TRANSPORTATION IMPACT ANALYSIS FOR
U.S. DEPARTMENT OF VETERANS AFFAIRS
WEST LOS ANGELES CAMPUS
DRAFT MASTER PLAN
PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT / PROGRAMMATIC ENVIRONMENTAL IMPACT REPORT

Prepared for:

UNITED STATES DEPARTMENT OF VETERANS AFFAIRS

Prepared by:

Crain & Associates
300 Corporate Pointe, Suite 470
Culver City, California 90230
(310) 473-6508
www.crainandassociates.com

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EXECUTIVE SUMMARY

Project Location – The U.S. Department of Veterans Affairs (VA) West Los Angeles Campus (the "WLA Campus") provides medical services to U.S. military veterans. The WLA Campus encompasses approximately 388 acres west of the I-405/San Diego Freeway and north and south of Wilshire Boulevard. The site is surrounded by the Los Angeles communities of Brentwood, Westwood and West Los Angeles. The WLA Campus is bounded by the Brentwood School and single-family homes to the north/northwest; single family/multifamily homes, the Los Angeles National Cemetery and the San Diego Freeway/I-405 to the east; multifamily residential uses and Ohio Avenue to the south; and, multifamily residential buildings, commercial buildings, U.S. Air Force, U.S. Army and California National Guard properties and Barrington Place, Barrington Avenue, Bringham Avenue and San Vicente Boulevard to the west. Wilshire Boulevard bisects the Project Site into the North and South Campuses.

Project Description – This transportation impact analysis has been prepared to assess the potential transportation impacts associated with the VA implementation of upgrades associated with the WLA Campus Draft Master Plan (the "Project"). The Project is described in more detail in the Programmatic Environmental Impact Statement and Programmatic Environmental Impact Report (PEIS/PEIR). This report utilizes that description and provides additional transportation information for inclusion in the PEIS/PEIR.

The WLA Campus consists of two (2) campuses: the North Campus and the South Campus. The campuses are separated by Wilshire Boulevard. The Project at full build-out will be comprised of the following primary components:

North Campus Housing

The North Campus will provide housing for Veterans under two (2) approaches:

- Building Renovation: These projects involve the renovation, use conversion, and seismic correction of 19 buildings totaling 794,731 building square feet, creating 994 new permanent supportive housing units.
- New Construction and Development: These projects involve new construction and development on under-utilized and vacant land through five (5) distinct locations and numerous buildings creating 608,850 building square feet and 801 new permanent supportive housing units.

North Campus Operations

These projects will involve the renovation, use conversion, and seismic correction of six (6) buildings totaling 54,988 building square feet, to be utilized for VA North Campus Operations.

North Campus Town Center

The Town Center is situated near the geographic center of the North Campus, touching on each of the primary Veteran residential neighborhoods and operations facilities as a place of common contact. The conceptual plan envisions an open Central Square and green space, surrounded by an array of services, opportunities, and amenities for Veterans, contemplating new construction of nine (9) buildings totaling 450,000 square feet in two (2) and three (3) story buildings. In order to facilitate the creation of the Town Center, four (4) buildings containing 76,459 square feet will be demolished and several surface parking lots will be relocated to adjacent locations on the WLA Campus.

South Campus Medical Center

South of Wilshire Boulevard, the proposed new Bed Tower, new outpatient clinic, new Surge (Cancer) building, and Regional Kitchen will anchor the Medical District, with an array of in-patient and out-patient care facilities. A variety of hospitality facilities, currently onsite, will remain to serve hospital visitors and their families.

The Medical Center as redeveloped will provide diagnostic and treatment facilities, clinical support and services in a modern state-of-the-art healing environment. Additionally, these program elements will provide a collaborative integration of healthcare, food service, and comprehensive translational research in support of Veterans. The Medical Center will meet VA and California seismic mandates for medical center operations. The Medical Center redevelopment is planned to include the following program elements:

- New construction of a 450,000 square foot Bed Tower;
- New construction of a 600,000 square foot Outpatient Clinic;
- New construction of a 75,000 square foot Surge Building;
- New construction of a 26,500 square foot Kitchen;
- New construction of a parking structure containing 800 parking spaces;
- New construction of a parking structure to accommodate displaced replacement parking related to the Metro Purple Line Extension project (number of spaces to be determined and to be built by LA Metro).
- Related central utility plant, utility system and infrastructure improvements;
- New construction of research facilities containing 200,000 square feet;
- Demolition of 955,652 building square feet contained in seven buildings (B-500, B-501, B-304, B-345, B-401, B-402, B-507).

Our analysis is based on the renovation and construction occurring in one (1) phase, with the anticipated completion of the full build-out in year 2029.

Study Scope – A total of 55 study intersections were analyzed as part of this transportation

study. There were 47 study intersections within the City of Los Angeles [including one (1) shared study intersection within the City of Santa Monica] and eight (8) internal study intersections. The selected intersections were analyzed for detailed level of service analyses under Existing (2017), Existing (2017) Plus Project and Future (2029) Without and With Project traffic conditions. The analysis focused on assessing potential traffic impacts during the AM and PM peak hours on a typical weekday since these periods would be representative of the combined peak traffic conditions associated with the Project and existing and cumulative conditions.

In addition to the 55 study intersections, a total of 22 roadway segments were analyzed. These included a total of 12 residential roadway segments as they represent residential streets closest to the Project site that have the most potential to be significantly impacted by the Project, along with a total of 10 internal roadway segments.

This analysis was prepared in accordance with the assumptions, methodologies, and procedures outlined by the cities of Los Angeles and Santa Monica along with the Los Angeles County Congestion Management Program.

Project Site Access and Circulation – Access to the proposed Project site would be improved for pedestrians, bicycles, transit/shuttles, deliveries, and private automobiles. The Project would maintain the four (4) existing motor vehicle access points currently provided around the WLA Campus -- from Bonsall Avenue, Constitution Avenue, and Sawtelle Boulevard. Improvements to these four (4) access points were evaluated to determine the feasibility of implementing strategies to increase the effective utilization of these points and improve the efficiency of the overall internal roadway network. These measures include the consideration of installing motor vehicle entry gates at the WLA Campus access points, with supporting traffic calming measures, such as speed humps, chockers, and mini roundabouts, on the connecting internal roadway system.

The bicycle and pedestrian access to the Project site (including pedestrian access from the transit system) would be enhanced through planned improvements adjacent to the site at Bonsall Avenue north and south of Wilshire Boulevard. The Project would also provide sidewalk and crosswalk improvements that would provide enhanced pedestrian connectivity, including connections to the existing and future bus stops on Wilshire Boulevard. There are significant improvements to the public transportation network scheduled for implementation by the Project Buildout year 2029. These include the extension of the Metro Purple Line subway, with a transit facility to be located at the WLA Campus, fronting Wilshire Boulevard and Bonsall Avenue. The Project would have great potential to take advantage of the opportunities to increase pedestrian and bicycle connectivity which arise from these new transit services. Further details are provided in the Circulation Plan located in *Appendix L*.

Project Parking – It is estimated that once the Project is completed by year 2029, the necessary number of parking spaces would be provided on the WLA Campus. Sufficient area is available to increase the parking supply to meet the projected parking demand. The existing and future parking supply and demand are analyzed in *Appendix I*.

Existing (2017) Traffic Conditions – 45 of the 47 external study intersections are currently operating at LOS D or better during the weekday AM and PM peak hours, with the remaining two (2) external intersections operating at LOS E or worse during one (1) or both peak periods. For the study intersections within the WLA Campus, all eight (8) intersections are currently operating at LOS D or better during the weekday AM and PM peak hours. The external and internal intersections are denoted on Figure ES-1.

Project Trip Generation – When the Project is fully completed in year 2029, the Project would generate approximately 3,949 net daily trips, including 351 (224 inbound/127 outbound) trips during the AM peak hour and 355 trips (127 inbound/228 outbound) during the PM peak hour.

Existing (2017) Plus Project Traffic Conditions – With the addition of Project trips, the level of service values for most study intersections would remain the same or incur a single level of service grade degradation during one (1) or both weekday AM or PM peak hours. With Project completion, but without mitigation or additional changes to the traffic conditions, a total of four (4) of the 47 external study intersections and three (3) of the eight (8) internal study intersections would experience LOS designations that would worsen by one (1) or more level of service grades during one (1) or both peak periods. Prior to the application of mitigation, there would be a total of eight (8) significantly impacted intersections (six [6] are located within the City of Los Angeles and two [2] within the WLA Campus). (No significant impacts are ultimately anticipated at the final, Future [2029] With Project With Mitigation scenario [See below].)

Ambient Growth and Related Projects – The ambient growth factors for the future year 2029 conditions were derived from the City of Los Angeles Westside Mobility Plan Model, which was determined to be the most accurate source for the study area. A growth rate was developed for each intersection. As part of the development of the future traffic conditions, and in addition to ambient growth, 49 related projects located within the Project study area were reviewed. Of the 49 related projects, 35 were considered outside of the Model growth projections, and therefore were added to the Future (2029) Without Project conditions.

Future (2029) Without Project Traffic Conditions – Under Future (2029) Without Project conditions, 38 external study intersections are expected to operate at LOS D or better during both weekday AM and PM peak hours. The remaining nine (9) are expected to operate at LOS E or worse during one (1) or both weekday AM and PM peak hours. For the study intersections within the WLA Campus, all eight (8) intersections are expected to operate at LOS

D or better during the weekday AM and PM peak hours.

Future (2029) With Project Traffic Conditions – With the addition of the Project traffic to Future (2029) Without Project volumes, and without implementing any mitigation measures, the study intersections would generally continue to operate at the same LOS as under Future (2029) Without Project conditions with the exception of eight (8) intersections that would experience LOS designations that would worsen by one (1) or more level of service grades during one (1) or both peak periods. A total of five (5) external study intersections and three (3) study intersections within the WLA Campus would experience deteriorating level of service during one (1) or both peak periods. Prior to the application of mitigation, there would be a total of eight (8) significantly impacted intersections (six [6] are located within the City of Los Angeles and two [2] within the WLA Campus). (No significant impacts are ultimately anticipated at the final, Future [2029] With Project With Mitigation scenario [See below].)

Roadway Segment Analysis – Roadway segment analyses were conducted for external residential street segments and internal roadway segments. The external residential street segment impact analysis at 12 roadway segments was performed to address the potential for residential streets to be used as cut-through routes for Project traffic. No external residential street segments are anticipated to be significantly impacted by Project traffic. Additionally, 10 roadway segments within the WLA Campus were analyzed to determine potential Project impacts to the internal circulation. The increase in Project traffic is likely to increase the potential for intermittent vehicular delays on the WLA Campus internal roadways. To alleviate the internal roadway congestions, WLA Campus access points and internal circulation system improvements were proposed to increase the efficiency of the internal roadway network. Further details are provided in the Circulation Plan located in *Appendix L*.

Congestion Management Program (CMP) Impact Analysis – It is estimated that the Project Buildout would result in significant impact at one (1) of the Los Angeles County Congestion Management Program (CMP) arterial monitoring location – Sepulveda Boulevard & Wilshire Boulevard. With the application of mitigation measures, this intersection would be fully mitigated. No significant impacts are expected at any freeway monitoring locations or to transit per the CMP criteria.

Caltrans Freeway Screening Analysis – The screening analysis evaluated four (4) freeway mainline segments (per direction), two (2) surface highway segments (per direction), and nine (9) freeway off-ramps. Of the locations analyzed, prior to the application of the Project mitigation measures, one (1) surface highway segment, and two (2) freeway off-ramps would meet the triggers for a further impact analysis based on the expected Project volume contributions at these locations. With the application of the proposed Project mitigation measures, none of these freeway segments, highway segments or freeway off-ramp locations would trigger further impact analysis based on the expected Project volume contributions at

these locations. Further analysis and discussion of the Caltrans Freeway Screening Analysis are included in *Appendix H*.

Mitigation Measures – Several mitigation measures were developed to address the significant traffic impacts of the Project. They include the Transportation Demand Management (TDM) Plan, the Transportation Systems Management (TSM) Plan, along with measures developed solely for the WLA Campus with the development of a WLA Campus Circulation Plan that outlines strategies for improving roadway use, with both physical and transit related enhancements.

The measures under the TDM Plan are designed to accomplish the reduction of Project vehicle trips through various measures and strategies that encourage use of alternative modes over drive-alone automobile travel. Under the TDM Plan, at Project Buildout, mitigation measures are expected to increase the WLA Campus transit/walk-in/bicycle usage, from 15 percent to 25 percent for buildings/facilities located south of Pershing Avenue/Constitution Avenue and from five (5) percent to 25 percent for buildings/facilities located north for proposed Project generated trips. This 25 percent alternative mode credit was not applied to the existing buildings/facilities that will remain on the Project site since they are not associated with this Project. However, the TDM program will be available for use by employees from the existing buildings and is anticipated to reduce their trip generation.

The TSM Plan will increase the person trip capacity of the transportation system in West Los Angeles. These TSM improvements will increase the person trip capacity of the transportation network by employing measures to shift area travelers out of the drive-alone automobile mode of travel and by improving the intersection roadway capacity. It is estimated that the Project's contribution to improving the effectiveness of the roadway system along with other area improvements will increase the capacity of the impacted intersection by one (1) percent in terms of person-trip capacity.

As part of the WLA Campus Circulation Plan, several strategies for improving the efficiency and sustainability of the internal roadway network were evaluated. The Circulation Plan includes recommendations for improving internal circulation via roadway reconfigurations; improved transit accessibility and connectivity, especially with the future Metro Purple Line Westwood/VA Hospital Station; enhanced pedestrian sidewalks; and, bicycle infrastructure to be built in a manner to close existing gaps in the overall bicycle network, to be consistent with the City of Los Angeles Mobility Plan 2035, and to offer direct connections to the future Westwood/VA Hospital Station. Additionally, one (1) physical mitigation measure is proposed as this would improve the projected level of delay at the intersection - a northbound right-turn-only lane to be added at the intersection of Bonsall Avenue & the Wilshire Boulevard Eastbound Ramps. Lastly, the Circulation Plan recommends measures to prevent non-Project traffic from entering the Project site and to improve motor vehicle traffic flow around the WLA

Campus. These measures include consideration of entry gates for the WLA Campus; traffic calming measures, such as speed humps, chokers, and traffic circles; and additional turn lanes at heavily utilized intersections. The Circulation Plan is provided in *Appendix L*.

The combination of mitigation measures were evaluated for the intersections that were identified as being potentially significantly impacted. The volume-to-capacity analysis conducted for the Without and With Project scenarios were adjusted and run for the With Project With Mitigation scenario. That analysis concluded that these mitigation measures would reduce the significant impacts at the eight (8) study intersections to a less than significant level under the Existing With Project With Mitigation and Future With Project With Mitigation conditions. The mitigation effectiveness for intersection impacts by location is shown in Figure ES-1.

Vehicle Miles Traveled (VMT) Analysis – A supplemental VMT analysis was conducted to determine the resultant VMT from the Project. The VMT was calculated both without and with the inclusion of the TDM mitigation measures. The Project VMT growth was compared to VMT growth with the employment increases in typical Los Angeles County and West Los Angeles locations. This analysis is provided in *Appendix J*. As shown in the analysis, continuing growth in employment will result in an increase in VMT. The increase in employment for the Project, if it were to occur in an average Los Angeles County location, would result in an increase in Los Angeles County VMT of 79,770 at Project completion. At an average location in West Los Angeles, the increase in the VMT would be 32,382 upon completion. At the WLA Campus, the increase in VMT would be 28,630. With the TDM, the VMT increase is anticipated to be reduced by 1,247.

Construction Traffic Analysis – There is a high likelihood that users of the area roadway network would experience the effects of construction-related traffic during some periods. While sometimes inconvenient, the construction-related traffic effects will be temporary, lasting until the completion of the Project and will be less than the traffic impact of the Project at build-out. Further details on the expected transportation impacts of Project construction are included as *Appendix K*.

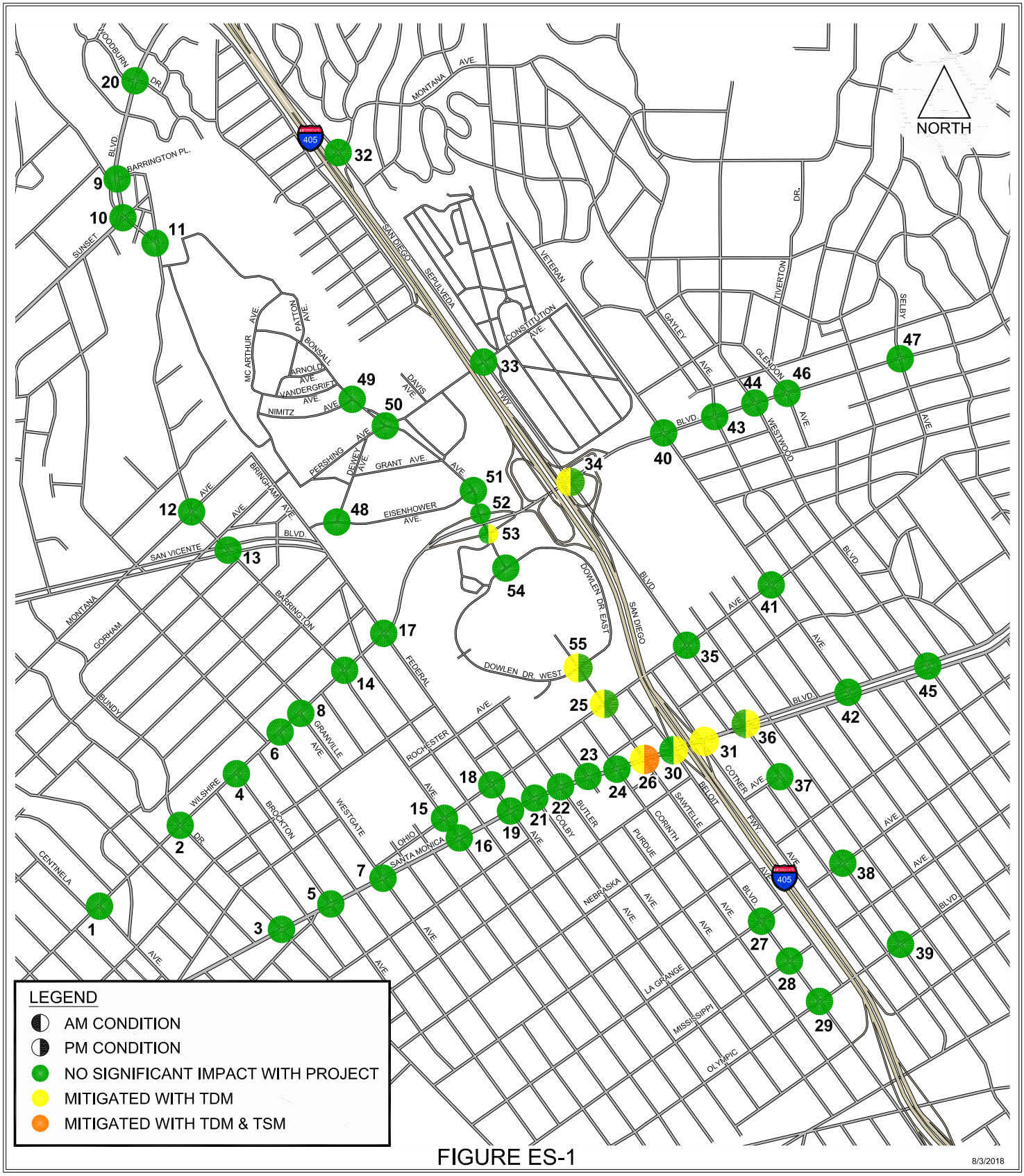

FIGURE ES-1

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FN: VAWLAHealthCareCtrEIS\IMPACTMAP-BUILDOUT(TDM&TSM)

FUTURE (2029) WITH PROJECT
STUDY AREA INTERSECTIONS
MITIGATION EFFECTIVENESS MAP

CRAIN & ASSOCIATES
Transportation Planning
Traffic Engineering
300 Corporate Pointe, Suite 470
Culver City, California 90230
PH (310) 473 6508 F (310) 444 9771
www.crainandassociates.com

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1 INTRODUCTION

The U.S. Department of Veterans Affairs (VA) is preparing a Programmatic Environmental Impact Statement and Programmatic Environmental Impact Report (PEIS/PEIR) with respect to the West Los Angeles Campus (the "WLA Campus") Draft Master Plan.

