4.5 TRANSPORTATION, TRAFFIC AND SAFETY

This section provides an overview of transportation and traffic and evaluates the operational and construction impacts associated with the proposed project and its alternatives. Topics addressed include the circulation system, congestion management plan, emergency access, and public transit, bicycle, and pedestrian facilities. Synchro modeling for Existing, Project and Alternative Conditions is on-file and available for review in the Planning Department, 6th Floor, Room 667, City Hall (contact Dave Somers at david.somers@lacity.org).

REGULATORY FRAMEWORK

Federal

There are no federal regulations that address transportation impacts associated with the project.

State

Complete Streets Act

Assembly Bill (AB) 1358, the Complete Streets Act (Government Code Sections 65040.2 and 65302), was signed into law by Governor Schwarzenegger in September 2008. As of January 1, 2011, the law requires cities and counties, when updating the part of a local general plan that addresses roadways and traffic flows, to ensure that those plans account for the needs of all roadway users. Specifically, the legislation requires cities and counties to ensure that local roads and streets adequately accommodate the needs of bicyclists, pedestrians and transit riders, as well as motorists.

At the same time, the California Department of Transportation (LADOT) unveiled a revised version of Deputy Directive 64, an internal policy document that now explicitly embraces Complete Streets as the policy covering all phases of state highway projects, from planning to construction to maintenance and repair.

CEQA

In September 2012, Governor Brown signed into law AB 2245, amending CEQA Section 21080.20.5 to exempt restriping of City streets (until January 1, 2018) for bicycle lanes. The City is required to prepare an assessment of traffic and safety impacts and to hold noticed public hearings in the affected areas.

Regional/Local

Congestion Management Program

As the Congestion Management Agency for Los Angeles County, Los Angeles County Metropolitan Transportation Authority (Metro) is responsible for implementing the Congestion Management Program (CMP). On October 28, 2010, the Metro Board adopted the 2010 CMP for Los Angeles County. The 2010 CMP summarizes the results of 18 years of CMP highway and transit monitoring and 15 years of monitoring local growth. CMP implementation guidelines for local jurisdictions are also contained in the 2010 CMP. Elements of the CMP include Highway and Roadway System monitoring, multi-modal system performance analysis, the Transportation Demand Management Program, the Land Use Analysis Program and local conformance for all the county's jurisdictions.

Please refer to the Section 4.3 Land Use for a discussion of relevant SCAG plans and the City of Los Angeles General Plan.

EXISTING SETTING

Circulation System

The City of Los Angeles has an extensive network of freeways, highways, and local streets. The Los Angeles General Plan contains definitions, goals and objectives, and regulatory requirements for a variety of roadway classifications that make up the City's roadway system. The City has five general categories of roadway classifications, including Major Class I Highway, Major Class II Highway, Secondary Highway, Collector Street, and Local Street. These roadway classifications consider the level of traffic volume, roadway capacity, and its functions. Major highways generally provide four to eight lanes of travel and have access to intersecting freeways; secondary highways typically have four travel lanes; and collector and local streets provide two travel lanes. The General Plan also recognizes Transit Priority Streets, Scenic Highways, and Non-Motorized Streets. Designations of Transit Priority Streets include Primary Transit Priority Streets, Transit Priority Streets, and Future Transit Priority Streets. Designations of Non-Motorized Streets include Class I, Class II, and Class III Bikeways, and Commuter Bikeways.

Regional Access

The City of Los Angeles includes seven freeways that crisscross the region connecting Los Angeles to its outer regions in the north-south and the east-west directions. They include Interstates (I) 5, 10, 105, 110, 210, 405, and United States Highway (US) 101. It has seven State highways (SR) 1, 2, 47, 90, 118, 170 and 187. Bicycles and pedestrians are not allowed on freeways, but are allowed on some state highways that function as arterial roads. Portions of state highways, including Pacific Coast Highway (SR-1), Santa Monica Boulevard (SR-2), Slauson Avenue (SR-90), and Venice Boulevard (SR-187), are currently designated as part of the citywide bikeway network.

Local Roadway Network

Los Angeles has over 4,300 street miles of local streets.[1] Most roadways are aligned on a grid system providing multiple route options for getting from place to place. Pursuant to the California Vehicle Code, bicycles are allowed on any street within the local street system. The existing citywide bicycle route network identifies a series of interconnected streets and pathways on which bicycling is encouraged.

The following paragraphs describe the streets included in the proposed project, including the City of Los Angeles General Plan roadway designations, lane configuration within the study area, parking availability and the average daily vehicle volumes on each street.

Venice Boulevard is a Secondary/Modified Secondary Highway. Between San Vicente Boulevard and Main Street, it is an east-west roadway. Between I-110 and Main Street was re-designated as part of the new Downtown Street Standards. This segment of Venice is a Modified Secondary Highway (approved by the City Council in 2009). In the 2010 Bicycle Plan, from Venice Beach to Central Avenue, Venice Boulevard is a part of the Backbone Bicycle Network and has a Bicycle Lane designation in the Citywide Bikeway System. Between San Vicente Boulevard and Main Street, it is an east-west roadway. Venice Boulevard has three lanes in each direction and a center left-turn lane from San Vicente Boulevard to Arlington Avenue, two lanes in each direction and left-turn pockets with flare-outs at major intersections from Arlington Avenue to Figueroa Street, and one full-time lane and one peak-period lane in each direction from Figueroa Street to Main Street. I-110 and I-10 on- and off-ramps are located near the Venice Boulevard/L.A. Live Way intersection. On-street parking is generally permitted on both sides of the street except for the segments west of Crenshaw Boulevard and the segments east of Grand Avenue. However, the northern parking lane between Crenshaw Boulevard and Figueroa Street operates as a tow-away lane during the PM peak period, and the southern parking lane between Crenshaw Boulevard and Normandie Avenue operates as a tow-away

[1]The City of Los Angeles General Plan, 1997.

lane during the AM peak period. On a typical weekday, Venice Boulevard carries approximately 15,800 to 24,000 vehicles.[2]

Lankershim Boulevard is a Major Class II Highway. In the 2010 Bicycle Plan, Lankershim Boulevard is a part of the Backbone Bicycle Network and has a Bicycle Lane designation in the Citywide Bikeway System. Between Cahuenga Boulevard and Chandler Boulevard, it is a north-south roadway. Lankershim Boulevard between Cahuenga Boulevard and Chandler Boulevard has two lanes in each direction and a center left-turn lane with the exception of the segment near Universal City where width and configurations vary. A US-101 off-ramp is located near the Lankershim Boulevard/Cahuenga Street intersection. The North Hollywood and Universal City Metro stations are located at the Lankershim Boulevard/Chandler Boulevard intersection and the Lankershim Boulevard/Camp de Cahuenga intersection, respectively. On-street parking is generally permitted on both sides of the street. On a typical weekday, Lankershim Boulevard carries approximately 22,600 vehicles.[3]

Cahuenga Boulevard West is a Major Class II Highway. Between Lankershim Boulevard and Pilgrimage Bridge, it is a north-south roadway. In the 2010 Bicycle Plan, Cahuenga Boulevard West is a part of the Backbone Bicycle Network and has a Bicycle Lane designation in the Citywide Bikeway System. Cahuenga Boulevard has two lanes in each direction and a center left-turn lane north of Barham Boulevard and a single northbound lane south of Barham Boulevard. US-101 on- and off-ramps are located at the Cahuenga Boulevard West/Regal Street intersection and also near the Cahuenga Boulevard West/Bennett Drive intersection. On-street parking is generally permitted on both sides of the street except for the segments south of Barham Boulevard. On a typical weekday, Cahuenga Boulevard West carries approximately 28,000 to 34,000 vehicles.[4]

Cahuenga Boulevard East is a Secondary Highway. Between Pilgrimage Bridge and Odin Street, it is a north-south roadway. In the 2010 Bicycle Plan, Cahuenga Boulevard East is a part of the Backbone Bicycle Network and has a Bicycle Lane designation in the Citywide Bikeway System. Cahuenga Boulevard East north of Odin Street has three northbound lanes, one of which transitions to the northbound US-101 on-ramp and also permits left-turns onto Pilgrimage Bridge. The other two northbound lanes merge into a single lane north of this on-ramp and the street operates northbound only for one-way traffic. US-101 off-ramps are located at the Cahuenga Boulevard East/Lakeridge Place intersection and also near the Cahuenga Boulevard East/Odin Street intersection. On-street parking is not permitted on either side of the street. On a typical weekday, Cahuenga Boulevard East carries approximately 24,000 vehicles.[5]

Cesar E. Chavez Avenue is a Major Class II Highway. In the 2010 Bicycle Plan, Cesar E. Chavez Avenue is a part of the Backbone Bicycle Network and has a Bicycle Lane designation in the Citywide Bikeway System. Between Figueroa Street and Mission Road, it is an east-west roadway. Cesar E. Chavez Avenue has two lanes in each direction. From Figueroa Street to North Broadway, a third peak-period lane exists in both directions with some discontinuity. From North Broadway to Alameda Street, a third full-time lane exists in the westbound direction. The LA Union Station is located off Cesar E. Chavez Avenue at the intersection with Union Station Driveway. On-street parking is generally permitted on both sides of the street west of Broadway outside of the AM and PM peak periods. On a typical weekday, Cesar E. Chavez Avenue carries approximately 28,600 vehicles.[6]

[2]LADOT, Traffic Count Data website, *http://ladot.lacity.org/tf_Traffic_volume_counts.htm*, accessed on April 1, 2012.
[3]*Ibid.*
[4]*Ibid.*
[5]*Ibid.*
[6]*Ibid.*

7th Street is a Secondary/Modified Secondary Highway. In the 2010 Bicycle Plan, 7th Street, from Rampart Boulevard to Soto Street is a part of the Backbone Bicycle Network and has a Bicycle Lane designation in the Citywide Bikeway System. Between Figueroa Street and Main Street, it is an east-west roadway. Between Figueroa and San Pedro it was redesignated to a Modified Secondary as part of the downtown street standards (approved by the city council in 2009). 7th Street has two lanes in each direction from Figueroa Street to Main Street. The 7th Street/Metro Center Station is located at the 7th/Flower Streets intersection. Except for the segments east of Broadway, on-street parking is generally permitted on both sides of the street outside of the AM and PM peak periods. On a typical weekday, 7th Street carries approximately 17,900 to 26,900 vehicles.[7]

Vermont Avenue is a Major Class II Highway and a Primary Transit Priority Street. In the 2010 Bicycle Plan, Vermont Avenue is a part of the Backbone Bicycle Network and has a Bicycle Lane designation in the Citywide Bikeway System. Between Venice Boulevard and Wilshire Boulevard, it is a north-south roadway. Vermont Avenue has two lanes in each direction and left-turn pockets with flare-outs at major intersections, with the exception of the northbound approach to Wilshire Boulevard, which has three lanes. The Wilshire/Vermont Metro Station is located at the Wilshire Boulevard/Vermont Avenue intersection. On-street parking is generally permitted on both sides of the street outside of the AM and PM peak periods. On a typical weekday, Vermont Boulevard carries approximately 39,000 vehicles.[8]

Martin Luther King Jr. Boulevard is a Major Class II Highway and a Transit Priority Street. In the 2010 Bicycle Plan, Martin Luther King Jr. Boulevard is a part of the Backbone Bicycle Network and has a Bicycle Lane designation in the Citywide Bikeway System. Between Marlton Avenue and Figueroa Street, it is an east-west roadway. Martin Luther King Jr. Boulevard has three lanes in each direction from Marlton Avenue to Crenshaw Boulevard, two lanes in each direction from Crenshaw Boulevard to Leimert Boulevard, and two full-time lanes and a peak-period lane in each direction from Leimert Boulevard to Figueroa Street. On-street parking is generally permitted on both sides of the street. However, the northern parking lane between Arlington Avenue and Normandie Avenue operates as a tow-away lane during the PM peak period and the southern parking lane between Leimert Boulevard and Figueroa Street operates as a tow-away lane during the AM peak period. On a typical weekday, Martin Luther King Jr. Boulevard carries approximately 43,700 vehicles.[9]

North Figueroa Street is a Major Class II Highway between San Fernando Road and Marmion Way, and a Secondary Highway between Marmion Way and Colorado Boulevard. In the 2010 Bicycle Plan, N. Figueroa Street is a part of the Backbone Bicycle Network and has a Bicycle Lane designation in the Citywide Bikeway System. Between San Fernando Road and Colorado Boulevard, it is a north-south roadway with two travel lanes in each direction and a center turn-lane. I-110 on- and off-ramps are located between N. San Fernando Road and W. Avenue 26. On-street parking is generally permitted on both sides of the street. On a typical weekday, N. Figueroa Street carries approximately 26,400 to 32,000 vehicles.[10]

South Figueroa Street is a Major Class II/Modified Major Class II Highway. Between 7th Street and Martin Luther King Jr. Boulevard, it is a north-south roadway. Between I-10 and 7th Street was re-designated to a Modified Major Class II Highway as part of the new downtown street standards. In the 2010 Bicycle Plan, S. Figueroa Street is a part of the Backbone Bicycle Network and has a Bicycle Lane designation in the Citywide Bikeway System. S. Figueroa Street has two full-time lanes and one peak-period lane in the southbound direction and three full-time lanes and one peak-period lane in the northbound direction from Martin Luther King Jr. Boulevard to 30th Street. From 30th Street to Figueroa Way, there are two full-time southbound lanes and three full-time lanes and one peak-period lane in the northbound direction. Also at Figueroa Way, the northbound peak-period lane is eliminated to make way for a northbound peak-period

[7] LADOT, Traffic Count Data website, http://ladot.lacity.org/tf_Traffic_volume_counts.htm, accessed on April 1, 2012.
[8] *Ibid.*
[9] *Ibid.*
[10] *Ibid.*

bus-only lane, which is present from Figueroa Way to 7th Street. From Figueroa Way to Venice Boulevard, there is one full-time time lane and one peak-period lane in the southbound direction and three full-time lanes and one peak-period bus-only lane in the northbound direction. North of Olympic Boulevard, Figueroa Street is a one-way northbound street with three full-time lanes and a peak-period bus-only lane up to 9th Street. North of 9th Street, an additional peak-period mixed-flow lane exists on the west side of the roadway, which becomes a full time lane just north of 8th Street. On-street parking is generally permitted on both sides of the street outside of the AM and PM peak periods. On a typical weekday, S. Figueroa Street carries approximately 28,000 vehicles.[11]

Westwood Boulevard is a Secondary Highway. In the 2010 Bicycle Plan, Westwood Boulevard is a part of the Backbone Bicycle Network and has a Bicycle Lane designation in the Citywide Bikeway System. Between Santa Monica Boulevard and National Boulevard, it is a north-south roadway. Westwood Boulevard has two southbound lanes and one northbound lane from National Boulevard to just south of Pico Boulevard. From just south of Pico Boulevard to Santa Monica Boulevard, there are two full-time southbound lanes, one full-time and one peak-period northbound lanes. On-street parking is generally permitted on both sides of the street. On a typical weekday, Westwood Boulevard carries approximately 26,300 to 34,100 vehicles.[12]

Bundy Drive is a Secondary Highway north of Pico Boulevard and a Major Class II Highway south of Pico Boulevard. In the 2010 Bicycle Plan, Bundy Drive is a part of the Backbone Bicycle Network and has a Bicycle Lane designation in the Citywide Bikeway System. Between San Vicente Boulevard and Stanwood Drive, it is a north-south roadway with one travel lane in each direction north of Wilshire Boulevard and two travel lanes in each direction south of Wilshire Boulevard. It continues on as Centinela Avenue south of Stanwood Drive. I-10 on- and off-ramps are located between Pico Boulevard and Pearl Street. On-street parking is generally permitted on both sides of the street with some discontinuity, except for parts of the street between Olympic Boulevard and Wilshire Boulevard, where parking is prohibited from 7:00 a.m. to 7:00 p.m. On a typical weekday, Bundy Drive carries approximately 48,500 to 59,000 vehicles.[13]

Centinela Avenue is a Major Class II Highway. Between Stanwood Drive and Washington Place, it is a north-south roadway with two travel lanes in each direction. In the 2010 Bicycle Plan, Centinela Avenue is a part of the Backbone Bicycle Network and has a Bicycle Lane designation in the Citywide Bikeway System. It continues on as Bundy Drive north of Stanwood Drive. On-street parking is generally permitted on both sides of the street. On a typical weekday, Centinela Avenue carries approximately 32,600 to 37,400 vehicles.[14]

Sepulveda Boulevard is a Major Class II Highway. In the 2010 Bicycle Plan, Sepulveda Boulevard is a part of the Backbone Bicycle Network and has a Bicycle Lane designation in the Citywide Bikeway System. Between National Boulevard and Ohio Avenue, it is a north-south roadway with two travel lanes in each direction. On-street parking is generally permitted on both sides of the street with the exception of the west side of Sepulveda Boulevard from Santa Monica Boulevard and Pico Boulevard, where parking is prohibited. On a typical weekday, Sepulveda Boulevard carries approximately 25,600 to 29,600 vehicles.[15]

Avenue of the Stars is a Major Class II Highway a Scenic Highway. In the 2010 Bicycle Plan, Avenue of the Stars is a part of the Backbone Bicycle Network and has a Bicycle Lane designation in the Citywide Bikeway System. Between Santa Monica Boulevard and Pico Boulevard, it is a north-south roadway with three travel lanes in each direction, and a wide landscaped median with center left-turn lanes. On-street parking is not permitted on either side of the street.

