

**CITYWIDE SPEED ZONE SURVEY**  
**ENGINEERING AND TRAFFIC SURVEYS**

*in the*

**CITY OF TORRANCE**

**2008**

*Prepared for*

**CITY OF TORRANCE**

January 2008



TRAFFIC No. 1575

DATE: 1-31-08

*Concurred by:*

A handwritten signature in black ink, appearing to read "Toufic Semaan".

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### APPENDIX

- A     Speed Zoning Regulations from Caltrans MUTCD 2003 California Supplement and Definitions of Terms
- B     Regulations Governing Speed Limits  
(Excerpts form California Vehicle Code)

## SECTION 1.0

### INTRODUCTION

The purpose of this report is to document the results of an engineering and traffic survey conducted to update the speed limits on a portion of the City of Torrance arterial and collector street network. The overall study was conducted to comply with existing State regulations concerning the increasing or decreasing of speed limits within City boundaries.

It is a common belief that posting of speed limit traffic signs will influence drivers to drive at that speed. However, the facts indicate otherwise.

Driver behavioral research conducted in many parts of this country over a span of several decades shows that the average driver is influenced by the appearance of the highway itself and the prevailing traffic conditions in choosing the speed at which he or she drives. Recognizing this, the California Vehicle Code (CVC) requires that speed limits be established in accordance with appropriate engineering practice and methods.

This report contains sufficient information to document that the conditions of the latest edition of the California Vehicle Code Section 627 have been satisfied and that other conditions not readily apparent to a motorist are properly identified. To legally use radar for speed enforcement, Section 40802(b) of the CVC requires that limits be established per Sections 22357 and 22358 of the CVC, the limits must be justified by an engineering and traffic survey conducted within five years prior to the date of the alleged violation. The latest edition of the CVC has highlighted bicycle and pedestrian safety as part of the traffic and engineering survey, and this aspect was considered.

At 147 locations on the City's arterial and collector street network, spot speed surveys were taken in conformance with the State law for conducting engineering and traffic surveys for the purpose of establishing prima facie speed limits. The data was collected per the California Manual of Uniform Traffic Control Devices (MUTCD). Sections of the MUTCD detailing regulations for conducting the required "Engineering and Traffic Survey" are presented in Appendix A. Also in Appendix A are definitions of terms used in speed zone surveys. Excerpts from the CVC regarding regulations governing speed limits are presented in Appendix B.

The actual speed zone surveys were conducted by Transportation Studies Inc. (TSI), a subconsultant to Albert Grover and Associates (AGA). A California registered traffic engineer from AGA drove the streets.

## SECTION 2.0

### STUDY METHODOLOGY

The study involved three major categories of data and analysis. The three major components are: (1) geometric and characteristic street surveillance; (2) spot speed survey; and (3) accident rate analysis.

The arterial and collector streets were surveyed by field observation to determine the existing roadway characteristics, condition and placement of signs and markings, adjacent land uses, pedestrian and bicycle activity, and to identify roadway characteristics that are not readily apparent to vehicle drivers.

Spot speed surveys, utilizing a calibrated radar gun, were conducted at 147 locations to determine existing vehicular travel speeds. A minimum of 100 observations (when possible) were recorded, 50 for each direction of travel, on all the arterial and collector streets. This data was used to calculate statistical information such as the 85th percentile speed, 10 mile per hour pace speed, percent of vehicles within the 10 mile per hour pace, median speed and other pertinent data for analysis.

Accident data was tabulated from the City's Accident Records (Crossroads) for the period from January 1, 2005 thru December 31, 2006 (2 year) for each roadway segment. The accident rate was calculated and considered in recommending the speed limit. The City's Crossroads accident program was utilized to calculate the accident rate.

## SECTION 3.0

### SURVEY RESULTS

#### 3.1 Street Surveillance

“Speed Limit and Zones” Section 2B.116 of the California MUTCD 2003 California Supplement states that the speed limit should be established at the nearest five mile per hour increment to the 85th percentile speed recorded during the spot speed survey. However, in matching existing conditions with the traffic safety needs of the community, engineering judgment may indicate the need for a further reduction in speed. Whenever such factors are considered to establish the speed limit, they should be documented on the speed survey or in the accompanying engineering report (Appendix A).

The survey streets were driven by Mr. Mark Miller, P.E, Principal-in-Charge, who is a registered Civil and Traffic Engineer in the State of California. The roadway characteristics, location of speed limit signs, conditions not readily apparent to the drivers, type of area adjoining the street (commercial, residential, school zone, parks, etc.) and type of roadway (divided, undivided, number of lanes, etc.) were recorded as part of the study. The roadway characteristics recorded were used to determine if any physical conditions warranted consideration of an *additional* five mile per hour reduction of the recommended speed in accordance with CVC Section 627.

The speed survey segment roadway characteristics for each segment are indicated on the speed zone spot survey data forms in Appendix C.

#### 3.2 Accident Rate Analysis

The accident rate for each speed survey segment was determined by using the most recent accident records as required by CVC Section 627. Based on a review of the City’s Accident Record System (Crossroads) reports from January 1, 2005 thru December 31, 2006, mid-block accident rates were calculated for each street surveyed.

The results of the accident rate calculations, including the expected accident rates for each type of roadway facility, are given in Table 1 and the Engineering and Traffic Survey Summary (Appendix B). The expected accident rates are based on the latest City of Torrance compiled data (Crossroads) and are as follows:

- ◆ Arterial Streets (4-6/Divided) 2.30
- ◆ Collector Streets (4/Undivided) 3.55
- ◆ Local Streets (2/Undivided) 1.98

The mid-block accident rate in terms of "accidents per 1,000,000 vehicle miles of travel" for each street surveyed was calculated and is shown on Table 1 and on the Engineering and Traffic Survey summary sheets. The following shows a sample calculation.

*Accident Rate Calculation:*

The rate was calculated using the following equation:

$$\text{Accident Rate} = \frac{\text{Number of Midblock accidents per year} \times 10^6}{24\text{-hour volume} \times 365 \times \text{segment length}}$$

Where: Number of mid-block accidents per year based on two years (January 1, 2005 thru December 31, 2006), 24-hour volume (both directions) in the survey segment, and segment length in miles.

*Example:*

Accident rate on Crenshaw Boulevard between Torrance Boulevard and Carson Street.

$$\begin{aligned} \text{Accident Rate} &= \frac{1 \times 10^6 (2)}{49,000 \times .35 \times 365 \times 2} \\ &= 0.16 \text{ accidents per million vehicle miles (A/MVM)} \end{aligned}$$

The expected accident rate for the segment is 2.30. The calculated accident rate of 0.16 is well below the expected rate for this segment.

**City of Torrance**  
**Table 1. 2007 Speed Zone Survey - Accident Survey Analysis**

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Street	No.	Location	Distance (mile)	Distance (feet)	ADT	Accidents <sup>1</sup> 2 yrs Total	Accident Rate	Expected <sup>2</sup> Acc. Rate
182nd	1	Kingsdale Ave to Hawthorne Blvd	0.18	930	13,000	0	0.00	3.55
	2	Hawthorne Blvd to Prairie Ave	0.50	2,641	10,000	0	0.00	3.55
	3	Prairie Ave to Yukon Ave	0.50	2,629	18,000	2	0.31	3.55
	4	Yukon Ave to Crenshaw Blvd	0.51	2,718	19,000	2	0.28	3.55
	5	Crenshaw Blvd to Van Ness Ave	0.50	2,629	15,000	1	0.18	3.55
	6	Van Ness Ave to Western Ave	0.50	2,629	16,000	0	0.00	3.55
190th	7	West City Limit to Anza Ave	0.54	2,830	37,000	1	0.07	2.30
	8	Anza Ave to Inglewood Ave	0.23	1,233	36,000	2	0.33	2.30
	9	Inglewood Ave to Hawthorne Blvd	0.45	2,399	36,000	1	0.08	2.30
	10	Hawthorne Blvd to Prairie Ave	0.56	2,955	31,000	0	0.00	2.30
	11	Prairie Ave to Yukon Ave	0.50	2,629	43,000	2	0.13	2.30
	12	Yukon Ave to Crenshaw Blvd	0.41	2,166	50,000	0	0.00	2.30
	13	Crenshaw Blvd to Van Ness Ave	0.59	3,091	36,000	0	0.00	2.30
	14	Van Ness Ave to Western Ave	0.50	2,625	39,000	3	0.21	2.30
223rd	15	Border Ave to Western Ave	0.25	1,320	15,000	1	0.37	2.30
235th	16	Nadine Circle to Juniper Ave	0.34	1,809	12,000	0	0.00	1.98
	17	Juniper Ave to Crenshaw Blvd	0.55	2,917	12,000	2	0.41	1.98
Amie	18	Spencer St to Torrance Blvd	0.50	2,640	2,000	0	0.00	1.98
Anza	19	190th St to Del Amo Blvd	0.72	3,788	26,000	4	0.29	2.30
	20	Del Amo Blvd to Torrance Blvd	0.76	3,999	28,000	6	0.39	2.30
	21	Torrance Blvd to Lenore St	0.28	1,498	26,000	0	0.00	2.30
	22	Lenore St to Carson St	0.22	1,175	25,000	0	0.00	2.30
	23	Carson St to Sepulveda Blvd	0.30	1,572	26,000	0	0.00	2.30
	24	Pacific Coast Hwy to Newton St	0.14	720	3,000	0	0.00	1.98
Arlington	25	Van Ness Ave to Torrance Blvd	0.26	1,354	20,000	0	0.00	1.98
	26	Torrance Blvd to Carson St	0.41	2,140	20,000	0	0.00	1.98
	27	Carson St to Sepulveda Blvd	0.80	4,227	6,000	0	0.00	1.98
	28	Sepulveda Blvd to 239th St	0.86	4,539	16,000	0	0.00	1.98
Artesia	29	Hawthorne Blvd to Prairie Ave	0.50	2,640	33,000	4	0.33	2.30
	30	Prairie Ave to Yukon Ave	0.50	2,630	39,000	7	0.49	2.30
	31	Yukon Ave to Crenshaw Blvd	0.50	2,630	29,000	1	0.09	2.30
	32	Crenshaw Blvd to Van Ness Ave	0.50	2,630	32,000	4	0.34	2.30
	33	Van Ness Ave to Western Ave	0.50	2,630	36,000	2	0.15	2.30
Beryl	34	190th St to Flagler Ln	0.35	1,856	2,000	0	0.00	1.98
Cabrillo	35	Torrance Blvd to Carson St	0.35	1,849	13,000	0	0.00	3.55
	36	Carson St to Plaza Del Amo	0.51	2,676	9,000	0	0.00	3.55
	37	Plaza Del Amo to Sepulveda Blvd	0.34	1,791	7,000	0	0.00	1.98
	38	Sepulveda Blvd to South City Limit	0.84	4,440	6,000	0	0.00	1.98
Calle Mayor	39	Palos Verdes Blvd to Via La Selva	0.58	3,057	6,000	0	0.00	1.98
	40	Via La Selva to Newton St	0.62	3,267	12,000	0	0.00	1.98
	41	Newton St to Pacific Coast Hwy	0.07	382	10,000	0	0.00	2.30
	42	Pacific Coast Hwy to Anza Ave	0.62	3,254	15,000	1	0.15	2.30
Calle Miramar	43	Palos Verdes Blvd to Paseo De La Playa	0.37	1,965	1,000	0	0.00	1.98
Carson	44	Palos Verdes Blvd to Anza Ave	0.47	2,497	6,000	0	0.00	1.98
	45	Anza Ave to Ocean Ave	0.30	1,584	14,000	0	0.00	2.30
	46	Ocean Ave to Madrona Ave	0.45	2,372	29,000	3	0.32	2.30
	47	Madrona Ave to Maple Ave	0.28	1,494	29,000	0	0.00	2.30
	48	Maple Ave to Crenshaw Blvd	0.65	3,452	30,000	1	0.07	2.30
	49	Crenshaw Blvd to Arlington Ave	0.62	3,283	31,000	2	0.14	2.30
	50	Arlington Ave to Cabrillo St	0.20	1,039	32,000	0	0.00	2.30
	51	Cabrillo St to Western Ave	0.31	1,621	34,000	1	0.13	2.30
	Civic Center	52	Madrona Ave to Maple Ave	0.27	1,439	2,000	0	0.00