This transportation impact analysis has been prepared to assess the potential transportation impacts associated with the WLA Campus Draft Master Plan. The Draft Master Plan would control development through the year 2029 (the "Project"). The Project at full build-out will be comprised of the following primary components:

North Campus Housing

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- Building Renovation: These projects involve the renovation, use conversion, and seismic correction of 19 buildings totaling 794,731 building square feet, creating 994 new permanent supportive housing units.
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Our analysis is based on the renovation and construction occurring in one (1) phase, with the anticipated completion of the full build-out in year 2029.

The WLA Campus encompasses approximately 388 acres west of the I-405/San Diego Freeway and north and south of Wilshire Boulevard. The site is surrounded by the Los Angeles communities of Brentwood, Westwood and West Los Angeles. The WLA Campus is bounded by the Brentwood School and single-family homes to the north/northwest; single family/multifamily homes, the Los Angeles National Cemetery and the San Diego Freeway/I-405 to the east; multifamily residential uses and Ohio Avenue to the south; and, multifamily residential buildings, commercial buildings, U.S. Air Force, U.S. Army and California National Guard properties and Barrington Place, Barrington Avenue, Bringham Avenue and San Vicente Boulevard to the west. Wilshire Boulevard bisects the Project Site into the North and South Campuses.

Figure 1-1 displays the Project site vicinity.

A total of 47 study intersections within the City of Los Angeles, one (1) of which is shared with the City of Santa Monica, and eight (8) study intersections within the WLA Campus were selected for detailed level of service analyses under Existing (2017), Existing (2017) Plus Project

and Future (2029) Without and With Project traffic conditions. The analysis focused on assessing potential traffic impacts during the AM and PM peak hours on a typical weekday since these periods would be representative of the combined peak traffic conditions associated with the Project and existing and cumulative conditions.

In addition to the 55 study intersections, a total of 22 roadway segments were analyzed. This includes 12 residential roadway segments, as they represent residential streets closest to the Project site that have the most potential to be significantly impacted by the Project, in addition to 10 WLA Campus roadway segments.

This analysis was prepared in accordance with the assumptions, methodologies, and procedures outlined by the following city traffic guidelines:

- *City of Los Angeles Department of Transportation (LADOT) Traffic Study Policies and Procedures* (December 2016);
- *City of Santa Monica Significance Criteria* (current as of October 2016); and
- *2010 Congestion Management Program (CMP) for Los Angeles County.*

This report presents the results of a detailed analysis of Existing (2017) and Future (2029) traffic conditions during the AM and PM peak hours at study intersections and for daily traffic on roadway segments. For future conditions, the Project impact analyses considered cumulative traffic attributable to ambient growth and related projects within the Project study area. The following existing and future traffic conditions have been analyzed:

- Existing (2017) Conditions;
- Existing (2017) Plus Project Conditions;
- Future (2029) Without Project Conditions; and
- Future (2029) With Project Conditions.

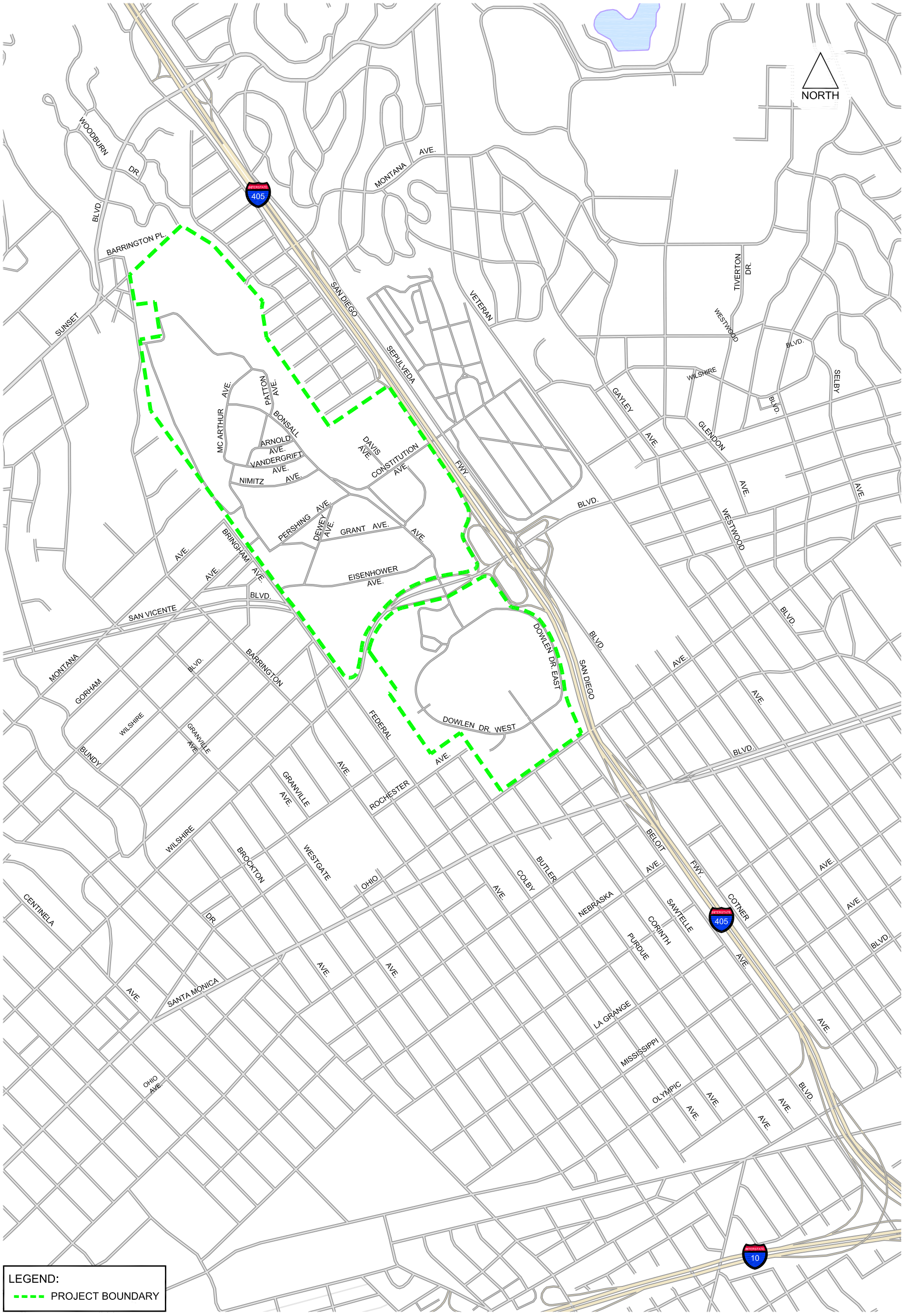

FIGURE 1-1

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VAWLAHealthCareCtrEIS/Graphics/ProjSiteVicinity

PROJECT SITE AND VICINITY

CRAIN & ASSOCIATES
Transportation Planning
Traffic Engineering
300 Corporate Pointe, Suite 470
Culver City, California 90230
PH (310) 473 6508 F (310) 444 9771
www.crainandassociates.com

1.1 Study Area

The study area covers an expanse of approximately 1.5-mile radius area surrounding the Project site as shown in Figure 1-1. The study area contains a portion of a total of two (2) separate cities -- Los Angeles and Santa Monica. Discussion of the existing study area transportation infrastructure and conditions is provided in Section 3. Additionally, as outlined in Section 6, the cumulative growth for the study area was carefully reviewed and the cumulative impacts within the study area surrounding the Project were assessed. The analysis considered the impacts of the cumulative growth at 55 study intersections and 22 street segments identified below.

1.1.1 Study Intersections

As noted earlier, the study area includes multiple jurisdictions. The study has categorized the jurisdictions as the City of Los Angeles, City of Santa Monica, and the WLA Campus (internal study intersections). The 55 study intersections are as follows:

City of Los Angeles

1. Centinela Avenue & Wilshire Boulevard *(shared with the City of Santa Monica)*
2. Bundy Drive & Wilshire Boulevard
3. Bundy Drive & Santa Monica Boulevard
4. Brockton Avenue & Wilshire Boulevard
5. Brockton Avenue & Santa Monica Boulevard
6. Westgate Avenue & Wilshire Boulevard
7. Westgate Avenue & Santa Monica Boulevard
8. Granville Avenue & Wilshire Boulevard
9. Barrington Place & Sunset Boulevard
10. Barrington Avenue & Sunset Boulevard
11. Barrington Avenue & Barrington Place
12. Barrington Avenue & Montana Avenue
13. Barrington Avenue & San Vicente Boulevard
14. Barrington Avenue & Wilshire Boulevard
15. Barrington Avenue & Ohio Avenue
16. Barrington Avenue & Santa Monica Boulevard
17. San Vicente Boulevard/Federal Avenue & Wilshire Boulevard
18. Federal Avenue & Ohio Avenue
19. Federal Avenue & Santa Monica Boulevard
20. Woodburn Drive & Sunset Boulevard
21. Colby Avenue & Santa Monica Boulevard
22. Butler Avenue & Santa Monica Boulevard
23. Purdue Avenue & Santa Monica Boulevard
24. Corinth Avenue & Santa Monica Boulevard
25. Sawtelle Boulevard & Ohio Avenue
26. Sawtelle Boulevard & Santa Monica Boulevard
27. Sawtelle Boulevard & La Grange Avenue
28. Sawtelle Boulevard & Mississippi Avenue

29. Sawtelle Boulevard & Olympic Boulevard
30. Beloit Avenue/I-405 Southbound Ramps & Santa Monica Boulevard
31. Cotner Avenue/I-405 Northbound Ramps & Santa Monica Boulevard
32. Sepulveda Boulevard & Montana Avenue
33. Sepulveda Boulevard & Constitution Avenue
34. Sepulveda Boulevard & Wilshire Boulevard
35. Sepulveda Boulevard & Ohio Avenue
36. Sepulveda Boulevard & Santa Monica Boulevard
37. Sepulveda Boulevard & Nebraska Avenue
38. Sepulveda Boulevard & La Grange Avenue
39. Sepulveda Boulevard & Olympic Boulevard
40. Veteran Avenue & Wilshire Boulevard
41. Veteran Avenue & Ohio Avenue
42. Veteran Avenue & Santa Monica Boulevard
43. Gayley Avenue & Wilshire Boulevard
44. Westwood Boulevard & Wilshire Boulevard
45. Westwood Boulevard & Santa Monica Boulevard
46. Glendon Avenue & Wilshire Boulevard
47. Selby Avenue & Wilshire Boulevard

City of Santa Monica

1. Centinela Avenue & Wilshire Boulevard *(shared with the City of Los Angeles)*

WLA Campus Study Intersections

48. Dewey Avenue & Eisenhower Avenue
49. Bonsall Avenue & Nimitz Avenue
50. Bonsall Avenue & Pershing Avenue
51. Bonsall Avenue & Eisenhower Avenue
52. Bonsall Avenue & Wilshire Boulevard WB Ramps
53. Bonsall Avenue & Wilshire Boulevard EB Ramps
54. Bonsall Avenue & Dowlen Drive
55. Sawtelle Boulevard & Dowlen Drive

1.1.2 Roadway Segments

The 22 roadway segments include 12 residential roadway segments in the City of Los Angeles and 10 roadway segments on the WLA Campus. The roadway segments are as follows:

City of Los Angeles

1. Barrington Avenue between Crescenda Street & Chaparal Street
2. Barrington Place between Sunset Boulevard & Chayote Street
3. Barrington Place between Barrington Avenue & Chayote Street
4. Church Lane between Elderwood Street & Montana Avenue
5. Montana Avenue between Westgate Avenue & Barrington Avenue
6. Montana Avenue between Barrington Avenue & Bringham Avenue

7. Bringham Avenue between Darlington Avenue & San Vicente Avenue
8. Rochester Avenue between Federal Avenue & Colby Avenue
9. Ohio Avenue between Stoner Avenue & Barrington Avenue
10. Butler Avenue between Wyoming Avenue & Ohio Avenue
11. Purdue Avenue between Ohio Avenue & Santa Monica Boulevard
12. Corinth Avenue between Massachusetts Avenue & Ohio Avenue

WLA Campus Study Segments

13. Patton Avenue north of Bonsall Avenue
14. Bonsall Avenue between Arnold Avenue & Vandergrift Avenue
15. Nimitz Avenue between MacArthur Avenue & Bonsall Avenue
16. Constitution Avenue east of Davis Avenue
17. Bonsall Avenue between Pershing Avenue & Grant Avenue
18. Dewey Avenue between Eisenhower Avenue & Grant Avenue
19. Eisenhower Avenue between Dewey Avenue & Bonsall Avenue
20. Bonsall Avenue between Eisenhower Avenue & Wilshire Boulevard Westbound Ramps
21. Bonsall Avenue between Wilshire Boulevard Eastbound Ramps & Dowlen Drive
22. Sawtelle Boulevard between Dowlen Drive & Ohio Avenue

The locations of these study intersections and roadway segments are illustrated in Figure 1-2.

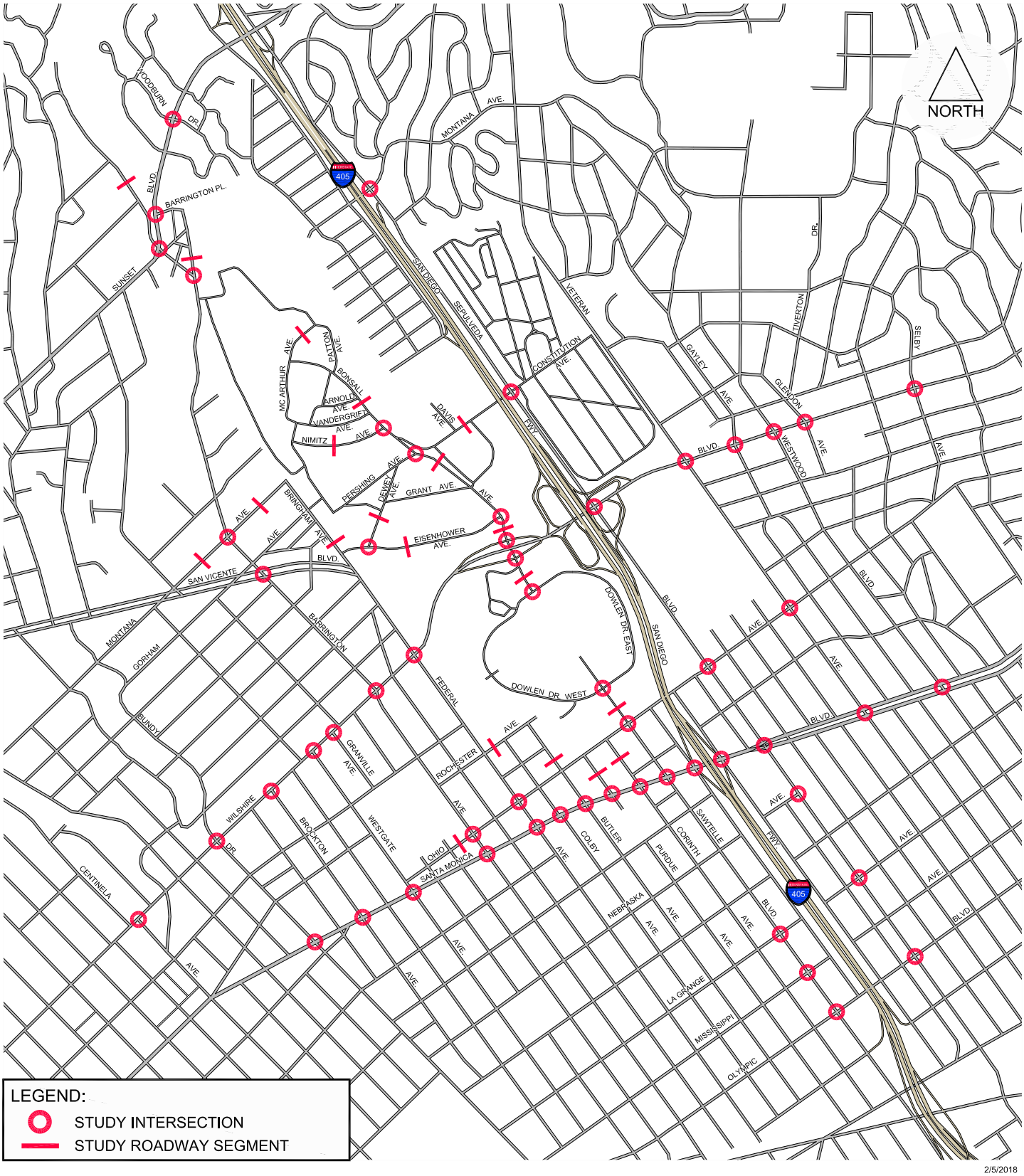

FIGURE 1-2

FN: VAWLAMasterPlan\STUDY_INTS&SEGS

PROJECT STUDY AREA INTERSECTIONS AND ROADWAY SEGMENT LOCATIONS

CRAIN & ASSOCIATES
Transportation Planning
Traffic Engineering
300 Corporate Pointe, Suite 470
Culver City, California 90230
PH (310) 473 6508 F (310) 444 9771
www.crainandassociates.com

2 PROJECT DESCRIPTION AND LOCATION

2.1 Project Site Location

The WLA Campus encompasses approximately 388 acres west of the I-405/San Diego Freeway and north and south of Wilshire Boulevard. The site is surrounded by the Los Angeles communities of Brentwood, Westwood and West Los Angeles. The WLA Campus is bounded by the Brentwood School and single-family homes to the north/northwest; single family/multifamily homes, the Los Angeles National Cemetery and the San Diego Freeway/I-405 to the east; multifamily residential uses and Ohio Avenue to the south; and, multifamily residential buildings, commercial buildings, U.S. Air Force, U.S. Army and California National Guard properties and Barrington Place, Barrington Avenue, Bringham Avenue and San Vicente Boulevard to the west. Wilshire Boulevard bisects the Project Site into the North and South Campuses. The Project site plan is illustrated in Figure 2-1.

The Project site is currently comprised of a variety of land uses to serve the veterans' community. The site is located in the West Los Angeles area which is a diverse urban area comprised of residential, commercial, light industrial, institutional, office, and school land uses. To the east of the Project site lays Westwood Village along with the University of California, Los Angeles campus.