[11]LADOT, Traffic Count Data website, http://ladot.lacity.org/tf_Traffic_volume_counts.htm, accessed on April 1, 2012.
[12]*Ibid.*
[13]*Ibid.*
[14]*Ibid.*
[15]*Ibid.*

Colorado Boulevard is a Major Class II Highway and a Scenic Highway. In the 2010 Bicycle Plan, Colorado Boulevard is a part of the Backbone Bicycle Network and has a Bicycle Lane designation in the Citywide Bikeway System. Between Lincoln Avenue and Avenue 64, it is an east-west roadway. Colorado Boulevard has two lanes in each direction and a center left-turn lane from Lincoln Avenue to Broadway, three lanes in each direction and a center left-turn lane from Broadway to Dahlia Drive, and two lanes in each direction and a center left-turn lane from Dahlia Drive to Avenue 64. SR-2 on- and off-ramps are located between Lincoln Avenue and Broadway. On-street parking is generally permitted on both sides of the street between Sierra Villa Drive and SR-2. On a typical weekday, Colorado Boulevard carries approximately 34,000 vehicles.[16]

Woodley Avenue is a Major Class II Highway. In the 2010 Bicycle Plan, Woodley Avenue is a part of the Neighborhood Bicycle Network and has a Bicycle Lane designation in the Citywide Bikeway System. Between Stagg Street and Chase Street, it is a north-south roadway with two travel lanes in each direction with left-turn pockets, except for the segment between Roscoe Boulevard and Raymer Street which has three travel lanes in each direction. Typically on-street parking is not permitted on either side of the street. On a typical weekday, Woodley Avenue carries approximately 30,900 vehicles.[17]

Devonshire Street is a Major Class II Highway and a Future Transit Priority Street. In the 2010 Bicycle Plan, Devonshire Street is a part of the Backbone Bicycle Network and has a Bicycle Lane designation in the Citywide Bikeway System. Between Haskell Avenue and Sepulveda Boulevard, it is an east-west roadway with three travel lanes in each direction and left-turn pockets. On-street parking is permitted on both sides of the street west of I-405 southbound ramps; however, the western parking lane operates as a tow-away lane during the PM peak period and the eastern parking lane operates as a tow-away lane during the AM peak period. On a typical weekday, Devonshire Street carries approximately 28,300 vehicles.[18]

2nd Street is a Secondary/Modified Secondary Highway/Modified Collector Street. In the 2010 Bicycle Plan, 2nd Street is a part of the Backbone Bicycle Network and has a Bicycle Lane designation in the Citywide Bikeway System. Between Beverly Boulevard and Broadway, it is an east-west roadway with two travel lanes in each direction except for the eastbound segment between Hill Street and Broadway where one of the lanes is a travel lane only in the peak-periods, with parking permitted outside of the AM and PM peak periods. The segment between Alameda and Los Angeles Street was redesignated to a Modified Collector Street; and between Los Angeles Street and Figueroa it was redesignated to a Modified Secondary Highway. The segment between Figueroa Street and Hill Street is grade-separated through a tunnel. On-street parking is generally permitted on both sides of the street north of Figueroa Street.

Grand Avenue is a Major Class II Highway. In the 2010 Bicycle Plan, Grand Avenue is a part of the Backbone Bicycle Network and has a Bicycle Lane designation in the Citywide Bikeway System. Between Washington Boulevard and 30th Street, it is a north-south roadway. Grand Avenue has two travel lanes in each direction with a center left-turn lane from 30th Street and only one northbound lane from Adams Boulevard to Washington Boulevard. On-street parking is generally permitted on both sides of the street except for the west side of the street between 30th Street and Adams Boulevard. On a typical weekday, Grand Avenue carries approximately 14,800 vehicles.[19]

Virgil Avenue is a Secondary Highway. Between Santa Monica Boulevard and Melrose Avenue, it is a north-south roadway with two travel lanes in each direction. In the 2010 Bicycle Plan, Virgil Avenue is a part of the Backbone Bicycle Network and has a Bicycle Lane designation in the Citywide Bikeway System. On-street parking is generally permitted on both sides of the street except for the PM peak period. On a typical weekday, Virgil Avenue carries approximately 37,000 vehicles.[20]

[16]LADOT, Traffic Count Data website, http://ladot.lacity.org/tf_Traffic_volume_counts.htm, accessed on April 1, 2012.
[17]*Ibid.*
[18]*Ibid.*
[19]*Ibid.*
[20]*Ibid.*

Level of Service Methodology

In order to quantify traffic delays along study streets, study intersections were identified within each study area where reduction of travel lanes along the street would likely result in significant traffic impacts. These intersections were evaluated using the *2010 Highway Capacity Manual* operations methodology, which determines the capacity for each lane group approaching the intersection. The level of service (LOS) is then based on the average stopped delay per vehicle (seconds per vehicle) for the various movements within the intersection. LOS is a qualitative measure used to describe the condition of traffic flow, ranging from excellent conditions at LOS A to overloaded conditions at LOS F. LOS D is recognized as the minimum acceptable level of service in the City of Los Angeles. **Table 4.5-1** defines each level of service.

TABLE 4.5-1: LEVEL OF SERVICE DEFINITIONS FOR SIGNALIZED INTERSECTIONS

LOS	Average Vehicle Delay (sec)	Definition
A	<10.0	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used
B	>10.0 and <20.0	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	>20.0 and <35.0	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	>35.0 and <55.0	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	>55.0 and <80.0	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	>80.0	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.

A total of 99 signalized intersections were analyzed. Most intersections include proposed bikeway improvements along the study street only, however, there are four intersections where bike improvements are proposed for both north-south and east-west approaches. For these four intersections, intersection LOS analysis assumes bike improvements on both streets are implemented. The intersections were analyzed for the peak 60-minute period during the weekday AM (7:00 a.m. to 10:00 a.m.) and PM (3:00 p.m. to 6:00 p.m.) peak periods to calculate the greatest impact at each study intersection.[21] No additional growth factor has been applied to the existing traffic turning movement counts since the proposed project would be implemented immediately.[22]

[21]LADOT conducted intersection LOS analysis using a SYNCHRO 7 model, which is based on the *2010 Highway Capacity Manual*, but has a capability to analyze the study intersections as a system for the entire roadway network. Traffic-turning movement counts were collected on Tuesday, March 20, 2012, during the AM and PM peak periods at 51 of 105 study intersections. Traffic data for the remaining 54 intersections were based on counts previously collected for LADOT between 2008 and 2011. Due to the economic recession and subsequent period of sustained low growth, using the data collected during this period for these 54 intersections is anticipated to represent a conservative approach.

[22]Improvements to be implemented on completion of environmental review, The Figueroa Corridor Streetscape Project would be implemented in 2013 to 2014.

Table 4.5-2 presents the existing LOS and average delay (in seconds) data for the study intersections. It is noted that the delay represents the sum of delays from all directions of travel including the direction of the study street and cross traffic. The results indicate that, of the 99 study intersections, 79 intersections currently operate at LOS D or better in the AM peak hour and 69 intersections operate at LOS D or better in the PM peak hour. In the AM peak hour, nine intersections operate at LOS E and eleven operate at LOS F. In the PM peak hour, these numbers increase to 14 intersections operating at LOS E and 16 operating at LOS F. Intersections operating at LOS E or F are shaded.

TABLE 4.5-2: INTERSECTION LEVEL OF SERVICE: EXISTING

No.	Street	Study Intersection/a/	AM Peak Hour		PM Peak Hour	
			LOS	Delay (seconds)	LOS	Delay (seconds)
1	Venice Blvd.	Crenshaw Blvd.	E	60.5	E	72.9
2		Arlington Ave.	D	53.8	C	25.7
3		Western Ave.	C	26.8	C	24.6
4		Normandie Ave.	C	28.8	C	22.2
5		Vermont Ave.	D	35.4	C	28
6		Hoover St.	D	35.4	E	55.6
7		Figueroa St.	C	22.8	D	39.6
8		Flower St.	B	17	B	18.5
9		Grand Ave.	A	9.3	C	30.7
10		Olive St.	B	19.9	B	15.3
11		Broadway	B	18	B	15.5
12	Lankershim Blvd.	Chandler Blvd.	B	16.1	B	19.3
13		Magnolia Blvd.	D	54	F	94.3
14		Camarillo St.	F	163.7	E	78.4
15		Moorpark St.	C	24.9	B	16.7
16		Cahuenga Blvd. W	E	65.8	D	39.3
17	Cahuenga Blvd. W	Regal Pl.	D	52.4	D	46.5
18		Univ. Studios Blvd.	B	14.3	C	22.5
19		Barham Blvd.	D	43.1	E	59.1
20	Cahuenga Blvd. E	Pilgrimage Bridge	C	22.4	E	61.8
21		Odin St.	C	23.5	F	94.4
22	Cesar E. Chavez Ave.	Figueroa St.	E	62.1	E	56.2
23		Grand Ave.	B	19.9	E	70.2
24		Broadway	D	41.2	C	26.1
25		Alameda St.	C	30.7	D	38
26		Vignes St.	C	28.2	D	35.2
27		Mission Rd.	F	108.3	F	355.7
28	7^{th} St.	Figueroa St.	D	40.7	E	59.9
29		Grand Ave.	B	14.1	C	25.3
30		Broadway	B	11.8	B	16.4
31		Spring St.	B	12	C	23.7
32		Main St.	B	19	B	12.9
33	Vermont Ave.	Wilshire Blvd.	D	44.5	D	43.2
34		Olympic Blvd.	E	73.8	F	90.4
35		Pico Blvd.	C	26.2	C	25.9
36		Venice Blvd.	D	35.4	C	28
37	Martin Luther King Jr. Blvd.	Crenshaw Blvd.	E	64.7	F	84.6
38		Leimert Blvd.	B	15.1	B	17.4
39		Arlington Ave.	D	36.2	E	56.9
40		Western Ave.	D	39.4	D	52.6
41		Normandie Ave.	C	26.1	C	24.1
42		Vermont Ave.	F	116.5	F	122.8
43		Figueroa St.	E	77.3	F	93.2
44	N. Figueroa St.	Colorado Blvd.	C	25.7	C	20.6
45		York Blvd.	C	24.9	C	28.8
46		Pasadena Ave.	B	19.7	B	13.2
47		Ave 26	D	54.1	D	38.9
48		San Fernando Rd.	B	15	B	16

TABLE 4.5-2: INTERSECTION LEVEL OF SERVICE: EXISTING

No.	Street	Study Intersection/a/	AM Peak Hour		PM Peak Hour	
			LOS	Delay (seconds)	LOS	Delay (seconds)
49	S. Figueroa St.	8th St.	C	25.6	F	135.3
50		Olympic Blvd.	C	27	C	21.3
51		Pico Blvd.	B	17.5	B	18.8
52		Venice Blvd.	C	22.8	D	39.6
53		18th St.	B	11.1	A	9.4
54		Washington Blvd.	F	142.2	E	66.7
55		23rd St.	B	14.2	B	15.6
56		Adams Blvd.	C	32.4	D	38.6
57		Jefferson Blvd.	D	43.7	D	38.9
58		Exposition Blvd.	C	30.3	D	38.8
59		Martin Luther King Jr. Blvd.	E	77.3	F	93.2
60	Westwood Blvd.	Santa Monica Blvd.	F	120.3	E	77.6
61		Olympic Blvd.	F	104	E	62.4
62		Pico Blvd.	E	55.8	F	90
63		National Blvd.	D	47	D	35.8
64	Bundy Dr.	Wilshire Blvd.	C	34.9	D	42.6
65		Santa Monica Blvd.	C	20.7	C	26.7
66		Olympic Blvd.	F	97.8	F	80.1
67		Pico Blvd.	D	54.4	E	76.2
68		I-10 E/B On-Ramp	B	20.3	C	23.8
69		Ocean Park Blvd.	F	110.1	F	186.6
70		National Blvd.	F	80.8	C	29
71	Centinela Ave.	Palms Blvd.	D	50.4	D	43.9
72		Venice Blvd.	F	112.8	F	161.4
73		Washington Pl.	C	31.7	D	36.4
74	Sepulveda Blvd.	Ohio Ave.	C	30.3	D	39.5
75		Santa Monica Blvd.	E	64.1	D	52.8
76		Olympic Blvd.	D	40.9	D	42.2
77		Pico Blvd.	E	79.1	E	70.8
78		National Blvd.	D	39.8	D	50.3
79	Ave. of the Stars	Santa Monica Blvd.	D	44.2	C	32.2
80		Constellation Blvd.	C	30.5	C	27.3
81		Olympic Blvd. (WB)	B	12.5	B	10.3
82		Olympic Blvd. (EB)	B	17.4	B	19.3
83		Pico Blvd.	C	33.4	B	18.3
84	Colorado Blvd.	SR-2 NB Ramps	B	17.2	B	16.7
85		Broadway	B	13.2	B	17.1
86		Sierra Villa Dr.	C	29.4	F	246.6
87		Eagle Rock Blvd.	D	37	F	264.4
88		SR-134 Ramps	C	23.3	B	14.7
89		N. Figueroa St.	C	25.7	C	20.6
90	Woodley Ave.	Roscoe Blvd.	F	117.1	F	175.6
91	Devonshire St.	I-405 SB Ramps	C	30.8	B	16.5
92		I-405 NB Ramps	B	11.6	B	11.1
93		Sepulveda Blvd.	D	51.8	F	106.1
94	2nd St.	Beverly Blvd./Glendale Blvd.	D	41.8	D	48.3
95		Beaudry Ave.	B	17.8	D	42.1
96		Figueroa St.	B	17.7	D	37.6
97		Hill St.	B	19.3	C	27.1
98		Broadway	B	16.1	B	19.3
99	Grand Ave.	Washington Blvd.	C	25.3	C	28.9
100		Adams Blvd.	B	16.9	C	21.9
101		30th St.	B	11.7	A	9.7
102	Virgil Ave.	Santa Monica Blvd.	C	23.7	B	18.6
103		Melrose Ave.	B	19.4	B	16.7

/a/Includes four duplicate study intersections where a study street meets another study street. They include the following intersections: Venice Blvd./ Vermont Ave., Venice Blvd./Figueroa St., Martin Luther King Jr. Blvd./Figueroa St., and Figueroa St./Colorado Blvd.
SOURCE: LADOT, 2012.