<sup>1</sup> Accident Data from 1-05 to 12-06<sup>2</sup> Source: City of Torrance Crossroads Program

**City of Torrance**  
**Table 1. 2007 Speed Zone Survey - Accident Survey Analysis**

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Street	No.	Location	Distance (mile)	Distance (feet)	ADT	Accidents <sup>1</sup> 2 yrs Total	Accident Rate	Expected <sup>2</sup> Acc. Rate	
<b>Crenshaw</b>	53	North City Limit to Artesia Blvd	0.63	3,303	31,000	6	0.42	2.30	
	54	Artesia Blvd to 182nd St	0.50	2,642	35,000	3	0.23	2.30	
	55	182nd St to 190th St	0.52	2,753	58,000	3	0.14	2.30	
	56	190th St to Del Amo Blvd	0.81	4,267	49,000	6	0.21	2.30	
	57	Del Amo Blvd to Dominguez St	0.41	2,174	43,000	3	0.23	2.30	
	58	Dominguez St to Torrance Blvd	0.31	1,613	48,000	0	0.00	2.30	
	59	Torrance Blvd to Carson St	0.35	1,833	49,000	2	0.16	2.30	
	60	Carson St to Sepulveda Blvd	0.65	3,431	60,000	1	0.04	2.30	
	61	Sepulveda Blvd to 235th St	0.63	3,329	53,000	3	0.12	2.30	
	62	235th St to Lomita Blvd	0.47	2,499	52,000	2	0.11	2.30	
	63	Lomita Blvd To Skypark Dr	0.32	1,679	46,000	3	0.28	2.30	
	64	Skypark Dr to Pacific Coast Hwy	0.76	4,034	49,000	3	0.11	2.30	
	65	Pacific Coast Hwy to South City Limit	0.62	3,250	34,000	0	0.00	2.30	
	<b>Crest</b>	66	Crenshaw Blvd to Highcross Dr	0.25	1,311	2,000	0	0.00	1.98
	<b>Del Amo</b>	67	West City Limit to Henrietta St	0.23	1,234	16,000	0	0.00	2.30
68		Henrietta St to Anza Ave	0.50	2,639	18,000	0	0.00	2.30	
69		Anza Ave to Hawthorne Blvd	0.50	2,640	18,000	1	0.15	2.30	
70		Hawthorne Blvd to Madrona Ave	0.48	2,554	21,000	1	0.13	2.30	
71		Madrona Ave to Maple Ave	0.31	1,619	11,000	0	0.00	2.30	
72		Crenshaw Blvd to Van Ness Ave	0.63	3,352	10,000	0	0.00	2.30	
73		Van Ness Ave to Western Ave	0.49	2,577	9,000	0	0.00	2.30	
<b>Del Amo Circle Dr</b>	74	Hawthorne Blvd to Carson St	0.30	1,604	2,000	0	0.00	3.55	
<b>Dominguez</b>	75	Crenshaw Blvd to Van Ness Ave	0.52	2,762	2,000	0	0.00	1.98	
<b>Earl</b>	76	Del Amo Blvd to Torrance Blvd	0.76	4,000	3,000	0	0.00	1.98	
<b>Emerald</b>	77	Henrietta St to Victor St	0.25	1,319	1,000	0	0.00	1.98	
	78	Victor St to Anza Ave	0.25	1,320	4,000	0	0.00	1.98	
	79	Anza Ave to Hawthorne Blvd	0.50	2,640	6,000	0	0.00	1.98	
	80	Hawthorne Blvd to Amie Ave	0.25	1,319	7,000	0	0.00	1.98	
	81	Amie Ave to Madrona Ave	0.26	1,394	6,000	1	0.86	1.98	
<b>Flagler</b>	82	West City Limit to Beryl St	0.23	1,200	4,000	0	0.00	1.98	
<b>Hawthorne</b>	83	Pacific Coast Hwy to South City Limit	0.75	3,939	40,000	0	0.00	2.30	
<b>Henrietta</b>	84	Del Amo Blvd to Torrance Blvd	0.76	3,998	4,000	1	0.45	1.98	
<b>Lomita</b>	85	Anza Ave to Hawthorne Blvd	0.60	3,152	15,000	0	0.00	2.30	
	86	Hawthorne Blvd to Madison St	0.22	1,153	36,000	2	0.35	2.30	
	87	Madison St to Crenshaw Blvd	1.28	6,751	36,000	3	0.09	2.30	
<b>Madison</b>	88	Lomita Blvd to Pacific Coast Hwy	0.76	3,991	14,000	0	0.00	2.30	
<b>Madrona</b>	89	Del Amo Blvd to Torrance Blvd	0.76	4,035	30,000	0	0.00	2.30	
	90	Torrance Blvd to Carson St	0.44	2,309	29,000	1	0.11	2.30	
	91	Carson St to Sepulveda Blvd	0.42	2,242	20,000	0	0.00	2.30	
<b>Maple</b>	92	Del Amo Blvd to Maricopa Ave	0.56	2,970	10,000	0	0.00	3.55	
	93	Maricopa Ave to Torrance Blvd	0.21	1,103	11,000	0	0.00	3.55	
	94	Torrance Blvd to Carson St	0.35	1,829	8,000	0	0.00	1.98	
	95	Carson St to Sepulveda Blvd	0.49	2,568	9,000	0	0.00	3.55	
	96	Sepulveda Blvd to 235th St	0.42	2,193	11,000	0	0.00	1.98	
<b>Marcelina</b>	97	Arlington Ave to Sartori Ave	0.23	1,224	1,000	0	0.00	1.98	
<b>Maricopa</b>	98	Maple Ave to Hawaii St	0.10	532	11,000	0	0.00	1.98	
	99	Hawaii St to Crenshaw Blvd	0.55	2,919	7,000	0	0.00	1.98	
<b>Newton</b>	100	Hawthorne Blvd to Pacific Coast Hwy	0.80	4,200	5,000	0	0.00	1.98	
<b>Palos Verdes</b>	101	Torrance Blvd to West City Limit	0.45	2,400	14,000	1	0.22	1.98	

<sup>1</sup> Accident Data from 1-05 to 12-06<sup>2</sup> Source: City of Torrance Crossroads Program