2.2 Proposed Project Description

The Project at full build-out will be comprised of the following primary components:

North Campus Housing

The North Campus will provide housing for Veterans under two (2) approaches:

- Building Renovation: These projects involve the renovation, use conversion, and seismic correction of 19 buildings totaling 794,731 building square feet, creating 994 new permanent supportive housing units.
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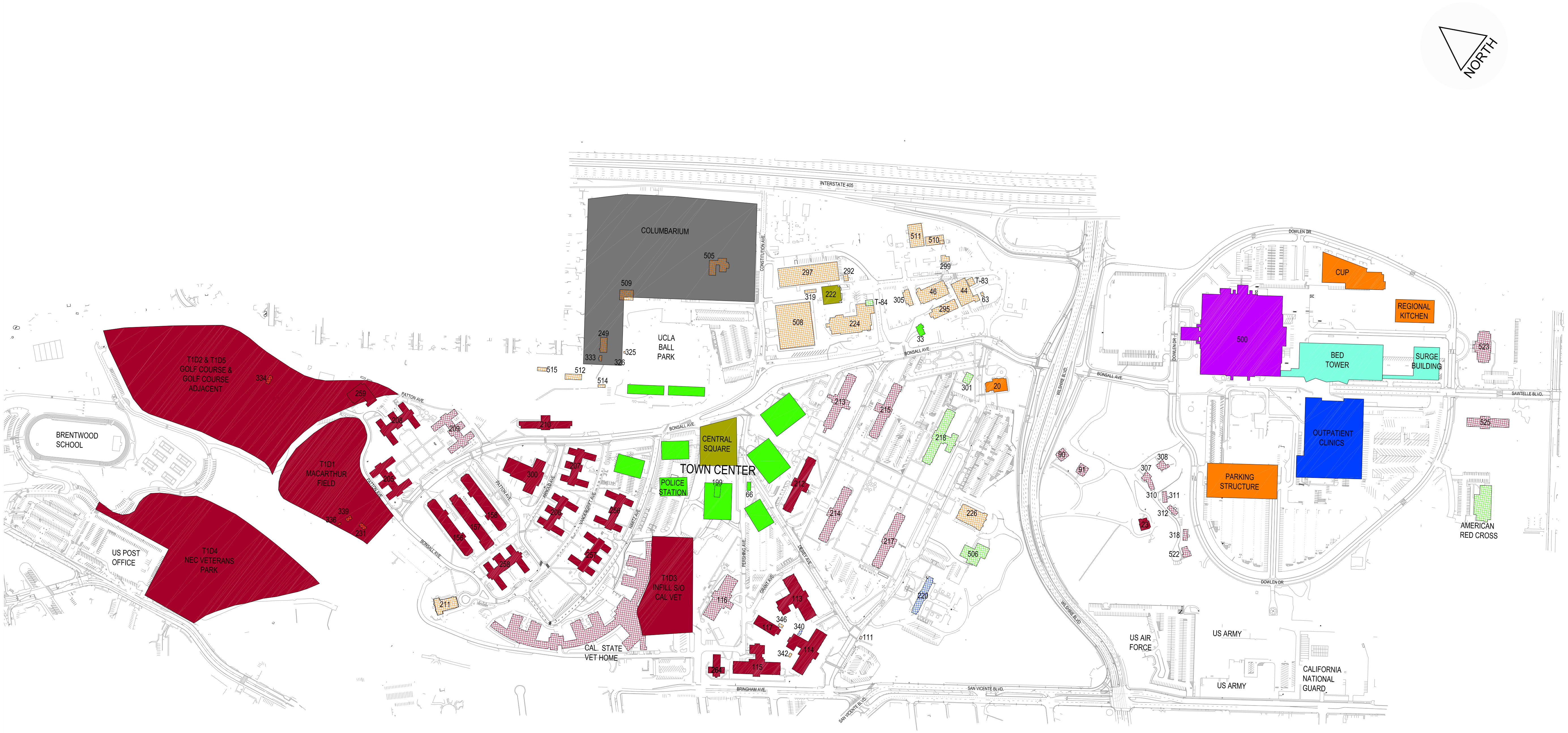
North Campus Operations

These projects will involve the renovation, use conversion, and seismic correction of six (6) buildings totaling 54,988 building square feet, to be utilized for VA North Campus Operations.



EXISTING USES TO REMAIN

- RESIDENTIAL
- MEDICAL OFFICE
- HOSPITAL
- RESEARCH
- ADMINISTRATIVE OFFICE
- ANCILLARY USE
- VACANT

PROPOSED USES

- RESIDENTIAL
- MEDICAL OFFICE
- HOSPITAL
- RESEARCH
- ADMINISTRATIVE OFFICE
- ANCILLARY USE
- COMMUNITY CENTER/TOWN CENTER
- COLUMBARIUM

8/3/2018

V\WLAHealthCareCtrEIS\SITE-PLAN

FIGURE 2-1

CRAIN & ASSOCIATES

Transportation Planning
Traffic Engineering

300 Corporate Pointe, Suite 470
Culver City, California 90230
PH (310) 473 6508 F (310) 444 9771
www.crainandassociates.com

PROJECT SITE PLAN

North Campus Town Center

The Town Center is situated near the geographic center of the North Campus, touching on each of the primary Veteran residential neighborhoods and operations facilities as a place of common contact. The conceptual plan envisions an open Central Square and green space, surrounded by an array of services, opportunities, and amenities for Veterans, contemplating new construction of nine (9) buildings totaling 450,000 square feet in two (2) and three (3) story buildings. In order to facilitate the creation of the Town Center, four (4) buildings containing 76,459 square feet will be demolished and several surface parking lots will be relocated to adjacent locations on the WLA Campus.

South Campus Medical Center

South of Wilshire Boulevard, the proposed new Bed Tower, new outpatient clinic, new Surge (Cancer) building, and Regional Kitchen will anchor the Medical District, with an array of in-patient and out-patient care facilities. A variety of hospitality facilities, currently onsite, will remain to serve hospital visitors and their families.

The Medical Center as redeveloped will provide diagnostic and treatment facilities, clinical support and services in a modern state-of-the-art healing environment. Additionally, these program elements will provide a collaborative integration of healthcare, food service, and comprehensive translational research in support of Veterans. The Medical Center will meet VA and California seismic mandates for medical center operations. The Medical Center redevelopment is planned to include the following program elements:

- New construction of a 450,000 square foot Bed Tower;
- New construction of a 600,000 square foot Outpatient Clinic;
- New construction of a 75,000 square foot Surge Building;
- New construction of a 26,500 square foot Kitchen;
- New construction of a parking structure containing 800 parking spaces;
- New construction of a parking structure to accommodate displaced replacement parking related to the Metro Purple Line Extension project (number of spaces to be determined and to be built by LA Metro).
- Related central utility plant, utility system and infrastructure improvements;
- New construction of research facilities containing 200,000 square feet;
- Demolition of 955,652 building square feet contained in seven buildings (B-500, B-501, B-304, B-345, B-401, B-402, B-507).

Project construction will commence with the renovations of three buildings (B-205, B-207, and B-208). Our analysis is based on the renovation and construction occurring in one (1) phase, with the anticipated completion of the full build-out in year 2029.

2.3 Project Site Access and Circulation

Descriptions of the existing and proposed Project site access and circulation schemes are described in this section.

2.3.1 Existing Project Site Access

The existing pedestrian, bicycle, and vehicular access to the Project site are described below.

Vehicular Access

Direct vehicular access to the Project site is provided via six (6) existing access points that are located at various sites around the WLA Campus. These access points include:

North Campus

- Gorham Avenue – Located on the western side of the property, this access point is currently closed to vehicular traffic;
- Eisenhower Avenue – Located south of the Gorham Avenue driveway, this access point is currently closed to vehicular traffic;
- Constitution Avenue – Located on the eastern side of the property with direct access to Sepulveda Boulevard;
- Bonsall Avenue – Located on the southern side of the property, this is the primary access point to the North Campus via westbound and eastbound on- and off-ramps with Wilshire Boulevard.

South Campus

- Bonsall Avenue – Located on the northern side of the property, this is the primary access point to the South Campus via westbound and eastbound on- and off-ramps with Wilshire Boulevard.
- Sawtelle Boulevard – Entrance located on the southern side of the property and provides direct access to Ohio Avenue.

Figure 2-2 presents the locations of vehicular access gates to the Project site. All open access points are included as study intersection locations for our analysis.

EXISTING USES

- RESIDENTIAL
- MEDICAL OFFICE
- HOSPITAL
- RESEARCH
- ADMINISTRATIVE OFFICE
- ANCILLARY USE
- VACANT

CAMPUS ACCESS LOCATIONS

- VEHICULAR ACCESS POINT
- PEDESTRIAN/BICYCLE ACCESS POINT
- EMERGENCY ACCESS POINT ONLY

FIGURE 2-2

EXISTING VEHICULAR, PEDESTRIAN, AND BICYCLE ACCESS

1/26/2018

VAWLAHealthCareCtrEIS/CirculationPlan

CRAIN & ASSOCIATES
Transportation Planning
Traffic Engineering
300 Corporate Pointe, Suite 470
Culver City, California 90230
PH (310) 473 6508 F (310) 444 9771
www.crainandassociates.com

Bicycle and Pedestrian Access

Bicycle facilities that serve the Project site include an existing bicycle lane/route on Ohio Avenue between Westgate Avenue and Westholme Avenue and on San Vicente Boulevard/Federal Avenue between Bringham Avenue and Ohio Avenue.

The existing pedestrian facilities surrounding the Project site generally include sidewalks located along roadways with crosswalks located at major intersections.

2.3.2 Proposed Project Site Access

Access to the proposed Project site would be improved for pedestrians, bicycles, transit/shuttles, deliveries, and private automobiles by the Project Buildout year 2029. This section provides a general overview of the proposed WLA Campus Circulation Plan, more details are provided in *Appendix L*.

Vehicular Access

Direct vehicular access to the Project site will be provided primarily via four (4) existing access points that are located at various sites around the WLA Campus. The Bonsall Avenue and Constitution Avenue access points will remain as the major access points to the North Campus. The Eisenhower Avenue access point to the North Campus will provide emergency access and temporary access for commercial vehicles. The Bringham Avenue access point will remain closed on the North Campus. The access points to the South Campus will remain the same as the existing condition.

Access improvements were evaluated to determine the feasibility and effectiveness in providing increased efficiency of the internal roadway network. These measures included consideration of entry gates along with traffic calming measures such as speed humps, chockers, and traffic circles for the whole Campus.

Bicycle and Pedestrian Access

The WLA Campus Circulation Plan includes dedicated bicycle/pedestrian gateways to the WLA Campus at the following locations:

- Eisenhower Avenue
- Gorham Avenue
- Waterford Street/Church Lane
- Texas Avenue (would require negotiations with the California National Guard)
- South of Veterans' Barrington Park along Barrington Avenue

These improvements would connect to existing and future bicycle facilities as part of the City of Los Angeles Bikeway Network located in the Project vicinity. This includes bicycle lanes along

Wilshire Boulevard (potentially as part of the transit lane network), and Bundy Drive; an extension of the Santa Monica Boulevard bicycle lanes currently ending to the east; and a bicycle friendly street designation and design (per LA Mobility Plan 2035) on Montana Avenue, Waterford Street/Church Lane, Texas Avenue, and Rochester Avenue. Within the WLA Campus, bicycle lanes on Bonsall Avenue, Constitution Avenue, and Sawtelle Avenue would provide connections internally and externally via the aforementioned designated bicycle gateways.

The Project would also provide sidewalk and crosswalk improvements that would enhance pedestrian connectivity, including connections to the existing and future bus stops on Wilshire Boulevard. Additionally, the Project would enhance the sidewalks, with widened pathways, wayfinding and other pedestrian amenities throughout the WLA Campus internal roadway system to provide comfortable pedestrian access to the planned Metro Purple Line Westwood/VA Hospital Station. The improvements made to the existing and proposed pedestrian network on the WLA Campus will enhance the walkability of the community and the surrounding neighborhoods, activating the area as a pedestrian-friendly environment.

Table 2-1 summarizes the existing peak-hour bicycle and pedestrian volumes for the WLA Campus, and are shown in *Appendix D*, the bicycle volumes are provided in Figures D-14 and D-15, and the pedestrian volumes are Figures D-16 and D-17.

Table 2-1 – Existing WLA Campus Bicycle and Pedestrian Peak-Hour Volumes

NO.	INTERSECTION	PEAK PERIOD	BICYCLE VOLUMES	PEDESTRIAN VOLUMES
48	DEWEY AVENUE & EISENHOWER AVENUE	AM PEAK	15	15
		PM PEAK	13	7
49	BONSALL AVENUE & NIMITZ AVENUE	AM PEAK	1	8
		PM PEAK	3	10
50	BONSALL AVENUE & PERSHING AVENUE	AM PEAK	1	8
		PM PEAK	1	24
51	BONSALL AVENUE & EISENHOWER AVENUE	AM PEAK	17	17
		PM PEAK	13	14
52	BONSALL AVENUE & WILSHIRE BOULEVARD WB RAMPS	AM PEAK	29	44
		PM PEAK	15	46
53	BONSALL AVENUE & WILSHIRE BOULEVARD EB RAMPS	AM PEAK	21	101
		PM PEAK	10	92
54	BONSALL AVENUE & DOWLEN DRIVE	AM PEAK	18	43
		PM PEAK	8	48
55	SAWTELLE BOULEVARD & DOWLEN DRIVE	AM PEAK	13	20
		PM PEAK	5	30

Public transportation connectivity and enhancements will be considered by the Project, along with providing pedestrians and bicyclists with increased mode-transfer opportunities to and

from public transit. There are significant improvements to the public transportation network scheduled for implementation by the Project Buildout year 2029. These include the extension of the Metro Purple Line subway, with a station at the WLA South Campus and improvements to the transit station along the Wilshire Boulevard/Bonsall Avenue interchange ramps. The Project could take advantage of the opportunities to increase pedestrian and bicycle connectivity which arise from these new transit services.

2.4 Project Parking

The Project will include changes to the WLA Campus parking supply and locations. These changes are described in this section.

2.4.1 Existing Parking Supply

The WLA Campus currently provides 4,297 on-site vehicular parking spaces for residents, employees, and guests. The North Campus supplies a total of 2,130 parking spaces, while the South Campus provides a total of 2,167 parking spaces. These parking spaces are located in surface parking lots dispersed throughout the Campuses. The WLA Campus also provides bicycle parking, with a storage capacity of 192 bicycles on the North Campus and 38 bicycles on the South Campus. More information on the existing parking supply is available in *Appendix I*.

2.4.2 Project Parking Supply

Due to the proposed expansion of the North and South Campus uses, the parking lots need to provide convenient access to the facilities on site. This includes providing adequate parking supply, ample drop-off/pick-up areas, higher than minimum ratio of Americans with Disabilities Act (ADA) compliant parking spaces and convenient parking access. The parking locations must also provide safe and convenient pedestrian paths of travel to and from facilities. The Project would provide the necessary parking spaces for the North Campus and the South Campus. More information on the future parking supply is available in *Appendix I*.

3 ENVIRONMENTAL SETTING

The Project site is located to the southeast of Wilshire Boulevard and the San Diego Freeway (I-405). The site is bounded by Wilshire Boulevard on the north; the San Diego Freeway/I-405 on the east; Ohio Avenue on the south; and Federal Avenue, multiple-family residential buildings, the U.S. Air Force, U.S. Army and California National Guard properties on the west.

3.1 Existing Street System

Regional access for the Project site and the surrounding area are well-served by an extensive freeway, arterial, collector, and local street network. The Santa Monica (I-10) and San Diego (I-405) freeways are located south and directly east of the Project site, respectively. These freeways provide convenient access to the larger, regional roadway network. Important surface streets within a mile of the Project site include Wilshire Boulevard, Sunset Boulevard, Santa Monica Boulevard, Sepulveda Boulevard, San Vicente Boulevard, Barrington Avenue, Westwood Boulevard, and Veteran Avenue. These facilities, in addition to other important roadways in the study area, are described in greater detail below.

3.1.1 Existing Freeways

The *San Diego Freeway (I-405)* is a major north-south Interstate Highway. I-405 branches off from Interstate 5 (I-5) in the Sylmar Community near the City of San Fernando and passes through the San Fernando Valley, West Los Angeles, South Central Los Angeles, the City of Long Beach and Orange County before rejoining I-5 in the City of Irvine. I-405 is primarily a north-south route through the west side of Los Angeles County. In the vicinity of the Project, this freeway typically provides four (4) general-purpose travel lanes and one (1) high-occupancy vehicle travel lane in each direction and interchanges with I-10 / Santa Monica Freeway, and has full or partial ramp connections at Sunset Boulevard, Wilshire Boulevard and Santa Monica Boulevard. According to most current (2016) data available on the Caltrans website, I-405 has an average daily traffic volume of 289,000 to 310,000 vehicles near Wilshire Boulevard.

The *Santa Monica Freeway (I-10)* is a major east-west Interstate Highway. This Interstate runs in the State of California east from Santa Monica through Los Angeles and San Bernardino to the border with Arizona continuing east through the southern United States. Near the Project site, I-10 connects Downtown Los Angeles to Mid-City, the City of Culver City, West Los Angeles and the City of Santa Monica. In the vicinity of the Project, this freeway typically provides four (4) travel lanes in each direction and interchanges with the I-405 / San Diego Freeway, and has full or partial ramp connections at Bundy Drive and Overland Boulevard. According to the most current (2016) data available on the Caltrans website, average daily traffic volumes on I-10 near the I-405 junction, are approximately 237,000 to 250,000 vehicles.

3.1.2 Existing Highways and Streets

Brief descriptions of the key roadways in the Project study area are provided below in addition to Table 3-1 which provides a comprehensive summary of the analyzed roadways and their street designations. Additionally, the study intersection lane configurations and phasing figure for all 55 study intersections is provided in *Appendix E*.

Santa Monica Boulevard is an east-west roadway located less than a quarter-of-a-mile (0.25 mile) south of the southern end of the Project site. Designated as a Boulevard II roadway, Santa Monica Boulevard is a major arterial, which travels through the Communities and Cities of Silver Lake, Little Armenia, Hollywood, West Hollywood, Beverly Hills, Century City, West Los Angeles, and Santa Monica. This roadway terminates at Ocean Avenue, near the Pacific Ocean and at Sunset Boulevard near downtown Los Angeles. Proximate to the WLA Campus, Santa Monica Boulevard generally provides three (3) through travel lanes per direction. Additionally, this roadway includes left- and right-turn channelization at major intersections and some segments feature one (1) local-access frontage lane in each direction. On-street parking is generally permitted. Bicycle lanes are striped intermittently on Santa Monica Boulevard, including near the Project site, between Sepulveda Boulevard and Avenue of the Stars. Santa Monica Boulevard connects to I-405 with on- and off-ramps in both the northbound and southbound directions.

Olympic Boulevard located approximately one (1) mile south of the Project site is an east-west Boulevard II roadway that extends from Montebello through East Los Angeles, the Fashion District, Downtown Los Angeles, Pico Union, Mid-Wilshire, Pico-Robertson, Beverly Hills, Century City, West Los Angeles, and Santa Monica. Within the study area, Olympic Boulevard generally features three (3) through travel lanes in each direction, with left- and right-turn channelization at major intersections, and on-street parking.

Sunset Boulevard is an east-west Avenue I that is within two (2) blocks of the northern end of the Project site. It extends easterly from the Pacific Ocean into the Echo Park/Downtown Los Angeles area, where it becomes Cesar Chavez Avenue. Within the study area, Sunset Boulevard has two (2) travel lanes and left-turn channelization at signalized intersections as well as on-/off-ramp connections with I-405.