Congestion Management Plan

The Los Angeles Metropolitan Transportation Authority (Metro) updates the Congestion Management Program (CMP) biannually to meet the requirements of Section 65089 of the California Government Code. As required by statute, Los Angeles County's CMP evaluates and monitors the performance of highways, roadways, and its multimodal system. The CMP establishes the LOS to measure congestion on the highways and roadways. The LOS standard in Los Angeles County is LOS E, except where base year LOS is worse than E. In such cases, the base year LOS is the standard. A 1992 base year has been established for Los Angeles.

There are three CMP monitoring intersections that overlap with the study intersections. They are the intersections of Westwood Boulevard/Santa Monica Boulevard (#60), Bundy Drive/Santa Monica Boulevard (#65), and Centinela Avenue/Venice Boulevard (#72).

Emergency Access

California state law requires that drivers yield the right-of-way to emergency vehicles and remain stopped until the emergency vehicles have passed. Generally, multi-lane arterial roadways allow the emergency vehicles to travel at higher speeds and permit other traffic to maneuver out of the path of the emergency vehicle.

Los Angeles Fire Department in collaboration with the LADOT has developed a Fire Preemption System (FPS), a system that automatically turns traffic lights to green for emergency vehicles travelling on designated streets in the City. Among the study streets, portions of Vermont Avenue, Sepulveda Boulevard, Cesar E. Chavez Avenue, and Martin Luther King Jr. Boulevard currently have FPS.[23]

Public Transit

The study areas are served by multiple transit operators, with routes connecting different communities within and outside of the City of Los Angeles. The primary transit operator in the City is Metro. Metro provides bus, light rail and subway services within the Los Angeles County. In addition, the LADOT operates local and commuter bus routes, which mainly connect the downtown area and the remaining parts of the City. There are also several regional rail and municipal bus operators which provide regional transit services between the City of Los Angeles and municipalities in the outer region.

Los Angeles County Metropolitan Transportation Authority (Metro). The Metro provides bus, light rail and subway services within the Los Angeles County. There are six Metro light rail lines (i.e., Blue, Red, Green, Gold, Purple, and Expo) and two subway lines (i.e., Orange and Silver) operating in exclusive right-of-ways. During the weekday PM peak period, headways are generally 5 to 10 minutes for each line. Bicycles are allowed in designated areas on Metro trains at no extra charge at all times. Metro also operates approximately 180 bus routes in mixed traffic. These bus services vary considerably in speed, frequency and capacity. Most buses are equipped with two bicycle racks at the front of the bus, and bicyclists are allowed to load their bicycles on the rack when there is space available at no extra charge. If the rack is full, bicyclists are asked to wait for the next bus.

Los Angeles Department of Transportation (LADOT). LADOT provides local and commuter express bus services in the City. The Downtown Area Short Hop (DASH) operates 32 local routes covering Downtown Los Angeles and many outlying communities within the City. The Commuter Express operates 14 routes making a limited number of stops and transporting passengers between Downtown Los Angeles and other major centers within the City. All Commuter Express routes except for one operate during the peak hours only in the peak direction. Most buses are equipped with two bicycle racks at the front of the bus, and bicyclists are allowed to load their bicycles on the rack when there is space available at no extra charge. If the rack is full, bicyclists are asked to wait for the next bus.

[23]Training Bulletin: Traffic Signal Preemption System for Emergency Vehicles, Los Angeles Fire Department, Bulletin No. 133, October, 2008.

Other Transit Operators. There are several other transit operators that provide transit services between the City of Los Angeles and outlying cities. These transit operators include Santa Monica Municipal Bus Lines (Big Blue Bus); Culver City Transit; Orange County Transportation Authority (OCTA); Riverside Transit Agency; OmniTrans, which serves the San Bernardino Valley; Santa Clarita Transit; Gardena Transit; Torrance Transit; and Montebello Bus Lines.

In addition, commuter rail services to Downtown are primarily provided by Metrolink and Amtrak. Metrolink covers six counties (Los Angeles County, Orange County, San Diego County, Riverside County, San Bernardino County and Ventura County) in Southern California. Amtrak also serves communities along the coast in Southern California. Most passengers on Metrolink and Amtrak arrive at Union Station, from which connecting services to their destinations are provided by Metro. Bikes are allowed on all Metrolink trains at all times with a capacity of up to three bikes per car. As part of its green initiative program, Metrolink also added special bike cars which could accommodate up to 18 bikes per car on select trains. Amtrak generally allows bikes onboard for free on select routes including Pacific Surfliner.

Major bus routes operating in each study area are summarized in **Table 4.5-3**. Almost all streets are served by transit routes, except for 2nd Street and Virgil Avenue, and have one or more bus routes operating along the entire study area. The streets most heavily served by transit are Cesar E. Chavez Avenue, 7th Street, and S. Figueroa Street with more than ten bus routes operating in each street.

TABLE 4.5-3: EXISTING TRANSIT ROUTES OPERATING ALONG STUDY STREETS

Street	Operator	Line	Service Type	Peak Frequency (min)	Day Frequency (min)	Serve Entire Segment
Venice Blvd.	Metro	2	Local	6-10	10-12	
	Metro	4	Local	9-12	15	
	Metro	33	Local	7-15	15-20	Yes
	Metro	70	Local	10-12	15	
	Metro	71	Local	15-35	35	
	Metro	733	Rapid	8-15	20	Yes
	Metro	770	Rapid	10-13	15	
Lankershim Blvd.	Metro	152	Local	8-20	23-24	
	Metro	183	Local	30-60	60	
	Metro	224	Local	10-12	20-40	Yes
	LADOT	549	Commuter Express	20-35	-	
Cahuenga Blvd. W	Metro	156	Local	25-50	50	Yes
	Metro	222	Local	25-40	50-60	
Cahuenga Blvd. E	Metro	222	Local	25-40	50-60	Yes
Cesar E. Chavez Ave.	Metro	2	Local	6-10	10-12	
	Metro	4	Local	9-12	15	
	Metro	40	Local	6-12	10	
	Metro	55	Local	4-15	20	
	Metro	60	Local	5-15	15	
	Metro	68	Local	15-17	20	
	Metro	70	Local	10-12	15	
	Metro	71	Local	15-35	35	
	Metro	78	Local	6-20	14-28	
	Metro	79	Local	15-30	40-45	
	Metro	302	Local	7-20	-	
	Metro	355	Local	8-18	-	
	Metro	378	Local	11-28	-	
	Metro	442	Express	30-35	-	
	Metro	704	Rapid	10-15	20	
	Metro	728	Rapid	12	30	
	Metro	733	Rapid	8-15	20	
	Metro	745	Rapid	4-10	20	
	Metro	770	Rapid	10-13	15	
	LADOT	Lincoln Heights/ Chinatown	DASH	30	30	
	BBB	Rapid 10	Bus	15	30	

TABLE 4.5-3: EXISTING TRANSIT ROUTES OPERATING ALONG STUDY STREETS

Street	Operator	Line	Service Type	Peak Frequency (min)	Day Frequency (min)	Serve Entire Segment
7th St.	Metro	20	Local	7-17	11-12	
	Metro	28	Local	6-12	20	
	Metro	51	Local	3-15	20-24	
	Metro	52	Local	-	20-24	
	Metro	60	Local	5-15	15	
	Metro	352	Local	15-30		
	Metro	760	Rapid	7-20	25	
	LADOT	Downtown A	DASH	7	7	
	LADOT	Downtown B	DASH	8	8	
	LADOT	Downtown E	DASH	5	5	
Vermont Ave.	Metro	204	Local	6-10	12-13	Yes
	Metro	754	Rapid	5-8	15	Yes
	LADOT	Wilshire Center/ Koreatown	DASH	20	20	
Martin Luther King Jr. Blvd.	Metro	40	Local	6-12	10	Yes
	LADOT	Crenshaw	DASH	20	20	
	LADOT	Leimert/Slauson	DASH	25	25	
	LADOT	Midtown	DASH	30	30	
N. Figueroa	Metro	81	Local	6-10	15	Yes
	Metro	84	Local	15-17	20	
	Metro	176	Local	45	45	
	Metro	181	Local	30	30-32	
	Metro	251	Local	15-20	20	
	Metro	252	Local	22-30	40	
	LADOT	Highland Park/ Eagle Rock	DASH	20	20	
S. Figueroa St.	Metro	81	Local	6-10	15	
	Metro	102	Local	30	30	
	Metro	200	Local	4-11	9-11	
	Metro	442	Express	30-35	-	
	Metro	450	Express	14-16	60	
	Metro	460	Express	23-36	30	
	Metro	Silver	Bus	5-10	15	
	DASH	Downtown F	Bus	10	10	
	DASH	King-East	Bus	20	20	
	DASH	Southeast	Bus	20	20	
	LADOT	419	Commuter Express	15-30	-	
	LADOT	422	Commuter Express	10-30	-	
	LADOT	423	Commuter Express	9-15	-	
	LADOT	431	Commuter Express	25-35	-	
	LADOT	437	Commuter Express	22-30	-	
	LADOT	438	Commuter Express	15-30	-	
	LADOT	448	Commuter Express	15-35	-	
	LADOT	534	Commuter Express	20-30	-	
	OCTA	701	Express	20-30	-	
	OCTA	721	Express	45	-	
Westwood Blvd.	BBB	4	Local	60	60	
	BBB	8	Local	12-15	15	Yes
	BBB	12	Local	12-15	15	Yes
	BBB	Rapid 12	Rapid	15	-	Yes
	Culver City	3	Daily	20	20	
Bundy Dr.	BBB	6	Local	20-30	-	
	BBB	10	Rapid	15	30	
	BBB	14	Local	13-15	30	Yes
	BBB	Sunset Ride	Local	15	15	
Centinela Ave.	BBB	6	Local	20-30	-	
	BBB	14	Local	13-15	30	Yes
Sepulveda Blvd.	Culver City	6	Daily	15-20	15-20	Yes
	Culver City	R6	Rapid	15	-	Yes
Ave. of the Stars	Metro	16	Local	3-8	8-10	
	Metro	28	Local	6-12	20	
	Metro	316	Local	9-20	-	
	Metro	728	Rapid	12	30	
	LADOT	573	Commuter Express	15	-	

TABLE 4.5-3: EXISTING TRANSIT ROUTES OPERATING ALONG STUDY STREETS

Street	Operator	Line	Service Type	Peak Frequency (min)	Day Frequency (min)	Serve Entire Segment
Colorado Blvd.	Metro	81	Local	6-10	15	Yes
	Metro	84	Local	15-17	20	
	Metro	180	Local	30	30-32	
	Metro	181	Local	30	30-32	
	Metro	780	Rapid	10-15	22-25	
	LADOT	Highland Park/ Eagle Rock	DASH	20	20	
Woodley	Metro	237	Local	60	60	Yes
Devonshire St.	Metro	158	Local	20-50	60-67	Yes
2nd St.	NO SERVICE					
Grand Ave.	Metro	37	Local	4-10	15	
	Metro	38	Local	8-24	24	Yes
	Metro	55	Local	4-15	20	
	Metro	355	Local	8-18	-	
	Metro	603	Shuttle	8-15	15-20	
Virgil Ave.	NO SERVICE					

SOURCE: CHS Consulting Group, 2012; Metro, LADOT, Santa Monica Big Blue Bus, Culver City, OCTA, 2012.

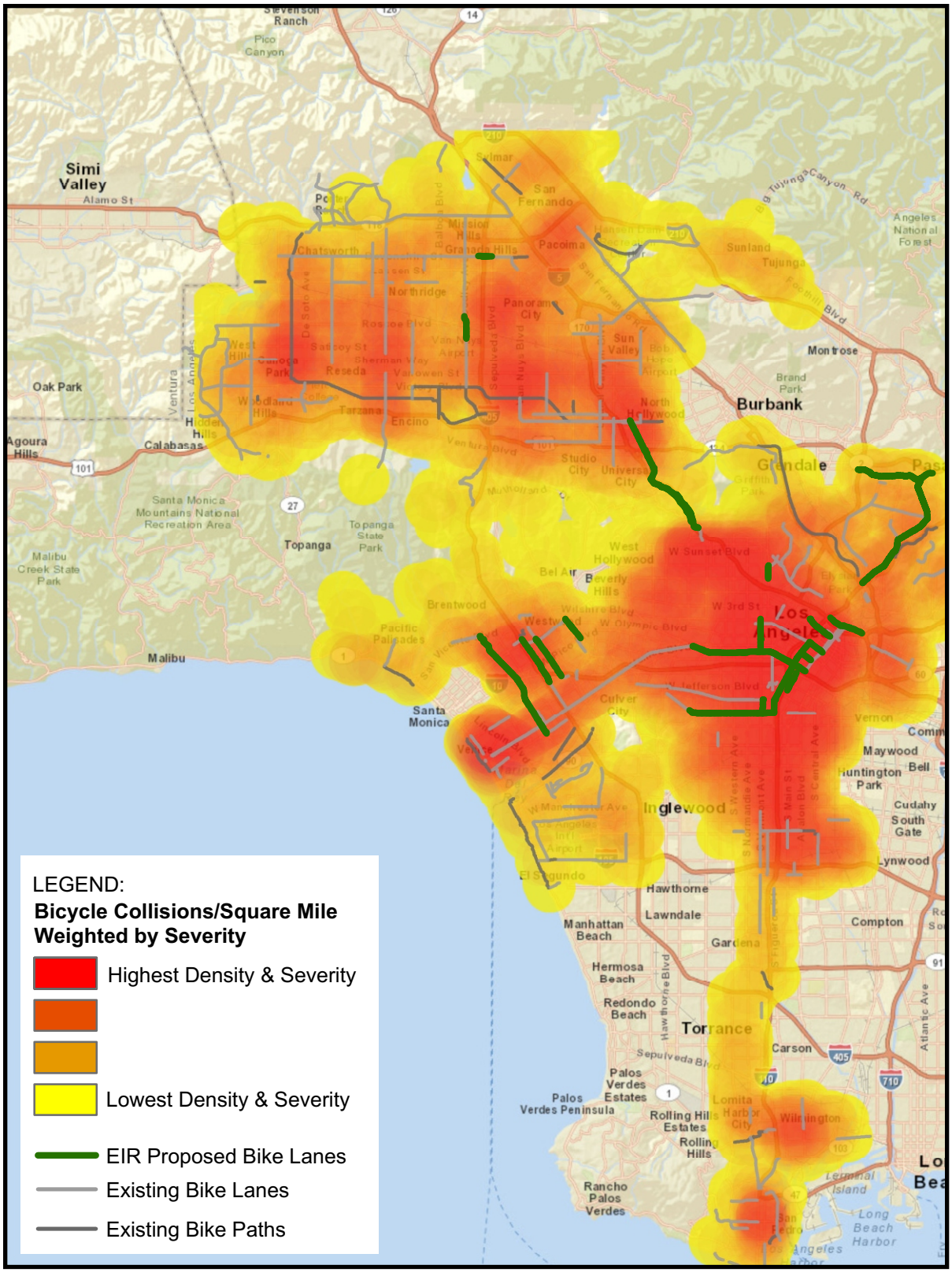
Bicycle Facilities

Bikeways are typically classified as Class I, Class II, or Class III facilities. Class I Bikeways provide a completely separated right-of-way for the exclusive use of bicycles and pedestrians and are typically not located within a roadway area. Class II Bikeways are bike lanes striped within the paved areas of roadways and established for one-way bike travel on a street or highway. Class III Bikeways are signed bike routes that allow bicycles to share streets with pedestrians or motor vehicle traffic. Class III Bikeways may also include Shared Lane Markings also known as sharrows. In addition, the bicycle facilities include the use of bicycle-transit-only lanes where bicycle use is allowed on surface street bus-only lanes as permitted by California Vehicle Code (CVC) 21202. The 2010 Bicycle Plan establishes a policy to work with Metro to develop both full-time and peak period bus/bike-only lane standards to accommodate bicycles and install appropriate signage and on-street markings. In addition, there are separated bicycle lanes that are within the existing roadbed positioned between a curb and a parking lane which provide an additional level of protection from travel lanes. Currently, the City has approximately 403.9 miles of bikeways, including 55.4 miles of Class I facilities, 240.1 miles of Class II facilities, and 108.4 miles of Class III facilities (and of those 29.6 miles have sharrows).[24]

Bicycle parking is provided both within the public right-of-ways and in private developments. The LADOT installs bicycle racks in public right-of-ways to encourage bicycling to shopping and commercial areas, city buildings and libraries. There are over 3,600 inverted-U racks provided by LADOT through the sidewalk bicycle-parking program. In addition, the City's Planning Department mandates the provision of off-street bicycle parking spaces in private developments per Los Angeles Municipal Code Sections 12.21.

