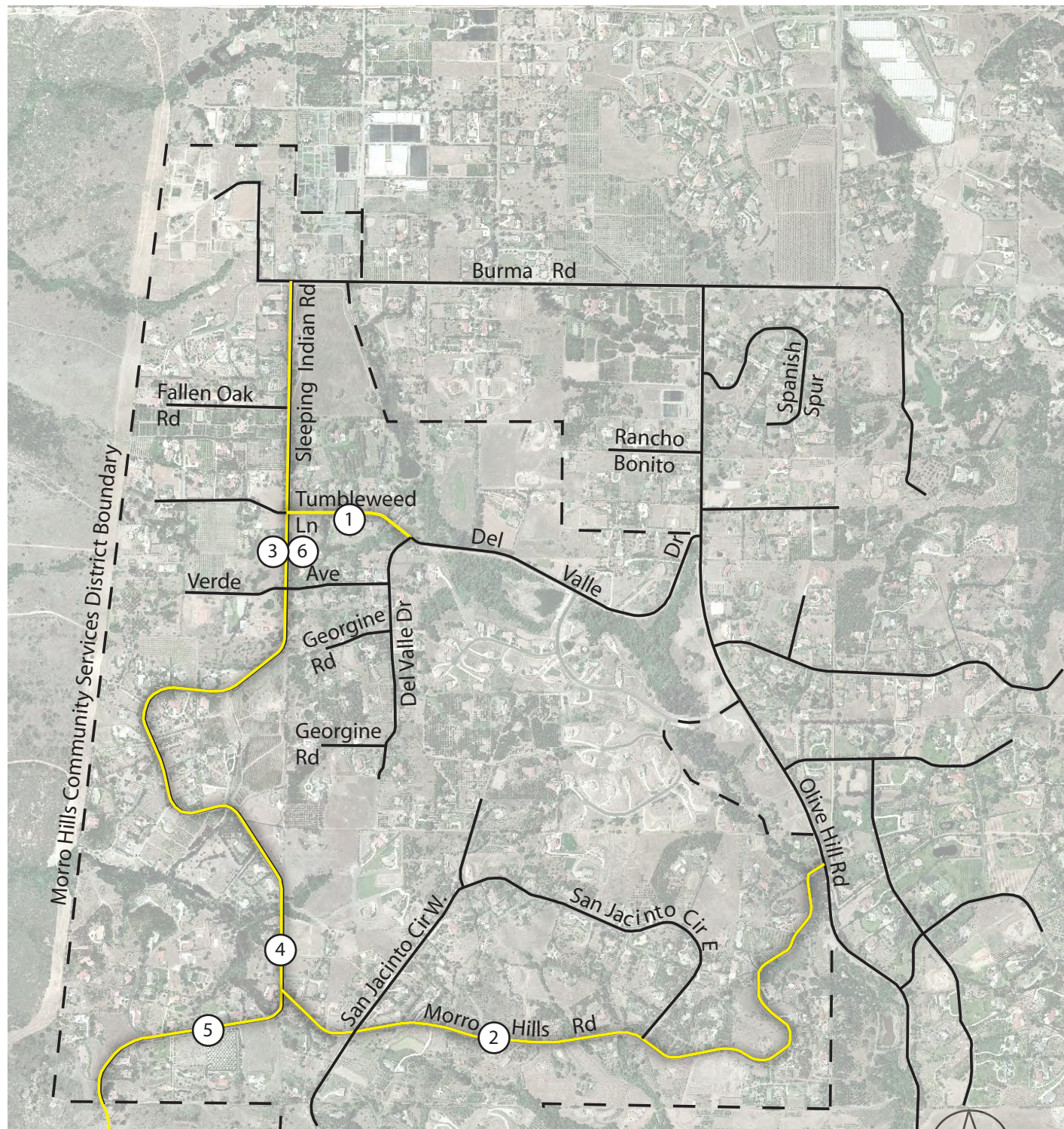
### **Speed Survey Data**

In addition to the vehicular volume data collection, speed radar and machine speed surveys along the major roadway were conducted by National Data Services. The speed machine data were collected along Tumbleweed Lane and Morro Hills Road on April 24, 2008 and June 25, 2008, respectively. A speed radar survey was conducted along Sleeping Indian Road just south of Tumbleweed Lane on August 5, 2008. In addition, 24-hour machine speed data were collected along three different segments of Sleeping Indian Road between June 26, 2008 and July 15, 2008. **Figure 4** shows the approximate location and type of the speed data collection.

The significant factors used to analyze the collected speeds data for the purpose of establishing the appropriate speed limit are summarized below:

1. The critical speed, or 85th percentile speed, is defined as that speed at or below which 85 percent of the traffic is moving. This factor is the primary guide in determining what speeds the majority of safe and reasonable drivers are traveling. Therefore, the practice is to set the speed limit to the nearest 5 mph increment from the Critical Speed unless other factors require a lower limit. Speed limits set on this basis provide law enforcement officials with a means of controlling reckless or unreliable drivers who will not conform to what the majority finds reasonable.





- |   |  |
|---|--|
| ① 24-hour machine data (April 24, 2008) | ④ 24-hour machine data (July 15, 2008) |
| ② 24-hour machine data (June 25, 2008)  | ⑤ 24-hour machine data (July 15, 2008) |
| ③ 24-hour machine data (June 26, 2008)  | ⑥ Speed Radar Survey (August 5, 2008)  |







2. The median speed, or 50th percentile speed, represents the mid-point value within the range of recorded speeds for a particular roadway location. In other words, 50 percent of the vehicles travel faster than and 50 percent travel slower than the median speed. This value is another measure of the central tendency of the vehicle speed distribution.
3. The 10 mph pace is the 10 mph increment range, which contains the largest number of recorded vehicles. The pace is a measure of the dispersion of speeds within the sample surveyed. Speed limits should normally be set to fall within the 10 mph pace. However, conditions not readily apparent to the driver or adhering to State mandated limits such as in Residence Districts may require setting speed limits below the 10 mph pace.

**Table 2** shows the summary of the speeds data collected along all roadway segments included in this study. A copy of the speed data survey reports can be found in the appendix.

**Table 2: Summary of Speed Data**

Roadway Segment	85 <sup>th</sup> Percentile Speed	50 <sup>th</sup> Percentile Speed	10 mph pace
Sleeping Indian Rd from Burma Rd to Oceanside City Limits	49.0 mph	44.0 mph	42-51 mph
Morro Hills Rd from Sleeping Indian Rd Olive Hills	37.4 mph	30.4 mph	25-34 mph
Tumbleweed Ln from Sleeping Indian Rd to Del Valle Dr	39.0 mph	31.0 mph	25-34 mph

As shown in the table, the 85<sup>th</sup> percentile speeds along Sleeping Indian Road were found to be 49 miles per hour. The higher speeds recorded along Sleeping Indian Road were in the range of 65 to 70 miles per hour. The higher concentration of vehicles traveling over the 85<sup>th</sup> percentile speed occurred during the afternoon peak commuter hour between 5:00 and 6:00 p.m. Half of the vehicles traveling along Sleeping Indian Road travel at 44 mph or lower speeds. The majority of the vehicles travel between 42 mph and 51 mph.

The 85<sup>th</sup> percentile speeds along Morro Hill Road were found to be 37.4 miles per hour. The higher speeds recorded along Morro Hills Road were in the range of 50 to 55 miles per hour. The higher concentration of vehicles traveling over the 85<sup>th</sup> percentile speed occurred during the afternoon peak commuter hour between 5:00



and 6:00 pm. Half of the vehicles traveling along Morro Hills Road travel at 30.4 mph or lower speeds. The majority of the vehicles travel between 25 mph and 34 mph.

Along Tumbleweed Lane, the 85<sup>th</sup> percentile speeds were found to be 39.0 miles per hour. The higher speeds recorded along Tumbleweed Lane were in the range of 45 to 50 miles per hour. Half of the vehicles traveling along Tumbleweed Lane travel at 31.0 mph or lower speeds. The majority of the vehicles travel between 25 mph and 34 mph.

### **Collision History**

Collision history data for the segment of Sleeping Indian Road, Morro Hills Road and Tumbleweed Road were provided by California Highway Patrol for the periods between January 1, 2004 and December 31, 2006. It should be noted that the year 2006 was the last completed year that the information was available. For the purpose of collision rate calculations, only full years can be used.