Wilshire Boulevard begins in the City of Santa Monica and continues easterly into Downtown Los Angeles. It is a Boulevard II roadway in the City of Los Angeles, extending through the Project site and serving as the primary access for the site. In the City of Santa Monica it is designated as a Boulevard roadway. In the site vicinity, Wilshire Boulevard is striped with three (3) travel lanes per direction, with left-turn channelization. Generally, within the City of Los Angeles, the eastbound and westbound curb lanes are restricted to bus and right-turn-only operation during the weekday morning and afternoon peak periods. Wilshire Boulevard is grade-separated over Bonsall Avenue, with on-/off-ramps accessing Bonsall Avenue. Wilshire

Table 3-1 – Project Study Area Roadway Classifications

Roadway Designation	Roadway	Primary Direction of Travel
Boulevard II	Olympic Boulevard	East-West
	Santa Monica Boulevard	East-West
	Sepulveda Boulevard	North-South
	Westwood Boulevard, between Wilshire Boulevard and Santa Monica Boulevard	North-South
	Wilshire Boulevard [1]	East-West
Avenue I	Bundy Drive, south of Wilshire Boulevard	North-South
	Centinela Avenue [2]	North-South
	Sunset Boulevard	East-West
	Westwood Boulevard, north of Wilshire Boulevard	North-South
Avenue II	Gayley Avenue	North-South
	Midvale Avenue, between Wilshire Boulevard and Rochester Avenue	North-South
	Montana Avenue, west of San Vicente Boulevard	East-West
	San Vicente Boulevard	East-West
	Veteran Avenue, between Sunset Boulevard and Missouri Avenue	North-South
	Westwood Boulevard, south of Santa Monica	North-South
Collector	Beloit Avenue	North-South
	Bundy Drive, north of Wilshire Boulevard	North-South
	Butler Avenue	North-South
	Church Lane, north of Sunset Boulevard	North-South
	Cotner Avenue	North-South
	Federal Avenue, between Wilshire Boulevard and Idaho Avenue	North-South
	La Grange Avenue	East-West
	Nebraska Avenue	East-West
	Ohio Avenue	East-West
	Sawtelle Boulevard	North-South
	Veteran Avenue, between Missouri Avenue and Pico Boulevard	North-South
	Westgate Avenue	North-South
Local	Barrington Avenue	North-South
	Barrington Place	North-South
	Bringham Avenue	North-South
	Brockton Avenue	North-South
	Church Lane, south of Sunset Boulevard	North-South
	Colby Avenue	North-South
	Corinth Avenue	North-South
	Federal Avenue, south of Idaho Avenue	North-South
	Glendon Avenue	North-South
	Granville Avenue	North-South
	Midvale Avenue, south ofRochester Avenue	North-South
	Mississippi Avenue	East-West
	Montana Avenue, east of San Vicente Boulevard	East-West
	Purdue Avenue	North-South
	Rochester Avenue	East-West
	Selby Avenue	North-South
	Woodburn Drive	North-South

Table 3-1 - Project Study Area Roadway Classifications (cont.)

Roadway Designation	Roadway	Primary Direction of Travel
Private [3]	Bonsall Avenue	North-South
	Constitution Avenue	East-West
	Dewey Avenue	North-South
	Dowlen Drive	North-South
	Eisenhower Avenue	East-West
	Nimitz Avenue	East-West
	Patton Avenue	North-South
	Pershing Avenue	East-West
	Sawtelle Boulevard, north of Ohio Avenue	East-West

Notes:

All roadway designations from the City of Los Angeles Mobility Plan 2035, unless otherwise specified

[1] Designated as a Boulevard in the City of Santa Monica

[2] Designated as a Secondary Avenue in the City of Santa Monica

[3] All roadways located on the WLA Campus were assigned private designations.

Boulevard also has northbound and southbound ramp connections with I-405.

Ohio Avenue is a Collector Street serving the neighborhood south of the Project site. Ohio Avenue forms the southern boundary of the Project site. It is striped with one (1) travel lane per direction and a bike lane in the eastbound direction, with left-turn channelization installed at key intersections.

Westwood Boulevard is designated an Avenue I roadway north of Wilshire Boulevard, a Boulevard II roadway between Wilshire Boulevard and Santa Monica Boulevard, and an Avenue II roadway south of Santa Monica Boulevard. Westwood Boulevard is located approximately one-half mile (0.50 mile) from the Project site and provides two (2) travel lanes per direction, except at Wilshire Boulevard where it has three (3) northbound lanes. Left- and/or right-turn lanes are available on Westwood Boulevard at some locations.

Veteran Avenue is approximately one-quarter mile (0.25 mile) from the Project site and extends from Sunset Boulevard to south of Pico Boulevard. Veteran Avenue is an Avenue II roadway from Sunset Boulevard to Missouri Avenue, a Collector Street from Missouri Avenue to Pico Boulevard, and then a local street farther south. It is striped with two (2) travel lanes and left- and right-turn channelization north and south of Wilshire Boulevard.

Sepulveda Boulevard is one of the longest, continuous arterials in Los Angeles County. A Boulevard II roadway in the City of Los Angeles, Sepulveda Boulevard extends from the northern San Fernando Valley to the South Bay. It runs along the east side of I-405 and provides secondary access to the Project site at its intersection with Constitution Avenue. Sepulveda Boulevard is generally striped with two (2) travel lanes per direction, along with left-turn channelization.

Sawtelle Boulevard provides primary southerly access for the WLA Campus, terminating within the site north of Dowlen Drive. On-site, Sawtelle Boulevard is a private street, with one (1) through travel lane in each direction. From Ohio Avenue to Olympic Boulevard, it is a Collector Street. Sawtelle Boulevard has one (1) travel lane northbound and southbound between Ohio Avenue and Olympic Boulevard, with left-turn channelization at Olympic Boulevard.

San Vicente Boulevard extends northerly from Wilshire Boulevard where Federal Avenue terminates, and then curves westerly into the City of Santa Monica. It forms a section of the western boundary of the North Campus. San Vicente Boulevard is designated an Avenue II roadway within the City of Los Angeles, where it provides two (2) northbound/westbound travel lanes and two (2) to three (3) southbound/eastbound travel lanes, separated by a raised median. Left-turn channelization is provided at signalized intersections.

Federal Avenue is proximate to the western boundary of the WLA Campus. From Wilshire Boulevard to Idaho Avenue, it is a Collector Street. Federal Avenue has one (1) to two (2) travel lanes per direction, along with left-turn channelization at key intersections. The prolongation of Federal Avenue north of Wilshire Boulevard is San Vicente Boulevard.

Barrington Avenue is a local street within the Project study area. Barrington Avenue is adjacent to or within two (2) blocks of the western boundary of the North Campus. It has one (1) to two (2) travel lanes in each direction, plus left-turn lanes at Wilshire Boulevard, Ohio Avenue and Santa Monica Boulevard.

In addition to Sawtelle Boulevard, on-site circulation is provided by a series of private streets. Bonsall Avenue serves as the primary north-south access roadway for the North Campus and, along with Sawtelle Boulevard, is a primary access roadway for the South Campus. Bonsall Avenue extends northerly from Dowlen Drive on the South Campus, passes under Wilshire Boulevard, and continues northerly to MacArthur Avenue on the North Campus. Constitution Avenue, also on the North Campus, runs east-west between a feeder roadway on the west and Sepulveda Boulevard on the east, and is used for secondary access to and from Sepulveda Boulevard. Dowlen Drive is a ring road on the South Campus, intersected by Bonsall Avenue on its northern perimeter and Sawtelle Boulevard on its southern perimeter, creating “East” and “West” segment designations. Dowlen Drive accesses all of the major parking lots and buildings on the South Campus. Generally, these private streets have two-way (2) flow, one (1) travel lane in each direction, and no on-street parking. All intersections on-site are stop-controlled, with most having all-way stops.

3.2 Existing Public Transit

An extensive system of bus lines and one (1) rail line currently operate through West Los Angeles. This section describes the public transit routes near the Project site. These transit lines, along with the wider area-wide transit network, are summarized in Table 3-2. Ongoing and funded transit extensions are also described below.

The Project site and surrounding area are well served by public transit. When transfer opportunities are considered, the site is very accessible to and from the greater Los Angeles region via public transit. Moreover, planned improvements and extensions to the bus and rail network are expected to further increase transit access near the WLA Campus before Project completion. It is expected that some of the person trips generated by the Project would utilize public transit as the primary travel mode instead of private vehicles.

3.2.1 Existing Public Bus Transit Service

The Project study area is served by an extensive system of bus lines operated by the Los Angeles County Metropolitan Transportation Authority (Metro), Los Angeles Department of Transportation (LADOT), Santa Monica Big Blue Bus (BBB), Culver City Bus (CCB), and the Antelope Valley Transit Authority (AVTA). There are 11 bus lines that stop within a "comfortable walking distance" (approximately one-quarter mile [0.25 mile]) from the Project site. Of the 11 bus lines, five (5) are walkable from both North and South Campus, three (3) are walkable from the North Campus, three (3) are walkable from the South Campus. These 11 bus lines are described in greater detail below.

Metro

Line 4 provides east-west local and late night Owl service along Sunset Boulevard and Santa Monica Boulevard from Downtown Los Angeles to Santa Monica. In the general Project vicinity, Line 4 provides bus stops along Santa Monica Boulevard, two (2) blocks south of the South Campus, at the intersection of Santa Monica Boulevard and Sawtelle Boulevard. Line 4 operates daily with headways of approximately 10-25 minutes during weekday peak hours. Generally, headways for both directions are approximately 10-20 minutes on the weekend. A rapid Line 704 also operates along roughly the same route, providing stops near the intersection of Sepulveda Boulevard and Santa Monica Boulevard, roughly one-half mile (0.5 mile) southeast of the South Campus.

Line 20, an east-west local and late night Owl service line, provides services from Downtown Los Angeles to Santa Monica primarily along Wilshire Boulevard. Bus stops are provided adjacent to the Project's North and South Campus at Bonsall Avenue and

Table 3-2 – Existing Transit Lines

TRANSIT AGENCY	LINE #	MODE	SERVICE TYPE	DESCRIPTION	DIRECTION OF SERVICE											
					EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND		
					Headways (min)			Headways (min)			Headways (min)			Headways (min)		
					AM Peak	PM Peak	Weekend	AM Peak	PM Peak	Weekend	AM Peak	PM Peak	Weekend	AM Peak	PM Peak	Weekend
Antelope Valley Transit Authority	AV786	Bus	Commuter Express	Antelope Valley-Westside/Hollywood Express: Northbound to Lancaster/Palmdale, Southbound to Century City/West LA/Hollywood via 14 Fwy, I-405 Fwy, Westwood Bl, Santa Monica Bl & Wilshire Bl							25	20-45	N/A	20-30	N/A	N/A
Big Blue Bus	BBB1	Bus	Local	Northeast bound to UCLA, Westbound to Santa Monica via Santa Monica Bl	12	12	15	12	12	15						
Big Blue Bus	BBB2	Bus	Local	Northeast bound to UCLA, Westbound to Santa Monica via Wilshire Bl	15-17	15-20	20-23	15-20	15-20	20						
Big Blue Bus	BBB8	Bus	Local	Downtown Santa Monica via National Bl, Ocean Park Bl	15-20	15-20	30	14-20	15-20	30						
Big Blue Bus	BBBR12	Bus	Rapid	Northbound to UCLA, Southbound to Culver City Station (Expo Line) via Westwood Bl, Palms Bl							12	12	30	12	12	30
Big Blue Bus	BBB14	Bus	Local	Northbound to Brentwood Village, Southbound to Playa Vista via Bundy Dr, Centinela Ave							16-20	15	17-20	15-20	14-16	20
Big Blue Bus	BBB15	Bus	Local	Northbound to Brentwood Village, Southbound to West LA via Barrington Ave							30-35	30-35	45	30-35	30-35	45
Big Blue Bus	BBB17	Bus	Local	Northbound to UCLA, Southbound to Culver City via Sawtelle Bl, Dowlen Dr East (thru VA Hospital grounds) & Wilshire Bl							16-20	21-22	45	19-21	18-21	45
Big Blue Bus	BBB18	Bus	Local	Northeast bound to UCLA, Westbound to Santa Monica via Wilshire Bl, San Vicente Bl & Montana Ave	20-27	20-26	30	20-29	25-26	30						
Culver City Bus	C6	Bus	Local	Northbound to UCLA, Southbound to Metro Green Line Station via Sepulveda Bl							14-20	16-30	20-22	17-20	20-22	20-22
Culver City Bus	R6	Bus	Rapid	Northbound to UCLA, Southbound to Metro Green Line Station via Sepulveda Bl							15-20	15-20	N/A	15-20	15-20	N/A
LADOT	CE431	Bus	Commuter Express	Eastbound to Downtown LA, Westbound to Westwood via I-10 Fwy	25-30	N/A	N/A	N/A	25-35	N/A						
LADOT	CE534	Bus	Commuter Express	Eastbound to Downtown LA, Westbound to West LA via Olympic Bl	N/A	20-40	N/A	25-30	N/A	N/A						
LADOT	CE573	Bus	Commuter Express [1]	Northbound to Encino/Mission Hills, Southbound to Westwood/Century City via I-405 Fwy							N/A	10-35	N/A	10-45	N/A	N/A
Metro Transit Authority	2/302	Bus	Limited, Owl [2]	Eastbound to Downtown LA, Westbound to Pacific Palisades via Sunset Bl	9-15	2-13	13-20	3-14	8-13	13-20						
Metro Transit Authority	4	Bus	Local, Owl	Eastbound to Downtown LA, Westbound to Santa Monica via Santa Monica Bl & Sunset Bl	10-16	8-12	10-20	4-25	11-15	10-20						
Metro Transit Authority	20	Bus	Local, Owl	Eastbound to Downtown LA, Westbound to Santa Monica via Wilshire Bl	10-13	10-15	15-20	5-15	6-15	15-20						
Metro Transit Authority	704	Bus	Rapid	Eastbound to Downtown Los Angeles, Westbound to Santa Monica via Santa Monica Bl	15-17	10-15	20-30	10-15	11-21	20-30						

Table 3-2 – Existing Transit Lines (cont.)

TRANSIT AGENCY	LINE #	MODE	SERVICE TYPE	DESCRIPTION	DIRECTION OF SERVICE											
					EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND		
					Headways (min)			Headways (min)			Headways (min)			Headways (min)		
					AM Peak	PM Peak	Weekend	AM Peak	PM Peak	Weekend	AM Peak	PM Peak	Weekend	AM Peak	PM Peak	Weekend
Metro Transit Authority	720	Bus	Rapid	Eastbound to Downtown LA/Commerce, Westbound to Downtown LA/Santa Monica via Wilshire Bl & Whittier Bl	7-11	3-6	6-20	1-5	8-10	6-20						
Metro Transit Authority	734	Bus	Rapid	Northbound to Sylmar Station, Southbound to Westwood via Sepulveda Bl							20-21	14-20	N/A	18-22	19-21	N/A
Metro Transit Authority	788	Bus	Express	Southbound to Westwood via Van Nuys Bl, I-405 Fwy							15-23	8-19	N/A	14-21	15-24	N/A
Metro Transit Authority	806	LRT	Rail	Eastbound to Downtown Los Angeles, Westbound to Santa Monica via Exposition Bl	6	6	12-15	6	6	12-15						

Legends:

1 = Only 1 Northbound AM bus & 1 Southbound PM bus during peak hours, hence corresponding headways data is N/A
2 = Line 302 operates only during the weekday peak hours

Wilshire Boulevard. Line 20 operates daily with headways of approximately five (5)-15 minutes during weekday peak hours and approximately 15-20 minutes on the weekend.

Line 720 provides east-west Rapid service along Wilshire Boulevard, connecting Santa Monica and the City of Commerce. Bus stops are located adjacent to the Project's North and South Campus at Bonsall Avenue and Wilshire Boulevard. Line 720 operates daily with weekday headways of approximately two (2)-10 minutes during the peak hours and approximately five (5)-20 minutes on the weekend.

Santa Monica Big Blue Bus

Line 1 provides east-west local service between UCLA and Venice, via Santa Monica Boulevard in the vicinity of the Project site. Line 1 provides stops along Santa Monica Boulevard, two (2) blocks south of the South Campus, with the closest stop at the intersection of Sawtelle Boulevard & Santa Monica Boulevard. Line 1 operates with headways of approximately 10-20 minutes during weekday peak hours and approximately 15-20 minutes on the weekend.

Line 2 provides east-west local service between UCLA and Santa Monica. The line primarily operates along Wilshire Boulevard and provides accessible stops adjacent to the Project's North and South Campus at Bonsall Avenue and Wilshire Boulevard. Line 2 operates daily with headways of approximately 15-20 minutes during weekday peak hours and approximately 20 minutes on the weekend.

Line 14 provides north-south local service between Brentwood and Playa Vista via Bundy Drive. The line provides a bus stop within walking distance to the west of the North Campus at Bringham Avenue and Gorham Avenue. This line operates daily with headways of approximately 15-20 minutes during weekday peak hours and approximately 20 minutes on the weekend.

Line 15 provides north-south local service between Brentwood and West Los Angeles, primarily along Barrington Avenue. This line has a bus stop within walking distance to the west of the North Campus at Barrington Avenue and San Vicente Boulevard for northbound travel and at Barrington Avenue and Gorham Avenue for southbound travel. Line 15 also provides northbound and southbound stops on Barrington Avenue near Wilshire Boulevard, approximately one-half mile (0.50) from both North Campus and South Campus. This line operates with headways of approximately 30-35 minutes during the weekday peak hour and approximately 45 minutes on the weekend.

Line 17 travels a north-south local route between UCLA and Culver City. As part of the route, Line 17 travels through the Project's South Campus via Bonsall Avenue, Dowlen

Drive, and Sawtelle Boulevard. It has bus stops at the intersections of Bonsall Avenue and Wilshire Boulevard that serve both the North and South Campus, and Ohio Avenue and Sawtelle Boulevard that serve the South Campus. There is also an on-site stop location proximate to the VA Medical Center, which directly serves the South Campus. Line 17 operates daily with headways of approximately 15-20 minutes during weekday peak and approximately 45 minutes on the weekend. On the weekends, the route ends at the VA Medical Center.

Line 18 offers north-south local service between UCLA and Marina del Rey via Wilshire Boulevard and Montana Avenue within the Project vicinity. Line 18 has bus stops at Wilshire Boulevard and Bonsall Avenue, which serve the North and South Campus, and two stops along San Vicente Boulevard at Mayfield Avenue and at Bringham Avenue, which are located within walking distance of the North Campus. Line 18 operates daily with headways of approximately 20-30 minutes and approximately 30 minutes on the weekend.

Culver City Bus Service

Line 6 provides north-south local service along Sepulveda Boulevard between the Metro Green Line LAX/Aviation Station and UCLA, passing the Project site to the east. The nearest bus stop is located at Sepulveda Boulevard and Ohio Avenue, within walking distance of the South Campus. A stop is also provided at Wilshire Boulevard and Veteran Avenue, approximately one-half (0.50) mile east from both the North Campus and South Campus. Line 6 operates on weekdays with headways of approximately 15-30 minutes during weekday peak hours and 20-25 minutes during the weekend.

LADOT Commuter Express Service

Line 431 provides east-west commuter service between Downtown Los Angeles and Westwood via the Santa Monica Freeway. Within the Project site, a bus stop is provided on-site at the North Campus Park and Ride Lot located at Constitution Avenue and Davis Avenue. Line 431 operates on the weekday with headways of approximately 25-35 minutes during peak hours, and generally travels eastbound during the AM peak period and westbound during the PM peak period. Weekend service is not provided.

The abovementioned bus routes have stops accessible within one-quarter mile (0.25 mile) of the Project site. In addition, there are numerous bus lines which exist outside this quarter-mile (0.25 mile) buffer, but are still relatively accessible to the Project site. Table 3-2 provides a comprehensive summary of all of the transit lines which run within two (2) miles of the Project vicinity.

The locations and general routes of the above bus lines relative to the Project site and surrounding areas are depicted in Figure 3-1.

VA Shuttle Service

VA offers patient shuttle transportation services that include internal circulation within the Project site and regional connections to the VA clinical facilities throughout the larger region. Internal circulator buses run with headways of approximately 45 minutes during the AM and PM peak hour. Intracity shuttles connect to locations in the San Fernando Valley and Downtown Los Angeles with scheduling throughout the day. Intercity shuttles offer daily connections to VA clinical facilities in Kern, San Luis Obispo, Santa Barbara, and Ventura counties. Dial-a-ride van transportation shuttles are also available, connecting locations internal to the WLA Campus and the greater region.

