

ENGINEERING AND TRAFFIC SURVEYS

IN THE

CITY OF HAWTHORNE

2014

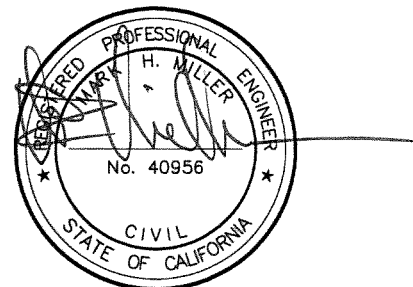
Prepared for



**City of Hawthorne
Public Works Department**

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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 the City of Hawthorne 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. However, a change in State law allows cities to extend the survey period up to seven or ten years depending on specific criteria. This change is expanded on in **Appendix B**. The latest edition of the CVC has highlighted bicycle, pedestrian, and equestrian safety as part of the traffic and engineering survey, and this aspect was considered.

According to City records, the last speed zone survey was prepared in 2007. The current study will verify, increase, or decrease existing speed limits within the City of Norco based on the data and results of this survey.

At 43 locations on the City's 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 (CA MUTCD) January 2012. Sections of the CA 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., a subcontractor of Albert Grover & 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 collection 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 43 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 for the period from January 1, 2011 through December 31, 2013 (three years) for all roadway segments. The accident rate was calculated and considered in recommending the speed limit.

SECTION 3.0

Survey Results

3.1 Street Surveillance

"Speed Limit Signs," Section 2B.13 of the CA MUTCD 2010, 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.

The survey streets were reviewed 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, conditions not readily apparent to the driver, 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 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 Engineering and Speed Survey Summary sheets 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 reports from January 1, 2004 thru December 31, 2006, mid-block accident rates were calculated for each street surveyed.

The results of the accident rate calculations, including the Average Expected Accident Rates for each type of roadway facility are shown in **Table 1** and on the Speed Zone Spot Survey Data Forms (Appendix C). The Average Expected Accident Rates are based on the latest average rate for each type of roadway in the County of Los Angeles.

- ◆ Arterial Streets (4-6/Divided) 2.14
- ◆ Secondary Arterial Streets (4/Undivided) 1.55
- ◆ Local Streets (2/Undivided) 1.83

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 the Engineering and Traffic Survey summary sheets. The following shows a sample calculation.

Table 1: 2014 Speed Zone Survey - Accident Survey Analysis

Street	No.	Location	Distance (miles)	2014* ADT	Accidents ¹	Accident Rate	Expected Accident Rate ²
					3 Years		
					Total		
EAST/WEST							
Imperial Highway	1	Inglewood Avenue to Hawthorne Boulevard	0.50	27,895	29	1.90	1.55
	2	Hawthorne Boulevard to Prairie Avenue	0.50	27,475	23	1.53	1.55
120th Street	3	Felton Avenue to Inglewood Avenue	0.25	12,124	5	1.51	1.55
	4	Inglewood Avenue to Hawthorne Boulevard	0.50	14,894	24	2.94	1.55
	5	Hawthorne Boulevard to Prairie Avenue	0.50	17,113	29	3.10	1.55
	6	Prairie Avenue to Crenshaw Boulevard	1.00	19,870	28	1.29	1.55
	7	Crenshaw Boulevard to Van Ness Avenue	0.50	21,381	10	0.85	2.14
El Segundo Boulevard	8	Aviation Boulevard to I-405 Ramps	0.30	39,630	5	0.38	1.55
	9	Inglewood Avenue to Hawthorne Boulevard	0.50	29,793	22	1.35	1.55
	10	Hawthorne Boulevard to Prairie Avenue	0.50	29,549	32	1.98	1.55
	11	Prairie Avenue to Yukon Avenue	0.50	29,222	30	1.88	1.55
	12	Yukon Avenue to Crenshaw Boulevard	0.50	27,356	15	1.00	1.55
	13	Crenshaw Boulevard to Van Ness Avenue	0.50	29,387	7	0.44	1.55
135th Street	14	Aviation Boulevard to Isis Avenue	0.25	7,343	2	0.99	1.55
	15	Isis Avenue to Glasgow Place	0.18	7,452	3	2.04	1.55
Rosecrans Avenue	16	Aviation Boulevard to Hindry Avenue	0.38	62,529	26	1.00	2.14
	17	I-405 Freeway to Inglewood Avenue	0.53	37,949	25	1.14	2.14
	18	Prairie Avenue to Yukon Avenue	0.50	37,215	44	2.16	2.14
	19	Yukon Avenue to Crenshaw Boulevard	0.50	32,730	41	2.29	1.55
Marine Avenue	20	Aviation Boulevard to I-405 Freeway	0.70	23,370	2	0.11	1.55
	21	Prairie Avenue to Yukon Avenue	0.50	20,821	2	0.18	1.55
147th Street	22	Inglewood Avenue to Ocean Gate Avenue	0.32	10,308	3	0.83	1.83
Jack Northrop Avenue	23	Crenshaw Boulevard to Prairie Avenue	1.00	3,905	4	0.94	1.55
NORTH/SOUTH							
Aviation Boulevard	24	Marine Avenue to Rosecrans Avenue	0.50	46,989	4	0.16	2.14
	25	Rosecrans to 13200 Aviation Boulevard	1.30	33,417	4	0.08	1.55
Inglewood Avenue	26	Imperial Highway to 120th Street	0.50	19,067	31	2.97	1.55
	27	120th Street to El Segundo Boulevard	0.50	19,584	28	2.61	1.55
	28	El Segundo Boulevard to 135th Street	0.46	25,504	28	2.18	1.55
	29	135th Street to Rosecrans Avenue	0.54	26,545	25	1.59	1.55
Hawthorne Boulevard	30	Imperial Highway to 120th Street	0.50	31,615	26	1.50	2.14
	31	120th Street to El Segundo Boulevard	0.50	29,785	19	1.17	2.14
	32	El Segundo Boulevard to 135th Street	0.46	36,332	53	2.90	2.14
	33	135th Street to Rosecrans Avenue	0.54	36,528	36	1.67	2.14
Birch Avenue	34	120th Street to El Segundo Boulevard	0.50	4,854	4	1.51	1.55
Prairie Avenue	35	Imperial Highway to 120th Street	0.50	28,769	22	1.40	1.55
	36	120th Street to El Segundo Boulevard	0.50	34,032	36	1.93	1.55
	37	El Segundo Boulevard to 135th Street	0.46	30,529	34	2.21	1.55
	38	135th Street to Rosecrans Avenue	0.50	28,323	26	1.68	1.55
	39	Rosecrans Avenue to Marine Avenue	0.50	29,151	17	1.07	1.55
Crenshaw Boulevard	40	120th Street to El Segundo Boulevard	0.50	42,471	28	1.20	2.14
	41	El Segundo Boulevard to 132nd Street	0.25	35,749	7	0.72	2.14
Van Ness Avenue	42	Imperial Highway to 120th Street	0.50	17,611	9	0.93	1.55
	43	120th Street to El Segundo Boulevard	0.50	22,621	4	0.32	1.55

1 Accident Data from 1/1/2011-12/31/2013

2 County of Los Angeles

* Estimated from 1998 counts

Accident Rate Calculation

The rate was calculated using the following equation:

$$\text{Accident Rate} = \frac{\text{Number of Midblock accidents per year} \times 10^6}{24\text{-hour volume} \times 365 \times \text{segment length} \times 3 \text{ years}}$$

Where: Number of mid-block accidents per year based on three years (January 1, 2011 thru December 31, 2013), 24-hour volume (both directions) in the survey segment and segment length in miles.

Example:

Accident rate on: El Segundo Boulevard between Yukon Avenue and Crenshaw Boulevard:

$$\begin{aligned} \text{Accident Rate} &= 1 \times 10^6 \times 20 \\ &= 39,000 \times 0.50 \times 365 \times 3 \\ &= \mathbf{0.94 \text{ accidents per million vehicle miles (A/MVM)}} \end{aligned}$$

The Average Expected Accident Rate for the segment is 1.55. The calculated accident rate of 0.94 is well below the expected rate for this segment.

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 normally be established at the first five mile per hour increment below the 85th 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 43 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 above factors for each roadway segment surveyed are listed on the spot speed survey data forms in Appendix C. 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, including any increases or decreases.

4.1 Speed Limit Signing

All California motorists are required to know the basic 15, 25, and 65 MPH speed laws and are tested on the subject when applying for a driver's license. The maximum speed limit on most California highways is 65 mph. You may drive 70 mph where posted. Unless otherwise posted, the maximum speed limit is 55 mph on two-lane undivided highways and for vehicles towing trailers. 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.

City of Hawthorne - Table 2: 2014 Segment Spot Speed Survey

Street	No.	Location	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
Imperial Hwy	1	Inglewood Ave to Hawthorne Blvd	E/W	4/28/2014	31-40	62	33	39	35	35	NC
	2	Hawthorne Blvd to Prairie Ave	E/W	4/28/2014	32-41	56	35	41	35	35	NC, continuity of speed
120th St	3	Felton to Inglewood Ave	E/W	4/28/2014	32-41	66	36	40	35	35	NC, residential, continuity of speed
	4	Inglewood Ave to Hawthorne Blvd	E/W	4/28/2014	31-40	57	33	38	35	35*	NC, residential, school
	5	Hawthorne Blvd to Prairie Ave	E/W	4/28/2014	30-39	63	32	39	35	35	NC, residential
	6	Prairie Ave to Crenshaw Blvd	E/W	4/28/2014	32-41	67	34	40	40	40	NC, continuity of speed
	7	Crenshaw Blvd to Van Ness	E/W	4/29/2014	29-38	60	31	37	40	40	NC, retail
El Segundo Blvd	8	Aviation to 405 Ramps	E/W	4/30/2014	28-37	55	32	39	40	40	NC, 85th, low accident rate
	9	Inglewood Ave to Hawthorne Blvd	E/W	5/15/2014	36-45	66	39	44	40	40	NC
	10	Hawthorne Blvd to Prairie Ave	E/W	4/29/2014	30-39	59	33	40	40	40*	NC, school
	11	Prairie Ave to Yukon Ave	E/W	4/29/2014	31-40	59	35	42	40	40*	NC, continuity of speed
	12	Yukon Ave to Crenshaw Blvd	E/W	4/29/2014	35-44	61	37	43	40	40	NC, 85th
	13	Crenshaw Blvd to Van Ness Ave	E/W	4/29/2014	35-44	54	36	43	40	40	NC, 85th
135th St	14	Aviation to Isis Ave	E/W	4/30/2014	30-39	75	33	38	30	30*	NC, 85th
	15	Isis Ave to Glasgow	E/W	4/30/2014	26-35	72	30	36	30	30	NC, 85th
Rosecrans Ave	16	Aviation to Hindry	E/W	4/30/2014	32-41	60	34	40	40	40	NC
	17	405 Fwy to Inglewood Ave	E/W	4/30/2014	28-37	58	32	38	40	40	NC
	18	Prairie Ave to Yukon Ave	E/W	5/1/2014	34-43	66	36	42	40	40	NC
	19	Yukon Ave to Crenshaw Blvd	E/W	5/1/2014	28-37	64	32	38	40	40	NC
Marine Ave	20	Aviation to 405 Fwy	E/W	5/1/2014	29-38	66	33	39	40	40	NC
	21	Prairie Ave to Yukon Ave	E/W	5/1/2014	34-43	80	37	42	35	35	NC, continuity of speed, Gardena 35 mph
147th St	22	Inglewood Ave to Ocean Gate	E/W	5/1/2014	26-35	78	28	33	30	30	NC, multiple crossings, truck traffic
Jack Northrop Ave	23	Crenshaw Blvd to Prairie Ave	E/W	4/29/2014	33-42	33-42	38	46	40	40	NC, multiple crossings

City of Hawthorne - Table 2: 2014 Segment Spot Speed Survey

Street	No.	Location	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
NORTH/SOUTH											
Aviation Blvd	24	Marine to Rosecrans	N/S	5/1/2014	29-38	69	32	37	40	40	NC, 85th, continuity of speed
	25	Rosecrans Ave to 13200 Aviation	N/S	4/30/2014	32-41	60	36	43	40	40	NC, 85th, 40 mph: L.A. Co., Manhattan Beach, Redondo Beach, El Segundo
Inglewood Ave	26	Imperial Hwy to 120th St	N/S	4/28/2014	33-42	65	35	40	35	35	NC, multiple driveways
	27	120th St to El Segundo Blvd	N/S	4/28/2014	32-41	74	35	40	35	35	NC, multiple driveways
	28	El Segundo Blvd to 135th St	N/S	4/28/2014	32-41	73	36	41	35	35	NC, multiple driveways, continuity of speed
	29	135th St to Rosecrans Ave	N/S	4/28/2014	33-42	72	35	40	35	35	NC, multiple driveways, continuity of speed
Hawthorne Blvd	30	Imperial Hwy to 120th St	N/S	4/29/2014	27-36	73	31	36	35	35	NC, speed continuity, L.A. Co. 35 mph, pedestrian traffic
	31	120th St to El Segundo Blvd	N/S	4/29/2014	29-38	60	33	39	35	35	NC, continuity of speed
	32	El Segundo Blvd to 135th St	N/S	4/29/2014	30-39	72	32	37	35	35	NC, 85th
	33	135th St to Rosecrans Ave	N/S	4/28/2014	32-41	68	35	43	35	35	NC, continuity of speed, Lawndale 35 mph
Birch Ave	34	120th St to El Segundo Blvd	N/S	4/29/2014	25-34	65	28	33	35	35	NC
	35	Imperial Hwy to 120th St	N/S	4/29/2014	30-39	63	34	41	40	40*	NC, 85th, low accident rate
Prairie Ave	36	120th Street to El Segundo Blvd	N/S	4/29/2014	31-40	67	33	39	40	40	NC, 85th, low accident rate
	37	El Segundo Blvd to 135th St	N/S	4/29/2014	33-42	73	36	41	40	40	NC, 85th, low accident rate
	38	135th St to Rosecrans Ave	N/S	4/29/2014	31-40	73	33	39	40	40*	NC, 85th, low accident rate
	39	Rosecrans Ave to Marine Ave	N/S	4/29/2014	31-40	73	33	39	40	40	NC, 85th
Crenshaw Blvd	40	120th St to El Segundo Blvd	N/S	4/30/2014	33-42	67	36	42	40	40	NC, 85th, low accident, Inglewood 40 mph
	41	El Segundo Blvd to 132nd St	N/S	4/30/2014	29-38	61	34	40	40	40	NC, 85th, low accident, continuity of speed
Van Ness Ave	42	Imperial Hwy to 120th St	N/S	4/30/2014	34-43	66	38	43	35	35*	NC, 85th, pedestrians, continuity of speed, Inglewood 35 mph
	43	120th St to El Segundo Blvd	N/S	4/30/2014	35-44	65	39	44	35	35	NC, 85th, continuity of speed, Gardena 35 mph

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.