For Sleeping Indian Road, there were a total of five collisions recorded between the time period listed above. Four out of the five collisions involved vehicles hitting objects and one of the five collisions was a rear end collision between two vehicles. A total of three injuries were recorded without fatalities.

For Morro Hills Road, there were a total of three collisions recorded between the time periods listed above. One of the collisions involved a vehicle hitting an object, one involved a vehicle overturning and one involved two vehicles hitting each other head-on. One injury was recorded and no fatalities.

No collisions were recorded along Tumbleweed Lane.

The current accident rate for each segment was calculated using the following formula:

$$\text{Accident Rate} = (N * 1,000,000) / (ADT * L * D)$$

N: Number of accidents within the study segment in 1 year (higher year)

ADT: Average daily traffic

L: Length of segment in feet

D: Number of days in 1 year (365)

As show in the table below, the collision rate along the roadway segments studied in this report are lower than the county wide collision rates for this type of roadway classification.



**Table 3: Summary of Collision History Data**

<b>Roadway Segment</b>	<b>ADT (1)</b>	<b>Segment Length (feet)</b>	<b>Total Collision (2)</b>	<b>Current Accident Rate (3)</b>	<b>Comparable Collision Rate (4)</b>
Sleeping Indian Rd	1128	6900	4	0.51	1.0
Morro Hills Rd	438	5950	1	0.36	1.0
Tumbleweed Ln	165	1000	0	0	1.0
<b>Note:</b> (1) ADT were collected by National Data Services during April 24, 2008. (2) Provided by the California Highway Patrol and represent the higher number of collisions in 1 year. (3) Calculated by the $(N) * 1,000,000 / (ADT * L * D)$ formula (4) Comparable Collision Rate was calculated based on data from the California Department of Transportation					

### **Summary of Finding and Recommendations**

Based on the collected data and field visits, the following are the findings and recommendations:

- None of the study area roadway segments would meet the minimum residential density to be designated as a residential district with a prima facie speed limit of 25 mph.
- The speed limit along Sleeping Indian Road within the Morro Hills Community Service District should be set to 45 mph. The 5 mph reduction from the 85<sup>th</sup> percentile speeds is due to the roadside conditions not readily apparent to the typical driver (Shoulder conditions, No sidewalk).
- The speed limit along Morro Hills Road within the Community Service District should be set to 30 mph. The 5 mph reduction from the 85<sup>th</sup> percentile speeds is due to the roadside conditions not readily apparent to the typical driver (Shoulder conditions, No sidewalk).
- The 35 mph sign located along the west side of Sleeping Indian Road just south of Burma Road should be removed and replaced with a 45 mph sign. A "Radar Enforced" sign could be added to the 45 MPH sign.
- The 35 mph sign located along the north side of Sleeping Indian Road just west of Conejo Road should be removed and replace with a 45 mph sign. A "Radar Enforced" sign could be added to the 45 mph sign.





- A 45 mph sign should be installed along the east side of Sleeping Indian Road just north of Morro Hills Road. The sign should face the northbound direction of traffic. A “Radar Enforced” sign could be added to the new 45 mph sign.
- A 45 mph sign should be installed along the west side of Sleeping Indian Road just south of Tumbleweed Lane. The sign should face the southbound direction of traffic. A “Radar Enforced” sign could be added to the new 45 mph sign.
- A 45 mph sign should be installed along the east side of Sleeping Indian Road just north of Tumbleweed Lane. The sign should face the northbound direction of traffic. A “Radar Enforced” sign could be added to the new 45 mph sign.
- All other speed limit, curb warning and speed reduction signs should remain as existing conditions.

**Table 4** provides a comparison of the existing speed limits to the recommended speed limits. **Figure 4** illustrates the recommended speed limits within the community and the recommended signing locations.

**Table 4: Comparison of Speed Limits**

Roadway Segment	Existing Speed Limit	Recommended Speed Limit	Difference
Sleeping Indian Rd from Burma Road to Oceanside City Limits	35 mph	45 mph	+ 10 mph
Morro Hills Rd from Sleeping Indian Rd to San Jacinto Cir (E)	30 mph	30 mph	0 mph



We appreciate the opportunity of providing this service to your community.  
Should you have any questions, please contact me.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.

A handwritten signature in black ink, appearing to read "Leo Espelet", written over a horizontal line.

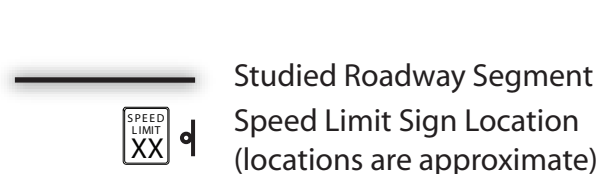
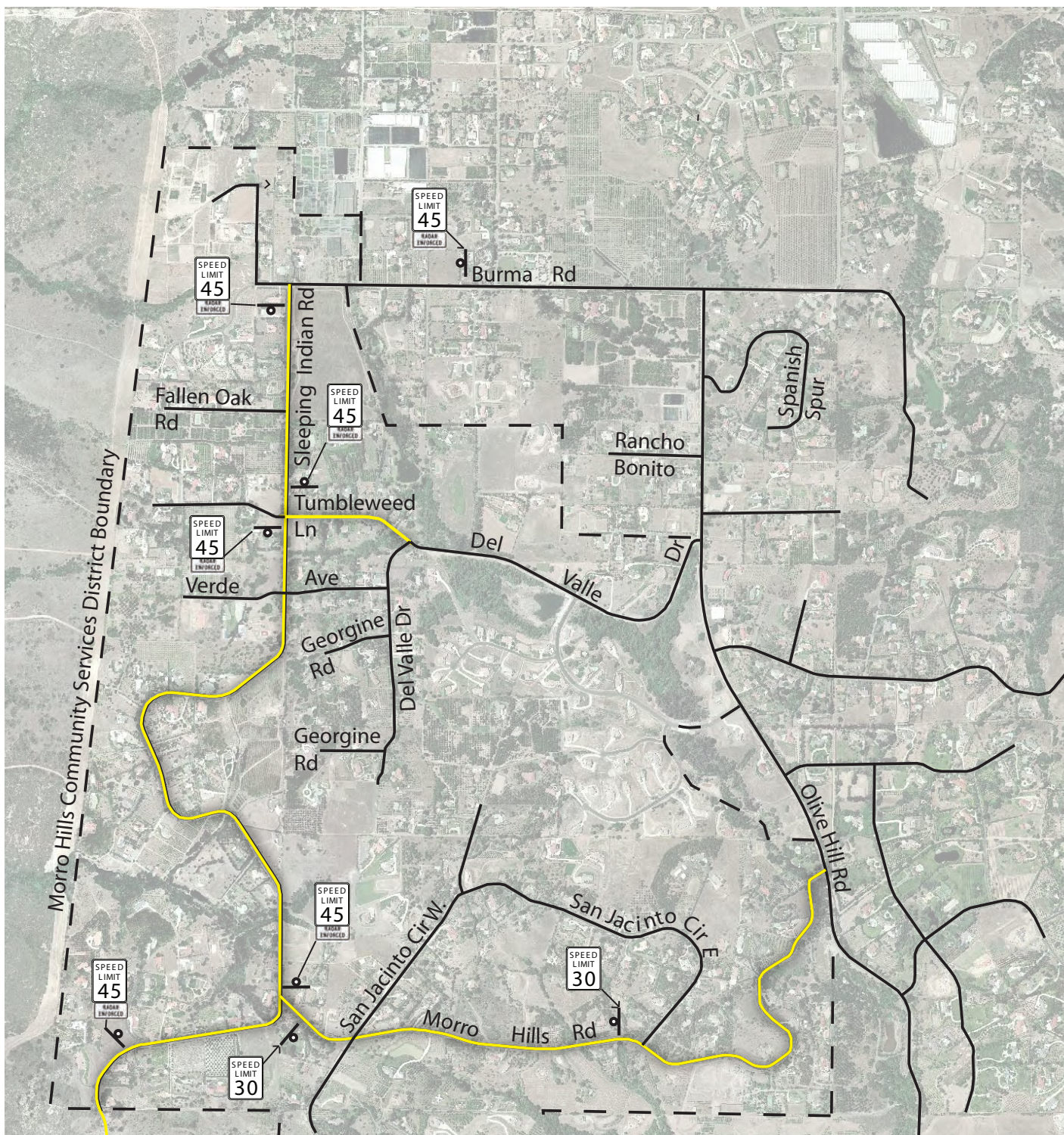
Leo Espelet, P.E.  
Project Manager