**City of Torrance**  
**Table 1. 2007 Speed Zone Survey - Accident Survey Analysis**

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Street	No.	Location	Distance (mile)	Distance (feet)	ADT	Accidents <sup>1</sup> 2 yrs Total	Accident Rate	Expected <sup>2</sup> Acc. Rate
Plaza Del Amo	102	Madrona Ave to Maple Ave	0.33	1,750	5,000	0	0.00	2.30
	103	Maple Ave to Crenshaw Blvd	0.66	3,463	5,000	0	0.00	2.30
	104	Carson St to Border Ave	0.89	4,700	15,000	1	0.10	1.98
Prairie	105	North City Limit to Artesia Blvd	0.17	890	49,000	1	0.17	2.30
	106	Artesia Blvd to 182nd St	0.50	2,645	56,000	0	0.00	2.30
	107	182nd St to 190th St	0.50	2,641	38,000	4	0.29	2.30
	108	190th St to Del Amo Blvd	0.69	3,632	50,000	2	0.08	2.30
Redondo Beach	109	Hawthorne Blvd to Prairie Ave	0.54	2,831	9,000	1	0.28	2.30
Rolling Hills	110	Hawthorne Blvd to South City Limit	0.91	4,800	10,000	0	0.00	3.55
Sepulveda	111	West City Limit to Palos Verdes Blvd	0.23	1,200	15,000	0	0.00	2.30
	112	Palos Verdes Blvd to Anza Ave	0.54	2,874	27,000	1	0.09	2.30
	113	Anza Ave to Hawthorne Blvd	0.47	2,489	27,000	0	0.00	2.30
	114	Hawthorne Blvd to Madrona Ave	0.39	2,061	42,000	0	0.00	2.30
	115	Madrona Ave to Maple Ave	0.30	1,582	49,000	1	0.09	2.30
	116	Maple Ave to Crenshaw Blvd	0.67	3,544	41,000	2	0.10	2.30
	117	Crenshaw Blvd to Arlington Ave	0.51	2,684	48,000	0	0.00	2.30
	118	Arlington Ave to Cabrillo St	0.23	1,237	49,000	0	0.00	2.30
	119	Cabrillo St to Western Ave	0.44	2,311	47,000	1	0.07	2.30
Skypark	120	Hawthorne Blvd to Garnier St	0.73	3,845	21,000	1	0.09	2.30
	121	Garnier St to Crenshaw Blvd	0.61	3,214	22,000	3	0.31	2.30
Spencer	122	Victor St to Anza Ave	0.25	1,320	5,000	1	1.10	1.98
	123	Anza Ave to Hawthorne Blvd	0.50	2,639	5,000	0	0.00	1.98
	124	Hawthorne Blvd to Madrona Ave	0.25	1,319	5,000	0	0.00	1.98
Torrance	125	West City Limit to Henrietta St	0.23	1,200	27,000	0	0.00	2.30
	126	Henrietta St to Victor St	0.25	1,320	32,000	2	0.34	2.30
	127	Victor St to Anza Ave	0.25	1,320	32,000	2	0.34	2.30
	128	Anza Ave to Hawthorne Blvd	0.50	2,643	32,000	1	0.09	2.30
	129	Hawthorne Blvd to Madrona Ave	0.51	2,669	36,000	1	0.08	2.30
	130	Madrona Ave to Maple Ave	0.29	1,547	37,000	3	0.38	2.30
	131	Maple Ave to Crenshaw Blvd	0.65	3,451	34,000	2	0.12	2.30
	132	Crenshaw Blvd to Van Ness Ave	0.77	4,074	33,000	0	0.00	2.30
	133	Van Ness Ave to Western Ave	0.38	2,001	30,000	0	0.00	2.30
	Van Ness	134	North City Limit to 164th St	0.23	1,200	13,000	0	0.00
135		164th St to Artesia Blvd	0.63	3,304	14,000	0	0.00	3.55
136		Artesia Blvd to 182nd St	0.50	2,642	16,000	0	0.00	3.55
137		182nd St to 186th St	0.22	1,170	14,000	0	0.00	3.55
138		186th St to 190th St	0.28	1,472	16,000	0	0.00	3.55
139		190th St to Del Amo Blvd	0.79	4,192	18,000	1	0.10	2.30
140		Del Amo Blvd to Torrance Blvd	0.82	4,323	16,000	2	0.21	2.30
Via Valmonte	141	South City Limit to Hawthorne Blvd	0.32	1,680	2,000	0	0.00	1.98
Victor	142	Del Amo Blvd to Torrance Blvd	0.76	3,998	4,000	0	0.00	1.98
Vista Montana	143	Paseo De Las Tortugas to Newton St	0.45	2,375	3,000	0	0.00	1.98
Western	144	Artesia Blvd to 182nd St	0.50	2,643	32,000	4	0.34	2.30
Yukon	145	North City Limit to Artesia Blvd	0.50	2,640	5,000	1	0.55	1.98
	146	Artesia Blvd to 182nd St	0.50	2,658	4,000	0	0.00	1.98
	147	182nd St to 190th St	0.50	2,642	4,000	0	0.00	1.98

<sup>1</sup> Accident Data from 1-05 to 12-06<sup>2</sup> Source: City of Torrance Crossroads Program

### 3.3 Spot Speed Survey

Spot speed surveys were conducted at each street segment to establish a reasonable and effective speed limit based on the premise that the speed limit thus established conforms to the actual behavior of the majority of motorists. The speed limit should be established at or near the 85<sup>th</sup> percentile speed recorded for the surveyed segment. However, engineering judgment and other factors such as street surveillance (Section 3.1) and accident rates (Section 3.2) may indicate the need for further reduction in establishing reasonable and effective speed limits.

The criteria used in conducting the radar survey are listed in Appendix A.

Appendix C contains the spot speed survey data sheets for each of the 147 sections surveyed. The information collected and data calculated for the radar speed survey are as follows:

- ◆ Posted speed limit
- ◆ Direction of survey
- ◆ Date and time of speed survey
- ◆ 50th Percentile speed
- ◆ 85th Percentile speed
- ◆ 10 mph pace speed
- ◆ Percent over pace speed
- ◆ Range of speeds
- ◆ Number of vehicles observed
- ◆ Average speed
- ◆ Accident history
- ◆ Accident rate
- ◆ Average Daily Traffic
- ◆ Road description
- ◆ Pedestrian and bicycle activity

The summary contains information about vehicular speed data observed, accident data, street classification, and any unusual conditions at the location.

## SECTION 4.0

### SURVEY FINDINGS AND RECOMMENDATIONS

In accordance with the State-imposed speed limit establishment regulation, as defined by CVC Section 627 described in Appendix A, there are several factors that may be considered to justify setting the prima facie speed limits more than five miles per hour below the observed 85th percentile speed.

It should be noted that the regulations in Appendix A also state that the *maximum* permissible lowering of the proposed speed limit from the 85th percentile is 10 miles per hour.

The factors to be considered are:

- ◆ Most recent accident record (mid-block)
- ◆ Roadway design speed
- ◆ Safe stopping sight distance
- ◆ Superelevation
- ◆ Grades
- ◆ Shoulder condition
- ◆ Profile condition
- ◆ Intersection spacing offsets
- ◆ Commercial driveway characteristics (land use)
- ◆ Pedestrian traffic with and without sidewalks
- ◆ Pedestrian and Bicycle safety

The 85th percentile speed and the above factors were considered in verifying existing speed limits and recommending speed limit changes (increase or decrease). Additionally, discussions were held with City staff in making decisions with respect to changing existing speed limits. This allowed for consideration of any special knowledge of the segment. Table 2 shows the surveyed road segments with posted and recommended speed limits.

Table 2: Segment Spot Speed Survey 2007

Street	No	Dir.	Date	10-Mile- Pace (mph)	% in. 10-Mile Pace	50th % Tile (mph)	85th % Tile (mph)	Posted Speed Limit (mph)	Recommended Speed Limit (mph)	Comments	
182nd	1	E/W	8/16/2007	26-35	86.4	29.9	34.2	30	30	No change, 25 mph in Redondo Beach	
	2	E/W	8/16/2007	29-38	67.8	34.3	39.6	35	35	No change	
	3	E/W	8/16/2007	29-38	77.8	33.4	37.9	35	35	No change, continuity of speed	
	4	E/W	8/16/2007	28-37	80.9	32.4	35.8	35	35 *	No change	
	5	E/W	8/16/2007	28-37	84.3	33.5	36.1	35	35 *	No change	
190th	6	E/W	8/15/2007	29-38	87.7	33.2	36.4	35	35	No change, 30 mph in Los Angeles	
	7	E/W	7/19/2007	29-38	69.0	33.1	39.0	35	35	No change, low accident rate, 35 mph in Redondo Beach	
	8	E/W	7/19/2007	29-38	67.0	34.4	39.8	35	35	No change, low accident rate, 35 mph in Redondo Beach	
	9	E/W	7/24/2007	34-43	76.0	38.3	43.4	40	40	No change, continuity of speed	
	10	E/W	8/21/2007	35-44	82.8	39.4	43.1	40	40	No change, continuity of speed	
	11	E/W	8/21/2007	39-48	75.4	43.0	47.5	45	45	No change	
	12	E/W	8/21/2007	40-49	74.0	43.0	47.2	45	45	No change	
	13	E/W	8/21/2007	38-47	74.4	41.2	44.9	45	45	No change	
	14	E/W	8/21/2007	37-46	71.8	41.0	45.1	45	45	No change	
	223rd	15	N/S	10/18/2007	25-34	77.8	28.5	34.1	35	35	No change, 85th percentile
	235th	16	E/W	8/11/2007	32-41	80.2	35.8	40.5	35	35	No change, low accident rate, residential, pedestrians
		17	E/W	8/11/2007	33-42	86.0	36.5	39.9	35	35	No change, low accident rate, residential, pedestrians
	Amie	18	N/S	8/2/2007	19-28	79.0	23.9	27.4	25	25	No change
	Anza	19	N/S	8/21/2007	30-39	80.4	33.7	37.9	35	35	No change, continuity of speed
20		N/S	8/1/2007	27-36	73.1	32.4	37.2	35	35	No change	
21		N/S	8/29/2007	30-39	85.2	34.1	37.1	35	35 *	No change	
22		N/S	8/29/2007	29-38	76.7	34.2	38.3	35	35 *	No change, continuity of speed	
23		N/S	8/29/2007	31-40	75.1	34.4	38.7	35	35	No change, continuity of speed	
24		N/S	7/23/2007	34/43	59.4	37.8	42.7	35	35	No change, hilly, continuity of speed	
Arlington	25	N/S	8/23/2007	28-37	85.2	32.3	35.4	25	25	No change, residential area, 15 mph curves	
	26	N/S	8/23/2007	23-32	93.9	25.9	29.7	25	25	No change, residential, pedestrians	
	27	N/S	8/28/2007	25-34	79.5	29.9	34.8	30	30	No change, low accident rate, residential, curves	
	28	N/S	8/30/2007	32-41	77.2	33.9	38.4	35	35 *	No change, continuity of speed	
Artesia	29	E/W	8/14/2007	36-45	73.3	39.3	44.4	40	40	No change, continuity of speed	
	30	E/W	8/15/2007	32-41	85.7	37.5	40.2	40	40	No change	
	31	E/W	8/15/2007	35-44	76.0	37.8	41.2	40	40	No change	
	32	E/W	10/16/2007	37-46	87.3	40.3	44.7	40	45	Increase, low accident rate	
	33	E/W	10/16/2007	38-47	80.7	40.6	44.9	40	45	Increase, low accident rate, 45 mph in Gardena	
Beryl	34	N/S	8/21/2007	23-32	90.2	25.9	30.8	not posted	30 *	Establish, low accident rate	
Cabrillo	35	N/S	8/28/2007	24-33	87.8	25.9	30.0	25	30	Increase, low accident rate	
	36	N/S	8/28/2007	23-32	97.2	25.3	28.8	25	30	Increase, low accident rate	
	37	N/S	7/19/2007	25-34	76.0	29.4	35.2	30	30	No change, continuity of speed	
	38	N/S	7/19/2007	25-34	83.2	27.8	31.8	30	30	No change	
Calle Mayor	39	E/W	7/18/2007	28-37	79.2	31.8	36.0	30	30	No change, narrow roadway	
	40	E/W	7/18/2007	27-36	78.0	30.0	34.7	30	30	No change, narrow roadway	
	41	E/W	7/24/2007	27-36	81.6	31.9	35.5	30	30	No change, narrow roadway	
	42	E/W	7/24/2007	34-43	74.5	38.8	43.9	35	35 *	No change, continuity of speed	