Speed limit signs should be installed at about one-half mile intervals on the City streets which have been speed zoned. 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 43 sections on the City's arterial and secondary arterial street network were surveyed.
3. The accident rate (Table 1) for the majority of the street segments is well below the expected accident rate obtained from the City of Hawthorne for various types of roadway facilities within Los Angeles County area.
4. Speed limits for all the streets surveyed remained the same as the existing speed limits.

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**Speed Zoning Regulations
from 2012 CA MUTCD**

RADAR SPEED ZONE SURVEYS

Introduction

This report presents the results of a traffic and engineering study for establishment of speed limits on city streets as required by Sections 22357 and 22358 of the California Vehicle Code. The review included radar surveys of prevailing vehicle speeds at various locations along the length of each street, recent traffic counts and an analysis of reported traffic accidents recorded during the specific interval.

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 this study, the police department will be able to enforce posted speed limits with radar equipment.

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

Driver behavior 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 requires that speed limits be established in accordance with appropriate engineering practice and methods.

Regulations Governing Speed Limits

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 or more of the contiguous property fronting thereon is occupied by buildings in use for business, or (b) upon both sides 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 sides 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 houses 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

2358. 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.

Study Method

Speed zones are established to inform drivers of the safe speed limit and to protect the general public from unreasonable and reckless drivers. Research has shown that most drivers travel at speeds that are safe and reasonable, therefore, speed limits are established primarily on the consensus of the majority of those who use the roads. Speed limits are not based on the actions of few. The California Vehicle Code requires the limits to be established on the basis of an engineering and traffic survey rather than by arbitrary methods.

The study is conducted in accordance with the appropriate sections of the California Vehicle Code, the Caltrans Traffic Manual (Chapter 8-03) and the Federal Manual on "Uniform Traffic Control Devices", (Section 2B-10).

Surveys are conducted on arterial streets and selected local streets. Each of the selected streets was analyzed individually.

The accident analysis was based on a review of the City's Traffic Accident Records (Crossroads). Only non-intersection accidents are included since intersection accidents are considered correctable using conventional intersection traffic controls such as stop signs or traffic signals.

Accident rates were computed using a formula that takes into account the number of accidents in the two-year period, the length of roadway being studied, and the average daily traffic volume. The rate is expressed in accidents per million vehicle miles (Acc/MVM). The formula is:

$$\text{Acc/MM} = \frac{\text{Number of Accidents} \times 1,000,000}{\text{Distance} \times \text{ADT} \times \text{No. of Days}}$$

In order to evaluate the accident rates for each street segment, the average rate for all surveyed arterial street segments was calculated. Average rates were calculated for two-lane and four-or-more-lane arterial streets, two-lane collector and two-lane local streets. The accident rates for each segment were compared to the citywide average rates for streets with similar characteristics.

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**Regulations Governing Speed Limits
(excerpts from California Vehicle Code)
and Definitions of Terms**

04 If used, the Overhead Pedestrian Crossing sign shall be placed over the roadway at the crosswalk location.

05 An In-Street or Overhead Pedestrian Crossing sign shall not be placed in advance of the crosswalk to educate road users about the State law prior to reaching the crosswalk, nor shall it be installed as an educational display that is not near any crosswalk.

Guidance:

06 If an island (see Chapter 3I) is available, the In-Street Pedestrian Crossing sign, if used, should be placed on the island.

Option:

07 If a Pedestrian Crossing (W11-2) warning sign is used in combination with an In-Street or an Overhead Pedestrian Crossing sign, the W11-2 sign with a diagonal downward pointing arrow (W16-7P) plaque may be post-mounted on the right-hand side of the roadway at the crosswalk location.

Standard:

08 The In-Street Pedestrian Crossing sign and the Overhead Pedestrian Crossing sign shall not be used at signalized locations.

09 The STOP FOR legend shall only be used in States where the State law specifically requires that a driver must stop for a pedestrian in a crosswalk.

10 The In-Street Pedestrian Crossing sign shall have a black legend (except for the red-STOP or YIELD sign symbols) and border on a white background, surrounded by an outer yellow or fluorescent yellow-green background area (see Figure 2B-2). The Overhead Pedestrian Crossing sign shall have a black legend and border on a yellow or fluorescent yellow-green background at the top of the sign and a black legend and border on a white background at the bottom of the sign (see Figure 2B-2).

11 Unless the In-Street Pedestrian Crossing sign is placed on a physical island, the sign support shall be designed to bend over and then bounce back to its normal vertical position when struck by a vehicle.

Support:

12 The Provisions of Section 2A.18 concerning mounting height are not applicable for the In-Street Pedestrian Crossing sign.

Standard:

13 The top of an In-Street Pedestrian Crossing sign shall be a maximum of 4 feet above the pavement surface. The top of an In-Street Pedestrian Crossing sign placed in an island shall be a maximum of 4 feet above the island surface.

Option:

14 The In-Street Pedestrian Crossing sign may be used seasonably seasonally to prevent damage in winter because of plowing operations, and may be removed at night if the pedestrian activity at night is minimal.

15 In-Street Pedestrian Crossing signs, Overhead Pedestrian Crossing signs, and Yield Here To (Stop Here For) Pedestrians signs may be used together at the same crosswalk.

Section 2B.13 Speed Limit Sign (R2-1)

Support:

00 The setting of speed limits can be controversial and requires a rational and defensible determination to maintain public confidence. Speed limits are normally set near the 85th-percentile speed that statistically represents one standard deviation above the average speed and establishes the upper limit of what is considered reasonable and prudent. As with most laws, speed limits need to depend on the voluntary compliance of the greater majority of motorists. Speed limits cannot be set arbitrarily low, as this would create violators of the majority of drivers and would not command the respect of the public.

Standard:

01 Speed zones (other than statutory speed limits) shall only be established on the basis of an engineering and traffic survey (E&TS) study that has been performed in accordance with traffic engineering practices. The engineering study shall include an analysis of the current speed distribution of free-flowing vehicles.

02 The Speed Limit (R2-1) sign (see Figure 2B-3) shall display the limit established by law, ordinance, regulation, or as adopted by the authorized agency based on the engineering study. The speed limits displayed shall be in multiples of 5 mph.

03 Speed Limit (R2-1) signs, indicating speed limits for which posting is required by law, shall be located at the points of change from one speed limit to another.

04 At the downstream end of the section to which a speed limit applies, a Speed Limit sign showing the next speed limit shall be installed. Additional Speed Limit signs shall be installed beyond major intersections and at other locations where it is necessary to remind road users of the speed limit that is applicable.

05 Speed Limit signs indicating the statutory speed limits shall be installed at entrances to the State and, where appropriate, at jurisdictional boundaries in urban areas.

Support:

06 In general, the maximum speed limits applicable to rural and urban roads are established:

- A. Statutorily – a maximum speed limit applicable to a particular class of road, such as freeways or city streets, that is established by State law; or**
- B. As altered speed zones – based on engineering studies.**

07 State statutory limits might restrict the maximum speed limit that can be established on a particular road, notwithstanding what an engineering study might indicate.

Option:

~~**08 If a jurisdiction has a policy of installing Speed Limit signs in accordance with statutory requirements only on the streets that enter a city, neighborhood, or residential area to indicate the speed limit that is applicable to the entire city, neighborhood, or residential area unless otherwise posted, a CITYWIDE (R2-5aP), NEIGHBORHOOD (R2-5bP), or RESIDENTIAL (R2-5cP) plaque may be mounted above the Speed Limit sign and an UNLESS OTHERWISE POSTED (R2-5P) plaque may be mounted below the Speed Limit sign (see Figure 2B-3).**~~

Guidance:

09 A Reduced Speed Limit Ahead (W3-5 or W3-5a) sign (see Section 2C.38) should be used to inform road users of a reduced speed zone where the speed limit is being reduced by more than 10 mph, or where engineering judgment indicates the need for advance notice to comply with the posted speed limit ahead.

10 States and local agencies should conduct engineering studies at least once every 5, 7 or 10 years, in compliance with CVC Section 40802 to reevaluate non-statutory speed limits on segments of their roadways that have undergone significant changes since the last review, such as the addition or elimination of parking or driveways, changes in the number of travel lanes, changes in the configuration of bicycle lanes, changes in traffic control signal coordination, or significant changes in traffic volumes.

11 No more than three speed limits should be displayed on any one Speed Limit sign or assembly.

~~**12 When a speed limit within a speed zone is posted, it should be within 5 mph of the 85th percentile speed of free flowing traffic.**~~

Standard:

12a When a speed limit is to be posted, it shall be established at the nearest 5 mph increment of the 85th-percentile speed of free-flowing traffic, except as shown in the two Options below.

Option:

- 1. The posted speed may be reduced by 5 mph from the nearest 5 mph increment of the 85th-percentile speed, in compliance with CVC Sections 627 and 22358.5. See Standard below for documentation requirements.**
- 2. For cases in which the nearest 5 mph increment of the 85th-percentile speed would require a rounding up, then the speed limit may be rounded down to the nearest 5 mph increment below the 85th percentile speed, if no further reduction is used. Refer to CVC Section 21400(f).**

Standard:

12b If the speed limit to be posted has had the 5 mph reduction applied, then an E&TS shall document in writing the conditions and justification for the lower speed limit and be approved by a registered Civil or Traffic Engineer. The reasons for the lower speed limit shall be in compliance with CVC Sections 627 and 22358.5.

Support:

12c The following examples are provided to explain the application of these speed limit criteria:

- A. Using Option 1 above and first step is to round down: If the 85th percentile speed in a speed survey for a location was 37 mph, then the speed limit would be established at 35 mph since it is the closest 5 mph increment to the 37 mph speed. As indicated by the option, this 35 mph established speed limit could be reduced by 5 mph to 30 mph if the**

- conditions and justification for using this lower speed limit are documented in the E&TS and approved by a registered Civil or Traffic Engineer.
- B. Using Option 1 above and first step is to round up: If the 85th percentile speed in a speed survey for a location was 33 mph, then the speed limit would be established at 35 mph since it is the closest 5 mph increment to the 33 mph speed. As indicated by the option, this 35 mph speed limit could be reduced by 5 mph to 30 mph if the conditions and justification for using this lower speed limit are documented in the E&TS and approved by a registered Civil or Traffic Engineer.
 - C. Using Option 2 above and first step is to round up: If the 85th percentile speed in a speed survey for a location was 33 mph, instead of rounding up to 35mph, the speed limit can be established at 30mph, but no further reductions can be applied (which is allowed in the two examples above).

Standard:

^{12d} Examples 1 and 2 for establishing posted speed limits shall apply to engineering and traffic surveys (E&TS) performed on or after July 1, 2009 in accordance with the Department's Traffic Operations Policy Directive Number 09-04 dated June 29, 2009.

Option:

^{12a} After January 1, 2012, Example 3 may be used to establish speed limits. Refer to CVC 21400(f).

Support:

^{12f} Any existing E&TS that was performed before July 1, 2009 in accordance with previous traffic control device standards is not required to comply with the new criteria until it is due for reevaluation per the 5, 7 or 10 year criteria.

¹³ *Speed studies for signalized intersection approaches should be taken outside the influence area of the traffic control signal, which is generally considered to be approximately 1/2 mile, to avoid obtaining skewed results for the 85th-percentile speed.*

Support:

¹⁴ Advance warning signs and other traffic control devices to attract the motorist's attention to a signalized intersection are usually more effective than a reduced speed limit zone.

Guidance:

¹⁵ *An advisory speed plaque (see Section 2C.08) mounted below a warning sign should be used to warn road users of an advisory speed for a roadway condition. A Speed Limit sign should not be used for this situation.*

Option:

¹⁶ Other factors that may be considered when establishing or reevaluating speed limits are the following:

- A. Road characteristics, shoulder condition, grade, alignment, and sight distance;
- B. The pace;
- C. Roadside development and environment;
- D. Parking practices and pedestrian activity; and
- E. Reported crash experience for at least a 12-month period.

¹⁷ Two types of Speed Limit signs may be used: one to designate passenger car speeds, including any nighttime information or minimum speed limit that might apply; and the other to show any special speed limits for trucks and other vehicles.

¹⁸ A changeable message sign that changes the speed limit for traffic and ambient conditions may be installed provided that the appropriate speed limit is displayed at the proper times.

¹⁹ A changeable message sign that displays to approaching drivers the speed at which they are traveling may be installed in conjunction with a Speed Limit sign.

Guidance:

²⁰ *If a changeable message sign displaying approach speeds is installed, the legend YOUR SPEED XX MPH or such similar legend should be displayed. The color of the changeable message legend should be a yellow legend on a black background or the reverse of these colors.*

Support:

²¹ Advisory Speed signs and plaques are discussed in Sections 2C.08 and 2C.14. Temporary Traffic Control Zone Speed signs are discussed in Part 6. The WORK ZONE (G20-5aP) plaque intended for installation above a Speed Limit sign is discussed in Section 6F.12. School Speed Limit signs are discussed in Section 7B.15.

²² 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.

²³ Refer to Part 6, Section 6C.01 for speed limit signs in temporary traffic control zones. Refer to Part 7 for speed limit signs in school areas.

Engineering and Traffic Survey (E&TS)

Support:

²⁴ CVC Section 627 defines the term "Engineering and traffic survey" and lists its requirements.

Standard:

²⁵ **An engineering and traffic survey (E&TS) shall include, among other requirements deemed necessary by the department, consideration of all of the following:**

- A. Prevailing speeds as determined by traffic engineering measurements.**
- B. Collision records.**
- C. Highway, traffic, and roadside conditions not readily apparent to the driver.**

Guidance:

²⁶ *The E&TS 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 driver are properly identified.*

²⁷ *Prevailing speeds are determined by a speed zone survey. A speed zone survey should include:*

- A. 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.*
- B. Only one person is required for the field work. Speeds should be read directly from a radar or other electronic speed measuring devices; or,*
- C. Devices, other than radar, capable of accurately distinguishing and measuring the unimpeded speed of free flowing vehicles may be used.*
- D. 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.*
- E. 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.*
- F. The weather should be fair (dry pavement) with no unusual conditions prevailing.*
- G. 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.*
- H. 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.*
- I. Short speed zones of less than 0.5 mile should be avoided, except in transition areas.*
- J. Speed zone changes should be coordinated with changes in roadway conditions or roadside development.*
- K. Speed zoning should be in 10 mph increments except in urban areas where 5 mph increments are preferable.*
- L. Speed zoning should be coordinated with adjacent jurisdictions.*

Support:

²⁸ 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:

²⁹ When qualifying an appropriate speed limit, local authorities may also consider all of the following findings:

- A. 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:**
 - 1. Upon one side of the highway, within 0.25 mile, the contiguous property fronting thereon is occupied by 13 or more separate dwelling houses or business structures.**

2. Upon both sides of the highway, collectively, within a distance of 0.25 mile the contiguous property fronting thereon is occupied by 16 or more separate dwelling houses or business structures.
3. The portion of highway is larger than 0.25 mile but has the ratio of separate dwelling houses or business structures to the length of the highway described in either subparagraph a or b.