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Attachment:

- Engineering and Traffic Survey Sheets
- Existing ADT Traffic Counts
- Speed Data Surveys
- Speed pattern charts
- Collision History
- County wide Collision Rate







## APPENDICES

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## ENGINEERING AND TRAFFIC SURVEY

Prepared in accordance with 627 CVC by methods determined by the California Manual on Uniform Traffic Control Devices for Streets and Highways as amended for use in California (September 2006) Short Method

Location: \_\_\_\_\_ Direction: \_\_\_\_\_

Limit 1 \_\_\_\_\_ Limit 2 \_\_\_\_\_

Street Width: \_\_\_\_\_ Segment Length: \_\_\_\_\_ Classification: \_\_\_\_\_

Surrounding Land Use: \_\_\_\_\_

### SURVEY DATA

Date of Survey \_\_\_\_\_ 85<sup>th</sup> Percentile Speed \_\_\_\_\_ Mean Speed \_\_\_\_\_

Average Daily Traffic Volume \_\_\_\_\_

### ACCIDENT HISTORY

Number of reported collisions during most recent two years \_\_\_\_\_

Functional Classification \_\_\_\_\_

Average Accident Rate based on functional classification \_\_\_\_\_

Accident Rate for this segment \_\_\_\_\_

### HIGHWAY, TRAFFIC, and ROADSIDE CONDITIONS NOT READILY APPARENT

\_\_\_\_\_ Commercial Driveway Characteristics

\_\_\_\_\_ Safe Stopping Sight Distance

\_\_\_\_\_ Shoulder Conditions

\_\_\_\_\_ Superelevation

\_\_\_\_\_ Pedestrian and Bicyclist Safety

\_\_\_\_\_ Roadway Design Speed

\_\_\_\_\_ Intersection Spacing/Offset

\_\_\_\_\_ No Sidewalks

\_\_\_\_\_ Profile Conditions

\_\_\_\_\_ Accident History

### RESIDENTIAL DENSITY

Meets residential density conditions per Section 627 CVC Y (N)

### CONDITIONS USED TO ESTABLISH POSTED SPEED LIMIT

85<sup>TH</sup> PERCENTILE SPEED

Nearest 5 MPH increment of the 85<sup>th</sup> Percentile

\_\_\_\_\_ MPH

Further 5 MPH speed reduction is based upon:

\_\_\_\_\_ MPH

(A) Accident History

(B) Conditions Not Readily Apparent

(C) Residential Density

Y (N)  
Y (N)  
Y (N)

SPEED LIMIT TO BE POSTED TO BE RADAR ENFORCEABLE \_\_\_\_\_ MPH

## ENGINEERING AND TRAFFIC SURVEY

Prepared in accordance with 627 CVC by methods determined by the California Manual on Uniform Traffic Control Devices for Streets and Highways as amended for use in California (September 2006) Short Method

Location: Morro Hills Rd Direction: Eastbound/Westbound

Limit 1 Sleeping Indian Rd Limit 2 Olive Hills Rd

Street Width: 24' Segment Length: 5950' Classification: Rural Collector  
Surrounding Land Use: Estate Residential

### SURVEY DATA

Date of Survey 6-25-2008 85<sup>th</sup> Percentile Speed 37.4 mph Mean Speed 30.4 mph  
Average Daily Traffic Volume \_\_\_\_\_

### ACCIDENT HISTORY

Number of reported collisions during most recent two years 1  
Functional Classification Collector  
Average Accident Rate based on functional classification 1.0  
Accident Rate for this segment 0.36

### HIGHWAY, TRAFFIC, and ROADSIDE CONDITIONS NOT READILY APPARENT

<input type="checkbox"/> Commercial Driveway Characteristics	<input type="checkbox"/> Roadway Design Speed
<input type="checkbox"/> Safe Stopping Sight Distance	<input type="checkbox"/> Intersection Spacing/Offset
<input checked="" type="checkbox"/> Shoulder Conditions	<input checked="" type="checkbox"/> No Sidewalks
<input type="checkbox"/> Superelevation	<input type="checkbox"/> Profile Conditions
<input type="checkbox"/> Pedestrian and Bicyclist Safety	<input type="checkbox"/> Accident History

### RESIDENTIAL DENSITY

Meets residential density conditions per Section 627 CVC Y (N)

### CONDITIONS USED TO ESTABLISH POSTED SPEED LIMIT

85<sup>TH</sup> PERCENTILE SPEED 37.4 MPH  
Nearest 5 MPH increment of the 85<sup>th</sup> Percentile 35.0 MPH  
Further 5 MPH speed reduction is based upon:

- (A) Accident History  
(B) Conditions Not Readily Apparent  
(C) Residential Density

Y	(N)
(Y)	(N)
Y	(N)

SPEED LIMIT TO BE POSTED TO BE RADAR ENFORCEABLE 30 MPH

Volumes for: Thursday, April 24, 2008

City: Fallbrook

Project #: 08-4116-001

Location: Sleeping Indian Rd btwn Morro Hills Rd & Lower Springs Rd

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB
00:00	0	0			12:00	3	7		
00:15	1	0			12:15	6	3		
00:30	1	0			12:30	6	7		
00:45	0	2	1	1	12:45	8	23	9	26
01:00	0	0			13:00	6	5		
01:15	0	0			13:15	5	5		
01:30	0	0			13:30	2	4		
01:45	0	0	0	0	13:45	4	17	8	22
02:00	1	0			14:00	10	4		
02:15	0	0			14:15	11	5		
02:30	0	0			14:30	7	10		
02:45	1	2	0	0	14:45	12	40	5	24
03:00	0	0			15:00	10	11		
03:15	1	2			15:15	12	11		
03:30	0	2			15:30	16	3		
03:45	0	1	0	4	15:45	28	66	6	31
04:00	0	3			16:00	23	2		
04:15	0	0			16:15	19	8		
04:30	0	0			16:30	28	10		
04:45	0	0	2	5	16:45	22	92	6	26
05:00	1	1			17:00	23	14		
05:15	1	2			17:15	25	12		
05:30	7	4			17:30	24	18		
05:45	3	12	8	15	17:45	22	94	7	51
06:00	2	9			18:00	20	4		
06:15	5	24			18:15	10	5		
06:30	19	22			18:30	14	3		
06:45	11	37	25	80	18:45	12	56	5	17
07:00	8	21			19:00	9	3		
07:15	9	21			19:15	8	1		
07:30	4	25			19:30	3	3		
07:45	6	27	21	88	19:45	6	26	3	10
08:00	3	13			20:00	4	6		
08:15	4	12			20:15	2	3		
08:30	0	12			20:30	2	5		
08:45	11	18	3	40	20:45	4	12	2	16
09:00	0	7			21:00	5	3		
09:15	5	2			21:15	4	0		
09:30	2	9			21:30	1	6		
09:45	8	15	3	21	21:45	4	14	0	9
10:00	2	5			22:00	0	0		
10:15	6	7			22:15	1	0		
10:30	2	4			22:30	1	1		
10:45	6	16	6	22	22:45	0	2	0	1
11:00	2	8			23:00	0	0		
11:15	7	0			23:15	2	0		
11:30	6	6			23:30	2	0		
11:45	10	25	3	17	23:45	0	4	1	1

Total Vol.	155	293		448		446	234		680
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Daily Totals					
NB	SB	EB	WB	Combined	
601	527			1128	

AM

PM

Split %	34.6%	65.4%	39.7%	65.6%	34.4%	60.3%
Peak Hour	06:30	06:15	06:30	15:45	17:00	17:00
Volume	47	92	136	98	51	145
P.H.F.	0.62	0.92	0.83	0.79	0.71	0.86