The proposed bike lanes would create a comprehensive network of citywide bikeways by filling in the gaps and connecting the proposed bike lanes in this EIR with the existing bike lanes. **Figure 4.5-1** shows the location of proposed bike lanes in relation to the existing bike lanes, as well as areas with high rate of bike collisions. It shows that the areas with higher accident rates tend to be concentrated in the Central and South Los Angeles, as well as parts of the West Los Angeles near Santa Monica and the Northridge areas. They are mostly highly urbanized areas in the City with a large volume of motorists, pedestrians and bicyclists on the roadway. These areas are partially served by bike facilities today. The existing bike facilities in the vicinity of the study areas are described below.

[24]LADOT Bike Blog, http://ladotbikeblog.wordpress.com/bikeway-projects/, accessed on December 5, 2012.



SOURCE: SWIRTS, LADOT Bike Program, 2012.

taha 2011-068

First Year of the First Five-Year Implementation Strategy & Figueroa Streetscape Project Environmental Impact Report

CITY OF LOS ANGELES DEPARTMENT OF CITY PLANNING

FIGURE 4.5-1

SAFETY HOTSPOT ANALYSIS

Venice Boulevard – There are bike lanes along Venice Boulevard from near its western terminus in Venice Beach to Crenshaw Boulevard. The study segment would extend these bike lanes east to Main Street. This extension would facilitate connections with the existing bike lanes on Hoover Street and Main Street and the proposed bike lanes on Vermont Avenue and Figueroa Street.

Lankershim Boulevard – There are no bike lanes along Lankershim Boulevard today. The proposed bike lanes along Lankershim Boulevard would connect with the existing bike lanes on Chandler Boulevard and the proposed bike lanes on Cahuenga Boulevard West.

Cahuenga Boulevard West – There are no bike lanes along Cahuenga Boulevard West today. The proposed bike lanes along Cahuenga Boulevard West would connect with the proposed bike lanes on Lankershim Boulevard.

Cahuenga Boulevard East – There are bike lanes along Cahuenga Boulevard East from Odin Street to Yucca Street. The proposed bike lanes would extend these lanes north to Pilgrimage Bridge.

Cesar E. Chavez Avenue – There are no bike lanes along Cesar E. Chavez Avenue today. The proposed bike lanes along Cesar E. Chavez Avenue would connect with the existing bike lanes on North Spring Street and North Main Street.

7th Street – There are bike lanes along 7th Street from Catalina Street to Figueroa Street. The proposed bike lanes would extend the existing bike lanes and connect with the existing bike lanes on Spring Street and Main Street.

Vermont Avenue – There are no bike lanes along Vermont Avenue today. The proposed bike lanes along Vermont Avenue would connect with the existing bike lanes on 7th Street and the proposed bike lanes on Venice Boulevard.

Martin Luther King Jr. Boulevard – There are bike lanes along Martin Luther King Jr. Boulevard from Rodeo Road to Marlton Avenue. The proposed bike lanes would extend these bike lanes and connect with the proposed bike lanes on Figueroa Street.

N. Figueroa Street – There are no bike lanes along N. Figueroa Street today. The proposed bike lanes along N. Figueroa Street would connect with the Los Angeles River Bike Path (under construction) and the proposed bike lanes on Colorado Boulevard.

S. Figueroa Street – There are no bike lanes along S. Figueroa Street today. The proposed bike lanes on S. Figueroa Street would connect to the proposed bike lanes on Martin Luther King Jr. Boulevard, Venice Boulevard, 11th Street, and 7th Street.

Westwood Boulevard – There are no bike lanes along Westwood Boulevard today. The proposed bike lanes would extend the existing bike lanes on Westwood Boulevard north of Santa Monica Boulevard and connect with the existing bike lanes on National Place and Santa Monica Boulevard.

Bundy Drive – There are no bike lanes along Bundy Drive today. The proposed bike lanes would connect with the existing bike lanes on San Vicente Boulevard.

Sepulveda Boulevard – There are bike lanes along Sepulveda Boulevard from Venice Boulevard to National Boulevard. The proposed bike lanes would extend these bike lanes north and connect with the existing bike lanes on Santa Monica Boulevard.

Avenue of the Stars – There are no bike lanes along Avenue of the Stars today. The proposed bike lanes would connect with the existing bike lanes on Santa Monica Boulevard.

Colorado Boulevard – There are no bike lanes along Colorado Boulevard today. The proposed bike lanes would connect with the proposed bike lanes on N. Figueroa Street.

Woodley Avenue – There are bike lanes along Woodley Avenue from Victory Boulevard to Rinaldi Street, with the exception of the study segment. The proposed bike lanes would close this gap and provide continuous bike lanes from Victory Boulevard to Rinaldi Street.

Devonshire Street – There are bike lanes along Devonshire Street from Topanga Canyon Boulevard to Woodman Avenue, with the exception of the study segment. The proposed bike lanes would close this gap and provide continuous bike lanes from Topanga Canyon Boulevard to Woodman Avenue.

Pedestrian Facilities

In Los Angeles County, approximately 14 percent of trips are made by walking and all transit trips require a pedestrian link.[25] Although the majority of streets in Los Angeles are known as auto-oriented, there are several pockets of commercial and neighborhood activity centers that are characterized by ground floor retail and service uses oriented to pedestrians along the sidewalk. The City of Los Angeles General Plan designates such areas as Pedestrian Priority Street segments. In general, sidewalks are 10 to 12 feet wide. Pedestrian Priority Street segments are recommended to have wider sidewalks of 15 to 17 feet in width and other pedestrian friendly features such as curb side parking, wide crosswalks with the minimum width of 15 feet, and traffic signal modifications to ensure longer pedestrian crossing times, where warranted.

THRESHOLDS OF SIGNIFICANCE

In accordance with Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact related to transportation and traffic if it would:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;
- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;
- Result in inadequate emergency access; and/or
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

This section discusses potential transportation-related impacts for each of the above significance thresholds.

Significant traffic impacts generated by the proposed project are identified by comparing the LOS of the Existing Plus Project condition to the No Project condition. In accordance with the LADOT's Traffic Study Policies and Procedures, traffic circulation impacts are evaluated based on the additional average vehicle delay that a proposed project could cause. **Table 4.5-4** presents the applicable thresholds for this evaluation. For example, a project is considered to have a significant impact at an intersection with existing LOS C if it adds 6.0 or more seconds of delay. If an intersection continues to operate at LOS A or B after implementation of a project, then it is considered to have no substantial adverse impact on that intersection.

[25]Metro, Pedestrian Planning website, http://www.metro.net/projects/ped/, accessed on March 1, 2012.

TABLE 4.5-4: INTERSECTION SIGNIFICANCE THRESHOLDS

Final Intersection LOS with Project	Change in Delay (in seconds) from the Existing Condition
LOS A	----
LOS B	----
LOS C	6.0
LOS D	4.0
LOS E	2.5
LOS F	2.5

SOURCE: LADOT, 2012.

Approach to Analysis

The transportation impact analysis was conducted for the "Existing Plus Project" and a "Future Cumulative (2035)" conditions. The "Existing Plus Project" condition was analyzed by assuming the proposed project is implemented on the existing transportation conditions. The impact analysis does not take into account anticipated potential decreases in traffic caused by shifting to alternative transportation modes such as increased bicycling as bicycle and pedestrian routes become more convenient, safer, and user friendly.

Year 2035 was selected as the future cumulative analysis year because the Southern California Association of Governments (SCAG)'s Regional Travel Demand Model provides traffic forecasts for cumulative development and growth through the year 2035. The SCAG's travel demand model considers increases in population and employment anticipated to occur between now and 2035 to forecast future year 2035 traffic volumes. The SCAG data conservatively (for traffic impacts) assumes only modest share of bicycle trips with approximately1.5 percent to 2 percent of total trips by bicycle.

IMPACTS

The results of the traffic analysis and corresponding AM and PM peak hour LOS and delay are presented in **Table 4.5-5**. The results indicate that under the project condition, 44 intersections would operate at LOS D or better in the AM peak hour and 37 intersections would operate at LOS D or better in the PM peak hour. During the AM peak hour, 15 intersections would operate at LOS E and 40 would operate at LOS F. In the PM peak hour, these numbers would increase to 19 intersections operating at LOS E and 43 operating at LOS F.

Per significance thresholds presented in **Table 4.5-4**, above, 63 intersections would have potentially significant impacts during the AM peak hour and 71 intersections would have potentially significant impacts during the PM peak hour. Intersections with potentially significant impacts are shaded.

TABLE 4.5-5: INTERSECTION LEVEL OF SERVICE: PROPOSED PROJECT

			AM Peak Hour				PM Peak Hour			
No.	Street	Study Intersection/a/	LOS	Delay (sec)	Change in Delay (sec)	Sig Impact	LOS	Delay (sec)	Change in Delay (sec)	Sig Impact
1	Venice Blvd.	Crenshaw Blvd	F	101.2	40.7	YES	E	80	7.1	YES
2		Arlington Ave	F	130.3	76.5	YES	E	68.5	42.8	YES
3		Western Ave	F	86.7	59.9	YES	E	71.6	47	YES
4		Normandie Ave	E	69	40.2	YES	D	41.6	19.4	YES
5		Vermont Ave	F	210.7	175.3	YES	F	186.5	158.5	YES
6		Hoover St	E	55.5	20.1	YES	E	68.5	12.9	YES
7		Figueroa St	F	332	309.2	YES	F	294	254.4	YES
8		Flower St	E	73.2	56.2	YES	E	66.8	48.3	YES
9		Grand Ave	B	12.5	3.2	NO	D	38.4	7.7	YES
10		Olive St	C	21.9	2	NO	D	41.3	26	YES

TABLE 4.5-5: INTERSECTION LEVEL OF SERVICE: PROPOSED PROJECT

No.	Street	Study Intersection/a/	AM Peak Hour				PM Peak Hour			
			LOS	Delay (sec)	Change in Delay (sec)	Sig Impact	LOS	Delay (sec)	Change in Delay (sec)	Sig Impact
11		Broadway	B	19.7	1.7	NO	B	19.3	3.8	NO
12	Lankershim Blvd.	Chandler Blvd	B	16.3	0.2	NO	C	21.6	2.3	NO
13		Magnolia Blvd	D	55	1	NO	F	155.5	61.2	YES
14		Camarillo St	F	150.3	-13.4	NO	F	141.2	62.8	YES
15		Moorpark St	C	25.6	0.7	NO	D	49.6	32.9	YES
16		Cahuenga Blvd W	E	65.8	0	NO	D	39.3	0	NO
17	Cahuenga Blvd. W	Regal Pl	D	46	-6.4	NO	D	46.5	0	NO
18		Univ. Studios Blvd	B	13.4	-0.9	NO	C	22.8	0.3	NO
19		Barham Blvd	F	238.6	195.5	YES	F	179.4	120.3	YES
20	Cahuenga Blvd. E	Pilgrimage Bridge	F	81.6	59.2	YES	F	244.6	182.8	YES
21		Odin St	C	23.5	0	NO	F	94.4	0	NO
22	Cesar E. Chavez Ave.	Figueroa St	F	153.5	91.4	YES	F	83.9	27.7	YES
23		Grand Ave	D	43.8	23.9	YES	F	81.8	11.6	YES
24		Broadway	E	63.5	22.3	YES	D	45.2	19.1	YES
25		Alameda St	D	37.5	6.8	YES	F	124.7	86.7	YES
26		Vignes St	C	29.1	0.9	NO	F	159.9	124.7	YES
27		Mission Rd	F	145.4	37.1	YES	F	533.1	177.4	YES
28	7th St.	Figueroa St	D	42.5	1.8	NO	E	66.2	6.3	YES
29		Grand Ave	C	28.3	14.2	YES	D	52.4	27.1	YES
30		Broadway	E	68.3	56.5	YES	E	63.2	46.8	YES
31		Spring St	D	52.1	40.1	YES	E	69.5	45.8	YES
32		Main St	F	186.3	167.3	YES	E	56.4	43.5	YES
33	Vermont Ave.	Wilshire Blvd	E	66.6	22.1	YES	E	73.3	30.1	YES
34		Olympic Blvd	F	210.9	137.1	YES	F	203	112.6	YES
35		Pico Blvd	F	112.7	86.5	YES	F	111.3	85.4	YES
36		Venice Blvd	F	210.7	175.3	YES	F	186.5	158.5	YES
37	Martin Luther King Jr. Blvd.	Crenshaw Blvd	E	71.4	6.7	YES	F	86.2	1.6	NO
38		Leimert Blvd	B	17.6	2.5	NO	C	20.2	2.8	NO
39		Arlington Ave	D	37.9	1.7	NO	E	56.9	0	NO
40		Western Ave	D	47.6	8.2	YES	E	58.1	5.5	YES
41		Normandie Ave	C	33.4	7.3	YES	C	25.9	1.8	NO
42		Vermont Ave	F	149.6	33.1	YES	F	148.9	26.1	YES
43		Figueroa St	F	185.3	108	YES	F	131.8	38.6	YES
44	N. Figueroa St.	Colorado Blvd	E	56.2	30.5	YES	D	40.1	19.5	YES
45		York Blvd	E	66.4	41.5	YES	D	46.1	17.3	YES
46		Pasadena Ave	C	25.3	5.6	NO	B	13.4	0.2	NO
47		Ave 26	F	149.5	95.4	YES	D	45.7	6.8	YES
48		San Fernando Rd	B	14.3	-0.7	NO	C	21.6	5.6	NO
49	S. Figueroa St.	8th St	C	24.9	-0.7	NO	F	109.2	-26.1	NO
50		Olympic Blvd	F	287.8	260.8	YES	F	159.2	137.9	YES
51		Pico Blvd	F	260.6	243.1	YES	F	176.2	157.4	YES
52		Venice Blvd	F	332	309.2	YES	F	294	254.4	YES
53		18th St	F	347	335.9	YES	F	187.5	178.1	YES
54		Washington Blvd	F	474.9	332.7	YES	F	334.6	267.9	YES
55		23rd St	F	86.5	72.3	YES	E	76.4	60.8	YES
56		Adams Blvd	F	167.2	134.8	YES	F	96.4	57.8	YES
57		Jefferson Blvd	F	120.5	76.8	YES	F	131.1	92.2	YES
58		Exposition Blvd	F	109	78.7	YES	F	108.7	69.9	YES
59		Martin Luther King Jr Blvd	F	185.3	108	YES	F	131.8	38.6	YES
60	Westwood Blvd.	Santa Monica Blvd	F	215.1	94.8	YES	F	200.3	122.7	YES
61		Olympic Blvd	F	145.1	41.1	YES	F	192	129.6	YES
62		Pico Blvd	F	121.2	65.4	YES	F	192.6	102.6	YES
63		National Blvd	D	46.8	-0.2	NO	D	36.4	0.6	NO
64	Bundy Dr.	Wilshire Blvd	E	63.7	28.8	YES	F	94.3	51.7	YES
65		Santa Monica Blvd	F	122.7	102	YES	F	142	115.3	YES
66		Olympic Blvd	F	187.4	89.6	YES	F	154.5	74.4	YES