B. Pedestrian and bicyclist safety.

³⁰ The following two methods of conducting E&TS may be used to establish speed limits:

1. State Highways - The E&TS 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 Example of Speed Zone Survey Sheet (See Figure 2B-101(CA)) 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 85th 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 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-103(CA) & 2B-104(CA) show examples 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.

³¹ 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:

³² *The factors justifying a reduction below the 85th 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.*

³³ *The establishment of a speed limit of more than 5 mph below the 85th percentile speed should be done with great care as studies have shown that establishing a speed limit at less than the 85th percentile generally results in an increase in collision rates; in addition, this may make violators of a disproportionate number of the reasonable majority of drivers.*

Support:

³⁴ Generally, the most decisive evidence of conditions not readily apparent to the driver surface in collision histories.

³⁵ Speed limits are established at or near the 85th percentile speed, which is defined as that speed at or below which 85th percent of the traffic is moving. The 85th percentile speed is often referred to as the critical speed. Pace speed is defined as the 10 mph increment of speed containing the largest number of vehicles (See Figure 2B-102(CA)). 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 85th percentile are not generally considered reasonable and prudent. Speed limits below the 85th 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 85th percentile conform to the consensus of those who drive highways as to what speed is reasonable and prudent, and are not dependent on the judgment of one or a few individuals.

³⁶ The majority of drivers comply with the basic speed law. Speed limits set at or near the 85th 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 85th percentile (Critical Speed) generally results in an increase in collision rates.

Option:

³⁷ 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 85th percentile may be justified. Concurrence and support of enforcement officials are necessary for the successful operation of a restricted speed zone.

Guidance:

³⁸ *Speed zones of less than 0.5 mile and short transition zones should be avoided.*

Signs

Standard:

³⁹ **The Speed Limit (R2-1) sign shall be used to give notice of a prima facie or maximum speed limit except as provided under Prima Facie Speed Limits in CVC 22352.**

⁴⁰ **When used, the TRUCKS, 3 AXLES OR MORE 55 MAXIMUM (R6-3(CA)) sign shall be installed approximately 750 feet following each R2-1 sign.**

⁴¹ **The ALL VEHICLES WHEN TOWING 55 MAXIMUM (R6-4(CA)) sign shall be installed approximately 750 feet following the R6-3(CA) sign.**

Guidance:

⁴² *The R6-3(CA) and R6-4(CA) signs should be placed on highway segments where speeds in excess of 55 mph are permitted.*

Option:

⁴³ The existing AUTOS WITH TRAILERS, TRUCKS 55 MAXIMUM (R6-1(CA)) sign may remain in place until it is knocked down, damaged, stolen, vandalized, or otherwise reaches the end of its useful life.

⁴⁴ The local California Highway Patrol office may be consulted to identify highway segments where enforcement is an issue. On these segments early replacement of existing R6-1(CA) signs may be necessary.

Support:

⁴⁵ Refer to CVC Section 22406 for types of vehicles subject to the 55 mph maximum speed limit.

Option:

⁴⁶ The Speed Zone Ahead (R2-4(CA)) sign (see Figure 2B-3(CA)) may be used to inform the motorist of a reduced speed zone.

Standard:

⁴⁷ **The R2-4(CA) sign shall always be followed by a Speed Limit (R2-1) sign installed at the beginning of the zone where the reduced speed limit applies.**

⁴⁸ **The End Speed Limit (R3(CA)) sign shall only be used to mark the end of a speed zone.**

⁴⁹ **The R3(CA) sign shall not be used at a transition into a change in speed limits within a reduced zone.**

Option:

⁵⁰ The R3(CA) sign (see Figure 2B-3(CA)) may be used with the TRUCK (M4-4) plaque to mark the end of truck speed zones on descending grades.

Standard:

⁵¹ **Speed limit signs shall be placed at the beginning of all restricted speed zones.**

Option:

⁵² Where speed zones are longer than 1 mile, intermediate signs may be placed at approximate 1 mile intervals. For three or more lanes in each direction, dual installation may be used.

Standard:

⁵³ The Speed Limit (R2-1) and End Speed Limit (R3(CA)) signs, as appropriate shall be placed at the end of all restricted speed zones.

⁵⁴ Freeways with 65 mph and those segments where a speed limit of 70 mph has been approved by the Department of Transportation, with approval by the California Highway Patrol, shall be posted as follows:

- At the segment entrance, R2-1 signs shall be installed right of traffic off of the right shoulder.
- R2-1 signs shall also be installed off of the right shoulder only, throughout the segment, at a maximum of 25 mile intervals.

Option:

- The 25 mile interval may be modified to include locations following entrance ramps.

Standard:

- The R6-3(CA) sign (see Figure 2B-3(CA)) shall be installed approximately 750 feet following each R2-1 sign, both at the beginning and throughout each 60, 65 or 70 mph segment.
- The R6-4(CA) sign (see Figure 2B-3(CA)) shall be installed approximately 750 feet following each R6-3(CA) sign.

Option:

- The SLOWER TRAFFIC KEEP RIGHT (R4-3) signs may be installed at locations where there is a tendency of the motorists to drive in the left-hand lane(s) below the normal speed of traffic.

Standard:

- Signs shall be placed in protected locations.
- At the end of the 70/65 mph segment, R2-1 signs shall be installed off of the right shoulder.

⁵⁵ Freeway segments where a 55 mph speed limit has been approved by the Department of Transportation, with the approval of the California Highway Patrol, shall be posted as follows:

- The beginning of the segment shall be posted with an R2-1 sign installed on the right shoulder and left shoulder where the median is of sufficient width to permit sign maintenance without lane closures.

Guidance:

- Subsequent signs should then be posted on the right shoulder, on approximate 3 mile intervals, with no more than 3 interchanges between signs.
- At the end of the segment, an R2-1 sign with the appropriate number for the next speed limit should be posted on the right shoulder.

⁵⁶ Conventional highways with 55 mph speed limits should be posted as follows:

Standard:

- The beginning of the segment shall be posted with an R2-1 sign installed on the right shoulder.

Guidance:

- Subsequent signs should then be posted on approximate 5 to 10 mile intervals and immediately after locations where significant volumes of traffic enter the segment.
- At the end of the segment, an R2-1 sign with the appropriate number for the next speed limit should be posted on the right shoulder.

Conventional highways with 65 mph speed limits should be posted as follows:

- The beginning of the segment should be posted with an R2-1 sign installed on the right shoulder.
- Subsequent signs should then be posted at 5 to 10 mile intervals and after locations where significant volumes of traffic enter the segment.
- At the end of the segment, an R2-1 sign with the appropriate number for the next speed limit should be posted on the right shoulder.

Option:

⁵⁷ Pavement markings with appropriate numerals (see Section 3B.21) may be used to supplement speed limit signs.

Standard:

⁵⁸ The R2-1 and R6-3(CA) and R6-4(CA) signs giving maximum statewide speed limits for various types of vehicles shall be installed on all State highways near the points of entrance into California.

Guidance:

⁵⁹ *The R2-1 and R6-3(CA) and R6-4(CA) signs should be placed in a location to be most effectively viewed by the approaching motorists.*

Standard:

⁶⁰ **Speed Limit (R2-1) signs shall be installed throughout segments of freeway with posted speed limits of 65 mph or 70 mph at a maximum of 25 mile intervals.**

Option:

⁶¹ The 25 mile interval may be modified to include locations following entrance ramps.

Standard:

⁶² **Speed Limit (R2-1) signs shall be installed throughout segments of conventional highways with a posted speed limit of 65 mph at 5 mile to 10 mile intervals.**

⁶³ **Speed Limit (R2-1) signs shall be installed throughout segments of freeway with a posted speed limit of 55 mph at approximately 3 mile intervals with no more than 3 interchanges between signs.**

⁶⁴ **Speed Limit (R2-1) signs shall be installed throughout segments of conventional highways with a posted speed limit of 55 mph at 5 mile to 10 mile intervals.**

Speed Enforced Signs

Option:

⁶⁵ The SPEED ENFORCED BY RADAR (R48(CA)) sign (see Figure 2B-3(CA)) may be used where the California Highway Patrol has received authority to use radar and requests such signs.

Guidance:

⁶⁶ *One sign should be used in each direction at the beginning of the segment of roadway, and at intervening major route intersections, where radar enforcement is in effect.*

Support:

⁶⁷ The R48(CA) sign is a stand-alone sign intended to alert motorists that speed is enforced by radar on a particular segment of roadway.

Option:

⁶⁸ The RADAR ENFORCED (R48-1(CA)) sign (see Figure 2B-3(CA)) may be used in combination with the Speed Limit (R2-1) sign on any roadway where law enforcement has the authority to use radar.

Guidance:

⁶⁹ *When used, the R48-1(CA) sign should be placed below the R2-1 sign, at the beginning of the segment of roadway and at intervening major intersections, where radar enforcement is in effect.*

Option:

⁷⁰ The SPEED ENFORCED BY AIRCRAFT (R48-2(CA)) sign (see Figure 2B-3(CA)) may be placed, when requested by the California Highway Patrol, on sections of highway regularly patrolled by aircraft.

Standard:

⁷¹ **The R48-2(CA) sign shall be used for both directions of travel.**

Guidance:

⁷² *The R48-2(CA) sign should be placed at the beginning of the section and spaced at 25 mile intervals. See Figure 3B-105(CA).*

Vehicle Speed Feedback Signs

Option:

⁷³ A Vehicle Speed Feedback sign that displays to approaching drivers the speed at which they are traveling may be installed in conjunction with a Speed Limit (R2-1) sign.

Standard:

⁷⁴ **If a Vehicle Speed Feedback sign displaying approach speeds is installed, the legend shall be YOUR SPEED XX. The numerals displaying the speed shall be white, yellow, yellow-green or amber color on black background. When activated, lights shall be steady-burn conforming to the provisions of CVC Sections 21466 and 21466.5. Vehicle Speed Feedback signs shall not alternatively be operated as variable speed limit signs.**

Guidance:

75 To the degree practical, numerals for displaying approach speeds should be similar font and size as numerals on the corresponding Speed Limit (R2-1) sign.

Option:

76 When used, the Vehicle Speed Feedback sign may be mounted on either a separate support or on the same support as the Speed Limit (R2-1) sign.

77 In lieu of lights, legend may be retroreflective film for flip-disk systems.

78 The legend YOUR SPEED may be white on black plaque located above the changeable speed display.

Support:

79 Driver comprehension may improve when the Vehicle Speed Feedback Sign is mounted on the same support below the Speed Limit (R2-1) sign.

80 Vehicle Speed Feedback Signs are appropriate for use with advisory speed signs and with temporary signs in temporary traffic control zones.

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

Support:

81 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:

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

Option:

83 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:

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

Guidance:

85 *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:

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

Standard:

87 **Metric speed limits shall not be placed on State highways. For use in this California MUTCD, 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:

88 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 65 mph on State highways. The Director of the Department of Transportation retains the authority to approve variable, minimum, and maximum speeds up to 70 mph on State freeways.

Standard:

89 **The speed limits shown in Table 2B-101(CA) shall apply, unless changed upon the basis of an engineering and traffic survey (E&TS).**

Option:

90 The speed limits shown in Table 2B-102(CA) may apply, unless changed upon E&TS.

Variable Speed Limits on Freeways - See CVC 22355

Option:

⁹¹ The following speed limits may apply:

- Whenever the Department of Transportation determines based upon an engineering and traffic survey (E&TS) 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:

⁹² The following speed limits may apply:

- Whenever the Department of Transportation determines based upon an engineering and traffic survey (E&TS) 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.

Speed Traps

Support:

⁹³ Refer to CVC 40802 for Speed Traps.

Standard:

⁹⁴ A speed trap shall not apply to a local street, road, or school zone.

⁹⁵ 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 (E&TS) 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.

⁹⁶ 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.

⁹⁷ 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:

⁹⁸ This time provision for an E&TS 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:

⁹⁹ Highway descending grades, if used for posting TRUCK Speed Limit signs (R2-1 and M4-4) for trucks travelling downhill, should have recorded incident history of runaway commercial vehicles. Descending grades shorter than 1 mile 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 mile.

Support:

¹⁰⁰ 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 10,000 lbs. or more will be provided.

Standard:

¹⁰¹ **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:

¹⁰² *Posted speeds should be on the low side of the scale, generally within the pace of loaded commercial vehicles.*

Standard:

¹⁰³ **If warranted, the Department of Transportation's District Director shall issue a standard speed zone order.**

Support:

¹⁰⁴ Posting of the regulation will be by placement of a standard 36 x 45 inch Speed Limit (R2-1) sign with a TRUCK (M4-4) plate above.

Standard:

¹⁰⁵ **A standard End Speed Limit (R3(CA)) sign with TRUCK (M4-4) plate shall be posted at the end of the truck zone when appropriate.**

Speed Zones in Temporary Traffic Control Areas

Support:

¹⁰⁶ For signing and establishing speed zones in temporary traffic control areas, refer to Section 6C.01 in Part 6.

Section 2B.14 Truck Speed Limit Plaque (R2-2P)

Standard:

⁰¹ **Where a special speed limit applies to trucks or other vehicles, the legend TRUCKS XX or such similar legend shall be displayed below the legend Speed Limit XX on the same sign ~~or on a separate R2-2P plaque (see Figure 2B-3) below the standard legend.~~**

⁰² **The Truck Speed Limit (R2-2) sign shall not be used in California. The TRUCK (M4-4) plaque placed above the Speed Limit (R2-1) sign shall be used instead.**

⁰³ **The TRUCK (M4-4) plaque shall be placed above the Speed Limit (R2-1) sign to indicate the truck speed limit. It shall also be placed above the End Speed Limit (R3(CA)) sign to mark the end of truck speed limits.**

Support:

⁰⁴ Refer to Section 2B.13 for more details.

Section 2B.15 Night Speed Limit Plaque (R2-3P)

Standard:

⁰¹ **Where different speed limits are prescribed for day and night, both limits shall be posted.**

Guidance:

⁰² *A Night Speed Limit (R2-3P) plaque (see Figure 2B-3) should be reversed using a white retroreflectorized legend and border on a black background.*

Option:

⁰³ **A Night Speed Limit plaque may be combined with or installed below the standard Speed Limit (R2-1) sign.**

Support:

⁰⁴ Refer to CVC 22355.