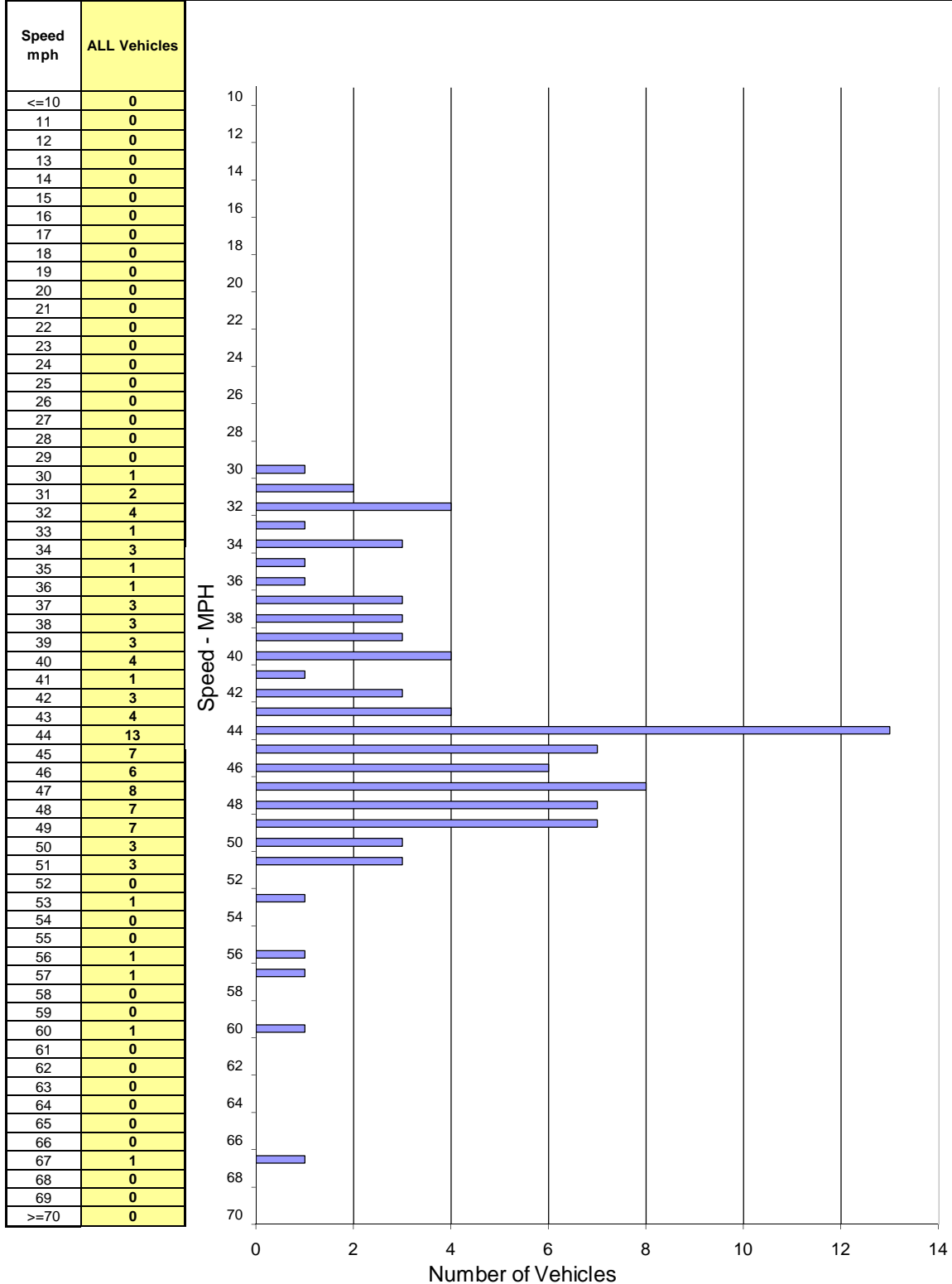
# Spot Speed Study

Prepared by: National Data & Surveying Services

## City of Fallbrook

Survey Time: 9:46am to 11:46pm  
 DATE: 8/5/2008 Location: Sleeping Indian Rd, 250' s/o Tumbleweed Ln  
 DAY: Tuesday Posted Speed: None Project #: 08-4206-001

### 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	93	11 - 69	44 mph	49 mph	42 - 51	61	66%	29% / 27	6% / 5

Volumes for: Thursday, April 24, 2008

City: Fallbrook

Project #: 08-4116-002

Location: Morro Hills Rd btwn San Jacinto Circle ( East ) & (West)

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB
00:00			0	0	12:00			4	4
00:15			0	0	12:15			1	1
00:30			0	0	12:30			1	4
00:45			0	0 0 0	12:45			7 13	6 15 28
01:00			0	0	13:00			5	3
01:15			0	0	13:15			1	1
01:30			0	1	13:30			3	7
01:45			0	0 0 1 1	13:45			5 14	3 14 28
02:00			0	0	14:00			5	6
02:15			0	0	14:15			5	5
02:30			0	0	14:30			1	2
02:45			0	0 0 0	14:45			8 19	5 18 37
03:00			0	0	15:00			5	5
03:15			1	1	15:15			4	3
03:30			1	0	15:30			8	6
03:45			0	2 0 1 3	15:45			2 19	3 17 36
04:00			0	0	16:00			2	6
04:15			0	0	16:15			2	2
04:30			1	0	16:30			3	3
04:45			0	1 0 0 1	16:45			4 11	5 16 27
05:00			1	1	17:00			8	2
05:15			0	0	17:15			4	6
05:30			1	0	17:30			5	6
05:45			2	4 0 1 5	17:45			2 19	2 16 35
06:00			3	0	18:00			4	3
06:15			1	2	18:15			4	5
06:30			1	2	18:30			2	2
06:45			2	7 4 8 15	18:45			4 14	2 12 26
07:00			6	4	19:00			1	2
07:15			8	6	19:15			3	2
07:30			3	1	19:30			1	2
07:45			6	23 4 15 38	19:45			2 7	0 6 13
08:00			4	5	20:00			1	1
08:15			4	1	20:15			0	3
08:30			4	0	20:30			2	0
08:45			3	15 11 17 32	20:45			2 5	2 6 11
09:00			5	3	21:00			1	1
09:15			3	0	21:15			1	1
09:30			11	0	21:30			1	0
09:45			5	24 8 11 35	21:45			1 4	2 4 8
10:00			3	1	22:00			1	3
10:15			5	5	22:15			1	1
10:30			4	4	22:30			0	1
10:45			6	18 3 13 31	22:45			0 2	1 6 8
11:00			2	3	23:00			0	0
11:15			0	2	23:15			0	0
11:30			6	2	23:30			0	0
11:45			3	11 1 8 19	23:45			1 1	0 0 1

Total Vol.	105	75	180	128	130	258
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NB	SB	Daily Totals	EB	WB	Combined
		233	205	438	

	AM	PM
Split %	58.3% 41.7% 41.1%	49.6% 50.4% 58.9%
Peak Hour	09:00 09:45 07:00	14:45 13:30 14:45
Volume	24 18 38	25 21 44
P.H.F.	0.55 0.56 0.68	0.78 0.75 0.79

# Daily Speed Report

Prepared by: National Data & Surveying Services

City of Fallbrook

Project #: 08-4163-001n

Date: 6/26/08 THURSDAY

Location: Sleeping Indian Rd S/o Tumbleweed Ln

## North Bound

	5	15	20	25	30	35	40	45	50	55	60	65	70	
Time	14	19	24	29	34	39	44	49	54	59	64	69	74+	Total
00:00 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	2	1	1	1	0	1	0	1	0	0	7
05:00	0	0	0	0	0	0	1	6	2	0	1	2	0	12
06:00	0	0	2	2	5	4	16	23	17	1	1	1	0	72
07:00	0	1	2	1	5	2	13	25	11	3	1	1	0	65
08:00	0	0	0	2	4	7	9	14	6	2	0	0	0	44
09:00	0	0	1	6	2	3	6	9	2	0	0	0	0	29
10:00	1	1	1	2	3	3	9	5	1	0	0	0	0	26
11:00	0	0	2	2	1	10	6	10	1	1	0	0	0	33
12:00 PM	0	0	0	1	1	1	2	7	5	1	0	2	0	20
13:00	0	0	1	8	2	6	2	4	3	2	0	0	0	28
14:00	0	1	2	1	3	3	9	3	3	2	0	0	0	27
15:00	0	0	0	2	1	3	5	11	6	2	1	0	0	31
16:00	0	0	0	1	1	1	4	16	4	2	1	0	0	30
17:00	0	0	1	0	2	6	6	18	10	4	0	1	0	48
18:00	0	1	0	1	3	4	5	9	3	0	0	0	1	27
19:00	0	0	1	0	1	3	1	10	2	0	1	0	0	19
20:00	0	0	1	0	1	3	2	2	0	0	0	0	0	9
21:00	0	0	0	1	0	0	2	1	0	0	0	0	1	5
22:00	0	0	0	0	0	1	2	0	0	0	0	0	0	3
23:00	0	0	0	0	0	0	1	1	1	0	0	0	0	3
Totals	1	4	14	32	36	61	102	174	79	21	7	7	2	540
% of Totals	0%	1%	3%	6%	7%	11%	19%	32%	15%	4%	1%	1%	0%	100%
% AM	0%	0%	1%	3%	4%	6%	11%	17%	8%	1%	1%	1%		54%
AM Peak Hour	10:00	07:00	06:00	09:00	06:00	11:00	06:00	07:00	06:00	07:00	04:00	05:00		06:00
Volume	1	1	2	6	5	10	16	25	17	3	1	2		72
% PM		0%	1%	3%	3%	6%	8%	15%	7%	2%	1%	1%	0%	46%
PM Peak Hour		14:00	14:00	13:00	14:00	13:00	14:00	17:00	17:00	17:00	15:00	12:00	18:00	17:00
Volume		1	2	8	3	6	9	18	10	4	1	2	1	48