TABLE 4.5-5: INTERSECTION LEVEL OF SERVICE: PROPOSED PROJECT

No.	Street	Study Intersection/a/	AM Peak Hour				PM Peak Hour			
			LOS	Delay (sec)	Change in Delay (sec)	Sig Impact	LOS	Delay (sec)	Change in Delay (sec)	Sig Impact
67		Pico Blvd	F	223.6	169.2	YES	F	190.8	114.6	YES
68		I-10 E/B On-Ramp	F	113.2	92.9	YES	E	62.6	38.8	YES
69		Ocean Park Blvd	F	182.8	72.7	YES	F	233.9	47.3	YES
70		National Blvd	F	310.6	229.8	YES	F	119.6	90.6	YES
71	Centinela Ave.	Palms Blvd	F	178.5	128.1	YES	E	79.5	35.6	YES
72		Venice Blvd	F	256	143.2	YES	F	240	78.6	YES
73		Washington Pl	E	65.2	33.5	YES	D	54.7	18.3	YES
74	Sepulveda Blvd.	Ohio Ave	D	40.8	10.5	YES	D	46.7	7.2	YES
75		Santa Monica Blvd	F	95.1	31	YES	F	85.2	32.4	YES
76		Olympic Blvd	D	51.6	10.7	YES	E	77.9	35.7	YES
77		Pico Blvd	E	79.9	0.8	NO	F	112.8	42	YES
78		National Blvd	D	41.4	1.6	NO	F	106.9	56.6	YES
79	Ave. of the Stars	Santa Monica Blvd	D	44.2	0	NO	C	32.2	0	NO
80		Constellation Blvd	D	41.2	10.7	YES	C	28.3	1	NO
81		Olympic Blvd (WB)	B	14.5	2	NO	B	10.9	0.6	NO
82		Olympic Blvd (EB)	B	18	0.6	NO	C	20.5	1.2	NO
83		Pico Blvd	C	33.4	0	NO	B	17.9	-0.4	NO
84	Colorado Blvd.	SR-2 NB Ramps	B	17.3	0.1	NO	B	16.7	0	NO
85		Broadway	B	12.8	-0.4	NO	B	17	-0.1	NO
86		Sierra Villa Dr	F	94.7	65.3	YES	F	471.5	224.9	YES
87		Eagle Rock Blvd	F	111.4	74.4	YES	F	453	188.6	YES
88		SR-134 Ramps	B	19.4	-3.9	NO	B	19	4.3	NO
89		N. Figueroa St	E	56.2	30.5	YES	D	40.1	19.5	YES
90	Woodley Ave.	Roscoe Blvd	F	183.3	66.2	YES	F	185.2	9.6	YES
91	Devonshire St.	I-405 SB Ramps	E	55.3	24.5	YES	C	21.1	4.6	NO
92		I-405 NB Ramps	B	14	2.4	NO	B	13	1.9	NO
93		Sepulveda Blvd	D	55	3.2	NO	F	113.8	7.7	YES
94	2nd St.	Beverly Blvd/ Glendale Blvd	D	41.8	0	NO	D	48.3	0	NO
95		Beaudry Ave	B	17.5	-0.3	NO	E	59	16.9	YES
96		Figueroa St	C	32.2	14.5	YES	F	85.8	48.2	YES
97		Hill St	B	19.6	0.3	NO	C	29.3	2.2	NO
98		Broadway	C	27.2	11.1	YES	C	24.8	5.5	NO
99	Grand Ave.	Washington Blvd	C	26.4	1.1	NO	E	77.7	48.8	YES
100		Adams Blvd	B	18.2	1.3	NO	D	38.2	16.3	YES
101		30th St	B	12.5	0.8	NO	B	11	1.3	NO
102	Virgil Ave.	Santa Monica Blvd	E	57.8	34.1	YES	D	37.3	18.7	YES
103		Melrose Ave	F	113.3	93.9	YES	E	70.6	53.9	YES

/a/Includes four duplicate study intersections where a study street meets another study street. They include the following intersections: Venice Blvd./ Vermont Ave., Venice Blvd./Figueroa St., Martin Luther King Jr. Blvd./Figueroa St., and Figueroa St./Colorado Blvd.
SOURCE: LADOT, 2012.

It is noted that while the proposed project could cause an increase in vehicle delays at the majority of study intersections (89 out of 99), some would experience a reduction in vehicle delays with the implementation of the proposed project. The reduction in vehicle delays at these intersections is minor. It is caused by changes in roadway geometry or due to fewer vehicles arriving from heavily congested upstream intersection. They are described in more detail below under the impacts discussion for each street.

Venice Boulevard – The proposed project would eliminate one travel lane in each direction between Crenshaw Boulevard and Figueroa Street and introduce a continuous center left turn lane between Arlington Avenue and Figueroa Street. This would result in potentially significant impacts at the following ten intersections:

- Intersection #1: Venice Boulevard/Crenshaw Boulevard (AM and PM)

- Intersection #2: Venice Boulevard/Arlington Avenue (AM and PM)
- Intersection #3: Venice Boulevard/Western Avenue (AM and PM)
- Intersection #4: Venice Boulevard/Normandie Avenue (AM and PM)
- Intersection #5: Venice Boulevard/Vermont Avenue (AM and PM)
- Intersection #6: Venice Boulevard/Hoover Street (AM and PM)
- Intersection #7: Venice Boulevard/Figueroa Street (AM and PM)
- Intersection #8: Venice Boulevard/Flower Street (AM and PM)
- Intersection #9: Venice Boulevard/Grand Avenue (PM)
- Intersection #10: Venice Boulevard/Olive Street (PM)

Currently there is one study intersection operating unsatisfactorily at LOS E or F in the AM peak hour and two intersections that are operating at LOS E or F in the PM peak hour. With the implementation of the proposed project, the number of intersections operating unsatisfactorily would increase to eight and seven in the AM or PM peak hours, respectively.

Lankershim Boulevard – The project would eliminate a travel lane in the northbound direction. There are currently two northbound lanes, with the exception of the segment adjacent to Universal City where there are four northbound lanes. As a result, only one travel lane would remain for the majority of the segment. Consequently, the proposed project would result in potentially significant impacts at the following three intersections:

- Intersection #13: Lankershim Boulevard/Magnolia Boulevard (PM)
- Intersection #14: Lankershim Boulevard/Camarillo Street (PM)
- Intersection #15: Lankershim Boulevard/Moorpark Street (PM)

Currently there are two intersections operating unsatisfactorily at LOS E or F each in the AM and PM peak hours. There would be no change in the number of intersections operating at LOS E or F with the proposed project. It is noted that during the AM peak hour, the intersection of Lankershim Boulevard/Camarillo Street would experience a decrease in delay because the project would change the first southbound shared lane into a second through lane, which would reduce the delay for the through movement, thus decreasing the delay at the intersection.

Cahuenga Boulevard West – South of Barham Boulevard, the project would eliminate two southbound lanes to a single southbound lane and introduce a southbound bike lane only. This would cause the project to result in potentially significant impacts at the following intersection:

- Intersection #19: Cahuenga Boulevard West/Barham Boulevard (AM and PM)

Currently all three study intersections operate satisfactorily at LOS D or better in the AM peak hour, and one intersection operates unsatisfactorily at LOS E or F in the PM peak hour. With the implementation of the proposed project, the number of intersections operating unsatisfactorily in the AM peak hour would increase to one; however, the number of intersections operating unsatisfactorily in the PM peak hour would not change. It is noted that during the AM peak hour, the intersections of Cahuenga Boulevard West/Regal Place and Cahuenga Boulevard West/Universal Studio Boulevard would experience a minor decrease in delay because the project would remove the parking lane near the intersection and the high traffic volume would experience less delay as a result of the parking reduction near the intersection.

Cahuenga Boulevard East – The project would eliminate a (northbound) travel lane on Cahuenga Boulevard East south of the Pilgrimage Bridge, north of Odin. This would cause the project to result in potentially significant impacts at the following intersection:

- Intersection #20: Cahuenga Boulevard East/Pilgrimage Bridge (AM and PM)

This intersection is currently operating at LOS C in the AM peak hour and at LOS E in the PM peak hour. With the implementation of the project, it would be degraded to LOS F in the AM and PM peak hours.

Cesar E. Chavez Avenue – The project would eliminate a travel lane in each direction during the AM and PM peak periods and on-street parking on the south side of the street. The double westbound left-turn pocket at Grand Avenue would be reduced to a single left-turn pocket. West of Alameda Street, travel lanes would be reduced from two eastbound lanes to a single eastbound lane. This would cause the project to result in potentially significant impacts at the following six intersections:

- Intersection #22: Cesar E. Chavez Avenue/Figueroa Street (AM and PM)
- Intersection #23: Cesar E. Chavez Avenue/Grand Avenue (AM and PM)
- Intersection #24: Cesar E. Chavez Avenue/Broadway (AM and PM)
- Intersection #25: Cesar E. Chavez Avenue/Alameda Street (AM and PM)
- Intersection #26: Cesar E. Chavez Avenue/Vignes Street (PM)
- Intersection #27: Cesar E. Chavez Avenue/Mission Road (AM and PM)

Currently there are two intersections operating unsatisfactorily at LOS E or F in the AM peak hour and three intersections operating at LOS E or F in the PM peak hour. With the implementation of the project, the LOS E or F intersections would increase to three and five in the AM and PM peak hours, respectively.

7th Street – Between Figueroa Street and Main Street, the project would eliminate one lane in each direction (with the exception of at the intersection with Figueroa Street where two westbound lanes can be retained) and introduce a continuous center left turn lane. This would cause the project to result in potentially significant impacts at the following five intersections:

- Intersection #28: 7th Street/Figueroa Street (PM)
- Intersection #29: 7th Street/Grand Avenue (AM and PM)
- Intersection #30: 7th Street/Broadway (AM and PM)
- Intersection #31: 7th Street/Spring Street (AM and PM)
- Intersection #32: 7th Street/Main Street (AM and PM)

Currently all five study intersections operate at LOS D or better in the AM and PM peak hours, except for the intersection of 7th Street/Figueroa Street, which operates at LOS E in the PM peak hour. With the implementation of the proposed project, two study intersections would operate at LOS E or F in the AM peak hour, and four study intersections would operate at LOS E or F in the PM peak hour.

Vermont Avenue – The proposed project would eliminate a travel lane in each direction while preserving two northbound lanes at Wilshire Boulevard, and would introduce a continuous center let-turn lane. This would cause the project to result in potentially significant impacts at the following four intersections:

- Intersection #33: Vermont Avenue/Wilshire Boulevard (AM and PM)
- Intersection #34: Vermont Avenue/Olympic Boulevard (AM and PM)
- Intersection #35: Vermont Avenue/Pico Boulevard (AM and PM)
- Intersection #36: Vermont Avenue/Venice Boulevard (AM and PM)

Currently only one study intersection operates at LOS E or F in the AM and PM peak hours; however, with the implementation of the project, the LOS at all four study intersections would be degraded to LOS E or F in the AM and PM peak hours.

Martin Luther King Jr. Boulevard – Between Marlton Avenue and Crenshaw Boulevard, the proposed project would eliminate one travel lane in each direction. Between Leimert Boulevard and Figueroa Street, an AM/PM peak-period lane would be eliminated in each direction. This would cause the proposed project to result in potentially significant impacts at the following five intersections:

- Intersection #37: Martin Luther King Jr. Boulevard/Crenshaw Boulevard (AM)
- Intersection #40: Martin Luther King Jr. Boulevard/Western Avenue (AM and PM)
- Intersection #41: Martin Luther King Jr. Boulevard/Normandie Avenue (AM)
- Intersection #42: Martin Luther King Jr. Boulevard/Vermont Avenue (AM and PM)
- Intersection #43: Martin Luther King Jr. Boulevard/Figueroa Street (AM and PM)

Currently there are three intersections operating at LOS E or F in the AM peak hour and four intersections operating at LOS E or F in the PM peak hour. With the implementation of the project, there would be no changes in LOS in the AM peak hour; however, the number of LOS E or F intersections would increase to five in the PM peak hour.

N. Figueroa Street – The proposed project would reduce traffic lanes in several segments along N. Figueroa Street: between San Fernando Road and I-110 ramps, and the two northbound lanes along Figueroa Street would be reduced to a single northbound lane. Between I-110 ramps and Pasadena Avenue, the project would eliminate one southbound lane. Between Pasadena Avenue and York Boulevard, the two southbound lanes would be reduced to a single southbound lane. Between York Boulevard and Colorado Boulevard, both northbound and southbound lanes would be reduced from two to one. These changes would cause the proposed project to result in potentially significant impacts at the following three intersections:

- Intersection #44: N. Figueroa Street/Colorado Boulevard (AM and PM)
- Intersection #45: N. Figueroa Street/York Boulevard (AM and PM)
- Intersection #47: N. Figueroa Street/Avenue 26 (AM and PM)

Currently, all five study intersections operate satisfactorily at LOS D or better in the AM and PM peak hours. The proposed project would cause the above three intersections to operate unsatisfactorily at LOS E or F in the AM peak hour. These intersections would continue to operate satisfactorily at LOS D or better conditions in the PM peak hour. It is noted that during the AM peak hour, the N. Figueroa Street/San Fernando Road intersection would experience a minor decrease in delay. This intersection's most congested movement is the southbound left turn from Figueroa Street to San Fernando Road. The project would change the northbound shared lane into a right turn lane. This change makes it easier for the left turning vehicles from Figueroa Street to perceive the oncoming traffic and make their turn, reducing the intersection delay.

S. Figueroa Street – The proposed project would reduce traffic lanes in several segments along S. Figueroa Street. The proposed project would eliminate one southbound lane and the peak-period northbound lane along Figueroa Street between Martin Luther King Jr. Boulevard and Exposition Boulevard. Between Exposition Boulevard and Figueroa Way, the project would eliminate the peak-period lane and one full-time travel lane in each direction, except the two northbound lanes would merge into a single northbound lane at Figueroa Way. Between Figueroa Way and Venice Boulevard, the peak-period southbound lane and two northbound lanes would be eliminated. Between Venice Boulevard and 7th Street, one northbound lane would be eliminated. These changes would cause the project to result in potentially significant impacts at the following ten intersections:

- Intersection #50: S. Figueroa Street/Olympic Boulevard (AM and PM)
- Intersection #51: S. Figueroa Street/Pico Boulevard (AM and PM)
- Intersection #52: S. Figueroa Street/Venice Boulevard (AM and PM)
- Intersection #53: S. Figueroa Street/18th Street (AM and PM)

- Intersection #54: S. Figueroa Street/Washington Boulevard (AM and PM)
- Intersection #55: S. Figueroa Street/23rd Street (AM and PM)
- Intersection #56: S. Figueroa Street/Adams Boulevard (AM and PM)
- Intersection #57: S. Figueroa Street/Jefferson Boulevard (AM and PM)
- Intersection #58: S. Figueroa Street/Exposition Boulevard (AM and PM)
- Intersection #59: S. Figueroa Street/Martin Luther King Jr. Boulevard (AM and PM)

Currently, there are two intersections operating unsatisfactorily at LOS E or F in the AM peak hour and three intersections operating at LOS E or F in the PM peak hour. With the implementation of the proposed project, the LOS E and F numbers would increase to ten and eleven in the AM and PM peak hours, respectively. It is noted that the S. Figueroa/8th Streets intersection would experience a decrease in delay because under the project condition, the "bus only" phase in the existing signal plan would be removed due to the changes in the lane configuration. This change in signal plan would allow an additional 12 seconds for the northbound through movement and decrease the intersection delay.

Westwood Boulevard – The proposed project would eliminate one southbound lane between National Boulevard and Pico Boulevard. From south of Pico Boulevard to Santa Monica Boulevard, the northbound peak-period lane would also be eliminated. These changes would cause the project to result in potentially significant impacts at the following three intersections:

- Intersection #60: Westwood Boulevard/Santa Monica Boulevard (AM and PM)
- Intersection #61: Westwood Boulevard/Olympic Boulevard (AM and PM)
- Intersection #62: Westwood Boulevard/Pico Boulevard (AM and PM)

Currently, there are three intersections operating unsatisfactorily at LOS E or F in the AM and PM peak hours. There would be no change in the number of intersections operating at LOS E or F with the proposed project. It is noted that the Westwood Boulevard/National Boulevard intersection would experience a minor decrease in delay because the upstream intersection (Westwood Boulevard/Pico Boulevard) would experience a large increase in delay, reducing the traffic traveling from Pico Boulevard to National Boulevard to slow and lowering the delay at the downstream intersection.

