


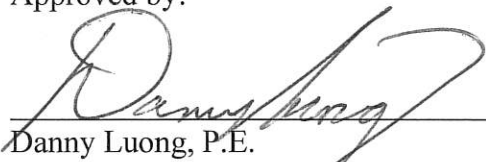
## Engineering and Traffic Survey (E&TS)

Prepared by:

  
\_\_\_\_\_  
Michael Roura, P.E.  
*Transportation Engineer*  
*Office of Corridor Management (South)*




Approved by:

  
\_\_\_\_\_  
Danny Luong, P.E.  
*Acting Senior Transportation Engineer*  
*Office of Corridor Management (South)*

3/10/2020  
DATE

Concurred by:

  
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Siew Mei Tan, P.E.  
*Acting Chief*  
*Office of Corridor Management (South)*

3/10/2020  
DATE

## I. BACKGROUND

This Engineering and Traffic Survey (E&TS) was conducted on Western Avenue (State Route 213) from 261<sup>st</sup> Street (PM 4.834) to Interstate 405 Overcrossing (I-405 OC, PM 9.984). The purpose of this E&TS is to update or revise the established speed limits as appropriate; the previous E&TS for the aforementioned limits was conducted in July 2009.

This E&TS consists of obtaining vehicle speed samples and field survey data necessary to complete the vehicle speed survey sheets, including recommendation of appropriate speed based upon but not limited to field observations, critical speed and accident history.

## II. EXISTING CONDITIONS

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### A. GENERAL

Western Avenue between 261<sup>st</sup> Street and I-405 OC is within an urban area and a major coastal artery that provides access to the major cities along the coast, Ports of Los Angeles and Long Beach, and many other residential and commercial developments in the area. Additionally, the highway is one of the most direct routes between City of Los Angeles, City of Torrance, City of Rancho Palos Verdes and City of Lomita in Los Angeles County. Consequently, this route frequently serves as an alternate to the Harbor Freeway (Interstate 110). Western Avenue falls within the boundaries of City of Los Angeles and City of Torrance within the survey limits.

### B. TYPE OF FACILITY

#### *City of Los Angeles (PM 4.834 to PM 6.525)*

Western Avenue from 261<sup>st</sup> Street (PM 4.834) to 237<sup>th</sup> Street (PM 6.525) is a 4-lane conventional highway with raised concrete medians separating the northbound (NB) and southbound (SB) lanes. Left turn pockets are available on Western Avenue at all the intersections within this segment. There are several variations of parking restrictions from "NO STOPPING ANY TIME" to time limit restrictions along this segment of the highway.

#### *City of Torrance (PM 6.525 to PM 7.984)*

Western Avenue from 237<sup>th</sup> Street (PM 6.525) to Carson Street (PM 7.984) is a 4-lane conventional highway with raised concrete medians separating the NB and SB lanes. Left turn pockets are available on Western Avenue at all the intersections within this segment. There are several variations of parking restrictions from "NO STOPPING ANY TIME" to time limit restrictions along this segment of the highway.

*City of Los Angeles (PM 7.984 to PM 9.984)*

Western Avenue from Carson Street (PM 7.984) to I-405 OC (PM 9.984) is a four to six-lane conventional highway with raised concrete medians separating the NB and SB lanes. Left turn pockets are available on Western Avenue at all the intersections within this segment. There are several variations of parking restrictions from "NO STOPPING ANY TIME" to time limit restrictions along this segment of the highway.

C. TRAFFIC

The highway carries a mix of commuter, local, and through traffic. The 2017 Annual Average Daily Traffic (AADT) for Western Avenue from State Route 1 to I-405 OC ranges from 20,900 to 31,500 vehicles per day.

D. EXISTING SPEED ZONES

The posted speed limits on Western Avenue are as follows:

Limits		Speed Limit	
From (Postmile)	To (Postmile)	NB (MPH)	SB (MPH)
Peninsula Verde Dr. (PM 4.097)	Lomita Boulevard (PM 5.665)	35	35
Lomita Boulevard (PM 5.665)	237 <sup>th</sup> Street (PM 6.525)	35	40
237 <sup>th</sup> Street (PM 6.525)	215 <sup>th</sup> Street (PM 8.137)	40	40
215 <sup>th</sup> Street (PM 8.137)	Del Amo Boulevard (PM 9.056)	40	40
Del Amo Boulevard (PM 9.056)	JCT Route 405 (PM 9.984)	40	40

MPH – Miles Per hour

E. ACCIDENT RATES

The most recent three-year (1/1/2016 to 12/31/2018) accident rates for State Route 213 within the survey limits from the Traffic Accident Surveillance and Analysis System (TASAS) are as follows:

Highway Segment (Postmile)		Accident Rate (Accidents/MVM)		Fatality Rate (Accidents/MVM)	
		Actual	Average	Actual	Average
261 <sup>th</sup> Street (PM 4.834)	I-405 OC (PM 9.984)	0.43	1.37	0.000	0.011

MVM = Million Vehicle Miles

This segment of Western Avenue has a lower accident rate compared to the statewide average for similar type of facility.