Section 2B.16 Minimum Speed Limit Plaque (R2-4P)

Standard:

⁰¹ **A Minimum Speed Limit (R2-4P) plaque (see Figure 2B-3) shall be displayed only in combination with a Speed Limit sign.**

Option:

⁰² **Where engineering judgment determines that slow speeds on a highway might impede the normal and reasonable movement of traffic, the Minimum Speed Limit plaque may be installed below a Speed Limit (R2-1)**

sign to indicate the minimum legal speed. If desired, the Speed Limit sign and the Minimum Speed Limit plaque may be combined on the R2-4a sign (see Figure 2B-3).

Support:

03 Refer to CVC 22400.

Section 2B.17 Higher Fines Signs and Plaque (R2-6P, R2-10, and R2-11)

Standard:

01 If increased fines are imposed for traffic violations within a designated zone of a roadway, a **BEGIN HIGHER DOUBLE FINES ZONE (R2-10)** sign (see Figure 2B-3) or a **FINES HIGHER DOUBLE (R2-6P)** plaque (see Figure 2B-3) shall be used to provide notice to road users. If used, the **FINES HIGHER DOUBLE** plaque shall be mounted below an applicable regulatory or warning sign in a temporary traffic control zone, a school zone, or other applicable designated zone.

02 If an R2-10 sign or an R2-6P plaque is posted to provide notice of increased fines for traffic violations, an **END HIGHER DOUBLE FINES ZONE (R2-11)** sign (see Figure 2B-3) shall be installed at the downstream end of the zone to provide notice to road users of the termination of the increased fines zone.

Guidance:

03 If used, the **BEGIN HIGHER DOUBLE FINES ZONE** sign or **FINES HIGHER DOUBLE** plaque should be located at the beginning of the temporary traffic control zone, school zone, or other applicable designated zone and just beyond any interchanges, major intersections, or other major traffic generators.

Standard:

04 The **Higher Double Fines** signs and plaque shall have a black legend and border on a white rectangular background. All supplemental plaques mounted below the **Higher Double Fines** signs and plaque shall have a black legend and border on a white rectangular background.

Guidance:

05 Agencies should limit the use of the **Higher Double Fines** signs and plaque to locations where work is actually underway, or to locations where the roadway, shoulder, or other conditions, including the presence of a school zone and/or a reduced school speed limit zone, require a speed reduction or extra caution on the part of the road user.

Option:

06 Alternate legends such as **BEGIN (or END) DOUBLE FINES ZONE** may also be used for the R2-10 and R2-11 signs.

07 The legend **FINES HIGHER** on the R2-6P plaque may be replaced by **FINES DOUBLE (R2-6aP)**, **\$XX FINE (R2-6bP)**, or another legend appropriate to the specific regulation (see Figure 2B-3).

08 The following may be mounted below an R2-10 sign or R2-6P plaque:

A. A supplemental plaque specifying the times that the higher fines are in effect (similar to the S4-1P plaque shown in Figure 7B-1), or

B. A supplemental plaque **WHEN CHILDREN (WORKERS) ARE PRESENT**, or

C. A supplemental plaque **WHEN FLASHING** (similar to the S4-4P plaque shown in Figure 7B-1) if used in conjunction with a yellow flashing beacon.

Support:

09 Section 6F.12 contains information regarding other signs and plaques associated with increased fines for traffic violations in temporary traffic control zones. ~~Section 7B.10 contains information regarding other signs and plaques associated with increased fines for traffic violations in designated school zones.~~

10 In California, as per CVC only doubling of the fines is allowed, not higher fines of other denominations. Refer to Section 6F.12 and CVC 42009 for fines for offenses committed in highway construction or maintenance area.

Standard:

11 The **SPECIAL DRIVING ZONE BEGINS HERE – DOUBLE FINE ZONE (SR53(CA))** sign (see Figure 2B-3(CA)) shall be placed at the beginning of those portions of highways designated and identified as Safety Enhancement – Double Fine Zones per CVC 42010.

12 The **SPECIAL DRIVING ZONE ENDS HERE (SR55(CA))** sign (see Figure 2B-3(CA)) shall be placed at the end of those portions of highways designated and identified as Safety Enhancement – Double Fine Zones per CVC 42010.

Definitions of Terms

Average Daily Traffic

Volume of traffic during a 24-hour period.

E.C.L.

Easterly City Limit, (also W.C.L., N.C.L., and S.C.L. for Westerly, Northerly, and Southerly City Limits, respectively.

85th 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

The average speed.

MPH or mph

Miles Per Hour.

MVM or mvm

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.

*A
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C*

Radar Survey Data Forms

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

DATE: 4/28/14 TIME START: 10:00 TIME STOP: 11:00

FOR ROADWAY: IMPERIAL HIGHWAY

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			0
53			0
52			0
51			1
50			1
49	X		1
48			0
47	X		1
46	X		3
45	X	X	2
44	X	X	3
43	X	X	3
42	X	X	7
41	X	X	1
40	X	X	7
39	X	X	8
38	X	X	13
37	X	X	11
36	X	X	15
35	X	X	9
34	X	X	12
33	X	X	16
32	X	X	13
31	X	X	10
30	X	X	7
29	X	X	6
28	X	X	9
27	X	X	9
26	X	X	3
25	X	X	4
24	X	X	3
23	X	X	2
22	X	X	2
21	X		0
20			1
19			0
18			0
17			0
16			0
15			0
GRAND TOTALS			183

85TH %: 39 M.P.H.
 50TH %: 33 M.P.H.
 15TH %: 27 M.P.H.
 AVERAGE SPEED: 34 M.P.H.
 10 MPH PACE: 31 - 40 M.P.H.
 % IN PACE: 62%
 % OVER PACE: 13%
 % UNDER PACE: 25%

OBSERVED BY: Edell
 REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: IMPERIAL HIGHWAY

DATE: 4/28/14 TIME START: 9:00 TIME STOP: 10:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55	X		1
54			0
53	X		1
52			0
51		X	1
50			0
49			0
48	X		1
47	X		3
46	X		3
45	X		4
44	X	X	6
43	X	X	4
42	X	X	7
41	X	X	9
40	X	X	14
39	X	X	10
38	X	X	11
37	X	X	12
36	X	X	14
35	X	X	12
34	X	X	9
33	X	X	11
32	X	X	9
31	X	X	8
30	X	X	10
29	X	X	5
28	X	X	4
27	X	X	7
26	X	X	7
25	X	X	3
24	X	X	3
23	X	X	2
22	X	X	1
21	X	X	2
20	X	X	4
19	X	X	2
18			0
17			0
16			0
15			0
GRAND TOTALS			200

LOCATION: Hawthorne Boulevard to Prairie Avenue (4100 Imperial Hwy)

ROAD DESCRIPTION: 3 lanes each direction, raised median, business, continuity of speed

ACCIDENT HISTORY: 23 MIDBLOCK COLLISIONS IN 3 YEARS (11/11/11 TO 12/31/13)

ACCIDENT RATE: 1.53 ACC./MVM, EXPECTED RATE: 1.55 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Partly Cloudy

EXISTING SPEED LIMIT: 35 PROPOSED SPEED LIMIT: 35

AVERAGE DAILY TRAFFIC: 27,475 SEGMENT LENGTH: 0.50

85TH %:	41	M.P.H.
50TH %:	35	M.P.H.
15TH %:	27	M.P.H.
AVERAGE SPEED:	35	M.P.H.
10 MPH PACE:	32 - 41	M.P.H.
% IN PACE:	56%	
% OVER PACE:	16%	
% UNDER PACE:	29%	

OBSERVED BY: Edell

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: 120TH STREET

DATE: 4/28/14 TIME START: 11:00 TIME STOP: 12:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60	X		1
59			0
58			0
57			0
56			0
55			0
54			0
53			0
52			0
51		X	1
50			0
49			0
48			0
47		X	1
46			0
45	X	X	3
44	X	X	4
43			0
42	X	X	3
41	X	X	6
40	X	X	7
39	X	X	8
38	X	X	9
37	X	X	10
36	X	X	4
35	X	X	8
34	X	X	5
33	X	X	4
32	X	X	5
31	X	X	5
30	X	X	6
29	X	X	5
28			0
27	X		3
26	X		1
25			1
24			0
23			0
22			0
21			0
20			0
19			0
18			0
17			0
16			0
15			0
GRAND TOTALS		100	

LOCATION: Felton Avenue to Inglewood Boulevard (4906 120th St)

ROAD DESCRIPTION: 2 lanes each direction, residential, 35mph LA County

ACCIDENT HISTORY: 5 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 1.51 **ACC./MVM,** **EXPECTED RATE:** 1.55 **ACC./MVM,**

ROADWAY CONDITIONS: Good

WEATHER: Partly Cloudy

EXISTING SPEED LIMIT: 35 **PROPOSED SPEED LIMIT:** 35

AVERAGE DAILY TRAFFIC: 12,124 **SEGMENT LENGTH:** 0.25

85TH %: 40 **M.P.H.**

50TH %: 36 **M.P.H.**

15TH %: 30 **M.P.H.**

AVERAGE SPEED: 36 **M.P.H.**

10 MPH PACE: 32 - 41 **M.P.H.**

% IN PACE: 66%

% OVER PACE: 13%

% UNDER PACE: 21%

OBSERVED BY: Edell

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: 120TH STREET

DATE: 4/28/14 TIME START: 1:00 TIME STOP: 2:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54	X		1
53			0
52			0
51			0
50			0
49			0
48			0
47	X		1
46	X		2
45			1
44		X	2
43		X	1
42			0
41	X		1
40	X		3
39	X	X	9
38	X	X	4
37	X	X	8
36	X	X	9
35	X	X	7
34	X	X	4
33	X	X	7
32	X	X	6
31	X	X	3
30	X		1
29	X	X	5
28	X	X	7
27	X	X	7
26	X	X	2
25	X	X	3
24	X	X	4
23			0
22	X		2
21	X		1
20	X	X	2
19	X		0
18			0
17			0
16			0
15			0
GRAND TOTALS			105

LOCATION: Inglewood Avenue to Hawthorne Boulevard (4634 120th St)

ROAD DESCRIPTION: 2 lanes each direction, residential/business, 25mph when children are present

ACCIDENT HISTORY: 24 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 2.94 ACC./MVM, EXPECTED RATE: 1.55 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Hazy

EXISTING SPEED LIMIT: 35 PROPOSED SPEED LIMIT: 35

AVERAGE DAILY TRAFFIC: 14,894 SEGMENT LENGTH: 0.50

85TH %:	38	M.P.H.
50TH %:	33	M.P.H.
15TH %:	26	M.P.H.
AVERAGE SPEED:	33	M.P.H.
10 MPH PACE:	31 - 40	M.P.H.
% IN PACE:	57%	
% OVER PACE:	9%	
% UNDER PACE:	34%	

OBSERVED BY: Edell

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: 120TH STREET

DATE: 4/28/14 TIME START: 2:00 TIME STOP: 3:00

LOCATION: Hawthorne Boulevard to Prairie Avenue (4269 120th St)	
ROAD DESCRIPTION: 2 lanes each direction, residential	
ACCIDENT HISTORY: 29 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)	
ACCIDENT RATE: 3.10 ACC./MVM, EXPECTED RATE: 1.55 ACC./MVM,	
ROADWAY CONDITIONS: Good	
WEATHER: Hazy	
EXISTING SPEED LIMIT: 35 PROPOSED SPEED LIMIT: 35	
AVERAGE DAILY TRAFFIC: 17,113 SEGMENT LENGTH: 0.50	

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			0
53			0
52			0
51			0
50			0
49			0
48			1
47			0
46			0
45			0
44			1
43	X		2
42	X		1
41	X	X	6
40	X	X	4
39	X	X	3
38	X	X	5
37	X	X	4
36	X	X	6
35	X	X	7
34	X	X	8
33	X	X	5
32	X	X	10
31	X	X	9
30	X	X	8
29	X	X	2
28	X	X	3
27	X	X	7
26	X	X	4
25	X	X	2
24	X	X	3
23			0
22	X		1
21			0
20	X		1
19			0
18			0
17			0
16			0
15			0
GRAND TOTALS			103

85TH %: 39 **M.P.H.**
50TH %: 32 **M.P.H.**
15TH %: 26 **M.P.H.**
AVERAGE SPEED: 33 **M.P.H.**
10 MPH PACE: 30 - 39 **M.P.H.**
% IN PACE: 63%
% OVER PACE: 15%
% UNDER PACE: 22%

OBSERVED BY: Edell
REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: 120TH STREET

DATE: 4/28/14 TIME START: 3:00 TIME STOP: 4:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			0
53			0
52			0
51	X		1
50			0
49			0
48			0
47			0
46			0
45			1
44			1
43	X		2
42	X		3
41	X	X	7
40	X	X	7
39	X	X	5
38	X	X	7
37	X	X	5
36	X	X	6
35	X	X	9
34	X	X	8
33	X	X	7
32	X	X	6
31	X	X	7
30	X	X	4
29	X	X	4
28	X	X	1
27	X	X	4
26	X	X	2
25			1
24			0
23			0
22			0
21			0
20			0
19			0
18			0
17			0
16			0
15			0
GRAND TOTALS			100

LOCATION: Prairie Avenue to Crenshaw Boulevard

ROAD DESCRIPTION: 2 lanes each direction, residential/Airport, continuity of speed

ACCIDENT HISTORY: 28 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 1.29 ACC./MVM, EXPECTED RATE: 1.55 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Hazy

EXISTING SPEED LIMIT: 40 PROPOSED SPEED LIMIT: 40

AVERAGE DAILY TRAFFIC: 19,870 SEGMENT LENGTH: 1.00

85TH %:	40	M.P.H.
50TH %:	34	M.P.H.
15TH %:	30	M.P.H.
AVERAGE SPEED:	36	M.P.H.
10 MPH PACE:	32 - 41	M.P.H.
% IN PACE:	67%	
% OVER PACE:	10%	
% UNDER PACE:	23%	

OBSERVED BY: Edell

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: 120TH STREET

DATE: 4/29/14 TIME START: 9:00 TIME STOP: 10:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			0
53			0
52			0
51			1
50			0
49			0
48			0
47			0
46			2
45			1
44			2
43			1
42			5
41			3
40			3
39			4
38			9
37			11
36			12
35			10
34			13
33			11
32			14
31			17
30			14
29			9
28			8
27			11
26			8
25			7
24			7
23			4
22			2
21			7
20			2
19			0
18			1
17			0
16			0
15			1
GRAND TOTALS			200

LOCATION: Crenshaw Boulevard to Van Ness Avenue (2831 120th St)

ROAD DESCRIPTION: 2 lanes WB; 3 lanes EB, commercial, raised median

ACCIDENT HISTORY: 10 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 0.85 **ACC./MVM, EXPECTED RATE:** 2.14 **ACC./MVM,**