3.2.2 Existing Public Rail Transit Service

Currently, one (1) rail line, the Expo Light Rail line, serves West Los Angeles. The Expo line provides service between Downtown Los Angeles and Santa Monica. Within the Project study area, two (2) stations are located within two-and-a-half miles (2.5 miles) of the South Campus. More specifically, located approximately two (2) miles southeast of the Project is the Expo/Sepulveda Station and approximately two-and-a-half miles (2.5 miles) southwest of the Project is the Expo/Bundy Station. This rail line operates with six (6) minute headways during weekday AM and PM peak periods and 12-15 minute headways during the weekend. The Expo Light Rail line provides multiple transfer opportunities with bus transit service along with other Metro rail lines allowing for greater connectivity to the Southern California region.

FUTURE WESTWOOD/VA HOSPITAL PURPLE LINE STATION

FIGURE 3-1

2/5/2018

Source: LA METRO

FN: VAWLAHealthCareCtrEIS/Graphic/TRANSIT

PROJECT AREA TRANSIT ROUTES

CRAIN & ASSOCIATES
Transportation Planning
Traffic Engineering
300 Corporate Pointe, Suite 470
Culver City, California 90230
PH (310) 473 6508 F (310) 444 9771
www.crainandassociates.com

3.3 Existing Bicycle and Pedestrian Facilities

The Project study area contains several bicycle facilities with most of the significant bicycle infrastructure located east of the Project site in Westwood. Most notably, lanes on Santa Monica Boulevard connect Santa Monica to Century City; Barrington Avenue connects West Los Angeles to Mar Vista; and Westwood Boulevard connects Westwood to Palms. A summary of all Project study area bicycle facilities is provided in Table 3-3 and a map showing the Project study area bicycle facilities is shown in Figure 3-2.

The roadways near the Project vicinity provide pedestrian sidewalks, generally on both sides of their right-of-way. Sidewalks which are part of a construction project must be compatible with the Americans with Disabilities Act (ADA), and provide curb ramps, adequate clearance widths and minimized cross slopes. The pedestrian facilities provide alternative mode connections to the Project site, including serving as first mile/last mile connections to the transit system.

Near the Project site, Westwood Boulevard east of the Project site (between Ashton Avenue and one [1] block north of Santa Monica Boulevard) is designated by the Los Angeles City Planning Department as a Pedestrian Oriented District. This district is subject to pedestrian-friendly design standards and prohibits auto-centric land uses. This district is within one-half mile (0.50 mile) of the Project site.

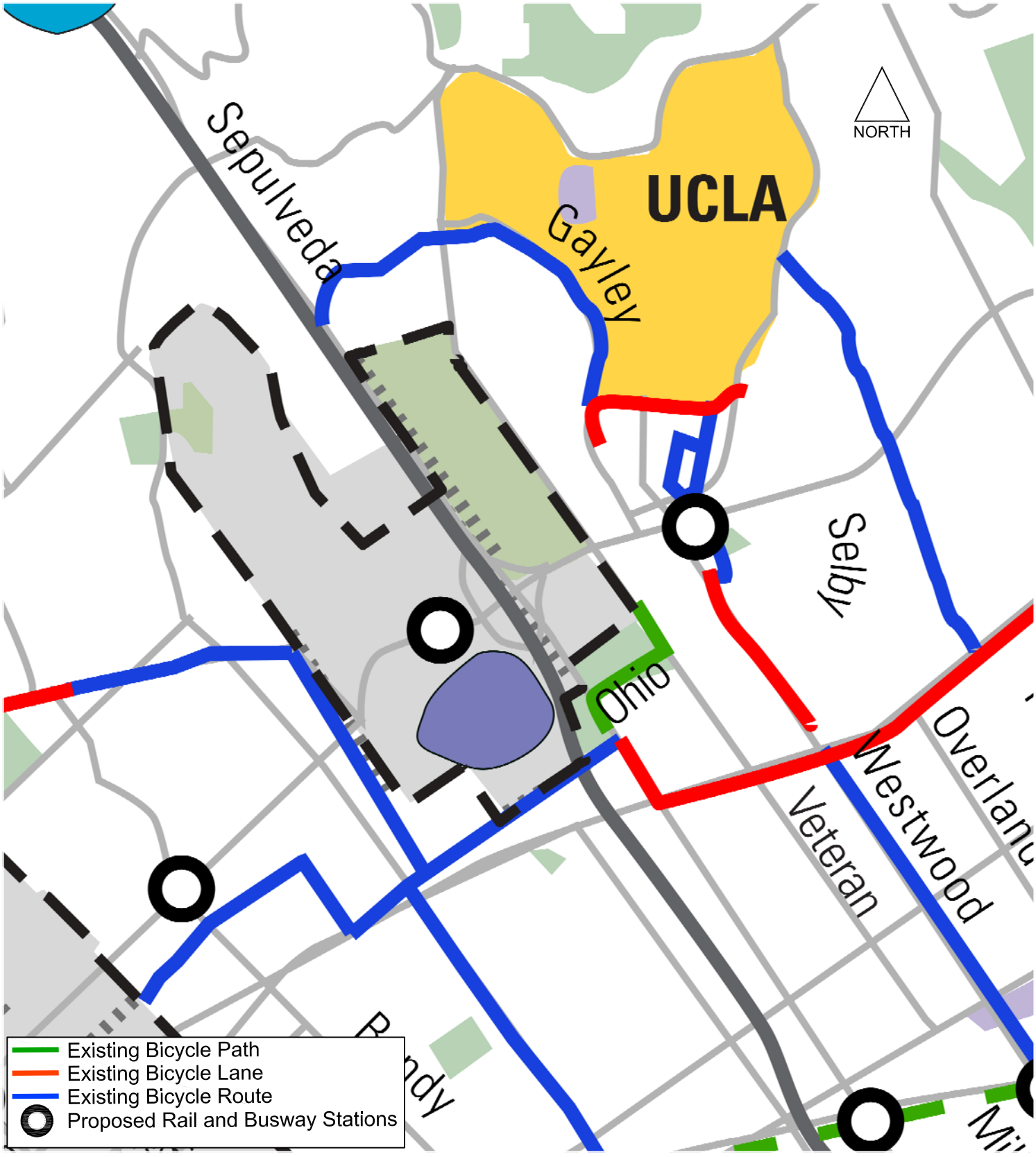


Figure 3-2

8/3/18

FN: VAWLAHealthCareCtrEIS\Existing_Bicycle_Facilities_20180801

EXISTING BICYCLE FACILITIES

CRAIN & ASSOCIATES
Transportation Planning
Traffic Engineering
300 Corporate Pointe, Suite 470
Culver City, California 90230
PH (310) 473 6508 F (310) 444 9771
www.crainandassociates.com

Table 3-3 – Bicycle Facilities in the Project Study Area

Roadway	Segment	Facility
Barrington Ave	Federal Ave to Ohio Ave	Route
Broxton Avenue	Le Conte Avenue to Weyburn Avenue	Route
Federal Avenue	Wilshire Boulevard to Ohio Avenue	Route
Gayley Avenue	Weyburn Avenue to Wilshire Boulevard; southbound between Le Conte Avenue and Weyburn Avenue; Le Conte Avenue to Landfair Avenue	Route
Gayley Avenue	Northbound between Le Conte Avenue and Weyburn Avenue	Lane
Glendon Avenue	Weyburn Avenue to Wellworth Avenue	Route
Kinross Avenue	Gayley Avenue to Glendon Avenue	Route
Le Conte Avenue	Gayley Avenue to Hilgard Avenue	Lane
Midvale Avenue	Wilshire Boulevard to Rochester Avenue	Route
Montana Avenue	Sepulveda Blvd to Landfair Avenue	Route
Ohio Avenue	Eastbound between Purdue Avenue and Sepulveda Boulevard	Lane
Ohio Avenue	Westgate Avenue to Purdue Avenue; westbound between Purdue Avenue and Sepulveda Boulevard; Sepulveda Boulevard to Westholme Avenue	Route
San Vicente Boulevard	City of Santa Monica limit to Bringham Avenue	Lane
San Vicente Boulevard	Bringham Avenue to Wilshire Boulevard	Route
Santa Monica Blvd	Sepulveda Blvd to 310' W/O Ave of the Stars	Lane
Santa Monica Blvd	Willey Ln to Flores St	Lane
Sepulveda Blvd	Bromwood Avenue to Montana Avenue	Lane
Sepulveda Blvd	Ohio Avenue to Santa Monica Boulevard	Route
Texas Avenue	City of Santa Monica limit to Westgate Avenue	Route
Tiverton Avenue	Le Conte Avenue to Glendon Avenue	Route
Wellworth Avenue	Midvale Avenue to Glendon Avenue	Route
Westgate Avenue	Texas Avenue to Ohio Avenue	Route
Westholme Ave	Hilgard Ave to Santa Monica Blvd	Route
Westwood Blvd	Wellworth Ave to 350' N/O Santa Monica Blvd	Lane
Westwood Blvd	350' N/O Santa Monica Blvd to National Blvd	Route
Weyburn Avenue	Gayley Avenue to Tiverton Avenue	Route

Source: LA 2010 Bicycle Plan and Navigate LA

3.4 Existing Year 2017 Traffic Volumes

3.4.1 Intersection Traffic Counts

Vehicular turning movement traffic counts were conducted during the weekday AM and PM peak periods at all 55 locations – at 47 City of Los Angeles study intersections, one (1) of which is shared with the City of Santa Monica and at eight (8) study intersections located in the WLA Campus. The manual counts for 55 of the intersections were conducted over the course of three (3) days from Tuesday, October 17, 2017 to Thursday, October 19, 2017. The counts were conducted from 7:00 AM to 10:00 AM and 3:00 PM to 6:00 PM in order to determine the weekday AM and PM peak hour traffic volumes. The peak-hour volumes for each study intersection were determined on the basis of the combined four (4) highest consecutive 15-minute traffic counts for all vehicular movements entering the intersection.

The existing weekday AM and PM peak-hour traffic volumes at all 55 study intersections are provided in *Appendix D,* Figures D-1 and D-2, respectively. Summary data worksheets of the manual traffic counts of the study intersections are contained in *Appendix A.* The 47 external and eight (8) internal intersections are shown in Figure 1-2.

3.4.2 Roadway Segment Traffic Count

The existing average daily traffic (ADT) volumes at the 22 roadway segments were conducted in concurrence with the intersection traffic counts on Thursday, October 19, 2017. The existing ADT traffic volumes at all 22 roadway segments are provided in *Appendix D*, Figure D-3. The ADT count data sheets are contained in *Appendix A*.

3.5 Existing Intersection Operating Conditions

The 47 study intersections in the City of Los Angeles, one (1) shared study intersection with the City of Santa Monica, and the eight (8) study intersections located in the WLA Campus were analyzed for existing traffic conditions. All the intersections located within the Cities of Los Angeles and Santa Monica are currently signalized. The remaining eight (8) study intersections are located on the WLA Campus. All of these intersections are currently unsignalized. The traffic volumes, along with information pertaining to intersection geometrics, traffic signal operations and on-street parking restrictions, were analyzed using established traffic engineering techniques. All study intersection data worksheets are provided in *Appendix B*.

3.5.1 City of Los Angeles Intersection Analysis Methodology

The *LADOT Traffic Study Policies and Procedures* (December 2016) require the use of the Critical Movement Analysis (CMA) methodology to analyze signalized intersections. This methodology is based on procedures outlined in the Transportation Research Board Circular

212, Interim Materials on Highway Capacity. Using the CMA procedures, a determination can be made of the operating characteristics of an intersection in terms of the Level of Service for different levels of traffic volume and other variables, such as critical signal phases and the number and type of traffic lanes.

The term "Level of Service" (LOS) describes the quality of traffic flow. LOS A through C are indicative of excellent to good traffic flow conditions. LOS D corresponds with fair conditions that may experience substantial delay during portions of the peak hours, but without excessive backups. LOS E represents poor conditions, with volumes at or near the capacity of the intersection and long lines of vehicles that may have to wait through several signal cycles. LOS F is characteristic of failure (i.e., the intersection is overloaded, vehicular movements may be restricted or prevented, and delays and queue lengths become increasingly longer).

A determination of the LOS at an intersection can be obtained through a summation of the critical movement volumes, on a per lane basis, at that intersection. Critical movement volumes are the highest total conflicting traffic for each signal phase. Once the sum of the critical movement volumes has been obtained, the values in Table 3-4 can be used to determine the applicable LOS. Table 3-4 is for planning purposes only.

Table 3-4 – Critical Movement Volume Ranges for Determining Levels of Service (LOS)

	Maximum Sum of Critical Volumes (Vehicles/Hour)		
LOS	**Two Phases**	**Three Phases**	**Four or More Phases**
A	900	855	825
B	1,050	1,000	965
C	1,200	1,140	1,100
D	1,350	1,275	1,225
E	1,500	1,425	1,375
F	----------Not Applicable----------		

Capacity is the total maximum hourly volume of vehicles in the intersection critical lanes that has a reasonable expectation of passing through the intersection under the prevailing roadway and traffic conditions. For planning purposes, the capacity for signalized intersections equates to the maximum critical movement value at LOS E, as indicated in Table 3-4.

The volume-to-capacity ratios (V/C) were calculated by dividing the sum of the critical movement volumes by the appropriate capacity value, for the type of signal control present or proposed at the subject intersections. A description of the different LOS and their corresponding V/C values is shown in Table 3-5.

Table 3-5 – Level of Service (LOS) – Signalized Intersection As a Function of V/C Values

Level of Service	Description of Operating Characteristics	Range of V/C Ratios
A	Excellent. No vehicle waits longer than one red light.	0.000 - 0.600
B	Very Good. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.	0.601 - 0.700
C	Good. Occasionally, drivers may have to wait through more than one red light; backups may develop behind turning vehicles.	0.701 - 0.800
D	Fair. Delays may be substantial during portions of the rush hour, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.	0.801 - 0.900
E	Poor. Represents the most vehicles that intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.	0.901 - 1.000
F	Failure. Backups from nearby intersections or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.	> 1.000

Applying this analysis procedure, the V/C ratio and corresponding LOS can be calculated for each study intersection for existing traffic conditions. These standard calculations are also adjusted to account for signal enhancements not considered in the CMA methodology, including the effects of intersections currently operating under the City of Los Angeles's Automated Traffic Surveillance and Control (ATSAC) system or the upgraded Adaptive Traffic Control System (ATCS).

The ATSAC/ATCS is a highly sophisticated computerized system that continually monitors traffic demand at signalized intersections within the system and modifies signal timing in real time to maximize capacity and decrease overall delay. The ATSAC system has been recognized to increase intersection capacity by approximately seven (7) percent. The upgrade to ATCS is able to increase capacity by an additional three (3) percent, resulting in a total 10 percent increase in intersection capacity. Therefore, per LADOT policy, the standard V/C ratios were

decreased by 0.070 where only the ATSAC system is in effect and by 0.100 where the combined ATSAC+ATCS are in effect. All 47 of the signalized study intersections in Los Angeles have been upgraded with full ATSAC/ATCS signal enhancements.

3.5.2 City of Santa Monica Intersection Analysis Methodology

The established traffic analysis methodology employed by the City of Santa Monica is the Highway Capacity Manual (HCM) Operational Analysis methodology for signalized intersections. The HCM methodology takes into account signal operations thereby calculating the average delay (in seconds) that a motorist will experience in addition to volume-to-capacity (V/C) ratios. Specifically, this method assesses the effects of signal type, timing, phasing, and progression; vehicle mix; and geometrics on delay. As part of the intersection analysis, both delay and V/C are used to evaluate the intersection operations. Level-of-service (LOS) designations are based on the criterion of average control or signal delay per vehicle. Control or signal delay is a measure of driver discomfort, frustration, and fuel consumption, and includes initial deceleration delay approaching the traffic signal, queue move-up time, stopped delay and final acceleration delay. The intersection LOS criteria are noted in Table 3-6.

Table 3-6 – Level of Service Criteria – Signalized Intersection
Delay (Seconds/Vehicles)

LOS	Description of Operating Characteristics	Control Delay per Vehicle (Seconds)
A	Very low control delay, most vehicles do not stop at all	$\leq$ 10.0
B	Relatively low control delay. However, more vehicles stop than LOS A.	>10.0 $\leq$ 20.0
C	Higher control delays. Individual cycle failures may begin to appear. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.	>20.0 $\leq$ 35.0
D	Control delay in the range where the influence of congestion becomes more noticeable. Many vehicles stop and individual cycle failures are noticeable.	>35.0 $\leq$ 55.0
E	High control delay values. Individual cycle failures are frequent occurrences.	>55.0 $\leq$ 80.0
F	High control delay values that often occur with over-saturation. Poor progression and long cycle lengths may also be major contributing causes to such delay levels	> 80.0

Source: *Highway Capacity Manual* (Transportation Research Board, Washington, D.C.; 2000)

3.5.3 WLA Campus Intersection Analysis Methodology

The HCM methodology for unsignalized intersections was applied to the eight (8) internal study intersections. The internal intersections include both all-way stop and two (2)-way stop control. The HCM methodology calculates the LOS based on the intersection delay in seconds for the intersection overall and each approach to determine the average delay that a motorist will experience. The intersection LOS can be determined according to the delay value criteria in Table 3-7.

Table 3-7 – Level of Service Criteria – Unsignalized Intersection Delay (Seconds/Vehicles)

Level Of Service	Overall/Control Delay (Seconds/Vehicle)
A	0 – 10
B	> 10 - 15
C	> 15 - 25
D	> 25 - 35
E	> 35 – 50
F	> 50

3.5.4 Existing Level of Service Results

The existing AM and PM peak hour service level calculations for the 55 study intersections are summarized in Table 3-8. For study intersections within the Cities of Los Angeles and Santa Monica, 45 intersections are currently operating at LOS D or better during the weekday AM and PM peak hours, with the remaining two (2) intersections operating at LOS E or worse during one (1) or both peak periods. For the internal study intersections, all eight (8) intersections are currently operating at LOS D or better during the weekday AM and PM peak hours.

It is noted and acknowledged that the LOS results for intersections along Wilshire Boulevard, Santa Monica Boulevard, Sunset Boulevard, and Olympic Boulevard indicate operations that are better than the level of traffic congestion drivers are experiencing at these intersections. The congestion at the intersections along these corridors is related to the I-405 ramps, which are located directly on the corridor or on adjoining streets to the corridor. It creates downstream blockages in the receiving lanes on these corridors with lower number of vehicles being able to pass through the intersections. Manual traffic counts only collect vehicular movements through the intersection and address if that intersection is a blockage. Therefore, due to the restrictive nature of the bottleneck associated with the freeway ramps, the actual number of vehicles entering the intersection is not indicative of the actual intersection demand. To correct for this phenomenon, a stricter significance impact threshold will be applied at intersections which experience substantial upstream queuing along these corridors.