Bundy Drive – The proposed project would eliminate one travel lane in each direction between Wilshire Boulevard and Olympic Boulevard (full-time northbound lane between Santa Monica Boulevard and Wilshire Boulevard and peak-period lanes elsewhere). Between Olympic Boulevard and Stanwood Drive, one northbound lane would be eliminated. These changes would cause the project to result in potentially significant impacts at the following seven intersections:

- Intersection #64: Bundy Drive/Wilshire Boulevard (AM and PM)
- Intersection #65: Bundy Drive/Santa Monica Boulevard (AM and PM)
- Intersection #66: Bundy Drive/Olympic Boulevard (AM and PM)
- Intersection #67: Bundy Drive/Pico Boulevard (AM and PM)
- Intersection #68: Bundy Drive/I-10 Eastbound On-Ramp (AM and PM)
- Intersection #69: Bundy Drive/Ocean Park Boulevard (AM and PM)
- Intersection #70: Bundy Drive/National Boulevard (AM and PM)

Currently, three of seven intersections operate unsatisfactorily at LOS E or F in the AM and PM peak hours. With the proposed project, all seven intersections would operate at LOS E or F in the AM and PM peak hours.

Centinela Avenue – The proposed project would eliminate one northbound lane throughout the study area. This change would cause the proposed project to result in potentially significant impacts at the following three intersections:

- Intersection #71: Centinela Avenue/Palms Boulevard (AM and PM)
- Intersection #72: Centinela Avenue/Venice Boulevard (AM and PM)
- Intersection #73: Centinela Avenue/Washington Place (AM and PM)

Currently, there is one intersection operating unsatisfactorily at LOS E or F in the AM and PM peak hours. With the proposed project, the LOS E or F intersections would increase to three and two in the AM and PM peak hours, respectively.

Sepulveda Boulevard – The proposed project would eliminate one southbound lane throughout the study area. This change would cause the project to result in potentially significant impacts at the following five intersections:

- Intersection #74: Sepulveda Boulevard/Ohio Avenue (AM and PM)
- Intersection #75: Sepulveda Boulevard/Santa Monica Boulevard (AM and PM)
- Intersection #76: Sepulveda Boulevard/Olympic Boulevard (AM and PM)
- Intersection #77: Sepulveda Boulevard/Pico Boulevard (PM)
- Intersection #78: Sepulveda Boulevard/National Boulevard (PM)

Currently, there are two intersections operating unsatisfactorily at LOS E or F in the AM peak hour and one intersection operating at LOS E or F in the PM peak hour. The number of intersections operating at LOS E or F in the AM peak hour would not change; however, the number of intersections operating at LOS E or F in the PM peak hour would increase to four.

Avenue of the Stars – The project would eliminate one travel lane in each direction, with the exception of a short section just north of Pico Boulevard. This would cause the proposed project to result in potentially significant impacts at the following two intersections:

- Intersection #80: Avenue of the Stars/Constellation Boulevard (AM)
- Intersection #83: Avenue of the Stars/Pico Boulevard (AM)

All five study intersections currently operate at LOS D or better in the AM and PM peak hours, and they would continue to operate at LOS D or better with the proposed project. It is noted that the Avenue of the Stars/Pico Boulevard intersection would experience a minor decrease in delay in the PM peak hour as a result of the interaction with the upstream intersections. An increased delay at upstream intersections would cause a slight decrease in traffic and delay traveling at the downstream direction.

Colorado Boulevard – The proposed project would eliminate one travel lane in each direction from Sierra Villa Drive and Avenue 64. This change would cause the project to result in potentially significant impacts at the following three intersections:

- Intersection #86: Colorado Boulevard/Sierra Villa Drive (AM and PM)
- Intersection #87: Colorado Boulevard/Eagle Rock Boulevard (AM and PM)
- Intersection #89: Colorado Boulevard/N. Figueroa Street (AM and PM)

Currently, all six study intersections operate at LOS D or better in the AM peak hour, and there are two intersections operating unsatisfactorily at LOS E or F in the PM peak hour. With the proposed project, the number of intersections operating unsatisfactorily at LOS E or F conditions would increase to three in the AM peak hour, but there would be no change in the PM peak hour.

Woodley Avenue – The proposed project would eliminate one travel lane in each direction throughout the study area. This change would cause the proposed project to result in potentially significant impacts at the following intersection:

- Intersection #90: Woodley Avenue/Roscoe Boulevard (AM and PM)

This study intersection currently operates at LOS F in the AM and PM peak hours, and would continue to operate at LOS F in the AM and PM peak hours with the proposed project.

Devonshire Street – The project would eliminate one travel lane in each direction throughout the study area. This change would cause the proposed project to result in potentially significant impacts at the following two intersections:

- Intersection #91: Devonshire Street/ I-405 Southbound Ramps (AM)
- Intersection #93: Devonshire Street/ Sepulveda Boulevard (PM)

Currently, all three study intersections operate satisfactorily in the AM peak hour, and there is one intersection operating at LOS E or F in the PM peak hour. With the proposed project, the number of intersections operating at LOS E or F would increase to one in the AM peak hour, but would not change in the PM peak hour.

2nd Street – The proposed project would eliminate one travel lane in each direction between Figueroa Street and Broadway. Between Figueroa Street and Beverly Boulevard/Glendale Boulevard, one westbound lane would be eliminated. These changes would cause the proposed project to result in potentially significant impacts at the following three intersections:

- Intersection #95: 2nd Street/Beaudry Avenue (PM)
- Intersection #96: 2nd Street/Figueroa Street (AM and PM)
- Intersection #98: 2nd Street/Broadway (AM)

Currently, all five study intersections operate satisfactorily at LOS D or better in the AM and PM peak hours. With the proposed project, they would continue to operate satisfactorily at LOS D or better in the AM peak hour; however, two intersections would be degraded to LOS E or F in the PM peak hour.

Grand Avenue – The proposed project would eliminate one southbound lane throughout the study area and one northbound lane between 30th Street and Adams Boulevard. These changes would cause the project to result in potentially significant impacts at the following two intersections:

- Intersection #99: Grand Avenue/ Washington Boulevard (PM)
- Intersection #100: Grand Avenue/ Adams Boulevard (PM)

Currently, all three study intersections operate satisfactorily at LOS D or better in the AM and PM peak hours. With the proposed project, they would continue to operate satisfactorily at LOS D or better condition in the AM peak hour; however, one intersection would be degraded to LOS F in the PM peak hour.

Virgil Avenue – The proposed project would eliminate one travel lane in each direction and implement a continuous center turn lane throughout the study area. These changes would cause the proposed project to result in potentially significant impacts at the following two intersections:

- Intersection #102: Virgil Avenue/Santa Monica Boulevard (AM and PM)
- Intersection #103: Virgil Avenue/Melrose Avenue (AM and PM)

Currently both study intersections operate satisfactorily at LOS D or better in the AM and PM peak hours. With the proposed project, the number of intersections operating at LOS E or F would increase to two and one in the AM and PM peak hours, respectively.

Redistribution of Trips

Along the identified bicycle lane roadways the proposed project would cause significant traffic congestion in certain locations, diversion of trips could occur on to adjacent parallel routes. It is anticipated that diversion would not occur on streets that operate at LOS D or better because the average intersection delay is not substantial. However, for the street segments where the intersection LOS would degrade from D to E or F, some trips could divert to adjacent streets to try to avoid long queues at congested intersections. These streets include 7th Street, S. Figueroa Street, Venice Boulevard, Bundy Drive, and Sepulveda Boulevard. Streets in the downtown area form a grid network, thus providing multiple travel options, including a robust transit system (evident from the high transit mode share). As such, vehicles travelling along 7th Street or S. Figueroa Street could potentially be redistributed throughout multiple streets in the downtown area. Vehicles travelling along Venice Boulevard could opt to travel along adjacent parallel streets such as Pico Boulevard or Washington Boulevard. Similarly, vehicles on Bundy Drive and Sepulveda Boulevard could divert to adjacent parallel streets such as Barrington Avenue and Sawtelle Boulevard, respectively. The extent to which trips would divert to adjacent roadways is not reasonably foreseeable and therefore impacts cannot be precisely determined. However, it is anticipated that some significant impacts could occur on these roadways.

Where parallel arterial streets are not available in relative short distance, traffic would most likely continue to travel along the affected streets because there are limited viable options for the diversion. Some local trips, however, could divert to alternate routes and potentially cause impacts on adjacent residential streets. It is noted that, with the increase in traffic congestion during the peak period, behavioral changes may occur such as diverting trips to the non-peak period to avoid congestion.

Special Events

Several study streets serve major local venues, such as the Hollywood Bowl, Dodger Stadium, the Coliseum, STAPLES Center and the Convention Center. The analysis of traffic impacts during special events is qualitative in nature due to the large variations in those events.

Hollywood Bowl is an amphitheater located in the Hollywood area with a seating capacity of 18,000. Cahuenga Boulevard East and Cahuenga Boulevard West serve as main access roadways to the amphitheater. Hollywood Bowl is used primarily for music performances throughout the year. Its peak season is in the summer months from July through September. During this time, an event is held almost every day. During the rest of the year, events are held about five days a month. The majority of these events start at 8:00 p.m. As a result, the Hollywood Bowl mostly generates trips after the PM peak period (which is typically from 4:00 p.m. to 6:00 p.m.). In order to alleviate traffic congestion in the vicinity of the Hollywood Bowl a shuttle service is provided from nearby Metro stations and parking lots.

Dodger Stadium is the home ballpark of Major League Baseball's Los Angeles Dodgers team, with a seating capacity of 56,000. The ballpark is located north of Downtown, and Cesar E. Chavez Avenue is a major thoroughfare running in the east-west direction immediately south of the ballpark. There are about a dozen home games a month during the baseball season from March through October. About half of these games are held on weekends, and the remaining half on weekdays. The weekday games typically start around 4:00 p.m. or 7:00 p.m. The games starting at 7:00 p.m. affect roadway congestion during the PM peak period along Cesar E. Chavez Avenue and N. Figueroa Street and project bicycle routes would aggravate the LOS at the intersections that are in the immediate vicinity such as the Cesar E. Chavez Avenue/N. Figueroa Street, Cesar E. Chavez Avenue/Grand Avenue, and Cesar E. Chavez Avenue/Broadway intersections. In order to alleviate traffic congestion near the stadium, the Dodgers and Metro provide a free bus service from Union Station to Dodger Stadium.

The Los Angeles Memorial Stadium and Sports Arena are the home stadiums of the University of Southern California (USC) football team. They are located in South Los Angeles at the northwest corner of

S. Figueroa Street and Martin Luther King Jr. Boulevard. Each has a seating capacity of 94,000 and 16,000, respectively. Football games are held at the Memorial Stadium approximately six times a year during the fall semester, and the games typically start around 4:00 p.m. or 8:00 p.m. Basketball games are held at the Sports Arena about 17 times a year with the majority of the games starting either at 1:00 p.m. or 7:30 p.m. The games starting at 7:30 p.m. and 8:00 p.m. could affect roadway congestion during the PM peak period along Martin Luther King Jr. Boulevard and S. Figueroa Street and project bicycle routes would further aggravate the LOS at the intersections that are in the immediate vicinity, such as the Martin Luther King Jr. Boulevard/S. Figueroa Street intersection. In order to alleviate traffic congestion near the coliseum, USC provides a free shuttle service on game days and Metro offers a variety of transportation alternatives that people can use to visit the Memorial Coliseum on game days.

The Los Angeles Convention Center is located in the northwest corner of S. Figueroa Street and Venice Boulevard south of Downtown Los Angeles. There are exhibits, shows, or other special events held in the convention center throughout the year almost daily. The majority of events in the convention center last throughout the day from 9:00 a.m. to 9:00 p.m. Some events are larger than others and special traffic measures are implemented as appropriate to address large events. Project bicycle routes would aggravate traffic conditions in the vicinity of the Convention Center.

Summary

In conclusion, the project would have potentially significant impacts at 63 intersections during the AM peak hour and 71 intersections during the PM peak hour. This may cause some local trips to divert to alternate routes, potentially causing impacts on adjacent residential streets. While many of the special event facilities in the vicinity of project bicycle routes would generate trips outside of the peak hours potentially affecting traffic during non-peak period, some sports events start immediately after the PM peak period and the project would aggravate the congestion on affected roadways on game/event days. Without mitigation, the proposed project would result in significant impacts related to the circulation system on game/event days.

Parking

Parking deficits are considered to be social effects, rather than impacts on the physical environment as defined by CEQA. Under CEQA, a project's social impacts need not be treated as significant impacts on the environment. However, environmental documents should address the secondary physical impacts that would be triggered by a social impact (CEQA Guidelines Section 15131). The social inconvenience of parking deficits, such as having to hunt for scare parking spaces, is not an environmental impact, but there may be secondary physical environmental impacts, such as increased traffic congestion at intersections, air quality impacts, safety impacts, or noise impacts caused by congestion. Also loss of parking could result in land use changes.

Transportation analysis accounts for potential secondary effects, such as cars circling and looking for a parking space in areas of limited parking supply, by assuming that all drivers would attempt to find parking along study streets and then seek parking farther away if convenient parking is unavailable. Moreover, the secondary effects of drivers searching for parking is typically off-set by a reduction in vehicle trips due to others who are aware of constrained parking conditions in a given area. Therefore, any secondary environmental impacts which may result from a shortfall in parking are anticipated to be minor and other transportation analyses reasonably address potential secondary impacts.

This evaluation of potential parking impacts considers the number of parking spaces lost in relation to the adjacent land uses and the affected hours of parking loss.

The proposed project would cause a net decrease in parking spaces on seven study streets for a total loss of 815 parking spaces. The affected study streets are Venice Boulevard, Cahuenga Boulevard West, Cesar E. Chavez Avenue, Martin Luther King Jr. Boulevard, S. Figueroa Street, Westwood Boulevard, Bundy Drive,

Sepulveda Boulevard, and 2nd Street. **Table 4.5-6** presents the number of parking spaces lost on each street, adjacent land uses, and the affected parking hours. About half of the total parking spaces lost (325 spaces) would be on Bundy Drive along the segments mostly occupied by residential uses. S. Figueroa Street, which is a major commercial street, would also have a substantial amount of parking loss (130 spaces) due to the project. Westwood Boulevard would lose spaces (up to 99 spaces) during the peak hours only. As a conservative estimate, Sepulveda Boulevard could lose up to 100 parking spaces dependent of the final design.