ROADWAY CONDITIONS: Good

WEATHER: Hazy

EXISTING SPEED LIMIT: 40 **PROPOSED SPEED LIMIT:** 40

AVERAGE DAILY TRAFFIC: 21,381 **SEGMENT LENGTH:** 0.50

85TH %: 37 **M.P.H.**

50TH %: 31 **M.P.H.**

15TH %: 25 **M.P.H.**

AVERAGE SPEED: 32 **M.P.H.**

10 MPH PACE: 29 - 38 **M.P.H.**

% IN PACE: 60%

% OVER PACE: 11%

% UNDER PACE: 29%

OBSERVED BY: Edell

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: EL SEGUNDO BOULEVARD

DATE: 4/30/14 TIME START: 9:00 TIME STOP: 10:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56	X		1
55			0
54			0
53			0
52			0
51			0
50		X	1
49	X		2
48			1
47			0
46	X		1
45	X		3
44	X		2
43	X	X	3
42	X	X	4
41	X	X	4
40	X	X	9
39	X	X	7
38	X	X	9
37	X	X	9
36	X	X	7
35	X	X	13
34	X	X	12
33	X	X	15
32	X	X	12
31	X	X	16
30	X	X	9
29	X	X	5
28	X	X	12
27	X	X	3
26	X	X	8
25	X	X	7
24	X	X	9
23	X	X	3
22	X	X	7
21	X	X	5
20	X		1
19			0
18	X		1
17			0
16			0
15			0
GRAND TOTALS			201

LOCATION: Aviation Boulevard to I-405 Ramps (2515 El Segundo Blvd)

ROAD DESCRIPTION: 3 lanes WB; 4 lanes EB, commercial/residential, continuity of speed

ACCIDENT HISTORY: 5 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 0.38 **ACC./MVM, EXPECTED RATE:** 1.55 **ACC./MVM,**

ROADWAY CONDITIONS: Good

WEATHER: Cloudy

EXISTING SPEED LIMIT: 40 **PROPOSED SPEED LIMIT:** 40

AVERAGE DAILY TRAFFIC: 39,630 **SEGMENT LENGTH:** 0.30

85TH %: 39 **M.P.H.**

50TH %: 32 **M.P.H.**

15TH %: 24 **M.P.H.**

AVERAGE SPEED: 33 **M.P.H.**

10 MPH PACE: 28 - 37 **M.P.H.**

% IN PACE: 55%

% OVER PACE: 23%

% UNDER PACE: 22%

OBSERVED BY: Edell

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: EL SEGUNDO BOULEVARD

DATE: 5/15/14 TIME START: 9:00 TIME STOP: 9:45

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			0
53			0
52			1
51			0
50			2
49	X	X	7
48	X	X	9
47	X	X	10
46	X	X	14
45	X	X	19
44	X	X	22
43	X	X	26
42	X	X	28
41	X	X	29
40	X	X	27
39	X	X	25
38	X	X	23
37	X	X	20
36	X	X	17
35	X	X	14
34	X	X	13
33	X	X	10
32	X	X	10
31	X	X	8
30	X	X	7
29	X	X	6
28	X	X	6
27	X	X	4
26	X	X	2
25			0
24			0
23			0
22			0
21			0
20			0
19			0
18			0
17			0
16			0
15			0
GRAND TOTALS			359

LOCATION: Inglewood Ave to Hawthorne Blvd (4519 El Segundo Blvd)

ROAD DESCRIPTION: 3 lanes each direction, business/apartments

ACCIDENT HISTORY: 22 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 1.35 ACC./MVM, EXPECTED RATE: 1.55 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Clear

EXISTING SPEED LIMIT: 40 PROPOSED SPEED LIMIT: 40

AVERAGE DAILY TRAFFIC: 29,793 SEGMENT LENGTH: 0.50

85TH %: 44 M.P.H.

50TH %: 39 M.P.H.

15TH %: 33 M.P.H.

AVERAGE SPEED: 39 M.P.H.

10 MPH PACE: 36 - 45 M.P.H.

% IN PACE: 66%

% OVER PACE: 12%

% UNDER PACE: 22%

OBSERVED BY: Ambracio S

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: EL SEGUNDO BOULEVARD

DATE: 4/29/14 TIME START: 3:00 TIME STOP: 4:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			1
53			0
52			1
51			0
50			0
49			0
48			2
47	X		1
46	X		3
45			2
44			2
43	X		5
42	X		6
41	X		7
40	X		4
39	X		13
38	X		11
37	X		12
36	X		11
35	X		10
34	X		10
33	X		12
32	X		11
31	X		13
30	X		16
29	X		12
28	X		11
27	X		7
26	X		7
25			2
24			1
23	X		4
22			0
21	X		4
20	X		1
19			0
18			0
17			0
16			0
15			0
GRAND TOTALS			202

LOCATION: Hawthorne Boulevard to Prairie Avenue (4081 El Segundo Blvd)

ROAD DESCRIPTION: 3 lanes each direction, business, 25mph when children are present

ACCIDENT HISTORY: 32 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 1.98 **ACC./MVM,** **EXPECTED RATE:** 1.55 **ACC./MVM,**

ROADWAY CONDITIONS: Good

WEATHER: Cloudy

EXISTING SPEED LIMIT: 40 **PROPOSED SPEED LIMIT:** 40

AVERAGE DAILY TRAFFIC: 29,549 **SEGMENT LENGTH:** 0.50

85TH %: 40 **M.P.H.**

50TH %: 33 **M.P.H.**

15TH %: 27 **M.P.H.**

AVERAGE SPEED: 34 **M.P.H.**

10 MPH PACE: 30 - 39 **M.P.H.**

% IN PACE: 59%

% OVER PACE: 17%

% UNDER PACE: 24%

OBSERVED BY: Edell

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: EL SEGUNDO BOULEVARD

DATE: 4/29/14 TIME START: 2:00 TIME STOP: 3:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60	X		1
59			0
58			0
57			0
56		X	1
55			0
54			0
53			0
52		X	1
51	X		1
50			0
49		X	1
48	X	X	3
47	X		3
46	X	X	2
45	X	X	5
44	X	X	7
43	X	X	6
42	X	X	5
41	X	X	7
40	X	X	10
39	X	X	15
38	X	X	10
37	X	X	15
36	X	X	13
35	X	X	15
34	X	X	9
33	X	X	12
32	X	X	10
31	X	X	8
30	X	X	5
29	X	X	6
28	X	X	5
27	X	X	5
26	X	X	5
25	X	X	4
24	X	X	1
23	X	X	3
22	X	X	1
21	X	X	2
20	X	X	3
19			0
18			0
17			0
16			0
15			0
GRAND TOTALS			200

LOCATION: Prairie Avenue to Yukon Avenue (3700 El Segundo Blvd)

ROAD DESCRIPTION: 3 lanes each direction, dmv, school, commercial, 25mph when children are present

ACCIDENT HISTORY: 30 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 1.88 ACC./MVM, EXPECTED RATE: 1.55 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Cloudy

EXISTING SPEED LIMIT: 40 **PROPOSED SPEED LIMIT:** 40

AVERAGE DAILY TRAFFIC: 29,222 **SEGMENT LENGTH:** 0.50

15TH %: 42 M.P.H.

50TH %: 35 M.P.H.

15TH %: 28 M.P.H.

AVERAGE SPEED: 36 M.P.H.

10 MPH PACE: 31 - 40 M.P.H.

% IN PACE: 59%

% OVER PACE: 22%

% UNDER PACE: 20%

OBSERVED BY: Edell

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: EL SEGUNDO BOULEVARD

DATE: 4/29/14 TIME START: 11:00 TIME STOP: 12:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			0
53		X	1
52			0
51			0
50			0
49		X	1
48	X	X	4
47	X	X	8
46	X	X	3
45	X	X	8
44	X	X	11
43	X	X	10
42	X	X	5
41	X	X	13
40	X	X	11
39	X	X	13
38	X	X	18
37	X	X	13
36	X	X	14
35	X	X	15
34	X	X	10
33	X	X	9
32	X	X	6
31	X	X	6
30	X	X	2
29	X	X	4
28	X	X	6
27	X	X	4
26	X	X	1
25	X	X	1
24	X	X	1
23			0
22			0
21	X		2
20	X		1
19			0
18			0
17			0
16			0
15			0
GRAND TOTALS			201

LOCATION: Yukon Avenue to Crenshaw Boulevard

ROAD DESCRIPTION: 2 lanes WB; 3 lanes EB, business/retail, continuity of speed

ACCIDENT HISTORY: 15 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 1.00 ACC./MVM, EXPECTED RATE: 1.55 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Hazy

EXISTING SPEED LIMIT: 40 PROPOSED SPEED LIMIT: 40

AVERAGE DAILY TRAFFIC: 27,356 SEGMENT LENGTH: 0.50

85TH %: 43 M.P.H.

50TH %: 37 M.P.H.

15TH %: 31 M.P.H.

AVERAGE SPEED: 38 M.P.H.

10 MPH PACE: 35 - 44 M.P.H.

% IN PACE: 61%

% OVER PACE: 12%

% UNDER PACE: 26%

OBSERVED BY: Edell

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: EL SEGUNDO BOULEVARD

DATE: 4/29/14 TIME START: 10:00 TIME STOP: 11:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60	X		1
59			0
58			0
57			0
56			0
55			0
54			0
53			0
52			0
51			0
50			0
49	X	X	3
48	X	X	3
47	X	X	6
46	X	X	3
45	X	X	5
44	X	X	11
43	X	X	9
42	X	X	9
41	X	X	10
40	X	X	14
39	X	X	9
38	X	X	11
37	X	X	15
36	X	X	8
35	X	X	11
34	X	X	10
33	X	X	8
32	X	X	9
31	X	X	7
30			3
29			4
28	X	X	6
27	X	X	6
26	X	X	8
25			1
24	X	X	6
23			1
22			1
21			0
20			0
19			0
18			0
17			0
16			0
15			0
GRAND TOTALS			200

LOCATION: Crenshaw Boulevard to Van Ness Avenue (2815 El Segundo Blvd)

ROAD DESCRIPTION: 3 lanes each direction, residential, business

ACCIDENT HISTORY: 7 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 0.44 ACC./MVM, EXPECTED RATE: 1.55 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Sunny

EXISTING SPEED LIMIT: 40 PROPOSED SPEED LIMIT: 40

AVERAGE DAILY TRAFFIC: 29,387 SEGMENT LENGTH: 0.50

85TH %: 43 M.P.H.

50TH %: 36 M.P.H.

15TH %: 28 M.P.H.

AVERAGE SPEED: 37 M.P.H.

10 MPH PACE: 35 - 44 M.P.H.

% IN PACE: 54%

% OVER PACE: 11%

% UNDER PACE: 36%

OBSERVED BY: Edell

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: 135TH STREET

DATE: 4/30/14 TIME START: 10:00 TIME STOP: 11:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			0
53			0
52			0
51			0
50			0
49			0
48			0
47	X		1
46	X		1
45			0
44	X	X	4
43	X		2
42	X		2
41	X		1
40	X		3
39	X	X	6
38	X	X	7
37	X	X	5
36	X	X	9
35	X	X	8
34	X	X	8
33	X	X	13
32	X	X	10
31	X	X	7
30	X	X	6
29	X		2
28	X		3
27	X		1
26	X	X	3
25			0
24	X		1
23			0
22	X		1
21			0
20			0
19			0
18	X		1
17			0
16			0
15			0
GRAND TOTALS			105

LOCATION: Aviation Boulevard to Isis Avenue (5443 135th St)

ROAD DESCRIPTION: 2 lanes each direction, 35mph in LA County, school, continuity of speed

ACCIDENT HISTORY: 2 MIDDLEBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 0.99 ACC./MVM, EXPECTED RATE: 1.55 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Cloudy

EXISTING SPEED LIMIT: 30 PROPOSED SPEED LIMIT: 30

AVERAGE DAILY TRAFFIC: 7,343 SEGMENT LENGTH: 0.25

85TH %: 38 M.P.H.

50TH %: 33 M.P.H.

15TH %: 29 M.P.H.

AVERAGE SPEED: 34 M.P.H.

10 MPH PACE: 30 - 39 M.P.H.

% IN PACE: 75%

% OVER PACE: 13%

% UNDER PACE: 11%

OBSERVED BY: Edell

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: 135TH STREET

DATE: 4/30/14 TIME START: 11:00 TIME STOP: 12:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			0
53			0
52			0
51			0
50			0
49			0
48			0
47			0
46			0
45			0
44			0
43	X		1
42			0
41			0
40		X X X	3
39	X	X X	3
38		X X X X	4
37	X X	X X X	5
36	X X	X X	4
35	X X X	X X X	6
34	X X X X	X X X X	8
33	X X X X	X X X	7
32	X X	X X X X	6
31	X X X X X X	X X X	9
30	X X X X X	X X X X	9
29	X X X X X X	X X X X X	11
28	X X X	X X X	4
27	X X X	X X X	6
26	X X X X	X X X X	6
25	X X X X	X X	6
24	X	X	1
23	X		1
22			0
21			0
20			0
19			0
18			0
17			0
16			0
15			0
GRAND TOTALS		100	

LOCATION: Isis Avenue to Glasgow Place (5309 135th St)

ROAD DESCRIPTION: 2 lanes each direction, residential, school, 25mph in LA County

ACCIDENT HISTORY: 3 MIDDLEBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 2.04 ACC./MVM, **EXPECTED RATE:** 1.55 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Cloudy

EXISTING SPEED LIMIT: 30 **PROPOSED SPEED LIMIT:** 30

AVERAGE DAILY TRAFFIC: 7,452 **SEGMENT LENGTH:** 0.18

85TH %: 36 M.P.H.

50TH %: 30 M.P.H.

15TH %: 26 M.P.H.

AVERAGE SPEED: 32 M.P.H.

10 MPH PACE: 26 - 35 M.P.H.

% IN PACE: 72%

% OVER PACE: 20%

% UNDER PACE: 8%

OBSERVED BY: Edell

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: ROSECRANS AVENUE

DATE: 4/30/14 TIME START: 2:00 TIME STOP: 3:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			0
53			0
52			0
51			0
50			0
49	X		1
48			0
47			0
46	X		2
45	X	X	2
44	X	X	4
43	X	X	4
42	X	X	4
41	X	X	8
40	X	X	8
39	X	X	11
38	X	X	9
37	X	X	11
36	X	X	13
35	X	X	16
34	X	X	14
33	X	X	13
32	X	X	13
31	X	X	8
30	X	X	7
29	X	X	10
28	X	X	8
27	X	X	10
26	X	X	5
25	X	X	2
24	X	X	1
23	X	X	3
22	X	X	1
21	X	X	2
20	X	X	1
19			0
18			0
17			0
16			0
15			0
GRAND TOTALS			198

LOCATION: Aviation Boulevard to Hindry Avenue

ROAD DESCRIPTION: 4 lanes each direction, business/residential

ACCIDENT HISTORY: 26 MIDDLEBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 1.00 ACC./MVM, EXPECTED RATE: 2.14 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Cloudy

EXISTING SPEED LIMIT: 40 PROPOSED SPEED LIMIT: 40

AVERAGE DAILY TRAFFIC: 62,529 SEGMENT LENGTH: 0.38

85TH %: 40 M.P.H.