Table 3-8 – Existing (2017) Traffic Conditions
Level of Service (LOS) Analysis Summary

		Existing Conditions		
No.	Intersection	Peak Hour	CMA	LOS
1	CENTINELA AVENUE & [a]	AM	0.450	A
	WILSHIRE BOULEVARD	PM	0.567	A
2	BUNDY DRIVE &	AM	0.799	C
	WILSHIRE BOULEVARD	PM	0.780	C
3	BUNDY DRIVE &	AM	0.668	B
	SANTA MONICA BOULEVARD	PM	0.734	C
4	BROCKTON AVENUE &	AM	0.465	A
	WILSHIRE BOULEVARD	PM	0.427	A
5	BROCKTON AVENUE &	AM	0.429	A
	SANTA MONICA BOULEVARD	PM	0.450	A
6	WESTGATE AVENUE &	AM	0.439	A
	WILSHIRE BOULEVARD	PM	0.399	A
7	WESTGATE AVENUE &	AM	0.463	A
	SANTA MONICA BOULEVARD	PM	0.487	A
8	GRANVILLE AVENUE &	AM	0.435	A
	WILSHIRE BOULEVARD	PM	0.401	A
9	BARRINGTON PLACE &	AM	0.775	C
	SUNSET BOULEVARD	PM	0.661	B
10	BARRINGTON AVENUE &	AM	0.726	C
	SUNSET BOULEVARD	PM	0.597	A
11	BARRINGTON AVENUE &	AM	0.321	A
	BARRINGTON PLACE	PM	0.336	A
12	BARRINGTON AVENUE &	AM	0.635	B
	MONTANA AVENUE	PM	0.616	B
13	BARRINGTON AVENUE &	AM	0.670	B
	SAN VICENTE BOULEVARD	PM	0.620	B
14	BARRINGTON AVENUE &	AM	0.752	C
	WILSHIRE BOULEVARD	PM	0.701	C
15	BARRINGTON AVENUE &	AM	0.559	A
	OHIO AVENUE	PM	0.647	B
16	BARRINGTON AVENUE &	AM	0.691	B
	SANTA MONICA BOULEVARD	PM	0.613	B
17	SAN VICENTE BOULEVARD/FEDERAL AVENUE &	AM	0.764	C
	WILSHIRE BOULEVARD	PM	0.705	C
18	FEDERAL AVENUE &	AM	0.373	A
	OHIO AVENUE	PM	0.375	A
19	FEDERAL AVENUE &	AM	0.529	A
	SANTA MONICA BOULEVARD	PM	0.423	A
20	SUNSET BOULEVARD &	AM	0.654	B
	WOODBURN DRIVE	PM	0.639	B

Table 3-8 – Existing (2017) Traffic Conditions
Level of Service (LOS) Analysis Summary (cont.)

		Existing Conditions		
No.	Intersection	Peak Hour	CMA	LOS
21	COLBY AVENUE &	AM	0.361	A
	SANTA MONICA BOULEVARD	PM	0.254	A
22	BUTLER AVENUE &	AM	0.385	A
	SANTA MONICA BOULEVARD	PM	0.335	A
23	PURDUE AVENUE &	AM	0.286	A
	SANTA MONICA BOULEVARD	PM	0.193	A
24	CORINTH AVENUE &	AM	0.460	A
	SANTA MONICA BOULEVARD	PM	0.313	A
25	SAWTELLE BOULEVARD &	AM	0.708	C
	OHIO AVENUE	PM	0.598	A
26	SAWTELLE BOULEVARD &	AM	0.523	A
	SANTA MONICA BOULEVARD	PM	0.466	A
27	SAWTELLE BOULEVARD &	AM	0.237	A
	LA GRANGE AVENUE	PM	0.289	A
28	SAWTELLE BOULEVARD &	AM	0.319	A
	MISSISSIPPI AVENUE	PM	0.436	A
29	SAWTELLE BOULEVARD &	AM	0.773	C
	OLYMPIC BOULEVARD	PM	0.760	C
30	BELOIT AVENUE/I-405 SOUTHBOUND RAMPS &	AM	0.923	E
	SANTA MONICA BOULEVARD	PM	0.750	C
31	COTNER AVENUE/I-405 NORTHBOUND RAMPS &	AM	0.649	B
	SANTA MONICA BOULEVARD	PM	0.569	A
32	SEPULVEDA BOULEVARD &	AM	0.706	C
	MONTANA AVENUE	PM	0.628	B
33	SEPULVEDA BOULEVARD &	AM	0.454	A
	CONSTITUTION AVENUE	PM	0.607	B
34	SEPULVEDA BOULEVARD &	AM	0.712	C
	WILSHIRE BOULEVARD	PM	0.848	D
35	SEPULVEDA BOULEVARD &	AM	0.787	C
	OHIO AVENUE	PM	0.815	D
36	SEPULVEDA BOULEVARD &	AM	0.837	D
	SANTA MONICA BOULEVARD	PM	0.740	C
37	SEPULVEDA BOULEVARD &	AM	0.338	A
	NEBRASKA AVENUE	PM	0.438	A
38	SEPULVEDA BOULEVARD &	AM	0.365	A
	LA GRANGE AVENUE	PM	0.472	A
39	SEPULVEDA BOULEVARD &	AM	0.873	D
	OLYMPIC BOULEVARD	PM	0.898	D
40	VETERAN AVENUE &	AM	0.740	C
	WILSHIRE BOULEVARD	PM	0.693	B

Table 3-8 – Existing (2017) Traffic Conditions
Level of Service (LOS) Analysis Summary (cont.)

		Existing Conditions		
No.	Intersection	Peak Hour	CMA	LOS
41	VETERAN AVENUE &	AM	0.683	B
	OHIO AVENUE	PM	0.691	B
42	VETERAN AVENUE &	AM	0.621	B
	SANTA MONICA BOULEVARD	PM	0.750	C
43	GAYLEY AVENUE &	AM	0.756	C
	WILSHIRE BOULEVARD	PM	0.691	B
44	WESTWOOD BOULEVARD &	AM	0.715	C
	WILSHIRE BOULEVARD	PM	0.637	B
45	WESTWOOD BOULEVARD &	AM	0.939	E
	SANTA MONICA BOULEVARD	PM	0.915	E
46	GLENDON AVENUE &	AM	0.628	B
	WILSHIRE BOULEVARD	PM	0.705	C
47	SELBY AVENUE &	AM	0.538	A
	WILSHIRE BOULEVARD	PM	0.672	B
48	DEWEY AVENUE & [b]	AM	6.9	A
	EISENHOWER AVENUE	PM	7.0	A
49	BONSALL AVENUE & [b]	AM	8.4	A
	NIMITZ AVENUE	PM	8.3	A
50	BONSALL AVENUE & [b]	AM	7.9	A
	PERSHING AVENUE	PM	8.1	A
51	BONSALL AVENUE & [b]	AM	10.4	B
	EISENHOWER AVENUE	PM	12.8	B
52	BONSALL AVENUE & [b]	AM	10.1	B
	WILSHIRE BOULEVARD WB RAMPS	PM	13.8	B
53	BONSALL AVENUE & [b]	AM	12.0	B
	WILSHIRE BOULEVARD EB RAMPS	PM	19.3	C
54	BONSALL AVENUE & [b]	AM	9.3	A
	DOWLEN DRIVE	PM	10.0	B
55	SAWTELLE BOULEVARD & [b]	AM	13.7	B
	DOWLEN DRIVE	PM	8.9	A

Notes

a - Intersection shared between the cities of Los Angeles and Santa Monica.

b -WLA Campus intersections, unsignalized

4 TRAFFIC FORECASTING METHODOLOGY

The following section describes the traffic forecasting methodology used to determine the Project trip generation, the geographic distribution of Project trips and the Project trips that were assigned to specific roadways and study intersections.

4.1 Project Traffic Generation

To estimate the Project trip generation associated with the development changes on the WLA Campus, trip generation rates from the Institute of Transportation Engineers (ITE) Trip Generation, 10th Edition manual were used for the calculation of daily, AM and PM peak-hour trips according to the trip rates in Table 4-1, to the extent feasible.

One exception was for permanent supportive housing. Since a large component of the Project is the development of permanent supportive housing on the North Campus, a more in-depth review of the trip generation rates was conducted.

The permanent supportive housing trip generation assessment included collecting empirical data for comparison with existing data sources. Four (4) supportive housing sites that are similar in nature to the Project's future residential uses were surveyed in order to establish trip generation rates that would best reflect this Project use. The four (4) sites involved in the data collection were located in various locations in the City of Los Angeles and included Path Villas at Del Rey, Villas at Gower, LA Kretz Villa Apartments, and Vermont Villas. The sites were surveyed on Thursday, November 2, 2017 from 7:00 AM to 10:00 AM and 3:00 PM to 6:00 PM to account for vehicles entering and exiting the site. The empirical trip generation rates are summarized in as trips per dwelling unit in Table 4-2.

These empirical trip generation rates were compared to both the ITE trip generation rates for Congregate Care Facility (ITE 253), which is the most representative land use, and LADOT trip generation rates for permanent supportive housing from the *LADOT Transportation Impact Study Guidelines* (December 2016).

In review of the rates noted in Table 4-2, the empirical rates that were collected specifically for this study had the lowest trip rates when compared to ITE, with the highest rates, and LADOT, with the middle rates. LADOT rates were utilized for this analysis since they best represent similar local uses.

Table 4-1 – Trip Generation Rates

ITE LAND USE CODE/LAND USE	UNIT	DAILY	AM PEAK HOUR			PM PEAK HOUR		
			I/B Percent	O/B Percent	TOTAL	I/B Percent	O/B Percent	TOTAL
110 General Light Industrial	sf	4.96	88%	12%	0.70	13%	87%	0.63
150 Warehousing	sf	1.74	77%	23%	0.17	27%	73%	0.19
220 Multifamily Housing (Low-Rise)	du	7.32	23%	77%	0.46	63%	37%	0.56
254 Assisted Living	bd	2.60	63%	37%	0.19	38%	62%	0.26
411 Public Park	ac	0.78	59%	41%	0.02	55%	45%	0.11
430 Golf Course	hole	30.38	79%	21%	1.76	53%	47%	2.91
488 Soccer Complex	field	71.33	61%	39%	0.99	66%	34%	16.43
495 Recreational Community Center	sf	28.82	66%	34%	1.76	47%	53%	2.31
560 Church	sf	6.95	60%	40%	0.33	45%	55%	0.49
566 Cemetery	ac	60.20	80%	20%	1.70	31%	69%	4.60
610 Hospital	sf	10.72	68%	32%	0.89	32%	68%	0.97
710 General Office	sf	9.74	86%	14%	1.16	16%	84%	1.15
720 Medical Office	sf	34.80	78%	22%	2.78	28%	72%	3.46
760 Research and Development Center	sf	11.26	75%	25%	0.42	15%	85%	0.49

Notes:

sf = square foot, ac = acre, du = dwelling unit, bd = bed

Daily and AM/PM peak-hour rates from Institute of Transportation Engineers (ITE) , Trip Generation Manual, 10th Edition, 2017.

Assisted Living - Unit of measurement based off 'beds'

Cemetery (LUC 566) - Land use trip generation rates increased by a factor of 10.

Table 4-2 – Permanent Supportive Housing Trip Generation Comparison

LAND USE	SOURCE	DAILY	AM PEAK HOUR			PM PEAK HOUR		
			TOTAL	IN	OUT	TOTAL	IN	OUT
Permanent Supportive Housing	Empirical	0.87	0.09	0.04	0.05	0.09	0.05	0.04
Congregate Care Facility (ITE 253)	ITE	2.02	0.06	0.59	0.41	0.17	0.55	0.45
Permanent Supportive Housing	LADOT	1.27	0.12	0.44	0.56	0.12	0.59	0.41

The Project will increase its residential population with the increase in permanent supportive housing uses. This will result in internal Project trips by North Campus residents in order to access the various services within the WLA Campus that are provided by VA. The inclusion of internal trip capture further reduces Project trips. To account for these internal trips the following assumptions were made for the North Campus:

- 10 percent of the residential uses on the North Campus would travel to the South Campus for work or medical purposes.
- 90 percent of the kitchen on the South Campus would mainly serve residents, patients, and staff already on the South Campus site.

Additionally, as the WLA Campus is readily accessible to public transit, there are VA shuttles and vans circulating throughout the WLA Campus, and the future Metro Purple Line Westwood/VA Hospital Station is planned to be in operation by year 2026, applicable transit credit was incorporated based on the location of the building/facility due to the sheer size of the WLA Campus. For buildings/facilities located north of Pershing Avenue/Constitution Avenue a five (5) percent transit/walk-in/bicycle credit was applied; for buildings/facilities located south (including all of the South Campus) a 15 percent transit/walk-in/bicycle credit was applied to the trip generation to account for the available transit services in the area, and for the active transportation mode choices which would also be available.

The trip generation rates were applied to the appropriate existing and future Project scenarios to determine the daily, AM peak-hour and PM peak-hour trip generations. It is estimated when the Project is fully completed in 2029, the Project would generate 3,949 net daily trips, including 351 (224 inbound/127 outbound) trips during the AM peak hour and 355 trips (127 inbound/228 outbound) during the PM peak hour. The detailed Project traffic generation is presented in Table 4-3.

Table 4-3 – Project Trip Generation

BUILDING/FACILITY	PARCEL	DESCRIPTION	USE	SIZE		ITE LAND USE	VEHICLE TRIPS						
								AM PEAK HOUR			PM PEAK HOUR		
							DAILY	I/B	O/B	TOTAL	I/B	O/B	TOTAL
PROPOSED													
NORTH CAMPUS													
Building 13 & 306	33	Town Center	Office	30,000	sf	710/General Office	292	30	5	35	6	29	35
Building 13 & 306	33	Town Center	Office	30,000	sf	710/General Office	292	30	5	35	6	29	35
Building 13 & 306	33	Town Center	Office	30,000	sf	710/General Office	292	30	5	35	6	29	35
Building 13 & 306	33	Town Center	Office	30,000	sf	710/General Office	292	30	5	35	6	29	35
Building 13 & 306	33	Town Center	Office	30,000	sf	710/General Office	292	30	5	35	6	29	35
Building 13 & 306	33	Town Center	Office	30,000	sf	710/General Office	292	30	5	35	6	29	35
Building 20	51	Adaptive Reuse	Chapel	5,350	sf	560/Church	37	1	1	2	1	2	3
Building 33	54	Adaptive Reuse	Office	1,200	sf	710/General Office	12	1	0	1	0	1	1
Building 66	29	Adaptive Reuse	Office	600	sf	710/General Office	6	1	0	1	0	1	1
Building 113	30	Residence	Residential	70	du	Supportive Housing [*/a]	89	4	4	8	5	3	8
Building 114	30	Residence	Residential	75	du	Supportive Housing [*/a]	95	4	5	9	5	4	9
Building 115	32	Residence	Residential	68	du	Supportive Housing [*/a]	86	4	4	8	5	3	8
Building 117	32	Residence	Residential/Open Space	16	du	Supportive Housing [*/a]	20	1	1	2	1	1	2
Building 156	13	Residence	Residential	55	du	Supportive Housing [*/a]	70	3	4	7	4	3	7
Building 157	13	Residence	Residential	38	du	Supportive Housing [*/a]	48	2	3	5	3	2	5
Building 158	13	Residence	Residential	56	du	Supportive Housing [*/a]	71	3	4	7	4	3	7
Building 199	27	Adaptive Reuse	Office	3,600	sf	710/General Office	35	3	1	4	1	3	4
Building 205	12	Residence	Residential	67	du	Supportive Housing [*/a]	85	4	4	8	5	3	8
Building 206	18	Residence	Residential	54	du	Supportive Housing [*/a]	69	3	3	6	4	2	6
Building 207	18	Residence	Residential	52	du	Supportive Housing [*/a]	66	3	3	6	4	2	6
Building 208	12	Residence	Residential	54	du	Supportive Housing [*/a]	69	3	3	6	4	2	6
Building 210	19	Residence	Residential	42	du	Supportive Housing [*/a]	53	2	3	5	3	2	5
Building 212	34	Residence	Multi-Use/Residential	79	du	Supportive Housing [*/a]	100	4	5	9	5	4	9
Building 222	58	Community Center	Community Center	22,266	sf	495/Recreational Community Center [b]	642	26	13	39	24	27	51
Building 233	20	Town Center	Office	30,000	sf	710/General Office	292	30	5	35	6	29	35
Building 236	22, 27	Town Center	Office	90,000	sf	710/General Office	877	89	15	104	17	87	104
Building 256	17	Residence	Residential	48	du	Supportive Housing [*/a]	61	3	3	6	4	2	6
Building 257	17	Residence	Multi-Use/Residential	62	du	Supportive Housing [*/a]	79	3	4	7	4	3	7
Building 258	13	Residence	Residential	66	du	Supportive Housing [*/a]	84	4	4	8	5	3	8
Building 259	6	Residence	Residential/Open Space	9	du	220/Apartment [a]	66	1	3	4	3	2	5
Building 264	25	Residence	Residential	12	du	Supportive Housing [*/a]	15	0	1	1	1	0	1
Building 300	13	Residence	Residential	71	du	Supportive Housing [*/a]	90	4	5	9	5	4	9
Building T1D1 - MacArthur Field	10	Residence	Residential	205	du	Supportive Housing [*/a]	260	11	14	25	15	10	25
Building T1D2 - Golf Course	6	Residence	Residential	333	du	Supportive Housing [*/a]	423	18	22	40	24	16	40
Building T1D3 - Infill S/O Cal Vet	23	Residence	Residential	135	du	Supportive Housing [*/a]	171	7	9	16	9	7	16
Building T1D4 - NEC Veterans Park	3	Residence	Residential	77	du	Supportive Housing [*/a]	98	4	5	9	5	4	9
Building T1D5 - Golf Course Adjac.	6	Residence	Residential	51	du	Supportive Housing [*/a]	65	3	3	6	4	2	6
Surface Parking Lot	28	Town Center	Central Square	-	-	-	-	-	-	-	-	-	-
Surface Parking Lot	21	Town Center	Office	30,000	sf	710/General Office	292	30	5	35	6	29	35
Surface Parking Lot	22	Town Center	VA Campus Police Station	30,000	sf	710/General Office	292	30	5	35	6	29	35
Surface Parking Lot	29	Town Center	Office	30,000	sf	710/General Office	292	30	5	35	6	29	35
Athletic Fields	11,66	Town Center	Office	30,000	sf	710/General Office	292	30	5	35	6	29	35
Athletic Fields	11,66	Town Center	Office	30,000	sf	710/General Office	292	30	5	35	6	29	35
Columbarium/Cemetery Expansion	63,64, 68-71	Columbarium/Cemetery Expansion	Columbarium	13.0	ac	566/Cemetery	783	18	4	22	19	41	60

Table 4-3 Project Trip Generation (cont.)