TABLE 4.5-6: LOSS OF PARKING SPACES UNDER PROPOSED PROJECT

Study Area		Parking Spaces Lost	Adjacent Land Uses	Affected Parking Hours	
				N/W Side	S/E Side
Venice Blvd.	Crenshaw Blvd to Arlington Ave	-32	Commercial/ Residential	Crenshaw Blvd to 7th Ave: All Day except for PM Peak/a/; 7th Ave to 6th Ave: 5:00 p.m. to 7:00 a.m.; 6th Ave to Arlington Ave: All Day	Crenshaw Blvd to 7th Ave: All Day except for AM Peak/a/; 7th Ave to Arlington Ave: All Day
	Figueroa St to Flower St	-7	Industrial	4PM-7AM(2) /b/	-
	Flower St to Grand Ave	-27	Industrial / Residential	Flower St to Hope St: All Day except for AM Peak/a/; Hope St to Grand Ave: All Day except for PM Peak/a/	Flower St to Hope St: 4:00 p.m. to 7:00 p.m.; Hope St to Grand Ave: 6:00 p.m. to 8:00 a.m.
	Aggregate Loss	-66			
Lankershim Blvd.	No Change				
Cahuenga Blvd W.	Barham Blvd to Univ. Studios Blvd	-2	Commercial	All Day	All Day
	Univ. Studios Blvd to Regal Pl	-10	Commercial	All Day	All Day
	Regal Pl to Lankershim Blvd	-15	Commercial	All Day	All Day
	Aggregate Loss	-27			
Cahuenga Blvd E.	No Change				
Cesar E. Chavez Ave.	Lyon St to Mission Rd	-4	Industrial	-	All Day
	Aggregate Loss	-4			
7th St.	No Change				
Vermont Ave.	No Change				
Martin Luther King Jr. Blvd.	Crenshaw Blvd to Leimert Blvd	-54	Residential	All Day	All Day
	Aggregate Loss	-54			
N. Figueroa St.	No Change				
S. Figueroa St.	Martin Luther King Jr. Blvd to Exposition Blvd	-23	Commercial	-	All Day except for AM/PM Peaks/a/
	Jefferson Blvd to Adams Blvd	-38	Commercial	All Day except for PM Peak/a/	All Day except for AM Peak/a/
	23rd St to Washington Blvd	-11	Commercial	23rd St to 20th St: All Day except for PM Peak/a/; 20th St to Washington Blvd: All Day except for AM/PM Peaks/a/	23rd St to 20th St: All Day except for AM Peak/a/; 20th St to Washington Blvd: 9:00 a.m. – 3:00 p.m.
	Washington Blvd to 18th St	-8	Commercial	All Day except for AM/PM Peaks/a/	All Day except for AM/PM Peaks/a/
	18th St to 17th St	-12	None	All Day except for AM/PM Peaks/a/	All Day except for AM/PM Peaks/a/
	Venice Blvd to Pico Blvd	-10	Commercial	-	All Day except for AM/PM Peaks/a/
	8th St to 7th St	-28	Commercial	All Day	All Day except for AM/PM Peaks/a/
	Aggregate Loss	-130			
Westwood Blvd.	Pico Blvd. to Santa Monica Blvd.	-99	Commercial	AM/ PM Peaks (4:00 p.m. to 7:00 p.m.) /d/	No Change
	Aggregate Loss	-99			

TABLE 4.5-6: LOSS OF PARKING SPACES UNDER PROPOSED PROJECT

Study Area		Parking Spaces Lost	Adjacent Land Uses	Affected Parking Hours	
				N/W Side	S/E Side
Bundy Drive	Santa Monica Blvd to Wilshire Blvd	-25	Residential	7:00 p.m. - 700 a.m.	-
	Wilshire Blvd to San Vicente Blvd	-300	Residential	Wilshire Blvd to Goshen Ave: 6:00 p.m. – 8:00 a.m./a/; Goshen Ave to San Vicente: All Day	Goshen Ave to San Vicente: All Day
	Aggregate Loss	-325			
Centinela Ave.	No Change				
Sepulveda Blvd.	National Blvd. to N. of Ohio	-100/c/	Commercial	All Day	All Day
	Aggregate Loss	-100			
Ave. of the Stars	No Change				
Colorado Blvd.	No Change				
Woodley Ave.	No Change				
Devonshire St.	No Change				
2nd St.	Hill St to Broadway	-10	Commercial	-	All Day except for AM/PM Peaks/a/
	Aggregate Loss	-10			
Grand Ave.	No Change				
Virgil Ave.	No Change				
TOTAL		**-815**			

Note: AM peak period typically lasts from 7:00 a.m. to 9:00 a.m., and PM peak period lasts from 4:00 p.m. to 6:00 p.m.
/a/Parking is already restricted in the AM and/or PM peak periods and thus the project would not affect parking where it is already restricted.
/b/The current restrictions are No Stopping 7:00 a.m. to 9:00 a.m. and No Parking 9:00 a.m. to 4:00 p.m., leaving only 4:00 p.m. to 7:00 a.m. for parking.
/c/Represents the most conservative case.
/d/Currently no restrictions on parking; with the project parking will be restricted in the peak hours.
SOURCE: LADOT, 2012.

The project would result in a loss of parking spaces that could increase VMT if people drive further to find parking or seek an alternate destination with more convenient parking. However, this increased VMT would typically be off-set by a reduction in vehicle trips due to others who are aware of constrained parking conditions in a given area and its impacts would be considered less than significant.

Transit

The project is considered to have a significant effect on the environment if: 1) it would cause a substantial increase in transit demand that could not be accommodated by adjacent transit capacity, resulting in unacceptable levels of transit service; or 2) cause a substantial increase in operating costs or delays such that significant adverse impacts to transit service levels could result. The City of Los Angeles does not have thresholds for determining the significance impacts to transit service. For the purpose of transportation impact analysis in this EIR, transit impacts are differentiated between streets that would have an exclusive bicycle-transit-only lane versus streets that would not. No transit demand analysis was conducted as the project would not cause changes to transit services (headway and routing), and is not expected to generate a substantial increase in transit demand.

Venice Boulevard – There are seven bus routes operating along Venice Boulevard in the study area, of which two routes traverse the entire study segment. Due to the high frequency and volume of buses on Venice Boulevard and the effective reduction of mixed-flow lanes, the project would implement bicycle-transit-only lanes between Arlington Avenue and S. Figueroa Street. This bicycle-transit-only lane would reduce the transit travel time in the study area.

Lankershim Boulevard – There are four bus routes operating along Lankershim Boulevard in the study area, one of which traverses the entire study segment. These bus routes would experience a similar increase in delay as regular traffic due to the proposed project.

Cahuenga Boulevard West – There are two bus routes operating along Cahuenga Boulevard West in the study area, and both routes traverse the entire study segment. These bus routes would experience a similar increase in delay as regular traffic due to the proposed project.

Cahuenga Boulevard East – There is one bus route operating along Cahuenga Boulevard East in the study area, and it traverses the entire study segment. This route would experience a similar increase in delay as regular traffic due to the proposed project.

Cesar E. Chavez Avenue – There are 21 bus routes operating along Cesar E. Chavez Boulevard in the study area, all of which serve portions of the study segment. Due to the high frequency and volume of buses on Cesar E. Chavez Avenue and the effective reduction of mixed-flow lanes, the project would add a bicycle-transit-only lane from Figueroa Street to Alameda Street. This bicycle-transit-only lane would reduce the transit travel time in within the segment.

7th Street – There are ten bus routes operating along 7th Street in the study area, all of which serve portions of the study segment. These bus routes would experience a similar increase in delay as regular traffic due to the proposed project.

Vermont Avenue – There are three bus routes operating along Vermont Avenue in the study area, of which two routes traverse the entire study segment. Due to the high frequency and volume of buses on Vermont Avenue and the effective reduction of mixed-flow lanes, the project would implement a bicycle-transit-only lane in each direction in lieu of standard bike lanes. This bicycle-transit-only lane would reduce the transit travel time in the study area.

Martin Luther King Jr. Boulevard – There are four bus routes operating along Martin Luther King Jr. Boulevard, one of which traverses the entire study segment. These bus routes would experience a similar increase in delay as regular traffic due to the proposed project.

N. Figueroa Street – There are seven bus routes operating along N. Figueroa Street in the study area, one of which traverses the entire study segment. These bus routes would experience a similar increase in delay as regular traffic due to the proposed project.

S. Figueroa Street – There are 20 bus routes operating along S. Figueroa Street in the study area, all of which serve only a portion of the study area. From 30th Street to Figueroa Way, peak period lanes and a full-time travel lane would be eliminated in each direction to make way for the peak-period bus lane. This peak-period bus lane would reduce the transit travel time in the study area.

Westwood Boulevard – There are five bus routes operating along Westwood Boulevard, of which two routes traverse the entire study area. Due to the high frequency and volume of buses on Westwood Boulevard and the effective reduction of mixed-flow lanes, the project would implement bicycle-transit-only lanes from Pico Boulevard to Santa Monica Boulevard. This bicycle-transit-only lane would reduce the transit travel time in the study area.

Bundy Drive – There are four bus routes operating along Bundy Drive in the study area, one of which traverses the entire study area. These bus routes would experience a similar increase in delay as regular traffic due to the proposed project.

Centinela Avenue – There are two bus routes operating along Centinela Avenue in the study area, one of which traverses the entire study area. These bus routes would experience a similar increase in delay as regular traffic due to the proposed project.

Sepulveda Boulevard – There are two bus routes operating along Sepulveda Boulevard in the study area, both of which traverse the entire study area. These bus routes would experience a similar increase in delay as regular traffic due to the proposed project.

Avenue of the Stars – There are five bus routes operating along Avenue of the Stars in the study area, all of which serve portions of the study area. These bus routes would experience a similar increase in delay as regular traffic due to the proposed project.

Colorado Boulevard – There are six bus routes operating along Colorado Boulevard in the study area, of which one route traverses the entire study area. These bus routes would experience a similar increase in delay as regular traffic due to the proposed project.

Woodley Avenue – There is one bus route operating along Woodley Avenue in the study area, and it traverses the entire study area. This route would experience a similar increase in delay as regular traffic due to the proposed project.

Devonshire Street – There is one bus route operating along Devonshire Street in the study area, and it traverses the entire study area. This route would experience a similar increase in delay as regular traffic due to the proposed project.

2nd Street – There is no transit service on 2nd Street. Therefore, there would be no transit impacts associated with the proposed project.

Grand Avenue – There are five bus routes operating along Grand Avenue in the study area, of which one route traverses the entire study area. These bus routes would experience a similar increase in delay as regular traffic due to the proposed project.

Virgil Avenue – There is no transit service on Virgil Avenue. Therefore, there would be no transit impacts associated with the proposed project.

The proposed bike lanes along Lankershim Boulevard, 7th Street, Vermont Avenue, and Cesar E. Chavez Avenue would provide direct connection to Metro and rail. The proposed bike lanes along Lankershim Boulevard would provide a connection to the Metro North Hollywood and Universal City Stations, which are served by Metro Red Line and have a combined capacity to store 193 bicycles on site. The proposed bike lanes along 7th Street would directly connect to the Metro 7th/Flower Street Station, which is served by Metro Purple and Red Lines. The northern terminus of the proposed bike lanes on Vermont Avenue would connect to the Metro Wilshire/Vermont Station, which is served by Metro Purple and Red lines and has 24 bike parking spaces. Cesar E. Chavez Avenue intersects Union Station Driveway, which directly connects to the Los Angeles Union Station. The Los Angeles Union Station is served by Metro Red and Purple Lines as well as Metro Gold Line and other heavy rail lines, such as Amtrak and Metrolink, and provides 114 bike parking spaces. In addition, the proposed bike lanes along Bundy Drive, Sepulveda and Westwood Boulevards are expected to serve future rail stations along the Metro Exposition Light Rail Line, which is scheduled to open in 2015.

With increased connectivity of bike lanes to transit centers, the proposed bike lanes would serve as a means to travel the last leg of a trip from or to a transit station. With increased transit service and increased connectivity of bicycle lanes, it is anticipated that potential bike-and-ride trips would contribute significantly in the reduction of traffic congestion on roadways consistent with State, regional and City sustainability requirements and policies. It should be noted that reductions in vehicle trips and increase in other mode shares have not been accounted for in this EIR.

In conclusion, the project would reduce transit travel time in four streets (Venice Boulevard, Cesar E. Chavez Avenue, Vermont Avenue, and Westwood Boulevard) by implementing bike transit-only lanes. In addition, the project would implement peak-period bus lanes along S. Figueroa Street, and this would reduce the transit travel time in the study area. The project would have no impact in two streets with no transit service (2nd Street and Virgil Avenue). Based on the intersection LOS and delay analyses for traffic circulation impacts, it is anticipated that the project would increase transit travel time in the remaining 14 streets. While

the buses operating in these streets would experience a similar level of congestion as regular traffic, the project would potentially cause a substantial increase in transit delay for the bus routes operating in about four streets due to heavy roadway congestion under the proposed project.[26] These streets are Bundy Drive, Centinela Avenue, Cahuenga Boulevard East, and Colorado Boulevard. There are four Big Blue Bus routes operating along Bundy Drive and Centinela Avenue and one route (Route 14) serves the entire study area on these two streets. Cahuenga Boulevard East is served by one bus route (Metro 156) for the entire study area. There are six bus routes operating along Colorado Boulevard, and one route (Metro 81) serves the entire study area. As a result, the proposed project would result in a potentially significant impact related to transit operations along those routes without a bus only lane, or a bike–transit-only lane.

Congestion Management Plan

The Los Angeles County CMP requires new projects to analyze potential project impacts on CMP monitoring locations. The project is considered to have a significant impact if it would add 50 or more trips to CMP arterial monitoring intersections or 150 or more trips to CMP mainline freeway monitoring locations, during either the AM or PM weekday peak hour.

A review of the CMP indicates that there are the following three arterial monitoring intersections along study areas:

- Westwood Boulevard/Santa Monica Boulevard (#60),
- Bundy Drive/Santa Monica Boulevard (#65),
- Centinela Avenue/Venice Boulevard (#72)

The proposed project would not generate any additional trips to these CMP monitoring locations; therefore, no impacts related to CMP would occur.

Emergency Access

The proposed project is considered to have a significant impact if it would result in inadequate emergency vehicle access. The proposed project would involve the loss of travel lanes along parts of the study area, which would cause additional traffic delays on these roadways. Nonetheless, the project would not cause any complete roadway closures or disruptions to emergency access. Where intersection LOS would not be significantly impacted, there would be no significant impacts on emergency vehicles. Where intersection LOS would be significantly impacted, emergency vehicles would not be significantly impacted because California state law requires that drivers yield the right-of-way to emergency vehicles and remain stopped until the emergency vehicles have passed. Generally, multi-lane arterial roadways allow the emergency vehicles to travel at higher speeds and permit other traffic to maneuver out of the path of the emergency vehicle. Therefore, no project impacts related to emergency access would occur.

Adopted Plans

The project is considered to have a significant impact if it conflicts with the goals and objectives set forth in the City of Los Angeles General Plan. Or, the project would cause potentially hazardous conditions for the users of transit, bicycle and pedestrian facilities. See the discussion of relevant plans in the Land Use section of this EIR.

The proposed project is generally consistent with the goals and objectives in the City of Los Angeles General Plan and facilitates the implementation of many goals and objectives. The General Plan Transportation Element's Goal C specifically calls for an integrated system of pedestrian priority street segments, bikeways, and scenic highways. Objective 10 of Goal C states, "[m]ake the street system accessible, safe, and

[26]Study areas with aggregate intersection delays of five minutes or longer were considered to have a substantial increase transit travel time for the bus routes operating in mixed traffic.

convenient for bicycle, pedestrian, and school child travel." All of these projects are included in the 2010 Bicycle Plan as either part of the Backbone Bikeway Network and the Neighborhood Bikeway Network, and in the Designated Bikeways as Bicycle Lane.

Safety

The proposed bike lanes would be generally implemented in areas with high rate of bicycle collision in a given area (**Figure 4.5-1**, above). With the implementation of the project, it is anticipated that bicyclists would benefit from improved safety with the designation of a clear right-of-way for their use. The LADOT has conducted a cost-benefit analysis to calculate the potential safety benefits expected from the proposed bike lanes.[27] The analysis used the Statewide Integrated Traffic Records System (SWITRS) accident data, including the number of bicycle accidents and vehicle collisions that occurred on the roadway within the study area for the last ten years. The expected safety benefit for each street was calculated based on the reduced number of accidents per year that would occur after the bike lanes have been implemented and by assigning a monetary value based on the severity of injury.[28] If bike lanes are installed, the expected accidents are decreased by 35 percent. In addition, numerous researches indicate that the provision of bike facilities promotes bicycling and creates safer environment for both motorists and bicyclists with reduced collisions.[29]

In terms of bicyclists' behavior, significant differences exist between bike lanes and wide curb lanes. A survey of 4,600 bicyclists in multiple states revealed that bicyclists are more prone to unsafe behaviors where they are allowed to travel in wider curb lanes as opposed to in bike lanes.[30] When there were bike lanes, fewer people rode bicycles on the wrong-side of the street or on sidewalks. Bike lanes also encouraged bicyclists to obey stop signs. A case study of 690 bike accidents in Toronto, Canada indicated that when riding on a road with a bike lane and no parked cars a chance of bike injury drops by about 50 percent compared to those riding in mixed-traffic.[31] The same improvement occurred on bike paths and local streets with designated bike routes; the risk of injury in protected bike lanes dropped by 90 percent. Similarly, a case study in Phoenix shows that the majority of bike collisions in the City occurred on streets with no bicycle facilities and about two percent occurred in a bicycle lane.[32] The experiences in other cities and general observation indicate that the installation of bike lanes would make the street safer for bicyclists as well as other modes.