Table 2: Segment Spot Speed Survey 2007

Street	No	Dir.	Date	10-Mile Pace (mph)	% In. 10-Mile Pace	50th % Tile (mph)	85th % Tile (mph)	Posted Speed Limit (mph)	Recommended Speed Limit (mph)	Comments		
Calle Miramar	43	E/W	7/18/2007	24-33	71.0	28.2	33.7	25	25	No change, residential area		
	Carson	44	E/W	8/1/2007	31-40	86.0	36.1	39.3	35	35	No change, residential area	
		45	E/W	8/29/2007	30-39	72.7	34.8	39.6	35	35	No change, residential area	
		46	E/W	8/29/2007	28-37	81.6	33.3	36.0	35	35	No change	
		47	E/W	8/29/2007	29-38	76.2	34.2	38.6	35	35	No change, residential area	
		48	E/W	8/29/2007	32-41	76.2	34.9	39.4	35	35 *	No change, residential area	
		49	E/W	8/29/2007	25-34	92.8	29.5	32.9	30	35 *	Increase, low accident rate	
		50	E/W	8/29/2007	25-34	87.3	29.1	32.7	30	35	Increase, low accident rate	
		51	E/W	8/28/2007	26-35	83.4	29.6	34.6	30	35	Increase, low accident rate	
		Civic Center	52	E/W	8/22/2007	23-32	91.1	26.1	29.8	25	25	No change, business district
		Crenshaw	53	N/S	8/14/2007	35-44	85.3	38.8	42.8	40	40	No change
54	N/S		8/15/2007	36-45	72.8	39.8	44.6	40	40	No change, residential area		
55	N/S		8/16/2007	31-40	72.7	35.3	39.7	40	40	No change		
56	N/S		8/22/2007	41-50	69.8	44.7	49.5	45	45	No change, residential area		
57	N/S		8/22/2007	38-47	73.6	41.9	45.7	45	45	No change		
58	N/S		8/23/2007	29-38	70.1	33.2	37.7	35	35	No change		
59	N/S		8/28/2007	30-39	79.8	34.1	37.6	35	35	No change		
60	N/S		8/30/2007	38-47	75.5	40.6	44.5	45	45	No change		
61	N/S		9/5/2007	40-49	78.6	44.9	48.7	45	45	No change, residential area		
62	N/S		9/5/2007	41-50	82.9	44.8	48.8	45	45	No change, residential area		
63	N/S		7/24/2007	30-39	71.0	34.0	39.6	45	45	No change, residential area		
64	N/S		7/26/2007	38-47	75.5	41.7	46.5	45	45	No change, residential area		
65	N/S		8/30/2007	38-47	65.1	43.6	48.2	45	45	No change, residential area		
Crest	66		E/W	7/26/2007	27-36	71.4	30.9	36.6	25	25	No change, residential area	
Del Amo	67		E/W	8/21/2007	35-44	77.0	38.1	41.8	40	40 *	No change, 40 mph in Redondo Beach	
	68	E/W	8/21/2007	34-43	81.1	38.3	41.6	40	40 *	No change		
	69	E/W	8/21/2007	34-43	75.9	38.3	41.8	40	40	No change		
	70	E/W	8/21/2007	33-42	78.1	38.2	41.8	40	40	No change		
	71	E/W	8/22/2007	29-38	82.0	33.5	37.0	35	35	No change		
	72	E/W	10/17/2007	32-41	80.2	34.8	38.7	35	35	No change, multiple driveways, pedestrians		
	73	E/W	10/17/2007	31-40	76.9	34.9	39.6	35	35	No change, low accident rate, residential		
Del Amo Circle Dr	74	N/S	1/15/2008	23-32	81.4	26.9	31.3	NP	30	Establish speed limit		
Dominguez	75	E/W	8/22/2007	24-33	94.8	27.0	31.2	25	25	No change, residential area		
Earl	76	N/S	7/31/2007	27-36	74.8	30.1	34.4	25	30	Increase, low accident rate		
Emerald	77	E/W	7/31/2007	25-34	80.8	29.3	33.4	25	25	No change, residential area		
	78	E/W	7/31/2007	25-34	75.6	27.8	32.0	25	25	No change, residential area		
	79	E/W	8/2/2007	23-32	84.6	27.4	31.7	25	25	No change, residential area		
	80	E/W	8/2/2007	25-34	79.5	27.4	31.4	25	25	No change, residential area		
	81	E/W	8/2/2007	24-33	80.6	28.5	32.1	25	25	No change, residential area		
Flagler	82	N/S	8/21/2007	24-33	97.9	26.7	30.3	25	25	No change, residential area		
Hawthorne	83	N/S	7/23/2007	33-42	73.0	39.9	45.5	40	45	Increase, low accident rate, 45 mph in Rolling Hills Estate		
Henrietta	84	N/S	8/1/2007	33-42	71.8	35.3	40.3	35	35 *	No change, residential, pedestrians		

Table 2: Segment Spot Speed Survey 2007

Page 3 of 4												
Street	No	Dir.	Date	10-Mile Pace (mph)	% in 10-Mile Pace	50th % Tile (mph)	85th % Tile (mph)	Posted Speed Limit (mph)	Recommended Speed Limit (mph)	Comments		
Lomita	85	E/W	10/18/2007	32-41	87.7	35.1	38.5	35	40 *	Increase, low accident rate		
	86	E/W	8/30/2007	38-47	70.0	41.9	45.6	45	45	No change		
	87	E/W	7/24/2007	37-46	79.1	41.3	45.3	45	45	No change		
Madison	88	N/S	8/30/2007	29-38	66.9	34.2	39.4	35	40	Increase, low accident rate		
Madrona	89	N/S	8/28/2007	29-38	77.2	33.3	37.5	40	40	No change		
	90	N/S	8/22/2007	35-44	79.6	39.1	42.8	35	35	No change, continuity of speed, pedestrians		
	91	N/S	8/29/2007	29-38	81.9	34.0	37.2	35	35	No change		
Maple	92	N/S	8/22/2007	23-32	76.4	26.0	32.5	25	30	Increase, low accident rate		
	93	N/S	8/22/2007	23-32	84.2	26.3	30.4	25	30	Increase, low accident rate		
	94	N/S	8/28/2007	23-32	90.1	26.5	30.0	25	25	No change, multiple driveways, pedestrians		
	95	N/S	8/29/2007	23-32	86.8	25.7	29.9	25	25	No change, multiple driveways, pedestrians		
	96	N/S	10/17/2007	30-39	82.3	34.8	38.6	35	35	No change, apartments, pedestrians		
	97	N/S	8/28/2007	20-29	95.3	24.7	27.4	not posted	25	Establish		
Marcelina	98	E/W	8/22/2007	29-38	72.4	32.7	37.1	35	35	No change		
	99	E/W	8/22/2007	30-39	73.9	34.7	38.7	35	35	No change, continuity of speed		
Newton	100	E/W	7/25/2007	24-33	80.2	28.7	32.5	25	25	No change, residential area		
Palos Verdes	101	N/S	8/11/2007	24-33	88.6	27.8	31.4	30	30	No change, 30 mph in Redondo Beach		
	102	E/W	8/29/2007	33-42	76.4	35.5	39.9	35	35	No change, continuity of speed		
Pizza Del Amo	103	E/W	8/30/2007	30-39	73.8	34.7	38.7	35	35	No change, continuity of speed		
	104	E/W	10/18/2007	25-34	77.8	28.5	34.1	25 (35)	30	Decrease, ordinance 35 mph, pedestrians		
	105	N/S	8/14/2007	30-39	81.9	34.2	38.3	35	35	No change, low accident rate, multiple driveways		
	106	N/S	8/16/2007	30-39	68.2	34.0	39.9	35	35	No change, low accident rate, multiple driveways		
Prairie	107	N/S	8/16/2007	30-39	71.2	34.9	39.7	35	35	No change, multiple driveways, pedestrians		
	108	N/S	8/22/2007	35-44	70.2	38.7	43.2	40	40*	No change, continuity of speed		
	109	N/S	8/15/2007	36-45	80.8	39.2	43.3	40	40	No change, continuity of speed in Los Angeles County		
Rolling Hills	110	N/S	7/25/2007	29-38	83.2	31.7	36.2	35	35	No change		
Sepulveda	111	E/W	8/12/2007	34-43	86.0	38.0	42.0	40	40	No change		
	112	E/W	8/12/2007	39-48	77.6	42.7	46.6	40	40	No change, continuity of speed		
	113	E/W	10/10/2007	34-43	73.1	38.6	42.5	40	40	No change		
	114	E/W	8/30/2007	32-41	70.8	36.3	39.8	40	40	No change		
	115	E/W	8/30/2007	33-42	79.1	37.7	41.2	40	40	No change		
	116	E/W	10/17/2007	36-45	85.3	40.3	44.4	40	45	Increase, low accident rate		
	117	E/W	9/5/2007	36-45	84.6	40.3	43.8	40	45	Increase, low accident rate		
	118	E/W	9/5/2007	35-44	81.7	38.8	42.7	40	40	No change		
	119	E/W	9/5/2007	35-44	88.8	38.3	41.2	40	40	No change, 40 mph in Los Angeles		
Skypark	120	E/W	7/24/2007	36-45	78.9	39.9	44.0	40	45	Increase, low accident rate		
	121	E/W	7/24/2007	34-43	79.3	38.6	43.6	40	45	Increase, low accident rate		