Average Speed	50th Percentile	85th Percentile
44.0	46	52



# Daily Speed Report

Prepared by: National Data & Surveying Services

City of Fallbrook

Project #: 08-4163-001s

Date: 6/26/08 THURSDAY

Location: Sleeping Indian Rd S/o Tumbleweed Ln

## South Bound

	5	15	20	25	30	35	40	45	50	55	60	65	70	
Time	14	19	24	29	34	39	44	49	54	59	64	69	74+	Total
00:00 AM	0	0	0	0	0	0	1	1	)	0	0	0	0	2
01:00	0	0	0	0	0	0	1	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	1	0	0	1	2
03:00	0	0	0	0	0	0	1	0	0	1	0	0	0	2
04:00	0	0	0	0	0	0	0	0	1	1	0	0	0	2
05:00	0	0	0	0	0	2	2	2	1	2	0	0	0	9
06:00	0	0	1	2	4	7	7	6	3	4	0	0	0	34
07:00	0	1	0	2	3	4	4	6	2	3	0	0	0	25
08:00	0	0	0	2	0	5	5	5	4	0	0	0	0	21
09:00	0	1	0	1	3	10	3	4	3	0	0	0	0	25
10:00	0	1	1	2	3	3	3	6	1	1	0	0	0	21
11:00	0	1	3	1	6	12	7	4	2	1	0	1	0	38
12:00 PM	1	1	2	4	3	7	4	1	2	0	0	0	0	25
13:00	0	0	0	4	2	8	7	3	3	0	0	0	0	27
14:00	0	0	0	1	1	4	8	6	6	1	0	0	0	27
15:00	0	0	0	1	3	12	17	14	5	1	0	0	1	54
16:00	0	0	1	1	8	12	23	19	1	2	0	0	0	67
17:00	0	0	0	3	7	17	23	27	9	5	0	0	0	91
18:00	0	0	0	3	7	13	17	9	7	1	0	1	0	58
19:00	2	0	1	3	5	6	8	3	1	0	1	0	0	30
20:00	0	0	1	0	3	4	1	5	0	0	0	0	0	14
21:00	0	0	0	0	2	2	1	2	0	1	1	0	0	9
22:00	0	0	0	0	2	2	0	3	2	1	0	0	0	10
23:00	0	0	0	0	1	2	0	2	1	0	0	0	0	6
Totals	3	5	10	30	63	132	143	128	54	26	2	2	2	600
% of Totals	1%	1%	2%	5%	11%	22%	24%	21%	9%	4%	0%	0%	0%	100%
% AM		1%	1%	2%	3%	7%	6%	6%	3%	2%		0%	0%	30%
AM Peak Hour		07:00	11:00	06:00	11:00	11:00	06:00	06:00	08:00	06:00		11:00	02:00	11:00
Volume		1	3	2	6	12	7	6	4	4		1	1	38
% PM	1%	0%	1%	3%	7%	15%	18%	16%	6%	2%	0%	0%	0%	70%
PM Peak Hour	19:00	12:00	12:00	12:00	16:00	17:00	16:00	17:00	17:00	17:00	19:00	18:00	15:00	17:00
Volume	2	1	2	4	8	17	23	27	9	5	1	1	1	91

Average Speed	50th Percentile	85th Percentile
41.8	42	50

# Daily Speed Report

Prepared by: National Data & Surveying Services

City of Fallbrook

Project #: 08-4163-002n

Date: 7/15/08 TUESDAY

Location: Sleeping Indian Rd N/o Morro Hills Rd

## North Bound

	5	15	20	25	30	35	40	45	50	55	60	65	70	
Time	14	19	24	29	34	39	44	49	54	59	64	69	74+	Total
00:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	1	1	0	0	0	0	0	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	1	0	0	1	2	1	0	0	0	0	0	5
05:00	0	0	0	2	1	8	4	3	1	0	0	0	0	19
06:00	0	0	1	0	8	13	24	18	11	1	0	0	0	76
07:00	0	0	1	3	5	9	19	17	7	0	0	1	0	62
08:00	0	0	0	0	2	13	7	2	7	1	0	0	0	32
09:00	0	0	1	0	0	5	8	4	1	0	0	0	0	19
10:00	0	0	0	3	4	9	7	6	3	1	0	0	0	33
11:00	0	1	0	1	3	5	10	2	0	0	0	0	0	22
12:00 PM	0	0	1	2	0	6	9	2	3	1	0	0	0	24
13:00	0	1	0	0	1	7	10	6	3	0	0	0	0	28
14:00	1	0	0	0	1	10	12	4	1	0	0	0	0	29
15:00	0	0	0	0	1	4	13	6	0	1	0	0	0	25
16:00	0	0	1	0	2	5	13	6	2	1	0	0	0	30
17:00	1	0	0	1	5	9	14	8	4	1	0	0	0	43
18:00	0	1	2	1	3	4	6	5	3	0	0	0	0	25
19:00	0	0	1	0	3	5	8	5	1	0	0	0	0	23
20:00	0	0	0	0	2	3	5	0	1	1	0	0	0	12
21:00	0	0	0	1	5	5	3	0	2	1	0	0	0	17
22:00	0	0	0	0	0	0	1	1	0	1	0	0	0	3
23:00	0	0	0	1	0	0	2	0	0	0	0	0	0	3
Totals	2	3	10	15	47	121	178	97	50	10		1		534
% of Totals	0%	1%	2%	3%	9%	23%	33%	18%	9%	2%		0%		100%
% AM		0%	1%	2%	4%	12%	15%	10%	6%	1%		0%		51%
AM Peak Hour		11:00	03:00	07:00	06:00	06:00	06:00	06:00	06:00	06:00		07:00		06:00
Volume		1	1	3	8	13	24	18	11	1		1		76
% PM	0%	0%	1%	1%	4%	11%	18%	8%	4%	1%				49%
PM Peak Hour	14:00	13:00	18:00	12:00	17:00	14:00	17:00	17:00	17:00	12:00				17:00
Volume	1	1	2	2	5	10	14	8	4	1				43