50TH %: 34 M.P.H.

15TH %: 27 M.P.H.

AVERAGE SPEED: 34 M.P.H.

10 MPH PACE: 32 - 41 M.P.H.

% IN PACE: 60%

% OVER PACE: 11%

% UNDER PACE: 29%

OBSERVED BY: Edell

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: ROSECRANS AVENUE

DATE: 4/30/14 TIME START: 3:00 TIME STOP: 4:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			0
53			0
52			0
51			0
50			0
49	X		1
48			0
47			0
46	X	X	3
45	X		1
44			0
43	X	X	4
42	X	X	6
41	X	X	5
40	X	X	8
39	X	X	9
38	X	X	12
37	X	X	12
36	X	X	10
35	X	X	12
34	X	X	13
33	X	X	11
32	X	X	13
31	X	X	15
30	X	X	9
29	X	X	10
28	X	X	13
27	X	X	10
26	X	X	11
25	X	X	7
24	X		3
23	X		3
22	X		1
21			1
20			0
19			0
18			0
17			0
16			0
15			0
GRAND TOTALS			203

LOCATION: -405 Freeway to Inglewood Avenue (4955 Rosecrans Ave)

ROAD DESCRIPTION: 4 lanes EB; 3 lanes WB, business

ACCIDENT HISTORY: 25 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 1.14 ACC./MVM, EXPECTED RATE: 2.14 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Cloudy

EXISTING SPEED LIMIT: 40 PROPOSED SPEED LIMIT: 40

AVERAGE DAILY TRAFFIC: 37,949 SEGMENT LENGTH: 0.53

85TH %: 38 M.P.H.
 50TH %: 32 M.P.H.
 15TH %: 26 M.P.H.
 AVERAGE SPEED: 33 M.P.H.
 10 MPH PACE: 28 - 37 M.P.H.
 % IN PACE: 58%
 % OVER PACE: 24%
 % UNDER PACE: 18%

OBSERVED BY: Edell

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: ROSECRANS AVENUE

DATE: 5/1/14 TIME START: 9:00 TIME STOP: 10:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58	X		1
57			0
56			0
55			0
54			0
53	X		1
52			0
51	X		1
50	X		3
49			0
48	X		1
47	X		1
46	X		2
45	X		4
44	X		5
43	X		11
42	X		9
41	X		14
40	X		10
39	X		16
38	X		18
37	X		16
36	X		15
35	X		14
34	X		8
33	X		10
32	X		7
31	X		7
30	X		2
29	X		6
28	X		5
27	X		3
26	X		2
25	X		2
24	X		3
23	X		3
22			0
21			0
20			0
19			0
18			0
17			0
16			0
15			0
GRAND TOTALS			200

LOCATION: Prairie Avenue to Yukon Avenue (3707 Rosecrans Ave)

ROAD DESCRIPTION: 3 lanes each direction, 40mph in Lawndale, residential/business

ACCIDENT HISTORY: 44 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 2.16 ACC./MVM, EXPECTED RATE: 2.14 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Partly Cloudy

EXISTING SPEED LIMIT: 40 PROPOSED SPEED LIMIT: 40

AVERAGE DAILY TRAFFIC: 37,215 SEGMENT LENGTH: 0.50

85TH %: 42 M.P.H.

50TH %: 36 M.P.H.

15TH %: 30 M.P.H.

AVERAGE SPEED: 37 M.P.H.

10 MPH PACE: 34 - 43 M.P.H.

% IN PACE: 66%

% OVER PACE: 10%

% UNDER PACE: 25%

OBSERVED BY: Edell

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: ROSECRANS AVENUE

DATE: 5/1/14 TIME START: 10:00 TIME STOP: 11:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			0
53			0
52			0
51			0
50			0
49			0
48			0
47	X		1
46			1
45	X		1
44	X		2
43	X	X	2
42	X	X	3
41	X	X	5
40	X	X	12
39	X	X	8
38	X	X	8
37	X	X	16
36	X	X	10
35	X	X	14
34	X	X	11
33	X	X	14
32	X	X	13
31	X	X	14
30	X	X	15
29	X	X	9
28	X	X	12
27	X	X	9
26	X		2
25	X		3
24	X		5
23	X		4
22	X		1
21	X	X	5
20	X		0
19	X		0
18	X		0
17	X		0
16	X		0
15	X		0
GRAND TOTALS			200

LOCATION: Yukon Avenue to Crenshaw Boulevard (3401 Rosecrans Ave)

ROAD DESCRIPTION: 3 lanes each direction, business/Apartments

ACCIDENT HISTORY: 41 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 2.29 ACC./MVM, EXPECTED RATE: 1.55 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Partly Cloudy

EXISTING SPEED LIMIT: 40 PROPOSED SPEED LIMIT: 40

AVERAGE DAILY TRAFFIC: 32,730 SEGMENT LENGTH: 0.50

85TH %: 38 M.P.H.

50TH %: 32 M.P.H.

15TH %: 27 M.P.H.

AVERAGE SPEED: 33 M.P.H.

10 MPH PACE: 28 - 37 M.P.H.

% IN PACE: 64%

% OVER PACE: 22%

% UNDER PACE: 15%

OBSERVED BY: Edell

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

DATE: 5/1/14 TIME START: 2:00 TIME STOP: 3:00

FOR ROADWAY: MARINE AVENUE

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			0
53			0
52			0
51			0
50			0
49			0
48			0
47			0
46			1
45			2
44			0
43			1
42			4
41			4
40			6
39			1
38			5
37			4
36			4
35			7
34			11
33			8
32			9
31			6
30			6
29			6
28			2
27			4
26			1
25			0
24			1
23			5
22			0
21			0
20			1
19			1
18			0
17			0
16			0
15			0
GRAND TOTALS			100

LOCATION: Aviation Boulevard to I-405 Freeway

ROAD DESCRIPTION: 2 lanes each direction, Edison/Northrop

ACCIDENT HISTORY: 2 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 0.11 ACC./MVM, EXPECTED RATE: 1.55 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Partly Cloudy

EXISTING SPEED LIMIT: 40 PROPOSED SPEED LIMIT: 40

AVERAGE DAILY TRAFFIC: 23,370 SEGMENT LENGTH: 0.70

85TH %: 39 M.P.H.

50TH %: 33 M.P.H.

15TH %: 28 M.P.H.

AVERAGE SPEED: 34 M.P.H.

10 MPH PACE: 29 - 38 M.P.H.

% IN PACE: 66%

% OVER PACE: 19%

% UNDER PACE: 15%

OBSERVED BY: Edell

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: MARINE AVENUE

DATE: 5/1/14 TIME START: 11:00 TIME STOP: 12:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			0
53			0
52			0
51			0
50			0
49			0
48	X		2
47	X		0
46	X	X	4
45	X	X	2
44	X	X	3
43	X	X	3
42	X	X	6
41	X	X	8
40	X	X	8
39	X	X	12
38	X	X	13
37	X	X	8
36	X	X	7
35	X	X	7
34	X	X	1
33	X		2
32	X		2
31	X		2
30	X		2
29			0
28	X		2
27			0
26			0
25			0
24			0
23			0
22			0
21			0
20			0
19			0
18			0
17			0
16			0
15			0
GRAND TOTALS			100

LOCATION: Prairie Avenue to Yukon Avenue

ROAD DESCRIPTION: 3 lanes each direction, 40mph in Lawndale, 35mph in Gardena, residential/school

ACCIDENT HISTORY: 2 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 0.18 **ACC./MVM,** **EXPECTED RATE:** 1.55 **ACC./MVM,**

ROADWAY CONDITIONS: Good

WEATHER: Partly Cloudy

EXISTING SPEED LIMIT: 35 **PROPOSED SPEED LIMIT:** 35

AVERAGE DAILY TRAFFIC: 20,821 **SEGMENT LENGTH:** 0.50

85TH %: 42 **M.P.H.**

50TH %: 37 **M.P.H.**

15TH %: 34 **M.P.H.**

AVERAGE SPEED: 38 **M.P.H.**

10 MPH PACE: 34 - 43 **M.P.H.**

% IN PACE: 80%

% OVER PACE: 11%

% UNDER PACE: 9%

OBSERVED BY: Edell

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE _____

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: 147TH STREET

DATE: 5/1/14 TIME START: 1:00 TIME STOP: 2:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			0
53			0
52			0
51			0
50			0
49			0
48			0
47			0
46			0
45			0
44			0
43			0
42			0
41			0
40			0
39	X		1
38		X	1
37	X	X	4
36	X		1
35	X	X	4
34	X	X	6
33	X	X	11
32	X	X	10
31	X	X	5
30	X	X	3
29	X	X	11
28	X	X	13
27	X	X	8
26	X	X	7
25	X	X	2
24	X	X	6
23	X	X	1
22	X	X	3
21	X		1
20			0
19			0
18			0
17			0
16	X		1
15			0
GRAND TOTALS			100

* * * P A C E * * *

LOCATION: Inglewood Avenue to Ocean Gate Avenue

ROAD DESCRIPTION: 1 lane each direction, industrial

ACCIDENT HISTORY: 3 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 0.83 **ACC./MVM,** **EXPECTED RATE:** 1.83 **ACC./MVM,**

ROADWAY CONDITIONS: Good

WEATHER: Cloudy

EXISTING SPEED LIMIT: 30 **PROPOSED SPEED LIMIT:** 30

AVERAGE DAILY TRAFFIC: 10,308 **SEGMENT LENGTH:** 0.32

85TH %: 33 **M.P.H.**

50TH %: 28 **M.P.H.**

15TH %: 25 **M.P.H.**

AVERAGE SPEED: 30 **M.P.H.**

10 MPH PACE: 26 - 35 **M.P.H.**

% IN PACE: 78%

% OVER PACE: 7%

% UNDER PACE: 15%

OBSERVED BY: Edell

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: JACK NORTHROP AVENUE

DATE: 4/29/14 TIME START: 1:00 TIME STOP: 2:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59	X		1
58			0
57	X		1
56			0
55			0
54			0
53	X		1
52			0
51	X		1
50			0
49	X	X	2
48	X	X	2
47	X	X	2
46	X	X	2
45	X	X	2
44	X	X	2
43	X	X	2
42	X	X	2
41	X	X	2
40	X	X	2
39	X	X	2
38	X	X	2
37	X	X	2
36	X	X	2
35	X	X	2
34	X	X	2
33	X	X	2
32	X	X	2
31	X	X	2
30			0
29	X	X	2
28	X	X	2
27	X	X	2
26			0
25			0
24			0
23			0
22	X	X	2
21			0
20			0
19			0
18			0
17			0
16			0
15			0
GRAND TOTALS			104

LOCATION: Crenshaw Boulevard to Prairie Avenue (3539 Jack Northrop Ave)

ROAD DESCRIPTION: 2 lanes each direction, multiple pedestrian crossings, industrial/Airport

ACCIDENT HISTORY: 4 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 0.94 ACC./MVM, **EXPECTED RATE:** 1.55 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Cloudy

EXISTING SPEED LIMIT: 40 **PROPOSED SPEED LIMIT:** 40

AVERAGE DAILY TRAFFIC: 3,905 **SEGMENT LENGTH:** 1.00

85TH %: 46 M.P.H.

50TH %: 38 M.P.H.

15TH %: 32 M.P.H.

AVERAGE SPEED: 39 M.P.H.

10 MPH PACE: 33 - 42 M.P.H.

% IN PACE: 58%

% OVER PACE: 33%

% UNDER PACE: 10%

OBSERVED BY: Edell

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: AVIATION BOULEVARD

DATE: 5/1/14 TIME START: 3:00 TIME STOP: 4:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	NORTHBOUND	SOUTHBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			0
53			0
52			0
51			0
50			0
49			0
48			1
47	X		1
46			0
45			1
44			1
43	X		1
42	X		3
41	X		5
40	X		5
39	X		10
38	X		13
37	X		11
36	X		12
35	X		12
34	X		19
33	X		19
32	X		12
31	X		11
30	X		12
29	X		16
28	X		9
27	X		8
26	X		8
25	X		1
24	X		3
23	X		3
22	X		1
21	X		1
20			0
19			0
18	X		1
17			0
16			0
15			0
GRAND TOTALS			200

LOCATION: Marine Avenue to Rosecrans Avenue

ROAD DESCRIPTION: 2 lanes NB; 3 lanes SB, business, continuity of speed

ACCIDENT HISTORY: 4 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 0.16 **ACC./MVM, EXPECTED RATE:** 2.14 **ACC./MVM,**

ROADWAY CONDITIONS: Good

WEATHER: Partly Cloudy

EXISTING SPEED LIMIT: 40 **PROPOSED SPEED LIMIT:** 40

AVERAGE DAILY TRAFFIC: 46,989 **SEGMENT LENGTH:** 0.50

85TH %: 37 **M.P.H.**

50TH %: 32 **M.P.H.**

15TH %: 27 **M.P.H.**

AVERAGE SPEED: 33 **M.P.H.**

10 MPH PACE: 29 - 38 **M.P.H.**

% IN PACE: 69%

% OVER PACE: 14%

% UNDER PACE: 18%

OBSERVED BY: Edell

REVIEWED BY: Mark Miller

HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: AVIATION BOULEVARD

DATE: 4/30/14 TIME START: 1:00 TIME STOP: 2:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	NORTHBOUND	SOUTHBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54	X		1
53			0
52			0
51	X		2
50	X		1
49	X		1
48	X		2
47	X		3
46	X		2
45	X		2
44	X	X	6
43	X		2
42	X		4
41	X	X	4
40	X	X	6
39	X	X	6
38	X	X	9
37	X	X	7
36	X	X	8
35	X	X	4
34	X	X	3
33	X	X	7
32	X	X	4
31	X	X	3
30	X	X	1
29	X	X	3
28	X	X	1
27	X	X	1
26			0
25			0
24			0
23			0
22	X		1
21			0
20			0
19			0
18			0
17			0
16			0
15			0
GRAND TOTALS		100	

LOCATION: Rosecrans Avenue to 13200 Aviation Boulevard (555 Aviation Blvd)

ROAD DESCRIPTION: 2 lanes each direction, business/school

ACCIDENT HISTORY: 4 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 0.08 ACC./MVM, EXPECTED RATE: 1.55 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Cloudy

EXISTING SPEED LIMIT: 40 PROPOSED SPEED LIMIT: 40

AVERAGE DAILY TRAFFIC: 33,417 SEGMENT LENGTH: 1.30

85TH %:	43	M.P.H.
50TH %:	36	M.P.H.
15TH %:	31	M.P.H.
AVERAGE SPEED:	38	M.P.H.
10 MPH PACE:	32 - 41	M.P.H.
% IN PACE:	60%	
% OVER PACE:	26%	
% UNDER PACE:	14%	

OBSERVED BY: Edell

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: INGLEWOOD AVENUE

DATE: 4/28/14 TIME START: 9:00 TIME STOP: 10:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	NORTHBOUND	SOUTHBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			0
53			0
52			1
51			0
50			0
49	X		1
48			0
47	X		1
46			1
45	X		1
44		X X	3
43			0
42	X X X X		7
41	X X X X		7
40	X X X X		8
39	X X X X		6
38	X X X X		6
37	X X X X		8
36	X X X X		8
35	X X X X		9
34	X X X X X X		10
33	X X X X X X		5
32	X X X X		7
31	X X X X		6
30	X X		5
29	X X X X		8
28	X X X		3
27	X		2
26	X		1
25			0
24			0
23			0
22			0
21			0
20			0
19			0
18			0
17			0
16			0
15			0
GRAND TOTALS			114

LOCATION: Imperial Highway to 120th Street

ROAD DESCRIPTION: 2 lanes each direction, business/Apartments, high collision rate

ACCIDENT HISTORY: 31 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 2.97 ACC./MVM, EXPECTED RATE: 1.55 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Clear

EXISTING SPEED LIMIT: 35 PROPOSED SPEED LIMIT: 35

AVERAGE DAILY TRAFFIC: 19,067 SEGMENT LENGTH: 0.50

85TH %: 40 M.P.H.