Table 2: Segment Spot Speed Survey 2007

Street	No	Dir.	Date	10-Mile Pace (mph)	% in 10-Mile Pace	50th % Tile (mph)	85th % Tile (mph)	Posted Speed Limit (mph)	Recommended Speed Limit (mph)	Comments
Spencer	122	E/W	7/31/2007	26-35	83.3	29.4	34.1	25	25 *	No change, residential area
	123	E/W	8/2/2007	23-32	75.0	27.7	31.6	25	25	No change, residential area
	124	E/W	8/2/2007	25-34	80.6	29.3	32.9	25	25	No change, residential area
Torrance	125	E/W	8/28/2007	30-39	81.6	34.4	37.9	40	40 *	No change, 35 mph in Los Angeles
	126	E/W	8/28/2007	29-38	77.8	33.5	37.1	40	40 *	No change
	127	E/W	8/28/2007	34-43	81.9	38.1	42.2	40	40	No change
	128	E/W	8/23/2007	35-44	74.0	38.6	42.3	40	40	No change
	129	E/W	8/23/2007	35-44	74.3	39.3	43.1	40	40	No change, continuity of speed
	130	E/W	8/23/2007	29-38	80.3	33.5	36.8	35	35 *	No change
	131	E/W	8/23/2007	30-39	77.6	33.7	37.4	35	35 *	No change
	132	E/W	8/23/2007	29-38	75.1	34.3	38.0	35	35	No change, continuity of speed
	133	E/W	8/23/2007	29-38	71.3	34.1	38.9	35	35	No change, continuity of speed, 35 mph in Los Angeles
Van Ness	134	N/S	9/11/2007	29-38	82.4	32.8	36.0	35	35	No change
	135	N/S	8/14/2007	30-39	82.8	34.9	38.4	35	35 *	No change, continuity of speed
	136	N/S	8/15/2007	30-39	75.6	34.2	38.2	35	35 *	No change, continuity of speed
	137	N/S	8/15/2007	29-38	74.5	33.5	37.5	35	35	No change
	138	N/S	8/16/2007	29-38	70.0	33.5	38.5	35	35	No change, continuity of speed
	139	N/S	8/23/2007	38-47	70.3	43.6	47.9	45	45	No change
140	N/S	8/23/2007	30-39	80.6	34.3	38.0	35	40	Increase, low accident rate	
Via Valmonte	141	E/W	8/22/2007	21-30	90.8	25.7	28.8	25	25	Residential area
Victor	142	N/S	7/31/2007	23-32	86.0	28.1	31.6	25	25 *	Residential area
Vista Montana	143	E/W	7/23/2007	34-43	59.4	37.8	42.7	35	35	Hilly, steep slope
Western	144	N/S	8/15/2007	36-45	72.1	39.5	44.7	40	40	No change, 40 mph in Gardena
Yukon	145	N/S	8/14/2007	20-29	91.6	25.3	27.9	25	25 *	No change, residential area
	146	N/S	8/15/2007	22-31	86.7	26.0	29.3	25	25 *	No change, residential area
	147	N/S	8/16/2007	22-32	83.6	26.4	30.9	25	25 *	No change, residential area

#### 4.1 Speed Limit Signing

All California motorists are required to know the basic 15, 25, and 55 MPH speed laws and are tested on the subject when applying for the driver's license. Consequently, speed limit signs covering these conditions need not be posted on City streets. However, although not required by law, speed limit signs for these situations may be posted on streets that have significant daily vehicular traffic volumes, a by-pass traffic situation, the continued violation of a residential 25 MPH speed zone, or with other applicable warrants.

It is normal policy to recommend the posting of speed limit signs only of streets that have been covered by the City speed limit ordinance or by warranted situations covered above.

Signs are normally installed on the exit side of traffic signal controlled intersections and the more important intersections where there is high side street vehicle entry. It is important that motorists be given adequate information while not over signing, which tends to confuse the motorist.

Enforcement problems can occur when, (a) the highway is posted with inappropriate speed limit signs; (b) the highway is improperly or inadequately posted; or, (c) the highway is not posted nor covered by ordinance and therefore falls under the basic speed law. In any of these events, the result is a debatable validity that may be questioned in court cases where citations are issued and contested.

## SECTION 5.0

### SUMMARY AND CONCLUSIONS

1. The radar survey and the raw data collection was conducted per CVC Section 627.
2. A total of 147 sections on the City's arterial, collector, and local street network were surveyed.
3. The accident rate for the majority of the street segments is well below the expected accident rate obtained from the City of Torrance for various types of roadway facilities.
4. A summary of recommended speed limits is shown in Table 2.
5. It was concluded that the existing speeds on arterial, collector, and local streets in the City of Torrance should remain unchanged except on the following roadway sections:
  - ◆ Artesia Boulevard between Crenshaw Boulevard and Western Avenue: Increase the existing posted speed limit from 40 mph to 45 mph based on the 85<sup>th</sup> percentile speed.
  - ◆ Beryl Street between 190<sup>th</sup> Street and Flagler Lane: Establish the posted speed limit at 30 mph based on the 85<sup>th</sup> percentile speed.
  - ◆ Cabrillo Avenue between Torrance Boulevard and Plaza Del Amo: Increase the existing posted speed limit from 25 mph to 30 mph based on the 85<sup>th</sup> percentile speed and low accident rate.
  - ◆ Carson Street between Crenshaw Boulevard and Western Avenue: Increase the existing posted speed limit from 30 mph to 35 mph based on the 85<sup>th</sup> percentile speed and a low accident rate.
  - ◆ Del Amo Circle Drive between Hawthorne Boulevard and Carson Street: Establish the posted speed limit at 30 mph based on the 85<sup>th</sup> percentile speed.
  - ◆ Earl Street between Del Amo Boulevard and Torrance Boulevard: Increase the existing posted speed limit from 25 mph to 30 mph based on the 85<sup>th</sup> percentile speed and low accident rate.

- ◆ Hawthorne Boulevard between Pacific Coast Highway and South City Limit: Increase the existing posted speed limit from 40 mph to 45 mph based on the 85<sup>th</sup> percentile speed and low accident rate.
- ◆ Lomita Boulevard between Anza Avenue and Hawthorne Boulevard: Increase the existing posted speed limit from 35 mph to 40 mph based on the 85<sup>th</sup> percentile speed and low accident rate.
- ◆ Madison Street between Lomita Boulevard and Pacific Coast Highway: Increase the existing posted speed limit from 35 mph to 40 mph based on the 85<sup>th</sup> percentile speed and low accident rate.
- ◆ Maple Avenue between Del Amo Boulevard and Torrance Boulevard: Increase the existing posted speed limit from 25 mph to 30 mph based on the 85<sup>th</sup> percentile speed and low accident rate.
- ◆ Marcelina Avenue between Arlington Avenue and Sartori Avenue: Establish the posted speed limit at 25 mph based on the 85<sup>th</sup> percentile speed.
- ◆ Plaza del Amo between Carson Street and Border Avenue: Decrease the existing posted speed limit from 35 mph to 30 mph based on high pedestrian activity.
- ◆ Sepulveda Boulevard between Maple Avenue and Arlington Avenue: Increase the existing posted speed limit from 40 mph to 45 mph based on the 85<sup>th</sup> percentile speed and low accident rate.
- ◆ Skypark Drive between Hawthorne Boulevard and Crenshaw Boulevard: Increase the existing posted speed limit from 40 mph to 45 mph based on the 85<sup>th</sup> percentile speed and low accident rate.
- ◆ Van Ness Avenue between Del Amo Boulevard and Torrance Boulevard: Increase the existing posted speed limit of 35 mph to 40 mph based on the 85<sup>th</sup> percentile speed and low accident rate.

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**Speed Zoning Regulations from  
California Manual on Uniform  
Traffic Control Devices (MUTCD)  
(FHWA's MUTCD 2003 Edition as amended for use in California)  
and Definition of Terms**

*A*

**Section 2B.116 Speed Limits and Zones****Support:**

Speed limits in California are governed by the California Vehicle Code (CVC), Sections 22348 through 22413; also, pertinent sections are found in Sections 627 and 40802 and others referenced in this section. See Section 1A.11 for information regarding this publication. Refer to Section 2B.13 for speed limit signs. Refer to Part 6 (Section 6C.01) for speed limit signs in temporary traffic control areas. Refer to Part 7 for speed limit signs in school areas.

**Basic Speed Law and Prima Facie Speed Limits – See CVC 22350 & 22352****Support:**

The basic speed law states “No person shall drive a vehicle upon a highway at a speed greater than is reasonable or prudent having due regard for weather, visibility, the traffic on, and the surface and width of, the highway, and in no event at a speed which endangers the safety of persons or property.”

**Standard:**

**Prima facie speed limits are specific limits and shall apply unless changed based upon an engineering and traffic survey and signs are posted that display the new speed limit.**

**Option:**

Prima facie speed limits may be preempted by the basic speed law, when roadway, traffic or weather conditions warrant a lower speed.

**Use of Metric System Designations – See CVC 21351.3****Option:**

Dual units for speed limits on signs may be placed on local streets and roads in both Metric and English units.

**Guidance:**

If used, dual unit speed limits should be rounded to the nearest 10 km/h for Metric and 5 mph for English units for posting on signs on local streets and roads.

**Support:**

Refer to AASHTO’s Traffic Engineering Metric Conversion Factors. See Section 1A.11 for information regarding this publication.

**Standard:**

**Metric speed limits shall not be placed on State highways. For use in this Supplement, 70 mph shall be shown as a metric equivalent of 110 km/h, neither of which shall be used on any local street or road.**

**Legal Authority for Establishing Speed Limits****Support:**

Delegation of legal authority to set speed limits on State highways is given to Department of Transportation’s District Directors. The District Director of each transportation district is authorized to issue orders regulating the speed of traffic, up to 110 km/h (65 mph) on State highways. The Director of the MUTCD Department of Transportation retains the authority to approve variable, minimum, and maximum speeds up to 110 km/h (70 mph) on State freeways.

**20 km/h (15 mph) - See CVC 22352.a.1****Standard:**

**The following speed limits shall apply, unless changed, based upon an engineering and traffic survey:**

- At a railroad grade crossing with an obstructed view.
- At an uncontrolled highway intersection with an obstructed view.
- On an alley.

**20 & 30 km/h (15 & 20 mph) - See CVC 22358.3 & 22358.4****Standard:**

The following speed limits shall apply, unless changed upon the basis of an engineering and traffic survey:

- Based upon an engineering and traffic survey where the prima facie speed of 40 km/h (25 mph) is more than is reasonable or safe.
- Due to a narrow street not exceeding 7.6 m (25 ft), other than a State highway, in a business or residential area or in a public park.
- Near a school or senior center facility.

40 km/h (25 mph) - See CVC 22352.a.2 & 22357.1

Standard:

The following speed limits shall apply, unless changed, based upon an engineering and traffic survey:

- On any highway other than a State highway in any business or residence district.
- In a school zone.
- When passing a facility primarily used by senior citizens and contiguous to a street other than a State highway.
- Adjacent to a children's playground in a public park, but only during particular hours or days when children are expected to use the facilities. This limit is effective when signs giving notice of the speed limit are posted.

40 to 100 km/h (25 to 60 mph) on State highways - See CVC 22354 & 22354.5

Option:

The following speed limits may apply:

- Whenever the Department of Transportation determines based upon an engineering and traffic survey that the limit of 110 km/h (65 mph) is more than is reasonable or safe upon a State highway, the Department may determine and post a prima facie speed limit of 100, 90, 80, 70, 60, 50, 40 km/hr (60, 55, 50, 45, 40, 35, 30, 25 mph) whichever is found most appropriate to facilitate the orderly movement of traffic and is reasonable and safe.
- Local city council or county board of supervisors may conduct a public hearing on proposed increases or decreases to posted speed limits and the Department shall take into consideration the results of the public hearing.