Average Speed	50th Percentile	85th Percentile
41.6	42	49

# Daily Speed Report

Prepared by: National Data & Surveying Services

City of Fallbrook

Project #: 08-4163-002s

Date: 7/15/08 TUESDAY

Location: Sleeping Indian Rd N/o Morro Hills Rd

## South Bound

	5	15	20	25	30	35	40	45	50	55	60	65	70	
Time	14	19	24	29	34	39	44	49	54	59	64	69	74+	Total
00:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	2	0	0	0	0	0	0	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	1	0	0	0	0	0	0	1
04:00	0	0	0	0	1	0	1	0	0	0	0	0	0	2
05:00	0	0	0	0	0	3	7	2	1	0	0	0	0	13
06:00	0	1	1	2	4	3	9	8	2	0	0	0	0	30
07:00	0	0	0	0	0	3	11	3	4	0	0	0	0	21
08:00	0	1	0	0	1	2	3	5	0	0	0	0	0	12
09:00	0	0	0	1	2	4	4	2	1	0	0	0	0	14
10:00	0	0	0	1	3	5	9	2	0	0	0	0	0	20
11:00	0	0	0	1	4	3	5	5	4	0	1	0	0	23
12:00 PM	0	0	0	1	1	2	10	6	3	0	0	0	0	23
13:00	0	0	0	0	3	2	4	5	2	1	0	0	0	17
14:00	0	0	0	1	1	8	6	6	4	2	0	0	0	28
15:00	0	0	2	0	3	12	19	10	8	1	0	0	0	55
16:00	0	0	2	0	1	13	33	27	14	3	1	0	1	95
17:00	0	1	2	2	1	8	31	31	12	3	0	1	0	92
18:00	0	0	1	2	4	9	17	21	6	4	1	1	0	66
19:00	0	0	0	1	4	3	9	3	3	1	1	0	0	25
20:00	0	0	0	1	2	5	7	10	2	1	0	0	0	28
21:00	0	0	0	2	1	3	7	4	2	0	1	0	0	20
22:00	0	0	0	0	0	1	4	2	0	0	0	0	0	7
23:00	0	0	1	1	1	1	3	1	1	1	0	0	0	10
Totals		3	9	16	37	90	203	153	69	17	5	2	1	605
% of Totals		0%	1%	3%	6%	15%	34%	25%	11%	3%	1%	0%	0%	100%
% AM		0%	0%	1%	2%	4%	9%	4%	2%		0%			23%
AM Peak Hour		06:00	06:00	06:00	06:00	10:00	07:00	06:00	07:00		11:00			06:00
Volume		1	1	2	4	5	11	8	4		1			30
% PM		0%	1%	2%	4%	11%	25%	21%	9%	3%	1%	0%	0%	77%
PM Peak Hour		17:00	15:00	17:00	18:00	16:00	16:00	17:00	16:00	18:00	16:00	17:00	16:00	16:00
Volume		1	2	2	4	13	33	31	14	4	1	1	1	95

Average Speed	50th Percentile	85th Percentile
43.4	44	50



# Daily Speed Report

Prepared by: National Data & Surveying Services

City of Fallbrook

Project #: 08-4163-003w

Date: 7/15/08 TUESDAY

Location: Sleeping Indian Rd bet. Morro Hills Rd & Conejo Rd

## West Bound

	5	15	20	25	30	35	40	45	50	55	60	65	70	
Time	14	19	24	29	34	39	44	49	54	59	64	69	74+	Total
00:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	1	1	0	0	0	0	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	1	0	0	0	0	0	0	0	1
04:00	0	0	0	0	0	1	1	0	0	0	0	0	0	2
05:00	0	0	0	0	0	4	3	6	0	0	0	0	0	13
06:00	1	0	0	0	2	9	8	6	4	1	0	0	0	31
07:00	0	0	0	1	2	6	4	7	1	0	0	0	0	21
08:00	0	0	1	0	1	4	5	4	1	0	0	0	0	16
09:00	0	0	0	9	1	4	4	4	0	0	0	0	0	22
10:00	0	0	0	3	4	12	6	5	0	0	0	0	0	30
11:00	0	0	0	1	2	4	8	7	2	1	1	0	0	26
12:00 PM	0	0	0	2	1	8	9	9	6	0	0	0	0	35
13:00	0	0	1	1	3	6	7	6	2	1	0	0	0	27
14:00	0	1	0	2	3	7	7	8	4	2	0	0	0	34
15:00	0	0	2	3	7	12	27	16	6	0	0	0	0	73
16:00	0	0	0	0	1	16	27	39	16	6	0	0	0	105
17:00	1	0	1	0	4	15	26	33	11	2	2	1	0	96
18:00	1	0	0	2	4	9	18	30	8	3	1	1	0	77
19:00	0	0	0	0	2	6	8	5	4	3	0	0	0	28
20:00	0	0	1	3	3	4	5	9	8	1	0	0	0	34
21:00	0	0	0	0	0	2	5	7	4	2	0	0	0	20
22:00	0	0	0	0	1	0	2	5	0	1	0	0	0	9
23:00	0	0	1	1	0	2	2	3	1	1	0	0	0	11
Totals	3	1	7	28	41	132	183	210	79	24	4	2		714
% of Totals	0%	0%	1%	4%	6%	18%	26%	29%	11%	3%	1%	0%		100%
% AM	0%		0%	2%	2%	6%	6%	6%	1%	0%	0%			23%
AM Peak Hour	06:00		08:00	09:00	10:00	10:00	06:00	07:00	06:00	06:00	11:00			06:00
Volume	1		1	9	4	12	8	7	4	1	1			31
% PM	0%	0%	1%	2%	4%	12%	20%	24%	10%	3%	0%	0%		77%
PM Peak Hour	17:00	14:00	15:00	15:00	15:00	16:00	15:00	16:00	16:00	16:00	17:00	17:00		16:00
Volume	1	1	2	3	7	16	27	39	16	6	2	1		105

Average Speed	50th Percentile	85th Percentile
43.3	44	50

# Daily Speed Report

Prepared by: National Data & Surveying Services

City of Fallbrook

Project #: 08-4163-004e

Date: 6-25-08 WEDNESDAY

Location: Morro Hills Rd bet. San Jacinto Cir W & San Jacinto Cir E

TOTAL														
	5	15	20	25	30	35	40	45	50	55	60	65	70	
Time	14	19	24	29	34	39	44	49	54	59	64	69	74+	Total
00:00 AM	0	0	0	0	0	3	0	0	0	0	0	0	0	3
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	1	1	1	0	0	0	0	0	0	0	0	3
04:00	0	0	0	0	1	1	0	0	0	0	0	0	0	2
05:00	0	2	0	1	2	1	0	0	0	0	0	0	0	6
06:00	0	0	1	3	6	3	0	0	0	0	0	0	0	13
07:00	2	2	1	7	12	3	1	0	0	0	0	0	0	28
08:00	0	0	6	8	5	2	0	1	0	0	0	0	0	22
09:00	1	1	7	6	4	3	1	0	0	0	0	0	0	23
10:00	1	2	2	23	14	3	0	1	0	0	0	0	0	46
11:00	1	0	3	6	14	8	1	0	0	0	0	0	0	33
12:00 PM	0	3	7	2	4	6	2	0	0	0	0	0	0	24
13:00	2	7	4	12	7	4	1	1	0	0	0	0	0	38
14:00	1	3	2	9	13	4	1	0	0	0	0	0	0	33
15:00	0	1	3	11	6	3	0	0	1	0	0	0	0	25
16:00	0	2	13	6	13	6	1	1	0	0	0	0	0	42
17:00	0	1	2	14	12	10	0	1	1	0	0	0	0	41
18:00	0	1	1	7	8	8	1	1	0	0	0	0	0	27
19:00	0	0	0	0	4	6	1	1	0	0	0	0	0	12
20:00	0	1	1	1	1	5	1	2	0	0	0	0	0	12
21:00	0	2	0	5	2	5	2	0	0	0	0	0	0	16
22:00	0	0	1	4	2	2	1	0	0	0	0	0	0	10
23:00	0	0	1	2	1	0	0	0	0	0	0	0	0	4
Totals	8	28	56	128	132	86	14	9	2					463
% of Totals	2%	6%	12%	28%	29%	19%	3%	2%	0%					100%
% AM	1%	2%	5%	12%	13%	6%	1%	0%						39%
AM Peak Hour	07:00	05:00	09:00	10:00	10:00	11:00	07:00	08:00						10:00
Volume	2	2	7	23	14	8	1	1						46
% PM	1%	5%	8%	16%	16%	13%	2%	2%	0%					61%
PM Peak Hour	13:00	13:00	16:00	17:00	14:00	17:00	12:00	20:00	15:00					16:00
Volume	2	7	13	14	13	10	2	2	1					42

Average Speed	50th Percentile	85th Percentile
30.3	30.4	37.4

# Daily Speed Report

Prepared by: National Data & Surveying Services

City of Fallbrook

Project #: 08-4116-003e

Date: 04/24/08 THURSDAY

Location: 624 Tumbleweed Ln

## East Bound

	5	15	20	25	30	35	40	45	50	55	60	65	70	
Time	14	19	24	29	34	39	44	49	54	59	64	69	74+	Total
00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	1	0	0	0	1	0	0	0	0	0	2
05:00	0	0	0	1	1	0	0	0	0	0	0	0	0	2
06:00	0	0	2	3	1	3	0	0	0	0	0	0	0	9
07:00	0	0	1	2	3	3	1	1	0	0	0	0	0	11
08:00	0	0	2	0	4	0	1	0	0	0	0	0	0	7
09:00	4	1	4	0	1	1	1	0	0	0	0	0	0	12
10:00	0	0	0	3	1	2	0	1	0	0	0	0	0	7
11:00	0	0	3	3	2	2	2	0	0	0	0	0	0	12
12:00 PM	0	3	2	5	4	0	0	0	0	0	0	0	0	14
13:00	2	0	2	6	2	4	0	0	0	0	0	0	0	16
14:00	0	2	0	4	4	0	1	0	0	0	0	0	0	11
15:00	0	2	1	1	3	4	2	0	0	0	0	0	0	13
16:00	0	1	1	3	4	1	0	0	0	0	0	0	0	10
17:00	0	0	0	5	4	1	0	0	0	0	0	0	0	10
18:00	0	0	0	3	4	0	3	0	0	0	0	0	0	10
19:00	0	0	0	0	2	1	0	0	0	0	0	0	0	3
20:00	0	0	1	1	2	2	2	0	0	0	0	0	0	8
21:00	0	0	0	1	1	3	2	0	0	0	0	0	0	7
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Totals	6	9	19	42	43	28	15	3						165
% of Totals	4%	5%	12%	25%	26%	17%	9%	2%						100%
% AM	2%	1%	7%	8%	8%	7%	3%	2%						38%
AM Peak Hour	09:00	09:00	09:00	06:00	08:00	06:00	11:00	04:00						09:00
Volume	4	1	4	3	4	3	2	1						12
% PM	1%	5%	4%	18%	18%	10%	6%							62%
PM Peak Hour	13:00	12:00	12:00	13:00	12:00	13:00	18:00							13:00
Volume	2	3	2	6	4	4	3							16