50TH %: 35 M.P.H.

15TH %: 29 M.P.H.

AVERAGE SPEED: 36 M.P.H.

10 MPH PACE: 33 - 42 M.P.H.

% IN PACE: 65%

% OVER PACE: 7%

% UNDER PACE: 28%

OBSERVED BY: Mike

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

DATE: 4/28/14 TIME START: 10:00 TIME STOP: 11:00

FOR ROADWAY: INGLEWOOD AVENUE

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	NORTHBOUND	SOUTHBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			2
53	X	X	1
52			0
51			0
50	X		1
49	X		2
48			0
47	X		1
46			1
45	X		1
44			0
43			1
42	X	X	5
41	X	X	7
40	X	X	7
39	X	X	10
38	X	X	11
37	X	X	5
36	X	X	7
35	X	X	12
34	X	X	14
33	X	X	11
32	X	X	8
31	X	X	5
30	X	X	5
29	X	X	2
28	X	X	3
27			1
26			0
25			0
24	X		1
23			0
22			0
21			0
20			0
19			0
18			0
17			0
16			0
15			0
GRAND TOTALS			124

* * * P A C E * * *

LOCATION: 120th Street to El Segundo Boulevard

ROAD DESCRIPTION: 2 lanes each direction, residential, multiple driveways, continuity of speed, high collision rate

ACCIDENT HISTORY: 28 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 2.61 **ACC./MVM,** **EXPECTED RATE:** 1.55 **ACC./MVM,**

ROADWAY CONDITIONS: Good

WEATHER: Clear

EXISTING SPEED LIMIT: 35 **PROPOSED SPEED LIMIT:** 35

AVERAGE DAILY TRAFFIC: 19,584 **SEGMENT LENGTH:** 0.50

85TH %: 40 **M.P.H.**

50TH %: 35 **M.P.H.**

15TH %: 31 **M.P.H.**

AVERAGE SPEED: 36 **M.P.H.**

10 MPH PACE: 32 - 41 **M.P.H.**

% IN PACE: 74%

% OVER PACE: 12%

% UNDER PACE: 14%

OBSERVED BY: Mike

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

DATE: 4/28/14 TIME START: 11:00 TIME STOP: 12:00

FOR ROADWAY: INGLEWOOD AVENUE

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	NORTHBOUND	SOUTHBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54	X		2
53			0
52			0
51			0
50			0
49			0
48			1
47	X		1
46			1
45	X		3
44	X		3
43	X	X	7
42	X		3
41	X	X	8
40	X	X	8
39	X	X	10
38	X	X	12
37	X	X	8
36	X	X	16
35	X	X	12
34	X	X	8
33	X	X	6
32	X	X	10
31			2
30	X		2
29	X		3
28	X		2
27	X		3
26			0
25	X		1
24	X		2
23			0
22			0
21			0
20			0
19			0
18			0
17			0
16			0
15			0
GRAND TOTALS			134

LOCATION: El Segundo Boulevard to 135th Street

ROAD DESCRIPTION: 2 lanes each direction, business, multiple driveways, continuity of speed

ACCIDENT HISTORY: 28 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 2.18 ACC./MVM, EXPECTED RATE: 1.55 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Clear

EXISTING SPEED LIMIT: 35 PROPOSED SPEED LIMIT: 35

AVERAGE DAILY TRAFFIC: 25,504 SEGMENT LENGTH: 0.46

85TH %: 41 M.P.H.

50TH %: 36 M.P.H.

15TH %: 31 M.P.H.

AVERAGE SPEED: 37 M.P.H.

10 MPH PACE: 32 - 41 M.P.H.

% IN PACE: 73%

% OVER PACE: 16%

% UNDER PACE: 11%

OBSERVED BY: Mike

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: INGLEWOOD AVENUE

DATE: 4/28/14 TIME START: 1:00 TIME STOP: 2:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	NORTHBOUND	SOUTHBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			0
53			0
52			0
51			0
50			0
49			0
48			0
47			0
46	X		2
45	X		1
44	X		2
43	X		2
42	X	X	7
41	X	X	7
40	X	X	7
39	X	X	9
38	X	X	10
37	X	X	8
36	X	X	11
35	X	X	13
34	X	X	8
33	X	X	10
32	X	X	5
31	X	X	8
30	X	X	4
29	X	X	6
28	X		1
27	X		2
26	X		2
25			0
24			0
23			0
22			0
21			0
20			0
19			0
18			0
17			0
16			0
15			0
GRAND TOTALS			125

LOCATION: 135th Street to Rosecrans Avenue (13752 Inglewood Ave)

ROAD DESCRIPTION: 2 lanes each direction, business

ACCIDENT HISTORY: 25 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 1.59 ACC./MVM, EXPECTED RATE: 1.55 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Clear

EXISTING SPEED LIMIT: 35 PROPOSED SPEED LIMIT: 35

AVERAGE DAILY TRAFFIC: 26,545 SEGMENT LENGTH: 0.54

85TH %: 40 M.P.H.

50TH %: 35 M.P.H.

15TH %: 30 M.P.H.

AVERAGE SPEED: 36 M.P.H.

10 MPH PACE: 33 - 42 M.P.H.

% IN PACE: 72%

% OVER PACE: 6%

% UNDER PACE: 22%

OBSERVED BY: Mike

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: HAWTHORNE BOULEVARD

DATE: 4/29/14 TIME START: 11:00 TIME STOP: 12:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			0
53			0
52			0
51			0
50			0
49	X		1
48			0
47			0
46			0
45			0
44	X		2
43			0
42		X	3
41	X	X	2
40		X	4
39	X	X	3
38			1
37	X	X	3
36	X	X	15
35	X	X	8
34	X	X	7
33	X	X	10
32	X	X	10
31	X	X	10
30	X	X	9
29	X	X	4
28	X	X	8
27	X	X	10
26	X	X	5
25	X	X	4
24	X	X	3
23	X	X	1
22	X		0
21			1
20			0
19			0
18			0
17			0
16			0
15			0
GRAND TOTALS			125

LOCATION: Imperial Highway to 120th Street (11712 Hawthorne Blvd)

ROAD DESCRIPTION: 4 lanes each direction, business, pedestrians, 35mph in LA County

ACCIDENT HISTORY: 26 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 1.50 ACC./MVM, EXPECTED RATE: 2.14 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Clear

EXISTING SPEED LIMIT: 35 **PROPOSED SPEED LIMIT:** 35

AVERAGE DAILY TRAFFIC: 31,615 **SEGMENT LENGTH:** 0.50

85TH %: 36 M.P.H.

50TH %: 31 M.P.H.

15TH %: 26 M.P.H.

AVERAGE SPEED: 32 M.P.H.

10 MPH PACE: 27 - 36 M.P.H.

% IN PACE: 73%

% OVER PACE: 15%

% UNDER PACE: 12%

OBSERVED BY: Mike

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: HAWTHORNE BOULEVARD

DATE: 4/29/14 TIME START: 9:00 TIME STOP: 10:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	NORTHBOUND	SOUTHBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			0
53			0
52			0
51			0
50			0
49			0
48	X		2
47	X		1
46	X		2
45		X	3
44	X		2
43	X		0
42	X		3
41		X	2
40	X	X	5
39	X	X	4
38	X	X	8
37	X	X	10
36	X	X	7
35	X	X	6
34	X	X	6
33	X	X	10
32	X	X	8
31	X	X	6
30	X	X	7
29	X	X	6
28	X	X	7
27	X	X	6
26	X	X	3
25	X		0
24			1
23	X		2
22			0
21			0
20			0
19			0
18			0
17			0
16			0
15			0
GRAND TOTALS			123

LOCATION: 120th Street to El Segundo Boulevard (12345 Hawthorne Blvd)

ROAD DESCRIPTION: 4 lanes each direction, business

ACCIDENT HISTORY: 19 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 1.17 ACC./MVM, EXPECTED RATE: 2.14 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Clear

EXISTING SPEED LIMIT: 35 PROPOSED SPEED LIMIT: 35

AVERAGE DAILY TRAFFIC: 29,785 SEGMENT LENGTH: 0.50

85TH %: 39 M.P.H.

50TH %: 33 M.P.H.

15TH %: 27 M.P.H.

AVERAGE SPEED: 34 M.P.H.

10 MPH PACE: 29 - 38 M.P.H.

% IN PACE: 60%

% OVER PACE: 20%

% UNDER PACE: 20%

OBSERVED BY: Mike

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: HAWTHORNE BOULEVARD

DATE: 4/29/14 TIME START: 3:00 TIME STOP: 4:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	NORTHBOUND	SOUTHBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			0
53			0
52			0
51			0
50			0
49			0
48			0
47			1
46			0
45			0
44			2
43			1
42			1
41			3
40			1
39			5
38			7
37			6
36			5
35			9
34			9
33			8
32			14
31			6
30			12
29			5
28			5
27			2
26			2
25			2
24			2
23			1
22			2
21			1
20			0
19			1
18			0
17			0
16			0
15			0
GRAND TOTALS			113

LOCATION: El Segundo Boulevard to 135th Street (13300 Hawthorne Blvd)

ROAD DESCRIPTION: 4 lanes each direction, business, multiple crosswalks

ACCIDENT HISTORY: 53 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 2.90 ACC./MVM, EXPECTED RATE: 2.14 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Clear

EXISTING SPEED LIMIT: 35 PROPOSED SPEED LIMIT: 35

AVERAGE DAILY TRAFFIC: 36,332 SEGMENT LENGTH: 0.46

85TH %: 37 M.P.H.

50TH %: 32 M.P.H.

15TH %: 28 M.P.H.

AVERAGE SPEED: 33 M.P.H.

10 MPH PACE: 30 - 39 M.P.H.

% IN PACE: 72%

% OVER PACE: 8%

% UNDER PACE: 20%

OBSERVED BY: Mike

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

DATE: 4/28/14 TIME START: 2:00 TIME STOP: 3:00

FOR ROADWAY: HAWTHORNE BOULEVARD

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	NORTHBOUND	SOUTHBOUND	
65		X	1
64		X	1
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			0
53			0
52			0
51	X		1
50		X	1
49		X	2
48	X	X	4
47		X	2
46		X	3
45	X	X	1
44	X	X	5
43	X	X	0
42	X	X	3
41	X	X	4
40	X	X	4
39	X	X	9
38	X	X	9
37	X	X	13
36	X	X	8
35	X	X	12
34	X	X	16
33	X	X	7
32	X	X	8
31	X	X	7
30	X	X	5
29	X		1
28	X		1
27	X	X	2
26	X		1
25			0
24		X	2
23			0
22			0
21	X		1
20			0
19			0
18			0
17			0
16			0
15			0
GRAND TOTALS			138

LOCATION: 135th Street to Rosecrans Avenue (13820 Hawthorne Blvd)

ROAD DESCRIPTION: 3 lanes each direction, business, multiple crosswalks, continuity of speed, 35mph in Lawndale

ACCIDENT HISTORY: 36 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 1.67 ACC./MVM, EXPECTED RATE: 2.14 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Clear

EXISTING SPEED LIMIT: 35 PROPOSED SPEED LIMIT: 35

AVERAGE DAILY TRAFFIC: 36,528 SEGMENT LENGTH: 0.54

85TH %: 43 M.P.H.

50TH %: 35 M.P.H.

15TH %: 31 M.P.H.

AVERAGE SPEED: 37 M.P.H.

10 MPH PACE: 32 - 41 M.P.H.

% IN PACE: 68%

% OVER PACE: 17%

% UNDER PACE: 14%

OBSERVED BY: Mike

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: BIRCH AVENUE

DATE: 4/29/14 TIME START: 10:00 TIME STOP: 11:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			0
53			0
52			0
51			0
50			0
49			0
48			0
47			0
46			0
45			0
44			0
43			0
42			0
41	X		2
40	X		1
39			0
38			0
37	X		2
36	X		1
35	X	X	5
34	X	X	5
33	X	X	6
32	X	X	8
31	X	X	7
30	X	X	5
29	X	X	10
28	X	X	7
27	X	X	6
26	X	X	4
25	X	X	8
24	X	X	5
23	X	X	4
22	X	X	6
21	X	X	5
20	X		1
19	X		3
18			0
17	X		1
16			0
15			0
GRAND TOTALS			102

LOCATION: 120th Street to El Segundo Boulevard (12336 Birch Ave)

ROAD DESCRIPTION: 2 lanes each direction, residential/business

ACCIDENT HISTORY: 4 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 1.51 ACC./MVM, EXPECTED RATE: 1.55 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Clear

EXISTING SPEED LIMIT: 35 PROPOSED SPEED LIMIT: 35

AVERAGE DAILY TRAFFIC: 4,854 SEGMENT LENGTH: 0.50

85TH %: 33 M.P.H.

50TH %: 28 M.P.H.

15TH %: 22 M.P.H.

AVERAGE SPEED: 28 M.P.H.