40 to 110 km/h (30 to 65 mph) on Local Streets & Roads - See CVC 22357

Option:

The following speed limits may apply:

- Whenever a local authority determines based upon an engineering and traffic survey that a speed greater than 40 km/h (25 mph) would facilitate the orderly movement of vehicular traffic and would be reasonable and safe upon any street other than a State highway otherwise subject to a prima facie limit of 40 km/h (25 mph), the local authority may by ordinance post a prima facie speed limit of 50, 60, 60, 70, 80, 90, or 100 km/h (30, 35, 40, 45, 50, 55, or 60 mph), or 110 km/h (65 mph), whichever is found most appropriate to facilitate the orderly movement of traffic and is reasonable and safe.

30 to 80 km/h (20 to 50 mph) for Trucks - See CVC 22407

Option:

The following speed limits may apply:

- Whenever the Department of Transportation or local authority determines based upon engineering studies and a traffic survey that the speed of 90 km/h (55 mph) is more than is reasonable or safe for vehicles mentioned in CVC 22406 with specified weight requirements, the department or local authority, with respect to highways under their respective jurisdiction, may determine and post a speed limit of 80, 70, 60, 60, 50, 40 or 30 km/h (50, 45, 40, 35, 30, 25 or 20 mph), whichever is found most appropriate to

facilitate the orderly movement of traffic and is reasonable and safe when appropriate signs are posted upon the highway.

**90 km/h (55 mph) – See CVC 22349.b & .c and 22406**

Option:

The following speed limits may apply:

- On a two-lane, undivided highway.
- On any highway if driving any of the following vehicles:
  - a. A motortruck or truck tractor having three or more axles or any motortruck or truck tractor drawing any other vehicle.
  - b. A passenger vehicle or bus towing any other vehicle.
  - c. A schoolbus transporting any school pupil.
  - d. A farm labor vehicle when transporting passengers.
  - e. A vehicle transporting explosives.
  - f. A trailer bus.

**110 km/h (65 mph) Maximum Speed Limit - See CVC 22349(a) & CVC 22349**

Option:

The following speed limits may apply:

- On any highway, or portion thereof, posted at 110 km/h (65 mph) based upon an engineering and traffic survey.

**110 km/h (70 mph) Maximum Freeway Speed Limit - See CVC 22356**

Option:

The following speed limits may apply:

- Whenever the Department of Transportation, after consultation with the California Highway Patrol (CHP), determines based upon an engineering and traffic survey on existing freeway segments that are otherwise subjected to a maximum speed limit of 110 km/h (65 mph), or upon the basis of appropriate design standards and projected traffic volumes in the case of newly constructed freeway segments, that a speed greater than 110 km/h (65 mph) would facilitate the orderly movement of vehicular traffic and would be reasonable and safe, the Department, with the approval of the CHP, may declare and post a higher maximum speed of 110 km/h (70 mph) for vehicles not subject to CVC 22406.

**Variable Speed Limits on Freeways - See CVC 22355**

Option:

The following speed limits may apply:

- Whenever the Department of Transportation determines based upon an engineering and traffic survey that the safe and orderly movement of traffic upon any freeway segment will be facilitated by the establishment of variable speed limits.
- The Department may erect, regulate, and control signs upon the state highway which is a freeway, or any portion thereof, which, if used, signs shall be designed to permit display of different speeds at various times of the day or night.
- Such signs need not conform to the standards & specifications per CVC 21400, but if used, shall be of sufficient size and clarity to give adequate notice of the applicable speed limit.

**Minimum Speed Limits on State Highways - See CVC 22400**

Option:

The following speed limits may apply:

- Whenever the Department of Transportation determines based upon an engineering and traffic survey that slow speeds on any part of a state highway consistently impede the normal and reasonable movement of traffic, the Department may determine and declare a minimum speed limit. Appropriate signs giving notice shall then be installed on that segment.

- A motorist can be cited for stopping or impeding the normal and reasonable movement of traffic unless the stop is necessary for safe operation and in compliance with the law.

### **Engineering and Traffic Survey**

#### **Support:**

CVC Section 627 defines the term “Engineering and traffic survey” and lists its requirements.

#### **Standard:**

**An engineering and traffic survey shall include, among other requirements deemed necessary by the department, consideration of all of the following:**

- (1) Prevailing speeds as determined by traffic engineering measurements.**
- (2) Accident records.**
- (3) Highway, traffic, and roadside conditions not readily apparent to the driver.**

#### **Guidance:**

The Engineering and Traffic Survey should contain sufficient information to document that the required three items of CVC Section 627 are provided and that other conditions not readily apparent to a motorist are properly identified.

Prevailing speeds are determined by a speed zone survey. A speed zone survey should include:

- The intent of the speed measurements is to determine the actual speed of unimpeded traffic. The speed of traffic should not be altered by concentrated law enforcement, or other means, just prior to, or while taking the speed measurements.
- Only one person is required for the field work. Speeds should be read directly from a radar or other electronic speed measuring devices; or,
- Devices, other than radar, capable of accurately distinguishing and measuring the unimpeded speed of free flowing vehicles may be used.
- A location should be selected where prevailing speeds are representative of the entire speed zone section. If speeds vary on a given route, more than one speed zone section may be required, with separate measurements for each section. Locations for measurements should be chosen so as to minimize the effects of traffic signals or stop signs.
- Speed measurements should be taken during off-peak hours between peak traffic periods on weekdays. If there is difficulty in obtaining the desired quantity, speed measurements may be taken during any period with free flowing traffic.
- The weather should be fair (dry pavement) with no unusual conditions prevailing.
- The surveyor and equipment should not affect the traffic speeds. For this reason, an unmarked car is recommended, and the radar speed meter located as inconspicuously as possible.
- In order for the sample to be representative of the actual traffic flow, the minimum sample should be 100 vehicles in each survey. In no case should the sample contain less than 50 vehicles.
- Short speed zones of less than 0.8 km (0.5 mi) should be avoided, except in transition areas.
- Speed zone changes should be coordinated with changes in roadway conditions or roadside development.
- The speed limit should be established at the nearest 10 km/h (5 mph) increment to the 85<sup>th</sup> percentile speed. However, in matching existing conditions with the traffic safety needs of the community, engineering judgement may indicate the need for a further reduction of 10 km/h (5 mph).
- Speed zoning should be in 20 km/h (10 mph) increments except in urban areas where 10 km/h (5 mph) increments are preferable.
- Speed zoning should be coordinated with adjacent jurisdictions.

**Support:**

Physical conditions such as width, curvature, grade and surface conditions, or any other condition readily apparent to the driver, in the absence of other factors, would not require special downward speed zoning. Refer to CVC 22358.5.

**Option:**

When qualifying an appropriate speed limit, State and local authorities may also consider the following findings:

1. Residential density, if any of the following conditions exist on the particular portion of highway and the property contiguous thereto, other than a business district:
  - a. Upon one side of the highway, within 0.4 km (0.25 mi), the contiguous property fronting thereon is occupied by 13 or more separate dwelling houses or business structures.
  - b. Upon both sides of the highway, collectively, within a distance of 0.4 km (0.25 mi) the contiguous property fronting thereon is occupied by 16 or more separate dwelling houses or business structures.
  - c. The portion of highway is larger than 0.4 km (0.25 mi) but has the ratio of separate dwelling houses or business structures to the length of the highway described in either subparagraph a or b.
2. Pedestrian and bicyclist safety.

**Option:**

The following two methods of conducting engineering and traffic surveys may be used to establish speed limits:

1. State Highways - The engineering and traffic survey for State highways is made under the direction of the Department of Transportation's District Traffic Engineer. The data includes:
  - a. One copy of the Standard Speed Zone Survey Sheet (See Figure 2B-103) showing:
    - A north arrow
    - Engineer's station or post mileage
    - Limits of the proposed zones
    - Appropriate notations showing type of roadside development, such as "scattered business," "solid residential," etc. Schools adjacent to the highway are shown, but other buildings need not be plotted unless they are a factor in the speed recommendation or the point of termination of a speed zone.
    - Collision rates for the zones involved
    - Average daily traffic volume
    - Location of traffic signals, signs and markings
    - If the highway is divided, the limits of zones for each direction of travel
    - Plotted 85<sup>th</sup> percentile and pace speeds at location taken showing speed profile
  - b. A report to the District Director that includes:
    - The reason for the initiation of speed zone survey.
    - Recommendations and supporting reasons.
    - The enforcement jurisdictions involved and the recommendations and opinions of those officials.
    - The stationing or reference post in kilometers (mileage) at the beginning and ending of each proposed zone and any intermediate equations. Location ties must be given to readily identifiable physical features.
2. City and County Through Highways, Arterials, Collector Roads and Local Streets.
  - a. The short method of speed zoning is based on the premise that a reasonable speed limit is one that conforms to the actual behavior of the majority of motorists, and that by measuring motorists' speeds, one will be able to select a speed limit that is both reasonable and effective. Other factors that need to be considered include but are not

limited to: the most recent two-year collision record, roadway design speed, safe stopping sight distance, superelevation, shoulder conditions, profile conditions, intersection spacing and offsets, commercial driveway characteristics, and pedestrian traffic in the roadway without sidewalks.

- b. Determination of Existing Speed Limits - Figures 2B-105 & 2B-106 show samples of data sheets which may be used to record speed observations. Specific types of vehicles may be tallied by use of letter symbols in appropriate squares.

In most situations, the short form for local streets and roads will be adequate; however, the procedure used on State highways may be used at the option of the local agency.

**Guidance:**

The factors justifying a reduction below the 85<sup>th</sup> percentile speed for the posted speed limit are the same factors mentioned above. Whenever such factors are considered to establish the speed limit, they should be documented on the speed zone survey or the accompanying engineering report.

The establishment of a speed limit of more than 10 km/h (5 mph) below the 85<sup>th</sup> percentile speed should be done with great care as studies have shown that establishing a speed limit at less than the 85<sup>th</sup> percentile generally results in an increase in accident rates; in addition, this may make violators of a disproportionate number of the reasonable majority of drivers.

**Support:**

Generally, the most decisive evidence of conditions not apparent to the motorist surface in accident histories.