Average Speed	50th Percentile	85th Percentile
30.6	31	39



#800690 1/1/04 - 12/31/06 COLLISIONS OCCURRED ON SLEEPING INDIAN RD BTWN BURMA RD & CONEJO RD, SAN DIEGO COUNTY

[illegible]



Report run on: 5/20/2008  
Total Count: 3

#800690 1/1/04 - 12/31/06 COLLISIONS OCCURRED ON MORRO HILLS RD BTWN OLIVE HILL RD &  
SLEEPING INDIAN RD, SAN DIEGO COUNTY

Case Listing  
Page 1

Primary Rd		MORRO HILLS RD		Distance (ft)	300	Direction	N	Secondary Rd	MORRO HILLS PL		NCIC	9685	State Hwy?	N	Route	Postmile Prefix		11325	Collision Date	20040322	Time	0840	Day	MON	
City		UNINCORP.		County	SAN DIEGO	Population	9	Rpt Dist	Beat 005		Type	3	CalTrans Dist		Badge	012438		Collision Date	20061225	Time	1157	Day	MON		
Primary Collision Factor		OTHER IMPROPR DRV		Violation		Weather1	CLEAR	Weather2		Rdwy Surface	DRY	Lighting	DAYLIGHT	Rdwy Cond1	NO UNSL CND	Severity	INJURY	Rdwy Cond2		Tow Away?	Y	Process Date	20040816		
Hit and Run		Motor Veh Involved With		FIXED OBJ																Spec Cond	0	Ramp/Int			
PARTY INFO																									
Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1	Viol	OAF2	Safety Equip	Role	Ext of Inj	Age	Sex	Seat	Pos	Safety Equip	Ejected	
1F	DRVR	18	M	W	IMP UNK	IMP UNK	RAN OFF	R	N	D	2200	DODGE	1997	-	D	N	-	L	-	1	M	1	L	-	0
Primary Rd		MORRO HILLS RD		Distance (ft)	950	Direction	E	Secondary Rd	OLIVE HILL RD		NCIC	9685	State Hwy?	N	Route	Postmile Prefix		9983	Collision Date	20050305	Time	2330	Day	SAT	
City		UNINCORP.		County	SAN DIEGO	Population	9	Rpt Dist	Beat 005		Type	3	CalTrans Dist		Badge	012438		Collision Date	20061225	Time	1157	Day	MON		
Primary Collision Factor		NOT DRIVER		Violation		Weather1	CLOUDY	Weather2		Rdwy Surface	DRY	Lighting	DARK - NO ST LTS	Severity	PDO	Rdwy Cond1	NO UNSL CND	Rdwy Cond2		Tow Away?	Y	Process Date	20050711		
Hit and Run		Motor Veh Involved With		NON-CLSN																Spec Cond	0	Ramp/Int			
PARTY INFO																									
Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1	Viol	OAF2	Safety Equip	Role	Ext of Inj	Age	Sex	Seat	Pos	Safety Equip	Ejected	
1	DRVR	17	M	W	HNBD	RAN OFF	R	E	A	0100	FORD	2001	-	2	L	-	N	G	-	1	M	1	L	-	0
Primary Rd		MORRO HILLS RD		Distance (ft)	2640	Direction	W	Secondary Rd	OLIVE HILL RD		NCIC	9650	State Hwy?	N	Route	Postmile Prefix		012438	Collision Date	20061225	Time	1157	Day	MON	
City		UNINCORP.		County	SAN DIEGO	Population	9	Rpt Dist	Beat 006		Type	3	CalTrans Dist		Badge	012438		Collision Date	20061225	Time	1157	Day	MON		
Primary Collision Factor		WRONG SIDE		Violation		Weather1	CLEAR	Weather2		Rdwy Surface	DRY	Lighting	DAYLIGHT	Rdwy Cond1	NO UNSL CND	Severity	PDO	Rdwy Cond2		Tow Away?	Y	Process Date	20070407		
Hit and Run		Motor Veh Involved With		OTHER MV																Spec Cond	0	Ramp/Int			
PARTY INFO																									
Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1	Viol	OAF2	Safety Equip	Role	Ext of Inj	Age	Sex	Seat	Pos	Safety Equip	Ejected	
1F	DRVR	34	M	W	HNBD	WRONG WY	W	A	A	0700	PONTI	2007	-	3	N	-	L	G	-	3	F	3	L	G	0
2	DRVR	50	M	W	HNBD	PROC ST	W	D	D	2200	CHEVR	2004	-	3	N	-	L	G	-	0	M	6	M	Q	0



TABLE 8A COLLISIONS BY COUNTY, CITY, AND ROAD CLASSIFICATION - 2006

COUNTY CITY ROAD CLASSIFICATION			COLLISIONS											
			Total	Total	Total	Alcohol	Alcohol	Pedestrian	Pedestrian	Bicycle	Bicycle	Motorcycle*	Motorcycle*	
			Fatal	Injury	Property Damage	Involved Fatal	Involved Injury	Involved Fatal	Involved Injury	Involved Fatal	Involved Injury	Involved Fatal	Involved Injury	
San Diego	Escondido		11	911	224	5	107		5	54		61	1	33
	Imperial Beach			47	140		12			11		3		1
	La Mesa		4	305	361	1	36	1	10		15	1	18	
	Lemon Grove		1	89	189	1	12		12		4		3	
	National City		5	361	340	1	51	2	30		13		17	
	Oceanside		21	779	904	12	120	8	37	1	38	1	90	
	Poway		3	136	262		20	1	11		8		5	
	San Diego		94	6,635	3,813	37	924	25	518	3	390	12	332	
	San Marcos		5	282	597	2	42	1	6		13	1	7	
	Santee		3	127	332	2	14		6		11	1	12	
San Diego	Solana Beach			41	72		10		2		3		2	
	Vista		4	391	668	2	63		20		17		15	
	Unincorporated		93	2,485	3,237	28	428	8	76	1	80	18	347	
	Uninc. State Highways		47	1,064	1,310	17	172	5	10		16	9	154	
	County Roadways		46	1,421	1,927	11	256	3	66	1	64	9	193	
	San Francisco		39	3,440	2,869	14	259	19	713	2	345	4	276	
	San Francisco		39	3,440	2,869	14	259	19	713	2	345	4	276	
	San Joaquin		107	4,121	8,103	42	459	13	236	1	215	19	184	
	Escalon			25	72		4				1			
	Lathrop		3	78	119		7		1				6	
San Joaquin	Lodi		4	231	846	2	29	2	18		18	1	6	
	Manteca		2	244	317	1	25		19		24		7	
	Ripon			48	128		7		3		3		1	
	Stockton		29	1,777	3,278	13	134	6	140		119	5	69	
	Tracy		5	312	706	2	25		12		26	1	9	
	Unincorporated		64	1,406	2,637	24	228	5	43	1	24	12	86	
	Uninc. State Highways		33	754	1,438	12	107	1	11		1	4	37	
	County Roadways		31	652	1,199	12	121	4	32	1	23	8	49	
	San Luis Obispo		35	1,230	3,171	18	206	3	50	2	106	6	82	
	Arroyo Grande		1	79	221		4	1	4		2			
San Luis Obispo	Atascadero		1	93	168	1	14		3		10		1	
	Grover Beach		1	39	147	1	6		1		8	1	2	
	Morro Bay			38	85		9		1		4			
	Paso Robles		2	110	544	1	10	1	6		5		4	
	Pismo Beach			53	176		6		6		2		2	
	San Luis Obispo		3	265	666	1	35		23	1	52	1	18	
	Unincorporated		27	553	1,164	14	122	1	6	1	23	4	55	
	Uninc. State Highways		15	283	607	6	53		1		6	2	28	
	County Roadways		12	270	557	8	69	1	5	1	17	2	27	
	San Mateo		38	2,755	6,243	10	251	13	243	1	188	7	158	
San Mateo	Atherton			30	82		3		2		3		1	
	Belmont			90	164		10		5		13		4	
	Brisbane		2	30	75		4		2		2			
	Broadmoor		1	9	20		1		1					
	Burlingame		1	192	278		22		15		11	1	10	
	Colma		1	12	8				1		1			
	Daly City		3	283	731	1	24		45		8	1	13	
	East Palo Alto		1	92	355		2		8		6		3	
	Foster City		1	53	211		1	1	2		8		1	
	Half Moon Bay			41	148		6		1		7			
San Mateo	Hillsborough			19	57		0		2		1		1	
	Menlo Park		1	186	424		20		6		18		6	
	Millbrae		2	77	98		7	1	17		3		3	
	Pacifica			73	83		10		15		2		5	
	Portola Valley			1	3				0					
	Redwood City		5	355	1,033	2	25	3	28		25		23	
	San Bruno		2	159	535	1	29	1	18		8	1	8	
	San Carlos		1	76	140		2	1	9		9		3	
	San Mateo		6	432	838	1	30	3	44		35	1	13	
	South San Francisco		5	221	328	3	17	3	14		3	1	2	
San Mateo	Woodside			8	20								1	
	Unincorporated		6	316	612	2	38		8	1	25		61	
	Uninc. State Highways		4	210	373	1	26		1	1	7		45	
	County Roadways		2	106	239	1	12		7		18		16	
	Santa Barbara		39	2,068	4,512	12	296	3	118	4	236	5	97	
	Buellton			8	31								1	
	Carpinteria			44	99		5		2		11		1	
	Goleta		4	131	261	1	10		8	1	24	1	7	