**F. ENFORCEMENT JURISDICTION**

The City of Los Angeles Police Department and City of Torrance Police Department are the enforcement agencies within their respective boundaries; these agencies use radar for speed enforcement.

**G. SPEED ZONE FIELD DATA**

Speed measurements were taken on September 27, October 2, October 4, October 23 and October 25, 2018. The results are noted in Attachment 1.

**III. COMMUNITY INVOLVEMENT**

This E&TS was shared with the City of Los Angeles and City of Torrance for review and comment.

**IV. CONCLUSIONS AND RECOMMENDATIONS**

Based on field speed measurements, the 85<sup>th</sup> Percentile and 10 MPH Pace Speeds are shown in the table below:

Location of Speed Measurements	85 <sup>th</sup> Percentile Speed		10 MPH Pace Speed	
	NB	SB	NB	SB
N/O Hillcrest Avenue (PM 4.594)	39	34	31-40	25-34
N/O 256 <sup>th</sup> Street (PM 5.225)	37	38	30-39	30-39
N/O 252 <sup>nd</sup> Street (PM 5.522)	37	37	30-39	29-38
N/O 247 <sup>th</sup> Street (PM 5.881)	41	43	32-41	32-41
N/O 236 <sup>th</sup> Street (PM 6.559)	39	38	31-40	30-39
N/O 228 <sup>th</sup> Street (PM 7.135)	37	36	29-38	30-39
N/O 222 <sup>nd</sup> Street (PM 7.564)	38	35	30-39	30-39
N/O 215 <sup>th</sup> Street (PM 8.137)	37	38	30-39	29-38
N/O Torrance Boulevard (PM 8.449)	40	40	32-41	32-41
N/O 204 <sup>th</sup> Street (PM 8.973)	41	39	34-43	34-43

Location of Speed Measurements	85 <sup>th</sup> Percentile Speed		10 MPH Pace Speed	
	NB	SB	NB	SB
N/O 195 <sup>th</sup> Street (PM 9.493)	40	41	32-41	34-43
N/O I-405 OC (PM 9.984)	42	39	33-42	34-43

N/O – North Of

Based on the 85<sup>th</sup> percentile speed, review of collision history, roadway geometry, and adjacent land use, the proposed speeds are as follows:

Limits		Existing Speed Limit		Proposed Speed Limits	
From (Postmile)	To (Postmile)	NB (MPH)	SB (MPH)	NB (MPH)	SB (MPH)
261 <sup>th</sup> Street (PM 4.834)	Lomita Boulevard (PM 5.665)	35	35	35	35
Lomita Boulevard (PM 5.665)	237 <sup>th</sup> Street (PM 6.525)	35	40	35	35
237 <sup>th</sup> Street (PM 6.525)	215 <sup>th</sup> Street (PM 8.137)	40	40	35	35
215 <sup>th</sup> Street (PM 8.137)	Del Amo Boulevard (PM 9.056)	40	40	40	40
Del Amo Boulevard (PM 9.056)	I-405 OC (PM 9.984)	40	40	40	40

*City of Los Angeles (PM 4.834 to PM 5.665)*

The average 85<sup>th</sup> percentile speed between 261<sup>th</sup> Street and Lomita Boulevard is 38 MPH in the NB direction and 36 MPH in the SB direction. It is recommended that the 35 MPH speed limit be retained for this segment.

*City of Los Angeles (PM 5.665 to PM 6.525)*

The average 85<sup>th</sup> percentile speed between Lomita Boulevard and 237<sup>th</sup> Street is 40 MPH in the NB direction and 40 MPH in the SB direction. It is recommended to maintain the existing NB speed limit of 35 MPH and to reduce the SB speed limit from the existing 40 MPH to 35 MPH due to the following factors:

- The 10 MPH Pace Speeds for SB within this segment are mostly in the low 30's.
- The SB portion of the highway traverses through mostly retail/commercial area, some residential area and Narbonne High School with closely located traffic signals, minor

streets, and private driveway accesses, which may increase potential traffic conflicts under high speed condition.

- Students/pedestrian activities in the area may also pose higher potentials for traffic conflicts.

*City of Torrance (PM 6.525 to PM 8.137)*

The average 85<sup>th</sup> percentile speed between 237<sup>th</sup> Street and 215<sup>th</sup> Street is 38 MPH in the NB direction and 37 MPH in the SB direction. It is recommended that the 40 MPH speed limit be reduced to 35 MPH in both directions within this segment due to following factor:

- The 85<sup>th</sup> percentile speeds are all below 40 MPH.
- The 10 MPH Pace Speeds are mostly below 40 MPH.
- This portion of the highway traverses through mostly retail/commercial and residential area with closely located traffic signals, minor streets, and private driveway accesses, which may increase potential traffic conflicts under high speed condition.

*City of Los Angeles (PM 8.137 to PM 9.984)*

The average 85<sup>th</sup> percentile speed between 215<sup>th</sup> Street and I-405 OC is 40 MPH in the NB direction and 39 MPH in the SB direction. It is recommended that the 40 MPH speed limit be retained for this segment.

## V. ATTACHMENTS

1. Vehicle Speed Survey Sheets
2. Speed Zone Survey Layout Sheet