Speed limits are established at or near the 85<sup>th</sup> percentile speed, which is defined as that speed at or below which 85<sup>th</sup> percent of the traffic is moving. The 85<sup>th</sup> percentile speed is often referred to as the critical speed. Pace speed is defined as the 16 km/h (10 mph) increment of speed containing the largest number of vehicles (See Figure 2B-104). The lower limit of the pace is plotted on the Speed Zone Survey Sheets as an aid in determining the proper zone limits. Speed limits higher than the 85<sup>th</sup> percentile are not generally considered reasonable and prudent. Speed limits below the 85<sup>th</sup> percentile do not ordinarily facilitate the orderly movement of traffic and require constant enforcement to maintain compliance. Speed limits established on the basis of the 85<sup>th</sup> percentile conform to the consensus of those who drive highways as to what speed is reasonable and prudent, and are not dependent on the judgement of one or a few individuals.

The majority of drivers comply with the basic speed law. Speed limits set at or near the 85<sup>th</sup> percentile speed provide law enforcement officers with a limit to cite drivers who will not conform to what the majority considers reasonable and prudent. Further studies show that establishing a speed limit at less than the 85<sup>th</sup> percentile (Critical Speed) generally results in an increase in accident rates.

**Option:**

When roadside development results in traffic conflicts and unusual conditions which are not readily apparent to drivers, as indicated in collision records, speed limits somewhat below the 85<sup>th</sup> percentile may be justified. Concurrence and support of enforcement officials are necessary for the successful operation of a restricted speed zone.

**Guidance:**

Speed zones of less than 0.8 km (0.5 mi) and short transition zones should be avoided.

**Speed Traps**

**Support:**

Refer to CVC 40802 for Speed Traps.

**Standard:**

**A speed trap shall not apply to a local street, road, or school zone.**

**A section of highway shall be defined as a speed trap if the prima facie speed limit is not justified by an engineering and traffic survey within five years, and the enforcement of**

the speed limit involves the use of radar or any other electronic device that measures the speed of moving objects.

This time provision shall be extended to seven years when using radar and all of the following criteria are met:

- The arresting officer has successfully completed a minimum of 24 hours of certified radar operator course training.
- The radar used to measure the speed meets or exceeds the minimal operational standards of the National Traffic Highway Safety Administration, and has been calibrated within three years of the alleged violation.

This time provision shall be extended to seven years when using laser or other electronic device (other than radar) and all of the following criteria are met:

- The arresting officer has successfully completed a minimum of 24 hours of certified radar operator course training.
- The arresting officer has successfully completed a minimum of 2 hours of additional approved certified training.
- The radar used to measure the speed meets or exceeds the minimal operational standards of the National Traffic Highway Safety Administration, and has been calibrated within three years of the alleged violation.

Option:

This time provision for an engineering and traffic survey may be extended to ten years when all of the above conditions are met and no significant changes in roadway or traffic conditions have occurred, including changes in adjoining property or land use, roadway width, or traffic volume as determined by a registered engineer.

#### **Truck Speed Zone on Descending Grades**

Guidance:

Highway descending grades, if used for posting TRUCK SPEED LIMIT signs for trucks traveling downhill, should have recorded incident history of runaway commercial vehicles. Descending grades shorter than 1.6 km (1 mi) should be avoided for posting signs because deceleration of vehicles due to braking action can generally provide sufficient control on descending grades of less than 1.6 km (1 mi).

Support:

To establish a downhill truck speed limit, a physical profile showing length and gradient and a downhill speed profile for three or more axle commercial vehicles with a gross rating of 4,536 kg (10,000 lbs.) or more will be provided.

Standard:

Speed profiles for truck speed limits shall be prepared on the same form as other speed surveys. An analysis of collisions involving trucks shall be prepared.

Guidance:

Posted speeds should be on the low side of the scale, generally within the pace of loaded commercial vehicles.

Standard:

If warranted, the Department of Transportation's District Director shall issue a standard speed zone order.

Support:

Posting of the regulation will be by placement of a standard 900 x 1150 mm (36 x 45 in) Speed Limit (R2-1) sign with a TRUCK (M4-4) plate above.

Standard:

A standard End Speed Limit (CA Code R3) sign with TRUCK (M4-4) plate shall be posted at the end of the truck zone when appropriate.

## Definitions of Terms

**Average Daily Traffic**  
**E.C.L.**

Volume of traffic during a 24-hour period.  
Easterly City Limit, (also W.C.L., N.C.L., and S.C.L. for Westerly, Northerly, and Southerly City Limits, respectively).

**85<sup>th</sup> Percentile Speed**  
**(Critical Speed)**

The "speed" which 85% of the observed vehicles are not exceeding. This speed is usually within 2 mph of the upper limit of the pace.

**Mean Speed**  
**MPH or mph**  
**MVM or mvm**

The average speed.

Miles Per Hour.

Million Vehicle Miles. Accident rates are generally expressed as the number of accidents occurring per million vehicle miles traveled during a given time period.

**Pace**

The 10 mph range of observed vehicle speeds containing the largest number of vehicles. A normal distribution will contain approximately 70% of the sample within the pace, with 15% above and 15% below.

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**Regulations Governing Speed Limits**  
(Excerpts from California Vehicle Code)

## REGULATIONS GOVERNING SPEED LIMITS

### INTRODUCTION

In order to enforce speed limits by radar or other electronic devices, a study must be conducted every five years. Section 40802 of the California Vehicle Code defines a speed limit enforced by radar and "...which speed limit is not justified by an engineering and traffic survey conducted within five years prior to the date of the alleged violation..." constitutes a speed trap, unless the following criteria are met:

If officers have completed specialized training courses that are approved by the Commission on Peace Officer Standards Training, the time span between studies can be extended to seven years.

If after seven years, "...a registered engineer evaluates the section of the highway and determines that no significant changes in roadway or traffic conditions have occurred, including, but not limited to, changes in adjoining property or land use, roadway width, or traffic volume..." the time span between studies can be extended to ten years.

Since speed traps are illegal, the lack of an adequate study effectively precludes the police from using radar enforcement. Through adoption of an adequate study, the police department will be able to enforce posted speed limits with radar equipment.

Under California law, the maximum speed limit for any passenger vehicle is 65 miles per hour (mph). All other speed limits are called prima facie limits which "on the face of it", are safe and prudent under normal conditions. Certain prima facie limits are established by law and include the 25 miles per hour limit in business and residential districts; the 15 miles per hour limit in alleys, at blind intersections and blind railroad grade crossings; and a part time 25 miles per hour in school zones when children are going to and from school.

Intermediate speed limits between 25 and 65 miles per hour may be established by local authorities based on traffic engineering surveys. Such surveys include the analysis of roadway conditions, accident records, and the prevailing speed of prudent drivers using the highway under study. If speed limits are established below what the majority of drivers consider reasonable, they are often not obeyed and consequently, are difficult to enforce. Those drivers who do not comply with posted reasonable speed limits are, conversely, subject to equitable enforcement action.

The Vehicle Code provides that the use of radar to enforce speed limits, which have not been based on a traffic and engineering study within the preceding five years, constitutes a "speed trap". Since speed traps are also prohibited by the code, lack of the required study effectively prohibits local agencies from using radar enforcement.

## APPLICABLE VEHICLE CODE SECTIONS

### Business District

235. A "business district: is that portion of a highway and the property contiguous thereto (a) upon one side of which highway, for a distance of 600 feet, 50 percent of more of the contiguous property fronting thereon is occupied by buildings in use for business, or (b) upon both sided of which highway, collectively, for a distance of 300 feet, 50 percent or more of the contiguous property fronting thereon is so occupied. A business district may be longer than the distance specified in this section if the above ratio of buildings in use for business to the length of the highway exists.

### Business and Residence District: Determination

240. In determining whether a highway is within a business or residence district, the following limitations shall apply and shall qualify the definitions Section 235 and 515:

- a) No building shall be counted unless its entrance faces the highway and the front of the building is within 75 feet of the roadway.
- b) Where a highway is physically divided into two or more roadways, only those buildings facing each roadway separately shall be counted for the purpose of determining whether the roadway is within a district.
- c) All churches, apartments, hotels, multiple dwelling houses, clubs and public buildings, other than schools, shall be deemed to be business structures.
- d) A highway or portion of a highway shall not be deemed to be within a district regardless of the number of buildings upon the contiguous property if there is no right of access to the highway by vehicles from the contiguous property.

### Residence District

515. A "residence district" is that portion of a highway and the property contiguous thereto, other than a business district, (a) upon one side of which highway, within a distance of a quarter of a mile, the contiguous property fronting thereon is occupied by 13 or more separate dwelling houses or business structures, or (b) upon both sided of which highway, collectively, within a distance of a quarter of a mile, the contiguous property fronting thereon is occupied by 16 or more separate dwelling housed or business structures. A residence district may be longer than one quarter of a mile if the above ratio of separate dwelling houses or business structures to the length of the highway exists.

### Engineering and Traffic Survey

627. (a) "Engineering and traffic survey" as used in this Code, means a survey of highway and traffic conditions in accordance with methods determined by the Department of Transportation for use by the state and local authorities.

(b) An engineering and traffic survey shall include, among other requirements deemed necessary by the department, consideration of all the following

- 1) Prevailing speeds as determined by traffic engineering measurements.
- 2) Accident records.
- 3) Highway, traffic, and roadside conditions not readily apparent to the driver.

### Maximum Speed Limit

22349. Except as provided in Section 22356, no person shall drive a vehicle upon a highway at a speed greater than 65 miles per hour.

### Basic Speed Law

22350. No person shall drive a vehicle upon a highway at a speed greater than is reasonable or prudent having due regard for weather, visibility, the traffic on, and surface and width of, the highway, and in no event at a speed which endangers the safety of persons or property.

### Speed Law Violations

22351. (a) The speed of any vehicle upon a highway not in excess of the limits specified in Section 22352 or established as authorized in this code is lawful unless clearly proved to be in violation of the basic speed law.

(b) The speed of any vehicle upon a highway in excess of the prima facie speed limits in Section 22352 or established as authorized in this code is prima facie unlawful unless the defendant establishes by competent evidence that the speed in excess of said limits did not constitute a violation of the basic speed law at the time, place and under the conditions then existing.