In conclusion, the proposed project would improve bicycle accessibility and connectivity, and therefore safety and would encourage bicycle use (potentially resulting in improved health of the population). Therefore, the project is consistent with the City's adopted General Plan. The proposed project would not decrease safety of bicyclists, pedestrians, and transit riders. Rather, the proposed project would significantly improve bicycle safety by providing bicycle lanes along 21 streets.

Construction

Construction-related impacts generally would not be considered significant due to their temporary and limited duration. The implementation of the proposed project would mostly involve roadway restriping, and

[27]The benefit for each street was derived using SWITRS accident data and the UC Berkeley's Safe Transportation Research & Education Center (SafeTREC) TIMS Benefit Benefit-Cost Calculator. This calculator was developed by SafeTREC in partnership with Federal Highway Administration (FHWA) and Caltrans to be used for the Highway Safety Improvement Program funding process.

[28]Injury types and their respective monetary values used are Fatality ($140,301), Severe Injury ($7,560), Other Visible Injury ($2,765), and Complaint of Pain ($1,572).

[29]Infrastructure, Programs, and Policies to Increase Bicycling, Pucher, Dill,and Susan Handy, 2009.

[30]Bike Lanes vs. Wide Curb Lanes, Federal Highway Administration, 1999.

[31]Teschke et al, Route Infrastructure and the Risk of Injuries to Bicyclists: A Case-Crossover Study, American Journal of Public Health, February 23, 2012.

[32]Bike Lane Safety Evaluation, Cynecki, 2000.

thus, would likely be short in duration lasting from a few days to a few weeks. Since impacts from construction would be temporary, impacts related to construction of the project would be less than significant.

MITIGATION MEASURES

This section presents recommended mitigation measures for reducing impacts to less-than-significant levels where feasible.

As described above, the project would cause potentially significant impacts to traffic circulation and transit operations. The project would have less-than-significant impacts on parking and transportation system safety. The project would have no impacts on emergency access and the CMP. LADOT has examined several potential mitigation measures and determined that there are no opportunities to modify the roadway geometry to increase intersection capacity. LADOT determined that the following operational improvements would be viable and could reduce significant impacts.

To mitigate the traffic circulation impacts:

T1 LADOT will adjust traffic signal timing after the implementation of the proposed project (both along project routes and parallel roadways if traffic diversions has occurred as a result of the project). This adjustment would be necessary, especially at the intersections where roadway striping would be modified. Signal timing adjustment could reduce traffic impacts at impacted intersections. (LADOT routinely makes traffic signal timing changes and signal optimization on an as-needed basis to accommodate the changes in traffic volumes to reduce congestion and delay in the City.)

T2 The City shall implement appropriate Transportation Demand Management (TDM) measures in the City of Los Angeles including potential trip-reducing measures such as bike share strategies, bike parking, expansion of car share programs near high density areas, bus stop improvements (e.g. shelters and "next bus" technologies), crosswalk improvements, pedestrian wayfinding signage, etc. (Such improvements shall also be required of private projects as part of the review and approval process.)

T3 In areas where implementation of bike lanes could potentially result in diversion of traffic to adjacent residential streets, LADOT shall monitor traffic on identified residential streets to determine if traffic diversion occurs. If traffic on residential streets is found to be significantly impacted, LADOT will work with neighborhood residents to identify and implement appropriate traffic calming measures.

T4 In cases where project-specific mitigation measures and bicycle lane improvements could overlap and/or be in conflict, LADOT shall assess potential for changes to previously disclosed impacts and shall ensure that any potential for new significant impacts is properly analyzed and addressed and additional mitigation required as appropriate consistent with AB 2245.

No impacts related to emergency access would occur. No mitigation measures are required.

No impacts related to parking are anticipated. No mitigation measures are required. Potential impacts of parking shortages on adjacent commercial land uses are addressed in Section 4.3, including Mitigation Measure LU1.

To reduce impacts related to the construction, the following measure is recommended:

T5 Construction activities will be managed through the implementation of a traffic control plan to mitigate the impact of traffic disruption and to ensure the safety of all users of the affected roadway. The plan will address construction duration and activities and include measures such as operating a temporary traffic signal or using flagmen adjacent to construction activities, as appropriate.

To reduce impacts related to the safety of the transportation system, the following measure is recommended:

T6 Prior to the implementation of bicycle-transit-only lanes, safety training and information sessions shall be conducted for bus drivers and the members of Los Angeles County Bicycle Coalition. The training information sessions would involve, but not be limited to, educating drivers and bicyclists about giving equal weight and equal responsibility for each others' safety within shared right-of-ways.

SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Implementation of Mitigation Measures **T1** through **T4** would potentially reduce congestion on impacted intersections; however, the degree to which signal optimization and TDM would mitigate intersection congestion is uncertain at this time. Therefore, the project's impacts to traffic circulation would remain potentially significant and unavoidable. However, with increased availability of transit and increased connectivity of bicycle lanes, it is anticipated that reductions in vehicle trips will occur that have not been accounted for in this EIR. Thus, the analysis presented above is a conservative case analysis without taking into account increased mode share of other modes as is anticipated to happen in order to comply with State, regional and City sustainability programs. Impacts are still anticipated to be significant but less than presented herein.

Impacts related to parking were determined to be less than significant without mitigation.

Implementation of Mitigation Measure **T1** would potentially reduce transit travel time by improving traffic flow, however, transit would be impacted along with vehicular traffic on streets where there would be no transit lane and therefore impacts to transit would be significant and unavoidable.

Impacts related to construction were determined to be less than significant without mitigation. Implementation of Mitigation Measure **T5** would improve the potential impacts associated with the construction of the project.

Impacts related to the safety of the transportation system circulation system were determined to be less than significant without mitigation. Implementation of Mitigation Measure **T6** would improve the safety of transit users and bicyclists.

CUMULATIVE IMPACTS

The following section discusses potential cumulative transportation-related impacts. CEQA Guidelines [Section 15130(d)] allows for two methods for reviewing cumulative development:

- A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or
- A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or greenhouse gas reduction plan. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information such as a regional modeling program. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.

For purposes of this analysis SCAG projections for the year 2035 are used to generally assess cumulative traffic impacts. There are a number of specific projects that are in various stages of the entitlement process

in the vicinity of the bicycle lane projects analyzed herein (including Farmer's Field, Universal Studios, Exposition Light Rail Line, Phase II). The bicycle lanes analyzed in this document are all anticipated to be completed in 2013, well in advance of any of the known major projects. In addition projects not yet identified also will be constructed before the General Plan/RTP horizon year (2035). Since it is not possible to determine when (or even if) many of the specific projects planned in the vicinity of the bicycle lanes will be implemented, a cumulative analysis of interim horizon years that include consideration of specific projects would not result in a complete analysis of all potential cumulative impacts (since inevitably other unknown projects would occur). Therefore, the cumulative analysis undertaken for this document uses the second of the methods identified above for reviewing cumulative impacts of the bicycle lane projects (summary of projections contained in the 2012-2035 RTP/SCS).

The proposed bike lanes would cause potential impacts with respect to worsening the intersection operating conditions and increasing transit travel time. The extent to which the project would contribute to a cumulatively significant impact is uncertain due to a large number of variables and uncertainties in mode shifts due to changes in gas prices, telecommute patterns, etc. Since the project is not expected to generate additional trips to the roadway or transit, cumulative impacts are addressed qualitatively in terms of an estimated growth in background traffic.

Growth factors were derived from SCAG's Regional Travel Demand Model comparing years 2012 and 2035, in order to account for cumulative development and growth. **Table 4.5-7** shows the future traffic growth rates for the study intersections. With anticipated growth in traffic volumes, future intersection LOS is likely to degrade and delay would increase further at the intersections that have significant impacts under the Existing Plus Project condition. There are 63 such intersections in the AM peak hour and 71 intersections in the PM peak hour.

TABLE 4.5-7: DAILY TRAFFIC GROWTH FROM 2012 TO 2035

No.	Study Street	Study Intersection/a/	Significant Impacts with proposed project		Percent Growth/b/	
			AM	PM	SB/EB	NB/WB
1	Venice Blvd	Crenshaw Blvd	YES	YES	12%	8%
2		Arlington Ave	YES	YES	12%	8%
3		Western Ave	YES	YES	12%	5%
4		Normandie Ave	YES	YES	10%	10%
5		Vermont Ave	YES	YES	9%	15%
6		Hoover St	YES	YES	11%	14%
7		Figueroa St	YES	YES	11%	14%
8		Flower St	YES	YES	6%	14%
9		Grand Ave	NO	YES	6%	14%
10		Olive St	NO	YES	6%	14%
11		Broadway	NO	NO	6%	14%
12	Lankershim Blvd	Chandler Blvd	NO	NO	5%	5%
13		Magnolia Blvd	NO	YES	5%	5%
14		Camarillo St	NO	YES	5%	5%
15		Moorpark St	NO	YES	5%	4%
16		Cahuenga Blvd W	NO	NO	-3%	1%
17	Cahuenga Blvd W	Regal Pl	NO	NO	14%	11%
18		Univ. Studios Blvd	NO	NO	3%	11%
19		Barham Blvd	YES	YES	3%	11%
20	Cahuenga Blvd E	Pilgrimage Bridge	YES	YES	-5%	-7%
21		Odin St	NO	NO	7%	1%
22	Cesar E. Chavez Ave	Figueroa St	YES	YES	11%	19%
23		Grand Ave	YES	YES	13%	21%
24		Broadway	YES	YES	13%	17%
25		Alameda St	YES	YES	13%	19%
26		Vignto ES St	NO	YES	15%	24%
27		Mission Rd	YES	YES	18%	19%

TABLE 4.5-7: DAILY TRAFFIC GROWTH FROM 2012 TO 2035

No.	Study Street	Study Intersection/a/	Significant Impacts with proposed project		Percent Growth/b/	
			AM	PM	SB/EB	NB/WB
28		Figueroa St	NO	YES	7%	10%
29		Grand Ave	YES	YES	7%	10%
30	7th St	Broadway	YES	YES	7%	10%
31		Spring St	YES	YES	7%	10%
32		Main St	YES	YES	7%	10%
33		Wilshire Blvd	YES	YES	5%	3%
34	Vermont Blvd	Olympic Blvd	YES	YES	5%	3%
35		Pico Blvd	YES	YES	4%	3%
36		Venice Blvd	YES	YES	5%	3%
37		Crenshaw Blvd	YES	NO	10%	8%
38		Leimert Blvd	NO	NO	7%	8%
39	Martin Luther King Jr. Blvd	Arlington Ave	NO	NO	5%	7%
40		Western Ave	YES	YES	5%	7%
41		Normandie Ave	YES	NO	4%	8%
42		Vermont Ave	YES	YES	6%	8%
43		Figueroa St	YES	YES	6%	8%
44		Colorado Blvd	YES	YES	-4%	0%
45		York Blvd	YES	YES	1%	0%
46	N. Figueroa St	Pasadena Ave	NO	NO	1%	0%
47		Ave 26	YES	YES	1%	0%
48		San Fernando Rd	NO	NO	1%	0%
49		8th St	NO	NO	11%	1%
50		Olympic Blvd	YES	YES	11%	4%
51		Pico Blvd	YES	YES	11%	4%
52		Venice Blvd	YES	YES	-5%	4%
53		18th St	YES	YES	-5%	4%
54	S. Figueroa St	Washington Blvd	YES	YES	-5%	4%
55		23rd St	YES	YES	-5%	4%
56		Adams Blvd	YES	YES	-5%	4%
57		Jefferson Blvd	YES	YES	-5%	4%
58		Exposition Blvd	YES	YES	-4%	4%
59		MLK Blvd	YES	YES	26%	4%
60		Santa Monica Blvd	YES	YES	10%	2%
61	Westwood Blvd	Olympic Blvd	YES	YES	6%	-1%
62		Pico Blvd	YES	YES	2%	1%
63		National Blvd	NO	NO	-4%	-3%
64		Wilshire Blvd	YES	YES	15%	-1%
65		Santa Monica Blvd	YES	YES	8%	15%
66		Olympic Blvd	YES	YES	11%	15%
67	Bundy Dr	Pico Blvd	YES	YES	11%	0%
68		I-10 EB On-Ramp	YES	YES	3%	0%
69		Ocean Park Blvd	YES	YES	3%	0%
70		National Blvd	YES	YES	4%	3%
71		Palms Blvd	YES	YES	9%	2%
72	Centinela Ave	Venice Blvd	YES	YES	9%	2%
73		Washington Blvd	YES	YES	10%	3%
74		Ohio Ave	YES	YES	24%	-1%
75		Santa Monica Blvd	YES	YES	30%	-1%
76	Sepulveda Blvd	Olympic Blvd	YES	YES	10%	12%
77		Pico Blvd	NO	YES	0%	1%
78		National Blvd	NO	YES	3%	16%
79		Santa Monica Blvd	NO	NO	11%	1%
80		Constellation Blvd	YES	NO	11%	-10%
81	Ave of the Stars	Olympic Blvd (WB)	NO	NO	10%	12%
82		Olympic Blvd (EB)	NO	NO	10%	12%
83		Pico Blvd	NO	NO	-13%	12%
84		SR-2 NB Ramps	NO	NO	-3%	10%
85		Broadway	NO	NO	-3%	10%
86		Sierra Villa Dr	YES	YES	8%	10%
87	Colorado Blvd	Eagle Rock Blvd	YES	YES	8%	11%
88		SR-134 Ramps	NO	NO	7%	12%
89		N. Figueroa St	YES	YES	7%	20%

TABLE 4.5-7: DAILY TRAFFIC GROWTH FROM 2012 TO 2035

No.	Study Street	Study Intersection/a/	Significant Impacts with proposed project		Percent Growth/b/	
			AM	PM	SB/EB	NB/WB
90	Woodley Ave	Roscoe Blvd	YES	YES	-11%	21%
91	Devonshire St	I-405 SB Ramps	YES	NO	-2%	-2%
92		I-405 NB Ramps	NO	NO	3%	0%
93		Sepulveda Blvd	NO	YES	3%	7%
94	2nd St	Beverly Blvd/ Glendale Blvd	NO	NO	10%	8%
95		Beaudry Ave	NO	YES	10%	11%
96		Figueroa St	YES	YES	10%	18%
97		Hill St	NO	NO	17%	21%
98		Broadway	YES	NO	11%	34%
99	Grand Ave	Washington Blvd	NO	YES	6%	-9%
100		Adams Blvd	NO	YES	6%	7%
101		30th St	NO	NO	-7%	1%
102	Virgil Ave	Santa Monica Blvd	YES	YES	4%	3%
103		Melrose Ave	YES	YES	3%	6%

/a/Includes four duplicate study intersections where a study street meets another study street. They include the following intersections: Venice Blvd./Vermont Ave., Venice Blvd./Figueroa St., Martin Luther King Jr. Blvd./Figueroa St., and Figueroa St./Colorado Blvd.
/b/Growth rates for the intersections without data were estimated to be the same as the adjacent intersection.
SOURCE: SCAG's Regional Travel Demand Model; CHS Consulting Group, 2012.

Intersections with less than significant impacts under the Existing Plus Project condition would potentially result in significant impacts under future cumulative condition where a substantial growth in background traffic is anticipated. There are 36 such intersections in the AM peak hour and 28 intersections in the PM peak hour, for a combined total of 41 intersections accounting for the intersections with impacts during both the AM and PM peak hours. Of the 41 intersections that would not have significant traffic impacts under the Existing Plus Project condition, 33 would have a growth rate above five percent. These intersections are anticipated to have significant traffic impact under the future cumulative condition. The remaining 8 intersections would have growth rates less than five percent and are not anticipated to have significant future cumulative traffic impacts. As a result, the proposed project would result in a potentially significant impact related to cumulative traffic impacts.