BUILDING/FACILITY	PARCEL	DESCRIPTION	USE	SIZE	ITE LAND USE	VEHICLE TRIPS						
							AM PEAK HOUR			PM PEAK HOUR		
						DAILY	I/B	O/B	TOTAL	I/B	O/B	TOTAL
PROPOSED												
					NORTH CAMPUS PROPOSED USES SUBTOTAL	*8,229*	*597*	*213*	*810*	*265*	*597*	*862*
					INTERNAL TRIP CAPTURE FOR RESIDENTIAL USES TRAVELING TO THE SOUTH CAMPUS (10%) [a]	*(233)*	*(10)*	*(12)*	*(22)*	*(13)*	*(9)*	*(22)*
					TRANSIT/WALK-IN/BICYCLE CREDIT FOR BUILDINGS/FACILITIES LOCATED SOUTH OF CONSTITUTION AVENUE/PERSHING AVENUE (15%)	*(464)*	*(38)*	*(10)*	*(48)*	*(13)*	*(37)*	*(50)*
					TRANSIT/WALK-IN/BICYCLE CREDIT FOR BUILDINGS/FACILITIES LOCATED NORTH OF CONSTITUTION AVENUE/PERSHING AVENUE (5%)	*(245)*	*(17)*	*(6)*	*(23)*	*(8)*	*(17)*	*(25)*
					NORTH CAMPUS PROPOSED PROJECT TRIPS (INCLUDING INTERNAL CAPTURE + TTRANSIT/WALK-IN/BICYCLE CREDIT) SUBTOTAL	***7,287***	***532***	***185***	***717***	***231***	***534***	***765***
SOUTH CAMPUS												
Building 23	76/76A	Adaptive Reuse	Residential	1 du	220/Apartment	7	0	0	0	1	0	1
Building 345	85											
Building 401	85											
Building 402	85											
Building 507	81	Outpatient Clinic	Outpatient Clinic	600,000 sf	720/Medical Office	20,880	1,301	367	1,668	581	1,495	2,076
Surface Parking Lot	84	Bed Tower	Hospital	450,000 sf	610/Hospital	4,824	273	128	401	140	297	437
Surface Parking Lot	84	Surge Building	Hospital	75,000 sf	610/Hospital	804	46	21	67	23	50	73
Surface Parking Lot	84	Kitchen	Kitchen	26,500 sf	610/Hospital	284	16	8	24	8	18	26
Surface Parking Lot	86-87	Research Building NRD1	Research	200,000 sf	760/Research & Development Ctr	2,252	63	21	84	15	83	98
					SOUTH CAMPUS PROPOSED USES SUBTOTAL	*29,051*	*1,699*	*545*	*2,244*	*768*	*1,943*	*2,711*
					INTERNAL TRIPS FROM RESIDENTIAL USES ON THE NORTH CAMPUS (10%) [a]	*(233)*	*(12)*	*(10)*	*(22)*	*(9)*	*(13)*	*(22)*
					INTERNAL TRIP CAPTURE FROM KITCHEN USE TRAVELING IN SOUTH CAMPUS (90%) [b]	*(256)*	*(14)*	*(8)*	*(22)*	*(7)*	*(16)*	*(23)*
					INTERNAL TRIP CAPTURE TO KITCHEN USE TRAVELING IN SOUTH CAMPUS (BASED TRIPS ON FROM KITCHEN)	*(256)*	*(8)*	*(14)*	*(22)*	*(16)*	*(7)*	*(23)*
					TRANSIT/WALK-IN/BICYCLE CREDIT (15%)	*(4,246)*	*(250)*	*(77)*	*(327)*	*(110)*	*(286)*	*(396)*
					SOUTH CAMPUS PROPOSED PROJECT TRIPS (INCLUDING INTERNAL CAPTURE + TRANSIT/WALK-IN/BICYCLE CREDIT) SUBTOTAL	***24,060***	***1,415***	***436***	***1,851***	***626***	***1,621***	***2,247***
PROPOSED PROJECT TRIPS FOR THE NORTH AND SOUTH CAMPUS												
NORTH CAMPUS												
					PROPOSED USES SUBTOTAL	*8,229*	*597*	*213*	*810*	*265*	*597*	*862*
					INTERNAL TRIP CAPTURE FOR RESIDENTIAL USES TRAVELING TO THE SOUTH CAMPUS (10%) [a]	*(233)*	*(10)*	*(12)*	*(22)*	*(13)*	*(9)*	*(22)*
					TRANSIT/WALK-IN/BICYCLE CREDIT FOR BUILDINGS/FACILITIES LOCATED SOUTH OF CONSTITUTION AVENUE/PERSHING AVENUE (15%)	*(464)*	*(38)*	*(10)*	*(48)*	*(13)*	*(37)*	*(50)*
					TRANSIT/WALK-IN/BICYCLE CREDIT FOR BUILDINGS/FACILITIES LOCATED NORTH OF CONSTITUTION AVENUE/PERSHING AVENUE (5%)	*(245)*	*(17)*	*(6)*	*(23)*	*(8)*	*(17)*	*(25)*
					NORTH CAMPUS PROPOSED PROJECT TRIPS (INCLUDING INTERNAL CAPTURE + TRANSIT/WALK-IN/BICYCLE CREDIT) SUBTOTAL	***7,287***	***532***	***185***	***717***	***231***	***534***	***765***
SOUTH CAMPUS												
					PROPOSED USES SUBTOTAL	*29,051*	*1,699*	*545*	*2,244*	*768*	*1,943*	*2,711*
					INTERNAL TRIPS FROM RESIDENTIAL USES ON THE NORTH CAMPUS (10%) [a]	*(233)*	*(12)*	*(10)*	*(22)*	*(9)*	*(13)*	*(22)*
					INTERNAL TRIP CAPTURE FROM KITCHEN USE TRAVELING IN SOUTH CAMPUS (90%) [b]	*(256)*	*(14)*	*(8)*	*(22)*	*(7)*	*(16)*	*(23)*
					INTERNAL TRIP CAPTURE TO KITCHEN USE TRAVELING IN SOUTH CAMPUS (BASED ON TRIPS FROM KITCHEN)	*(256)*	*(8)*	*(14)*	*(22)*	*(16)*	*(7)*	*(23)*
					TRANSIT/WALK-IN/BICYCLE CREDIT (15%)	*(4,246)*	*(250)*	*(77)*	*(327)*	*(110)*	*(286)*	*(396)*
					SOUTH CAMPUS PROPOSED PROJECT TRIPS (INCLUDING INTERNAL CAPTURE + TRANSIT/WALK-IN/BICYCLE CREDIT) SUBTOTAL	***24,060***	***1,415***	***436***	***1,851***	***626***	***1,621***	***2,247***
					OVERALL PROPOSED PROJECT TRIPS	***37,280***	***2,296***	***758***	***3,054***	***1,033***	***2,540***	***3,573***
					OVERALL PROPOSED PROJECT TRIPS (INCLUDING INTERNAL CAPTURE + TRANSIT/WALK-IN/BICYCLE CREDIT)	***31,347***	***1,947***	***621***	***2,568***	***857***	***2,155***	***3,012***
EXISTING USES TO BE REMOVED/RENOVATED												
NORTH CAMPUS												
Building 13	33	Campus Facilities	Storage	55,542 sf	150/Warehousing	97	7	2	9	3	8	11
Building 20	51	Wadsworth Chapel	Vacant	5,350 sf	-	0	0	0	0	0	0	0
Building 33	54	Superintendent's Home	Vacant	1,200 sf	-	0	0	0	0	0	0	0
Building 66	29	Trolley Station	Vacant	600 sf	-	0	0	0	0	0	0	0
Building 113	30	Research Lab	Research	57,875 sf	760/Research & Development Ctr	652	18	6	24	4	24	28
Building 114	30	Research Lab	Research	60,938 sf	760/Research & Development Ctr	686	20	6	26	5	25	30
Building 115	32	Research Lab	Research	54,234 sf	760/Research & Development Ctr	611	17	6	23	4	23	27
Building 117	32	Research Lab	Research	15,299 sf	760/Research & Development Ctr	172	5	1	6	1	6	7

Table 4-3 Project Trip Generation (cont.)

BUILDING/FACILITY	PARCEL	DESCRIPTION	USE	SIZE		ITE LAND USE	VEHICLE TRIPS						
							DAILY	AM PEAK HOUR			PM PEAK HOUR		
								I/B	O/B	TOTAL	I/B	O/B	TOTAL
Building 156	13	Vacant	Vacant	48,122	sf	-	0	0	0	0	0	0	0
Building 157	13	Vacant	Vacant	30,928	sf	-	0	0	0	0	0	0	0
			Vacant	17,798	sf	-	0	0	0	0	0	0	0
Building 158	13	VA North Campus Operations	VA North Campus Operations	26,996	sf	710/General Office	263	27	4	31	5	26	31
Building 199	27	Hoover Barracks	Vacant	3,600	sf	-	0	0	0	0	0	0	0
Building 205	12	Vacant	Vacant	45,379	sf	-	0	0	0	0	0	0	0
Building 206	18	VA North Campus Operations	VA North Campus Operations	43,122	sf	710/General Office	420	43	7	50	8	42	50
Building 207	18	Vacant	Vacant	43,698	sf	-	0	0	0	0	0	0	0
Building 208	12	VA North Campus Operations	VA North Campus Operations	41,050	sf	710/General Office	400	41	7	48	8	39	47
Building 210	19	VA North Campus Operations	VA North Campus Operations	32,548	sf	710/General Office	317	33	5	38	6	31	37
Building 212	34	Vacant	Vacant	65,081	sf	-	0	0	0	0	0	0	0
Building 222	58	Facilities Management	Command Center; Pharmacy; Supplies	22,266	sf	710/General Office	217	22	4	26	4	22	26
Building 233	20	Campus Facilities	Hazmat Building	840	sf	710/General Office	8	1	0	1	0	1	1
Building 236	22	Campus Facilities	Police Headquarters	8,626	sf	710/General Office	84	9	1	10	2	8	10
Building 256	17	VA North Campus Operations	VA North Campus Operations	37,990	sf	720/Medical Office	1,322	83	23	106	37	94	131
Building 257	17	VA North Campus Operations	VA North Campus Operations	43,761	sf	720/Medical Office	1,523	95	27	122	42	109	151
Building 258	13	VA North Campus Operations	VA North Campus Operations	53,389	sf	710/General Office	520	53	9	62	10	51	61
Building 259	6	Facilities Management	Facilities Management	7,747	sf	710/General Office	75	8	1	9	1	8	9
Building 264	25	Vacant	Vacant	9,587	sf	-	0	0	0	0	0	0	0
Building 300	13	Dietetics	Kitchen & Office of Information & Technology	59,195	sf	110/General Light Industrial	294	36	5	41	5	32	37
Building 306	36	Campus Facilities	Services	16,769	sf	710/General Office	163	16	3	19	3	16	19
Building 337	23	Vacant	Vacant	12,941	sf	-	0	0	0	0	0	0	0
Building T1D1 - MacArthur Field	16	MacArthur Field	Athletic Fields	2	fields	488/Soccer Complex	143	1	1	2	22	11	33
Building T1D2 - Golf Course	6	Golf Course	Golf Course	9	hole	430/Golf Course	273	13	3	16	14	12	26
Building T1D4 - NEC Veterans Park	3	Park	Park	12	ac	411/City Park	9	0	0	0	1	0	1
INTERNAL TRIP CAPTURE FOR RESIDENTIAL USES TRAVELING TO THE SOUTH CAMPUS (10%) [a]							*0*	*0*	*0*	*0*	*0*	*0*	*0*
TRANSIT/WALK-IN/BICYCLE CREDIT FOR BUILDINGS/FACILITIES LOCATED SOUTH OF CONSTITUTION AVENUE/PERSHING AVENUE (15%)							*(390)*	*(16)*	*(4)*	*(20)*	*(4)*	*(18)*	*(22)*
TRANSIT/WALK-IN/BICYCLE CREDIT FOR BUILDINGS/FACILITIES LOCATED NORTH OF CONSTITUTION AVENUE/PERSHING AVENUE (5%)							*(283)*	*(22)*	*(5)*	*(27)*	*(8)*	*(23)*	*(31)*
NORTH CAMPUS EXISTING USES TO BE REMOVED/RENOVATED (INCLUDING INTERNAL CAPTURE + TRANSIT/WALK-IN/BICYCLE CREDIT) SUBTOTAL							***7,576***	***510***	***112***	***622***	***173***	***547***	***720***
Building 23	76/76A	Governor's Mansion	Vacant	1	du	-	0	0	0	0	0	0	0
Building 304	81	Healthcare	Medical	74,852	sf	720/Medical Office	2,605	162	46	208	73	186	259
Building 345 & Building 507	85, 81	Healthcare	Medical	18,446	sf	720/Medical Office	642	40	11	51	18	46	64
Building 401	85	Healthcare	Medical	29,495	sf	720/Medical Office	1,026	64	18	82	29	73	102
Building 402	85	Healthcare	Medical	23,725	sf	720/Medical Office	826	51	15	66	23	59	82
Building 500 & 501 - Outpatient Clinc Component	82	Healthcare	Medical	396,476	sf	720/Medical Office	13,797	860	242	1,102	384	988	1,372
Building 500 & 501 - Hospital Component	82	Healthcare	Hospital	412,659	sf	610/Hospital	4,424	250	117	367	128	272	400
EXISTING USES TO BE REMOVED/RENOVATED SUBTOTAL							*23,320*	*1,427*	*449*	*1,876*	*655*	*1,624*	*2,279*
INTERNAL TRIPS FROM RESIDENTIAL USES ON THE NORTH CAMPUS [a]							*0*	*0*	*0*	*0*	*0*	*0*	*0*
TRANSIT/WALK-IN/BICYCLE CREDIT (15%)							*(3,498)*	*(214)*	*(67)*	*(281)*	*(98)*	*(244)*	*(342)*
SOUTH CAMPUS EXISTING USES TO BE REMOVED/RENOVATED (INCLUDING INTERNAL CAPTURE + TRANSIT/WALK-IN/BICYCLE CREDIT) SUBTOTAL							***19,822***	***1,213***	***382***	***1,595***	***557***	***1,380***	***1,937***
PROJECT TRIPS FOR EXISTING USES TO BE REMOVED/RENOVATED FOR THE NORTH AND SOUTH CAMPUS													
NORTH CAMPUS													
EXISTING USES TO BE REMOVED/RENOVATED SUBTOTAL							*8,249*	*548*	*121*	*669*	*185*	*588*	*773*
INTERNAL TRIP CAPTURE FOR RESIDENTIAL USES TRAVELING TO THE SOUTH CAMPUS (10%) [a]							*0*	*0*	*0*	*0*	*0*	*0*	*0*
TRANSIT/WALK-IN/BICYCLE CREDIT FOR BUILDINGS/FACILITIES LOCATED SOUTH OF CONSTITUTION AVENUE/PERSHING AVENUE (15%)							*(390)*	*(16)*	*(4)*	*(20)*	*(4)*	*(18)*	*(22)*
TRANSIT/WALK-IN/BICYCLE CREDIT FOR BUILDINGS/FACILITIES LOCATED NORTH OF CONSTITUTION AVENUE/PERSHING AVENUE (5%)							*(283)*	*(22)*	*(5)*	*(27)*	*(8)*	*(23)*	*(31)*
NORTH CAMPUS EXISTING USES TO BE REMOVED/RENOVATED (INCLUDING INTERNAL CAPTURE + TRANSIT/WALK-IN/BICYCLE CREDIT) SUBTOTAL							***7,576***	***510***	***112***	***622***	***173***	***547***	***720***

Table 4-3 Project Trip Generation (cont.)

SOUTH CAMPUS							
EXISTING USES TO BE REMOVED/RENOVATED SUBTOTAL	*23,320*	*1,427*	*449*	*1,876*	*655*	*1,624*	*2,279*
INTERNAL TRIPS FROM RESIDENTIAL USES ON THE NORTH CAMPUS [a]	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TRANSIT/WALK-IN/BICYCLE CREDIT (15%)	*(3,498)*	*(214)*	*(67)*	*(281)*	*(98)*	*(244)*	*(342)*
SOUTH CAMPUS EXISTING USES TO BE REMOVED/RENOVATED (INCLUDING INTERNAL CAPTURE + TRANSIT/WALK-IN/BICYCLE CREDIT) SUBTOTAL	***19,822***	***1,213***	***382***	***1,595***	***557***	***1,380***	***1,937***
OVERALL EXISTING USE TO BE REMOVED/RENOVATED PROJECT TRIPS	***31,569***	***1,975***	***570***	***2,545***	***840***	***2,212***	***3,052***
OVERALL EXISTING USE TO BE REMOVED/RENOVATED PROJECT TRIPS (INCLUDING INTERNAL CAPTURE + TRANSIT/WALK-IN/BICYCLE CREDIT)	***27,398***	***1,723***	***494***	***2,217***	***730***	***1,927***	***2,657***

NET PROJECT TRIPS FOR THE NORTH AND SOUTH CAMPUS							
NET PROJECT TRIPS FOR FUTURE USES - EXISTING USES (NORTH CAMPUS)	**(289)**	**22**	**73**	**95**	**58**	**(13)**	**45**
NET PROJECT TRIPS FOR FUTURE USES - EXISTING USES (SOUTH CAMPUS)	**4,238**	**202**	**54**	**256**	**69**	**241**	**310**
OVERALL NET PROJECT TRIPS	**3,949**	**224**	**127**	**351**	**127**	**228**	**355**

Notes

* - Rates are based on LADOT rates in the Transprotation Impact Study Guidelines (December 2016)

a - 10% internal trip capture applied to North Campus residential uses that would travel to the South Campus for work or hospital purposes.

b - 90% internal trip capture applied since the kitchen will mainly serve residents, patients, and staff already on site.

There may be potential rounding errors

4.2 Project Trip Distribution

The Southern California Associations of Governments (SCAG) developed a model to analyze traffic distribution for the five (5)-county Southern California area. This model was refined by LADOT to develop the Los Angeles Citywide Transportation Model, which addresses conditions throughout the entire City of Los Angeles. The LADOT model was in turn refined to develop the Westside Mobility Plan transportation model (the "Model"), which reflects more detailed conditions on the west side of Los Angeles. The Model was used for an analysis of the West Los Angeles Transportation Improvement and Mitigation Specific Plan (WLA TIMP) update. The Model was used to determine the trip distribution for the Project since it includes the WLA Campus.

Demographic projections have been implemented in the Model to develop Project traffic assignment matrices. The matrices provide trips from the WLA Campus to the other transportation analysis zones (TAZs) throughout the five (5)-county Southern California area. Our analysis counted all trips with one (1) end at the WLA Campus as new trips due to the Project.

4.3 Project Trip Assignment

The Model was also used to generate the Project trip assignments. A Model run of the City of Los Angeles Model was conducted to identify trips to and from the WLA Campus. The trip assignment data was utilized to develop the percentage of the Project generated trips for each of the study intersections by turning movement. Percentages were also developed for each study interchange and freeway study segment. The trip generation values and assignment percentages developed as described above have been used to estimate the number of Project trips during each peak hour at each intersection, roadway segment, interchange, and freeway segment.

The Project study intersection trip assignments for the AM and PM peak hours are provided in *Appendix C*. The study intersection Project trip volumes for the same time periods are provided in *Appendix D*, Figures D-4 and D-5.

5 EXISTING PLUS PROJECT CONDITIONS

The Existing Plus Project traffic conditions are defined by the traffic volumes, roadways and intersection configurations and controls that currently exist in the year 2017, and the addition of traffic that would be generated by the Project. Ambient and related project traffic growth, and any future roadway or infrastructure improvements, other than those directly at the Project site, were not included in this analysis, as this analysis is of the existing condition for the year 2017.

The Existing (2017) Plus Project AM and PM peak-hour volumes were analyzed according to the traffic procedures previously discussed and are located in *Appendix D*, Figures D-6 and D-7. These volumes were used to determine the impacts attributable to the Project relative to existing volumes. The definition of a significant traffic impact and its determination are described in Section 7. The Existing (2017) Plus Project results and impacts are evaluated in Section 8.2 and presented in Table 8-1. The traffic analysis worksheets for Existing (2017) Plus Project conditions are provided in *Appendix B*.

6 FUTURE CONDITIONS

The future traffic conditions are forecast by incorporating traffic growth from two (2) sources with existing traffic volumes. One source is the ambient growth in traffic, which reflects increases in traffic due to regional growth and development outside the study area. The other source is traffic attributable to projects in the vicinity of the study area that are proposed, approved or under construction, commonly referred to as "related projects." The combined traffic volume increases from these two (2) sources provided the basis for the analysis of the "Future Without Project" condition. Project traffic was then analyzed as an incremental addition to the Future Without Project traffic volumes, forming the traffic volumes for the "Future With Project" condition.

6.1 Ambient Traffic Growth

As a first step, future year 2029 conditions were developed from the Model to obtain the cumulative growth from which the annual rate was derived and projected onto the existing traffic counts. The Model contained a 2008 base year and a 2035 future year. This section outlines the procedures that were developed to translate the Model assumption years to the years used in this study. An individual growth rate was developed for each intersection. The growth rate was based on a comparison of:

a) The volumes entering the intersection via the segments ending at the intersection for the Future (2035) "Without Project" scenario in the Model, and

b) The volumes for those same segments for the Existing (2008) scenario in the Model.

The total growth ratio was divided by the 27 year period (2035-2008) to determine the annual growth rate. That annual growth rate was then multiplied by the number of years between the Existing (2017) counts and the Future (2029) conditions (total of 12 years). It should be noted that the development of an individual growth rate for each intersection based on an area-specific model is more rigorous than the standard approach for generating ambient growth. The standard approach uses the same growth factor for all intersections, and bases that growth factor on the publically available results for the study area portion of a county or region-wide model, such as the CMP or Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) model.