### Prima Facie Speed Limits

22352. The prima facie limits are as follows and the same shall be applicable unless changed as authorized in this code and, if so changed, only when signs have been erected giving notice thereof:

- (a) Fifteen miles per hour:

- 1) When traversing a railway grade crossing, if during the last 100 feet of the approach to the crossing the driver does not have a clear and unobstructed view of the crossing and of any traffic on the railway for a distance of 400 feet in both directions along such railway. This subdivision does not apply in the case of any railway grade crossing where a human flagman is on duty or a clearly visible electrical mechanical railway crossing signal device is installed but does not then indicate the immediate approach of a railway train or car.
  - 2) When traversing any intersection of highways if during the last 100 feet of his approach to the intersection the driver does not have a clear and unobstructed view of the intersection and of any traffic upon all of the highways entering the intersection for a distance of 100 feet along all such highways, except at an intersection protected by stop signs or yield right-of-way signs or controlled by official traffic control signals.
  - 3) On any alley.
- (b) Twenty-five miles per hour:

- 1) On any highway other than a state highway, in any business or residence district unless a different speed is determined by local authority under procedures set forth in this code.
- 2) When passing a school building or the grounds thereof, contiguous to a highway and posted with a standard "SCHOOL" warning sign, while children are going to or leaving the school either during school hours or during the noon recess period. Such prima facie limit shall also apply when passing any school grounds which are not separated from the highway by a fence, gate or other physical barrier while the grounds are in use by children and the highway is posted with a standard "SCHOOL" warning sign.
- 3) When passing a senior center or facility primarily used by senior citizens, contiguous to a street other than a state highway and posted with a standard "SENIOR" warning sign.

#### Increase of Local Limits

22357. Whenever a local authority determines upon the basis of an engineering and traffic survey that a speed greater than 25 miles per hour would facilitate the orderly movement of vehicular traffic and would be reasonable and safe upon any street other than a state highway otherwise subject to a prima facie limit of 25 miles per hour, the local authority may by ordinance determine and declare a prima facie limit of 25 miles per hour, the local authority may by ordinance determine and declare a prima facie speed limit of 30, 35, 40, 45, 50, 55, 60 miles per hour or a maximum speed limit of 65 miles per hour, whichever is found most appropriate to facilitate the orderly movement of

traffic and is reasonable and safe. The declared prima facie or maximum speed limit shall be effective when appropriate signs giving notice thereof are erected upon the street and shall not thereafter be revised except upon the basis of an engineering and traffic survey. The provisions of this section shall not apply in respect to any 25-mile-per-hour prima facie limit, which is applicable when passing a school building or the grounds thereof.

#### Decrease of Local Limits

22358. Whenever a local authority determines upon the basis of an engineering and traffic survey that the limit of 65 miles per hour is more than is reasonable or safe upon any portion of any street other than a state highway where the limit of 65 miles per hour is applicable, the local authority may by ordinance determine and declare a prima facie speed limit of 60, 55, 50, 45, 40, 35, 30, or 25 miles per hours, whichever is found most appropriate to facilitate the orderly movement of traffic and is reasonable and safe, which declared prima facie limit shall be effective when appropriate signs giving notice thereof are erected upon the street.

#### Downward Speed Zoning

22358.5 It is the intent of the Legislature that physical conditions such as width, curvature, grade and surface conditions or any other condition readily apparent to a driver, in the absence of other factors, would not require special downward speed zoning, as the basic rule of Section 22350 is sufficient regulation as to such conditions.

#### Boundary Line Streets

22359. With respect to boundary line streets and highways where portions thereof are within different jurisdictions, no ordinance adopted under Sections 22357 and 22358 shall be effective as to any such portion until all authorities having jurisdiction of the portions of the street concerned have approved the same. This section shall not apply in the case of boundary line streets consisting of separate roadways within different jurisdictions.

#### Multiple-Lane Highways

22361. On multiple-lane highways with two or more separate roadways, different prima facie speed limits may be established for different roadways under any of the procedures specified in Sections 22354 to 22359, inclusive.

#### Speed Trap Prohibition

40801. No peace officer or other person shall use a speed trap in arresting, or participating or assisting in the arrest of, any person for any alleged violation of this code nor shall any speed trap be used in securing evidence as to the speed of any vehicle for the purpose of an arrest or prosecution under this code.

Speed Trap

40802. A "speed trap" is either of the following:

- a) A particular section of a highway measured as to distance and with boundaries marked, designated, or otherwise determined in order that the speed of a vehicle may be calculated by securing the time it takes the vehicle to travel the known distance.
- b) A particular section of a highway with a prima facie speed limit provided by this code or by local ordinance pursuant to paragraph (1) of subdivision (b) of Section 22352, or established pursuant to Section 22354, 22357, 22358, or 22358.3, which speed limit is not justified by an engineering and traffic survey conducted within five years prior to the date of the alleged violation, and where enforcement involves the use of radar or other electronic devices which measures the speed of moving objects. This subdivision does not apply to local streets and roads.

For purposes of this section, local streets and roads shall be defined by the latest functional usage and federal-aid system maps as submitted to the Federal Highway Administration. When these maps have not been submitted, the following definition shall be used: A local street or road primarily provides access to abutting residential property and shall meet the following three conditions:

1. Roadway width of not more than 40 feet.
2. Not more than one-half mile of uninterrupted length. Interruptions shall include official traffic control devices as defined in Section 445.
3. Not more than one traffic lane in each direction.

Speed Trap Evidence.

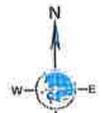
40803. (a) No evidence as to the speed of a vehicle upon a highway shall be admitted in any court upon the trial of any person in any prosecution under this code upon a charge involving the speed of a vehicle when the evidence is based upon or obtained from or by the maintenance or use of a speed trap
- (b) In any prosecution under this code of a charge involving the speed of a vehicle, where enforcement involves the use of radar or other electronic devices which measure the speed of moving objects, the prosecution shall establish, as part of its prima facie case, that the evidence or testimony presented is not based upon a speed trap as defined in subdivision (b) of Section 40802.
  - (c) When a traffic and engineering survey is required pursuant to subdivision (b) of Section 40802, evidence that a traffic and engineering survey has been

conducted within five years of the date of the alleged violation or evidence that the offense was committed on a local street or road as defined in subdivision (b) of Section 40802 shall constitute a prima facie case that the evidence or testimony is not based upon a speed trap as defined in subdivision (b) 40802.

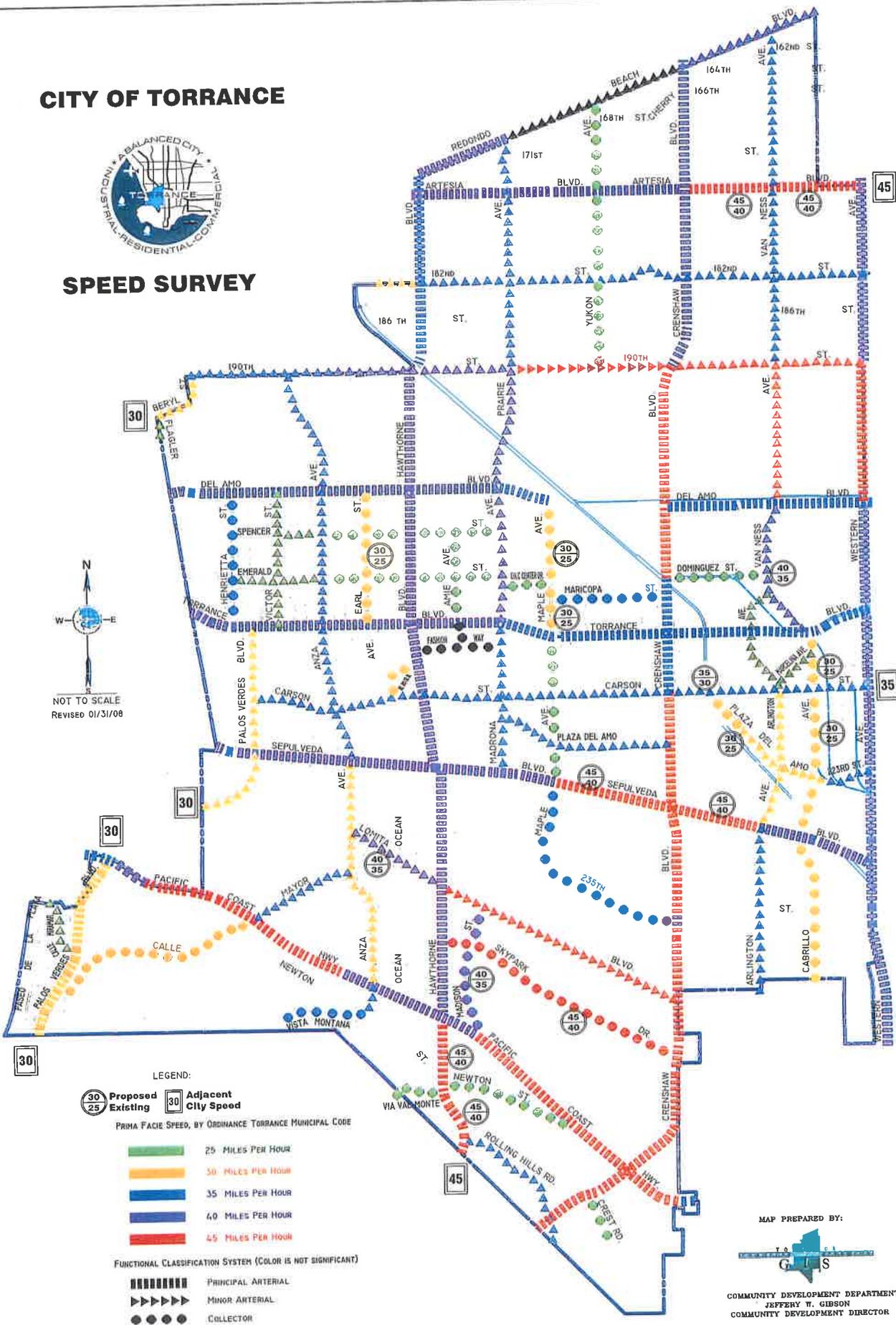
# CITY OF TORRANCE



## SPEED SURVEY



NOT TO SCALE  
REVISED 01/31/08



**LEGEND:**

**Proposed Existing Adjacent City Speed**

PRIMA FACIE SPEED, BY ORDINANCE TORRANCE MUNICIPAL CODE

- 25 MILES PER HOUR
- 30 MILES PER HOUR
- 35 MILES PER HOUR
- 40 MILES PER HOUR
- 45 MILES PER HOUR

**FUNCTIONAL CLASSIFICATION SYSTEM (COLOR IS NOT SIGNIFICANT)**

- PRINCIPAL ARTERIAL
- MINOR ARTERIAL
- COLLECTOR

MAP PREPARED BY:

COMMUNITY DEVELOPMENT DEPARTMENT  
JEFFERY W. GIBSON  
COMMUNITY DEVELOPMENT DIRECTOR

T:\eng\2\City\Aut\040\_DWG\9/10/07