Vehicle Miles of Travel on State Highway System(millions)

County Vehicle Miles of Travel (millions)									
County	2007	2006	2005	2004	2003	2,002	2001	2000	1999
ALAMEDA	8738.4	8870.7	8880.0	8745.2	8,602	8,722	8,532	8,533	8,309
ALPINE	46.6	53.0	52.1	48.1	50	50	46	45	45
AMADOR	334.2	328.9	323.7	305.9	298	294	271	261	253
BUTTE	703.8	690.7	701.2	692.8	673	658	648	643	610
CALAVERAS	281.4	299.3	295.5	281.3	278	272	249	244	242
COLUSA	482.8	497.4	492.3	485.5	469	426	430	407	405
CONTRA COSTA	4635	4678.7	4760.3	4727.3	4,595	4,242	4,215	4,220	3,775
DEL NORTE	162.6	164.5	162.2	141.6	131	152	152	154	158
EL DORADO	892.4	889.4	892.3	880.5	849	855	845	845	813
FRESNO	3562.3	3492.4	3453.5	3349.4	3,181	3,122	2,922	2,709	2,517
GLENN	358.4	363.4	359.5	362.9	351	320	310	309	307
HUMBOLDT	726.9	729.4	728.3	725.8	709	713	712	703	696
IMPERIAL	1282.5	1255.9	1276.9	1222.1	1,177	1,153	1,111	1,106	1,051
INYO	398.2	413.9	407.1	404.4	405	399	403	405	388
KERN	5028.7	4995.5	4801.2	4748.4	5,794	4,485	4,268	4,193	3,859
KINGS	802.9	796.3	777.0	781.5	755	749	674	649	614
LAKE	372.1	370.7	353.4	336.8	318	317	315	308	289
LASSEN	291.2	290.6	294.4	297.7	291	287	285	296	292
LOS ANGELES	40186.6	40103.9	39906.1	40065.2	38,628	39,057	38,302	37,403	36,914
MADERA	1108.4	1108.4	1071.9	1050.7	996	959	923	899	877
MARIN	1586.2	1602.8	1592.4	1582.6	1,544	1,557	1,543	1,553	1,548
MARIPOSA	122.3	115.9	133.4	130.7	128	127	126	122	117
MENDOCINO	706.8	718.6	717.6	714.7	692	690	693	689	664
MERCED	1779.2	1825.7	1799.3	1750.2	1,711	1,621	1,540	1,486	1,429
MODOC	85.4	85.4	85.7	83.0	82	83	80	81	80
MONO	245.5	243.8	244.5	248.3	243	243	236	237	231
MONTEREY	2154.4	2158.2	2018.4	2140.6	2,218	2,135	2,006	2,039	1,986
NAPA	730.4	719.2	711.2	697.8	691	686	680	676	674
NEVADA	668.9	676.6	676.0	669.3	656	697	689	700	629
ORANGE	14157.6	13892.9	13948.6	14096.4	13,485	13,575	13,265	12,808	12,260
PLACER	1866.9	1864.9	1872.2	1858.5	1,798	1,741	1,697	1,721	1,553
PLUMAS	170.4	173.3	174.3	175.9	171	174	184	176	176
RIVERSIDE	11620.2	11469.8	11295.9	10807.2	10,247	9,421	8,901	8,395	8,321
SACRAMENTO	5602	5606.2	5591.7	5465.8	5,284	5,065	4,998	4,960	4,406
SAN BENITO	344.3	371.8	355.4	329.1	331	358	362	347	337
SAN BERNARDINO	13153.1	13122.6	12877.4	12309.4	12,096	11,223	10,813	10,486	9,967

Vehicle Miles of Travel on State Highway System(millions)

County Vehicle Miles of Travel (millions)									
County	2007	2006	2005	2004	2003	2,002	2001	2000	1999
SAN DIEGO	15986.1	16095.0	16405.9	16492.5	15,939	15,834	15,260	14,770	14,410
SAN FRANCISCO	1278.4	1297.8	1316.2	1306.0	1,294	1,566	1,546	1,563	1,518
SAN JOAQUIN	4051.7	4134.8	4089.5	3981.3	3,831	3,689	3,440	3,117	3,017
SAN LUIS OBISPO	1945.1	1914.3	1906.2	1867.8	1,849	1,805	1,738	1,734	1,692
SAN MATEO	4724	4705.9	4717.1	4743.4	4,853	4,917	4,948	4,911	4,865
SANTA BARBARA	2367.4	2335.9	2371.0	2326.1	2,338	2,314	2,295	2,221	2,180
SANTA CLARA	8048.5	8060.3	8015.6	7883.0	7,931	7,887	7,924	7,671	7,586
SANTA CRUZ	1044	1054.4	1053.6	1051.1	1,041	1,041	996	1,012	1,004
SHASTA	1187.8	1163.9	1170.5	1164.2	1,145	1,146	1,093	1,070	1,055
SIERRA	59.8	60.0	62.2	63.4	62	67	65	66	66
SISKIYOU	589.9	586.8	594.0	591.9	596	608	585	579	563
SOLANO	3167.3	3170.8	3282.3	3282.9	3,206	3,005	2,949	2,930	2,710
SONOMA	2056.1	2096.4	2122.2	2102.8	2,066	2,030	2,009	1,899	1,891
STANISLAUS	1892.8	1932.2	1913.1	1865.7	1,667	1,572	1,476	1,390	1,358
SUTTER	512.1	508.0	496.2	466.1	453	434	410	394	385
TEHAMA	624.8	627.8	630.7	630.2	616	598	563	560	560
TRINITY	120.4	120.3	120.7	121.3	115	111	111	111	126
TULARE	1844	1817.2	1772.9	1774.3	1,688	1,656	1,550	1,511	1,491
TUOLUMNE	340.8	334.7	343.0	335.9	336	342	312	301	291
VENTURA	3753.5	3735.4	3761.0	3756.5	3,718	3,675	3,599	3,483	3,459
YOLO	1372.9	1357.0	1309.1	1304.9	1,315	1,366	1,226	1,183	1,131
YUBA	342.1	341.1	336.4	329.1	317	292	287	279	266
TOTAL	182698.50	182,491	181,872	180,153	176,299	172,584	167,808	163563	158412