10 MPH PACE: 25 - 34 M.P.H.

% IN PACE: 65%

% OVER PACE: 11%

% UNDER PACE: 25%

OBSERVED BY: Mike

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: PRAIRIE AVENUE

DATE: 4/29/14 TIME START: 1:00 TIME STOP: 2:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			0
53			0
52			0
51			0
50			1
49			0
48			0
47	X		4
46			0
45	X		3
44	X		3
43	X	X	7
42	X	X	2
41	X		3
40	X	X	5
39	X	X	11
38	X	X	7
37	X	X	6
36	X	X	9
35	X	X	10
34	X	X	10
33	X	X	8
32	X	X	11
31	X	X	7
30	X	X	9
29	X		3
28	X		3
27	X		3
26	X	X	5
25	X	X	4
24	X		2
23	X		1
22	X		1
21			1
20			0
19			0
18	X		1
17			0
16			0
15			0
GRAND TOTALS			140

LOCATION: Imperial Highway to 120th Street (11893 Prairie Ave)

ROAD DESCRIPTION: 2 lanes each direction, business/school, 25mph when children are present

ACCIDENT HISTORY: 22 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 1.40 ACC./MVM, EXPECTED RATE: 1.55 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Clear

EXISTING SPEED LIMIT: 40 PROPOSED SPEED LIMIT: 40

AVERAGE DAILY TRAFFIC: 28,769 SEGMENT LENGTH: 0.50

85TH %: 41 M.P.H.

50TH %: 34 M.P.H.

15TH %: 28 M.P.H.

AVERAGE SPEED: 35 M.P.H.

10 MPH PACE: 30 - 39 M.P.H.

% IN PACE: 63%

% OVER PACE: 20%

% UNDER PACE: 17%

OBSERVED BY: Mike

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

DATE: 4/29/14 TIME START: 1:00 TIME STOP: 2:00

FOR ROADWAY: PRAIRIE AVENUE

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			0
53			0
52	X		1
51			0
50			0
49			0
48	X		1
47			0
46		X	1
45			0
44	X		1
43			0
42	X		2
41	X	X	5
40	X	X	6
39	X	X	5
38	X	X	6
37	X	X	6
36	X	X	9
35	X	X	11
34	X	X	8
33	X	X	5
32	X	X	10
31	X	X	10
30	X		2
29	X	X	6
28	X	X	3
27	X	X	2
26	X	X	5
25	X	X	6
24	X		1
23	X		1
22		X	0
21			1
20			0
19			0
18			0
17			0
16			0
15			0
GRAND TOTALS			114

LOCATION: 120th Street to El Segundo Boulevard (12237 Prairie Ave)

ROAD DESCRIPTION: 3 lanes each direction, residential/Airport

ACCIDENT HISTORY: 36 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 1.93 ACC./MVM, EXPECTED RATE: 1.55 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Clear

EXISTING SPEED LIMIT: 40 **PROPOSED SPEED LIMIT:** 40

AVERAGE DAILY TRAFFIC: 34,032 **SEGMENT LENGTH:** 0.50

85TH %: 39 M.P.H.

50TH %: 33 M.P.H.

15TH %: 27 M.P.H.

AVERAGE SPEED: 34 M.P.H.

10 MPH PACE: 31 - 40 M.P.H.

% IN PACE: 67%

% OVER PACE: 10%

% UNDER PACE: 24%

OBSERVED BY: Mike

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: PRAIRIE AVENUE

DATE: 4/29/14 TIME START: 3:00 TIME STOP: 4:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			0
53			0
52			1
51			0
50			0
49			1
48			0
47	X		2
46	X		3
45	X		1
44	X		3
43	X		2
42	X	X	8
41	X	X	5
40	X	X	7
39	X	X	11
38	X	X	8
37	X	X	9
36	X	X	12
35	X	X	11
34	X	X	7
33	X	X	6
32	X	X	7
31	X		1
30	X	X	6
29	X	X	2
28	X		1
27	X		1
26			0
25			0
24			0
23			0
22			0
21			0
20			0
19			0
18			0
17			0
16			0
15			0
GRAND TOTALS		115	

LOCATION: El Segundo Boulevard to 135th Street (13332 Prairie Ave)

ROAD DESCRIPTION: 3 lanes each direction, business

ACCIDENT HISTORY: 34 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 2.21 ACC./MVM, EXPECTED RATE: 1.55 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Clear

EXISTING SPEED LIMIT: 40 PROPOSED SPEED LIMIT: 40

AVERAGE DAILY TRAFFIC: 30,529 SEGMENT LENGTH: 0.46

85TH %: 41 M.P.H.

50TH %: 36 M.P.H.

15TH %: 32 M.P.H.

AVERAGE SPEED: 37 M.P.H.

10 MPH PACE: 33 - 42 M.P.H.

% IN PACE: 73%

% OVER PACE: 11%

% UNDER PACE: 16%

OBSERVED BY: Mike

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: PRAIRIE AVENUE

DATE: 4/29/14 TIME START: 3:00 TIME STOP: 4:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			0
53			0
52		X	1
51			0
50			0
49			0
48	X		1
47	X		1
46	X		2
45			0
44			0
43	X		4
42	X		4
41	X		3
40	X		3
39	X	X	11
38	X	X	8
37	X	X	5
36	X	X	7
35	X	X	14
34	X	X	11
33	X	X	15
32	X	X	12
31	X	X	9
30	X	X	3
29	X	X	3
28	X	X	4
27	X	X	3
26	X	X	3
25	X	X	1
24	X	X	3
23			0
22			0
21			0
20			0
19			0
18			0
17			0
16			0
15			0
GRAND TOTALS			131

LOCATION: 135th Street to Rosecrans Avenue (14021 Prairie Ave)

ROAD DESCRIPTION: 3 lanes each direction, residential/school, crosswalks, 25mph when children are present

ACCIDENT HISTORY: 26 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 1.68 ACC./MVM, EXPECTED RATE: 1.55 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Clear

EXISTING SPEED LIMIT: 40 PROPOSED SPEED LIMIT: 40

AVERAGE DAILY TRAFFIC: 28,323 SEGMENT LENGTH: 0.50

85TH %: 39 M.P.H.

50TH %: 33 M.P.H.

15TH %: 30 M.P.H.

AVERAGE SPEED: 35 M.P.H.

10 MPH PACE: 31 - 40 M.P.H.

% IN PACE: 73%

% OVER PACE: 12%

% UNDER PACE: 15%

OBSERVED BY: Mike

REVIEWED BY: Mark Miller

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DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

DATE: 4/29/14 TIME START: 3:00 TIME STOP: 4:00

FOR ROADWAY: PRAIRIE AVENUE

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			0
53			0
52		X	1
51			0
50			0
49			0
48	X		1
47		X	1
46	X		2
45			0
44			0
43	X	X	4
42	X	X	4
41	X	X	4
40	X	X	3
39	X	X	11
38	X	X	8
37	X	X	5
36	X	X	7
35	X	X	14
34	X	X	11
33	X	X	15
32	X	X	12
31	X	X	9
30	X	X	3
29	X	X	3
28	X	X	4
27	X	X	3
26	X	X	3
25	X	X	1
24	X	X	3
23	X	X	0
22	X	X	0
21	X	X	0
20	X	X	0
19	X	X	0
18	X	X	0
17	X	X	0
16	X	X	0
15	X	X	0
GRAND TOTALS			131

185TH %: 39 M.P.H.
50TH %: 33 M.P.H.
15TH %: 30 M.P.H.
AVERAGE SPEED: 35 M.P.H.
10 MPH PACE: 31 - 40 M.P.H.
% IN PACE: 73%
% OVER PACE: 12%
% UNDER PACE: 15%

LOCATION: Rosecrans Ave to Marine Ave

ROAD DESCRIPTION: 3 lanes each direction

ACCIDENT HISTORY: 17 MIDBLOCK COLLISIONS IN 3 YEARS (1/11/11 TO 12/31/13)

ACCIDENT RATE: 1.07 ACC./MVM, **EXPECTED RATE:** 1.55 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Clear

EXISTING SPEED LIMIT: 40 **PROPOSED SPEED LIMIT:** 40

AVERAGE DAILY TRAFFIC: 29,151 **SEGMENT LENGTH:** 0.50

OBSERVED BY: Mike

REVIEWED BY: Mark Miller

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DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

DATE: 4/30/14 TIME START: 11:00 TIME STOP: 12:00

FOR ROADWAY: CRENSHAW BOULEVARD

LOCATION: 120th Street to El Segundo Boulevard (13012 Crenshaw Blvd)

ROAD DESCRIPTION: 3 lanes each direction, business, 40mph in Inglewood

ACCIDENT HISTORY: 28 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 1.20 ACC./MVM, EXPECTED RATE: 2.14 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Clear

EXISTING SPEED LIMIT: 35 **PROPOSED SPEED LIMIT:** 40

AVERAGE DAILY TRAFFIC: 42,471 **SEGMENT LENGTH:** 0.50

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			2
53			1
52			1
51			1
50			0
49			0
48			1
47			2
46			1
45			1
44			6
43			4
42			8
41			8
40			7
39			7
38			7
37			12
36			13
35			7
34			8
33			9
32			7
31			3
30			4
29			4
28			1
27			2
26			0
25			0
24			0
23			1
22			0
21			0
20			0
19			0
18			0
17			0
16			0
15			0
GRAND TOTALS			128

85TH %: 42 M.P.H.

50TH %: 36 M.P.H.

15TH %: 31 M.P.H.

AVERAGE SPEED: 38 M.P.H.

10 MPH PACE: 33 - 42 M.P.H.

% IN PACE: 67%

% OVER PACE: 16%

% UNDER PACE: 17%

OBSERVED BY: Mike

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

DATE: 4/30/14 TIME START: 1:00 TIME STOP: 2:00

FOR ROADWAY: CRENSHAW BOULEVARD

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			0
53			0
52			0
51			0
50			0
49			1
48			1
47	X		1
46			0
45			2
44			2
43	X		5
42	X		3
41	X		9
40	X		2
39	X		5
38	X		10
37	X		6
36	X		9
35	X		6
34	X		5
33	X		11
32	X		6
31	X		5
30	X		6
29	X		7
28	X		1
27	X		4
26	X		3
25	X		2
24	X		2
23			0
22	X		2
21			0
20			0
19			0
18			0
17			0
16			0
15			0
GRAND TOTALS			116

LOCATION: El Segundo Boulevard to 132nd Street (12101 Crenshaw Blvd)

ROAD DESCRIPTION: 3 lanes each direction, business

ACCIDENT HISTORY: 7 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 0.72 ACC./MVM, EXPECTED RATE: 2.14 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Clear

EXISTING SPEED LIMIT: 40 PROPOSED SPEED LIMIT: 40

AVERAGE DAILY TRAFFIC: 35,749 SEGMENT LENGTH: 0.25

85TH %: 40 M.P.H.

50TH %: 34 M.P.H.

15TH %: 28 M.P.H.

AVERAGE SPEED: 35 M.P.H.

10 MPH PACE: 29 - 38 M.P.H.

% IN PACE: 61%

% OVER PACE: 27%

% UNDER PACE: 12%

OBSERVED BY: Mike

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

FOR ROADWAY: VAN NESS AVENUE

DATE: 4/30/14 TIME START: 2:00 TIME STOP: 3:00

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60		X	1
59			0
58		X	1
57			0
56			0
55			0
54		X	1
53		X	1
52			0
51	X		2
50			0
49		X	1
48	X	X	3
47			0
46	X	X	4
45	X		1
44	X	X	3
43	X	X	7
42	X	X	11
41	X	X	8
40	X	X	6
39	X	X	8
38	X	X	12
37	X	X	5
36	X	X	8
35	X	X	4
34	X	X	6
33	X	X	6
32	X	X	6
31	X	X	6
30	X	X	2
29	X		1
28			0
27			0
26	X		1
25			0
24			0
23			0
22			0
21			0
20			0
19			0
18			0
17			0
16			0
15			0
GRAND TOTALS			117

LOCATION: Imperial Highway to 120th Street (11637 Van Ness Ave)

ROAD DESCRIPTION: 2 lanes each direction, business/golfcourse, pedestrians, 25mph when children present, Inglewood 35n

ACCIDENT HISTORY: 9 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 0.93 ACC./MVM, EXPECTED RATE: 1.55 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Clear

EXISTING SPEED LIMIT: 35 PROPOSED SPEED LIMIT: 35

AVERAGE DAILY TRAFFIC: 17,611 SEGMENT LENGTH: 0.50

85TH %: 43 M.P.H.

50TH %: 38 M.P.H.

15TH %: 32 M.P.H.

AVERAGE SPEED: 39 M.P.H.

10 MPH PACE: 34 - 43 M.P.H.

% IN PACE: 66%

% OVER PACE: 15%

% UNDER PACE: 19%

OBSERVED BY: Mike

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

DATE

CITY OF HAWTHORNE ENGINEERING AND SPEED SURVEY

DATE: 4/30/14 TIME START: 3:00 TIME STOP: 4:00

FOR ROADWAY: VAN NESS AVENUE

SPEED (MPH)	VEHICLES SURVEYED		TOTAL VEHICLES
	EASTBOUND	WESTBOUND	
65			0
64			0
63			0
62			0
61			0
60			0
59			0
58			0
57			0
56			0
55			0
54			0
53			0
52			0
51	X		2
50	X		2
49			0
48	X		3
47	X	X	5
46	X	X	4
45	X	X	5
44	X	X	5
43	X	X	9
42	X	X	10
41	X	X	11
40	X	X	8
39	X	X	9
38	X	X	8
37	X	X	5
36	X	X	4
35	X	X	9
34	X	X	5
33	X	X	4
32	X	X	4
31	X		1
30	X		1
29			1
28	X	X	2
27	X		1
26			0
25			0
24	X		2
23			0
22			0
21			0
20			0
19			0
18			0
17			0
16			0
15			0
GRAND TOTALS			120

LOCATION: 120th Street to El Segundo Boulevard (12333 Van Ness Ave)

ROAD DESCRIPTION: 2 lanes each direction, residential/industrial, low collision rate

ACCIDENT HISTORY: 4 MIDBLOCK COLLISIONS IN 3 YEARS (1/1/11 TO 12/31/13)

ACCIDENT RATE: 0.32 ACC./MVM, EXPECTED RATE: 1.55 ACC./MVM,

ROADWAY CONDITIONS: Good

WEATHER: Clear

EXISTING SPEED LIMIT: 35 **PROPOSED SPEED LIMIT:** 40

AVERAGE DAILY TRAFFIC: 22,621 **SEGMENT LENGTH:** 0.50

85TH %: 44 M.P.H.

50TH %: 39 M.P.H.

15TH %: 33 M.P.H.

AVERAGE SPEED: 39 M.P.H.

10 MPH PACE: 35 - 44 M.P.H.

% IN PACE: 65%

% OVER PACE: 18%

% UNDER PACE: 18%

OBSERVED BY: Mike

REVIEWED BY: Mark Miller

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF A SPEED ZONE SURVEY AS ON FILE IN THE OFFICE OF THE CITY TRAFFIC ENGINEER OF THE CITY OF HAWTHORNE, CALIFORNIA.

	DATE
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