6.2 Related Project Traffic Characteristics

As part of the development of the future traffic conditions, related projects located within the Project study area were reviewed. For related projects that were considered outside of the Model growth projections, these trips were added to the Future Without Project conditions. Each related project was assumed to be constructed and occupied by the Project Buildout.

There were a total of 49 related projects located in the cities of Los Angeles and Santa Monica. Of these projects, a total of 14 related projects were determined to be within the Model growth projections. Thus, trips for these projects were not considered as a part of the related project volumes. All 49 related projects are summarized in Table 6-1 and their locations are illustrated in Figure 6-1. The related project AM and PM peak hour traffic volumes for the 35 related projects exceeding the Model growth are located in *Appendix D*, Figures D-8 and D-9, respectively.

6.3 Future Year Traffic Volumes

The Project volumes for the completed Project have been added to the Future (2029) Without Project volumes to develop the With Project volumes. The impacts calculated based on the resulting changes have been compared against the City approved traffic methodologies to determine if the Project impacts will be significant.

The Future (2029) Without Project AM and PM peak-hour traffic volumes are located in *Appendix D*, Figures D-10 and D-11.

The Future (2029) With Project weekday AM and PM peak-hour traffic volumes are provided in *Appendix D*, Figures D-12 and D-13.

6.4 Future Highway Improvements

In order to estimate future traffic conditions in the Project area, a review was conducted of anticipated transportation improvements to the street system serving the Project area. The analysis examined any future highway improvements that are anticipated for the study intersections and roadway segments. These included reviewing the WLA TIMP update, City of Los Angeles Mobility Plan 2035, City of Los Angeles Bureau of Engineering project list, and Santa Monica Land Use and Circulation Element.

The WLA TIMP update includes converting existing mixed flow vehicle lanes (e.g., allowing use by through and turning automobiles, transit vehicles and bicycles) to special use lanes (e.g., no longer allowing through automobiles). In the future year analysis it was assumed that the WLA TIMP update was implemented by year 2029, although no unfunded capacity increases were assumed. Additionally, bicycle improvements have been incorporated into the analysis. No potential freeway changes have been identified as reasonably foreseeable prior to the Project completion.

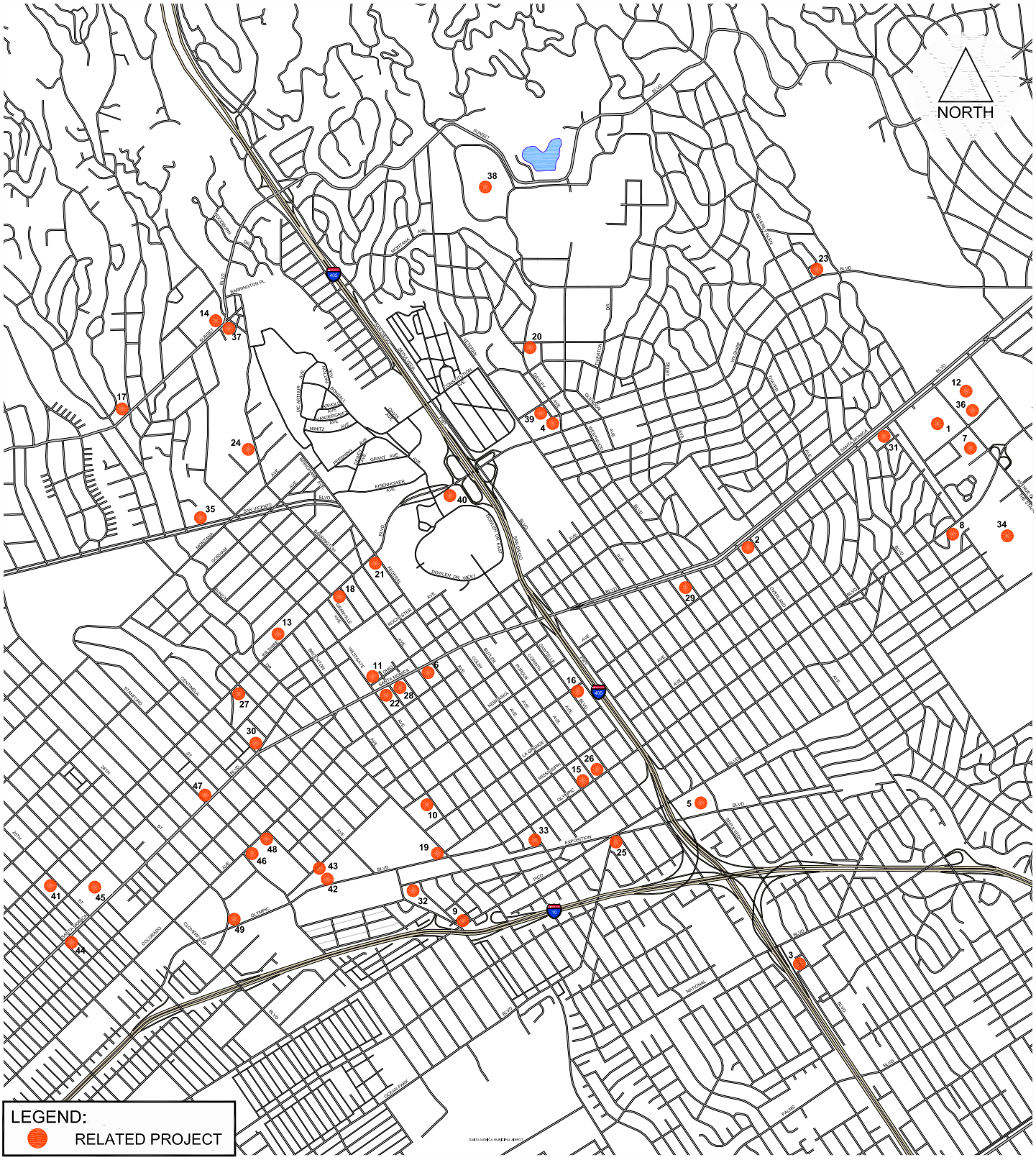


FIGURE 6-1

2/5/2018

FN: VA\WLAMasterPlan\RELPROJS

RELATED PROJECT LOCATION MAP

CRAIN & ASSOCIATES
Transportation Planning
Traffic Engineering
300 Corporate Pointe, Suite 470
Culver City, California 90230
PH (310) 473 6508 F (310) 444 9771
www.crainandassociates.com

Table 6-1 – Related Project List

	ADDRESS	PROJECT TITLE	SIZE		PROJECT DESCRIPTION	DAILY	AM PK HR IN	AM PK HR OUT	AM PK HR TOTAL	PM PK HR IN	PM PK HR OUT	PM PK HR TOTAL
City of Los Angeles												
1.	10250 W Santa Monica Blvd[1]	Westfield Century City-NCP Project	420,881	sf	Shopping Center	9,015	76	47	123	337	365	702
			20	du	Condominium	128	1	5	6	4	3	7
			30,000	sf	Office	357	54	8	62	11	54	65
			(407,819)	*sf*	*Office to be removed*	*(4,854)*	*(476)*	*(65)*	*(541)*	*(87)*	*(425)*	*(512)*
						4,646	**(345)**	**(5)**	**(350)**	**265**	**(3)**	**262**
2.	10700 W Santa Monica Blvd[2][31]		35,170	sf	Office	**(1,402)**	**(102)**	**(14)**	**(116)**	**(10)**	**(47)**	**(57)**
			9,208	sf	Retail							
3.	3115 S Sepulveda Blvd[2]		138	du	Condominiums	**772**	**16**	**57**	**73**	**61**	**50**	**111**
4.	10955 W Wilshire Blvd[3]	Westwood Hotel	250	rm	Hotel	2,230	97	71	168	93	97	190
			9,975	sf	Restaurant	260	4	3	7	13	16	29
			(7,256)	*sf*	*Retail to be removed*	*(218)*	*0*	*0*	*0*	*(22)*	*(27)*	*(49)*
			(8)	*fuel*	*Gas Station to be removed*	*(674)*	*(24)*	*(24)*	*(48)*	*(30)*	*(30)*	*(60)*
						1,598	**77**	**50**	**127**	**54**	**56**	**110**
5.	11122 W Pico Blvd[4]	Casden Sepulveda Project	538	du	Apartment	3,220	50	197	247	155	83	238
			212,450	sf	Retail	8,087	102	48	150	347	362	709
			54,350	sf	Supermarket	3,167	68	43	111	164	156	320
			(6,500)	*sf*	*Retail to be removed*	*(235)*	*9*	*5*	*14*	*8*	*9*	*17*
				other	*Other to be removed*	*(526)*	*18*	*27*	*45*	*9*	*9*	*18*
						13,713	**247**	**320**	**567**	**683**	**619**	**1,302**
6.	11660 W Santa Monica Blvd[2][31]	WLA Vons Supermarket	53,230	sf	Supermarket	**1,946**	**51**	**32**	**83**	**45**	**28**	**73**
7.	2025 S Ave of the Stars[5]	Century Plaza (Hyatt Regency Hotel)	331	du	Condominium	640	20	87	107	41	11	52
			10	du	Housekeeping	42	1	2	3	2	2	4
			394	rms	Hotel	2,294	128	82	210	106	100	206
			15,300	sf	Health/Fitness Club	344	7	9	16	24	20	44
			14,742	sf	Restaurant	658	30	26	56	47	22	69
			83,000	sf	Retail	3,219	47	29	76	156	161	317
			(727)	*rms*	*Hotel to be removed*	*(5,537)*	*(236)*	*(151)*	*(387)*	*(271)*	*(240)*	*(511)*
			(84,275)	*sf*	*Hotel meeting room to be removed*	*(2,516)*	*(84)*	*(53)*	*(137)*	*(65)*	*(57)*	*(122)*
			(32,615)	*sf*	*Health/Fitness Club to be removed*	*(827)*	*(13)*	*(20)*	*(33)*	*(56)*	*(52)*	*(108)*
						(1,683)	**(100)**	**11**	**(89)**	**(16)**	**(33)**	**(49)**
8.	10330 W Bellwood Ave[2]	Bellwood Avenue Senior Care & Medical Office Project	24,265	sf	Medical Office	877	44	12	56	27	72	99
			30	du	Congregate Care Facility	65	1	1	2	3	2	5
			98	bd	Assisted Living Facility	389	18	6	24	21	20	41
			(112)	*du*	*Apartment to be removed*	*(373)*	*(10)*	*(14)*	*(24)*	*(22)*	*(10)*	*(32)*
						958	**53**	**5**	**58**	**29**	**84**	**113**
9.	12301 W Pico Blvd[6]	Hyde Park Condominiums	95	du	Condominium	**367**	**5**	**23**	**28**	**19**	**10**	**29**
10.	1905 S Armacost Ave[2]	New West Charter School	875	stu	School	**2,170**	**497**	**317**	**814**	**214**	**294**	**508**
11.	1466 S Westgate Ave[2][31]	Westside Family YMCA	65,000	sf	Recreation Community Center	**1,204**	**52**	**33**	**85**	**27**	**46**	**73**
12.	1950 S Avenue of the Stars[7]	Century City Center	725,830	sf	Office	3,404	393	21	414	33	337	370
			4,120	sf	Ancillary Retail	0	0	0	0	0	0	0
						3,404	**393**	**21**	**414**	**33**	**337**	**370**
13.	12029 W Wilshire Blvd[2]	Picasso Mixed-Use	108	du	Apartment	607	9	38	47	29	16	45
			13,000	sf	Retail	418	7	6	13	22	26	48
			(22,458)	*sf*	*Mixed-Use to be removed*	*(236)*	*(26)*	*(4)*	*(30)*	*(12)*	*(45)*	*(57)*
						789	**(10)**	**40**	**30**	**39**	**(3)**	**36**
14.	11725 W Sunset Blvd[8]	Archer School for Girls	518	stu	Private School	**276**	**61**	**43**	**104**	**21**	**42**	**63**
15.	11421 W Olympic Blvd[2]		89	du	Apartment	**682**	**10**	**36**	**46**	**34**	**21**	**55**
			6,030	sf	Specialty Retail							

Table 6-1 – Related Project List (cont.)

	ADDRESS	PROJECT TITLE	SIZE	PROJECT DESCRIPTION	DAILY	AM PK HR IN	AM PK HR OUT	AM PK HR TOTAL	PM PK HR IN	PM PK HR OUT	PM PK HR TOTAL
City of Los Angeles											
16.	1900 S Sawtelle Blvd[2][31]		52 du	Apartment	**327**	**13**	**28**	**41**	**25**	**13**	**38**
			3,300 sf	Restaurant							
17.	12001 Sunset Blvd[9]	Brentwood School	265 stu	Private School	**657**	**162**	**103**	**265**	**19**	**26**	**45**
18.	11750 W Wilshire Blvd[10]	Landmark Apartments	376 du	Apartment	2,125	32	131	163	102	54	156
			5,000 sf	Retail	107	1	1	2	12	13	25
			(42,900) sf	*Supermarket to be removed*	*(2,632)*	*(55)*	*(33)*	*(88)*	*(136)*	*(131)*	*(267)*
					(400)	**(22)**	**99**	**77**	**(22)**	**(64)**	**(86)**
19.	12101 W Olympic Blvd[11]	Martin Expo Town Center Mixed-Use	516 du	Apartment	2,625	42	170	212	134	71	205
			40,000 sf	Retail	1,352	20	12	32	64	68	132
			200,000 sf	Office	1,687	189	25	214	32	158	190
			50,000 sf	Grocery Store	2,216	45	28	73	114	110	224
			5,000 sf	Quality Restaurant	292	2	1	3	16	7	23
			4,000 sf	High-Turnover Restaurant	294	17	9	26	15	15	30
			(99,399) sf	*Automobile Sales to be removed*	*(1,315)*	*(86)*	*(48)*	*(134)*	*(61)*	*(119)*	*(180)*
					7,151	**229**	**197**	**426**	**314**	**310**	**624**
20.	10970 W Le Conte Ave[2][31]		38,539 sf	Medical Office	**734**	**31**	**(4)**	**27**	**13**	**70**	**83**
21.	11600 W Wilshire Blvd[12][31]		120,160 sf	Office	1,537	191	26	217	37	179	216
			120,874 sf	Medical Office	4,367	220	58	278	138	355	493
			(168,160) sf	*Office to be removed*	*(1,991)*	*(250)*	*(34)*	*(284)*	*(47)*	*(230)*	*(277)*
			(72,874) sf	*Medical Office to be removed*	*(2,633)*	*(133)*	*(35)*	*(168)*	*(83)*	*(214)*	*(297)*
					1,280	**28**	**15**	**43**	**45**	**90**	**135**
22.	11800 W Santa Monica Blvd[13]	Santa Monica-Westgate Project	150 du	Apartment	848	13	53	66	43	20	63
			20,000 sf	Grocery Store	1,049	22	13	35	53	51	104
			10,000 sf	Shopping Center	194	2	2	4	21	22	43
			10,000 sf	Specialty Retail	360	4	5	9	18	23	41
			(20,382) sf	*Automobile Sales to be removed*	*(625)*	*(28)*	*(9)*	*(37)*	*(20)*	*(30)*	*(50)*
					1,826	**13**	**64**	**77**	**115**	**86**	**201**
23.	888 S Devon Ave[2]		32 du	Apartment	**213**	**3**	**13**	**16**	**10**	**6**	**16**
24.	625 S Barrington Ave[2][31]		46 du	Apartment	**146**	**3**	**8**	**11**	**7**	**4**	**11**
25.	11460 W Gateway Blvd[2]		129 du	Apartment	**1,107**	**(1)**	**84**	**83**	**51**	**17**	**68**
26.	11355 W Olympic Blvd[2]	Trident Center	115,242 sf	Office	**1,271**	**158**	**22**	**180**	**29**	**143**	**172**
			5,000 sf	Restaurant							
27.	12300 W Wilshire Blvd[2][31]		33,392 sf	Medical Office	**838**	**17**	**11**	**28**	**24**	**29**	**53**
28.	11750 W Santa Monica Blvd[2]	Buerge East	187 du	Apartment	**1,006**	**(5)**	**65**	**60**	**80**	**33**	**113**
29.	1855 S Westwood Blvd[14][31]		33 du	Apartment	**347**	**4**	**16**	**20**	**29**	**16**	**45**
			3,000 sf	Retail							
30.	12431 W Rochester Ave[2][31]		50 du	Apartment	**333**	**5**	**21**	**26**	**16**	**9**	**25**
31.	10306 W Santa Monica Blvd[2][31]		65 du	Apartment	**259**	**4**	**16**	**20**	**13**	**6**	**19**
32.	12414 W Exposition Blvd [15]		70,844 sf	Office	**781**	**98**	**13**	**111**	**18**	**88**	**106**
33.	2231 S Barrington Ave [2]		9,731 sf	Office	91	11	2	13	4	20	24
			4,461 sf	Quality Restaurant	301	2	1	3	17	8	25
			2,443 sf	High-Turnover Restaurant	202	9	8	17	12	9	21
			2,750 sf	Light Industrial (Catering)	16	2	1	3	1	2	3
					610	**24**	**12**	**36**	**34**	**39**	**73**
34.	10201 W Pico Blvd [16]	Fox Studios Master Plan	1,099,033 sf	Media Campus	**8,153**	**904**	**84**	**988**	**114**	**465**	**579**

Table 6-1 – Related Project List (cont.)

	ADDRESS	PROJECT TITLE	SIZE		PROJECT DESCRIPTION	DAILY	AM PK HR IN	AM PK HR OUT	AM PK HR TOTAL	PM PK HR IN	PM PK HR OUT	PM PK HR TOTAL
City of Los Angeles												
35.	11973 San Vicente Blvd [17][31]	Brentwood Town Green Project	58,500	sf	Retail	1,360	20	12	32	121	133	254
			8,000	sf	Office	88	11	1	12	4	19	23
			10,500	sf	High-Turnover Restaurant	913	43	39	82	57	36	93
			1	du	Single Family Residential	10	0	1	1	1	0	1
			(13,496)	*sf*	*Office to be removed*	*(149)*	*(18)*	*(3)*	*(21)*	*(6)*	*(32)*	*(38)*
			(680)	*sf*	*Medical Office to be removed*	*(25)*	*(2)*	*0*	*(2)*	*(1)*	*(2)*	*(3)*
			(15,430)	*sf*	*Retail to be removed*	*(555)*	*(10)*	*(7)*	*(17)*	*(27)*	*(35)*	*(62)*
			(3,500)	*sf*	*Nursery to be removed*	*(91)*	*(2)*	*(2)*	*(4)*	*(4)*	*(5)*	*(9)*
			(500)	*sf*	*Café/Coffee Shop to be removed*	*(76)*	*(2)*	*(3)*	*(5)*	*(1)*	*(1)*	*(2)*
			(2)	*du*	*Single Family House to be removed*	*(19)*	*0*	*(2)*	*(2)*	*(1)*	*(1)*	*(2)*
						1,456	**40**	**36**	**76**	**143**	**112**	**255**
36.	10131 Constellation Blvd [18]		483	du	Condominium	**2,806**	**36**	**177**	**213**	**168**	**83**	**251**
37.	115 S Barrington Avenue [19][31]	Augustson Brentwood Village Mixed-Use	20	du	Condominium	**367**	**8**	**9**	**17**	**35**	**33**	**68**
			1,000	sf	High-Turnover Restaurant							
			12,000	sf	Shopping Center							
38.	UCLA [20]	UCLA LRDP Amendment & Tansportation Impact Analysis	1,500,000	sf	School	**(77)**	**(10)**	**(14)**	**(24)**	**(5)**	**17**	**12**
39.	UCLA [21]	UCLA Geffen Academy Project	620	stu	School	**824**	**137**	**123**	**260**	**70**	**83**	**153**
40.	Westwood / VA Hospital Station [22]	Metro Purple Line	40	sp	Kiss & Ride	**490**	**55**	**55**	**110**	**55**	**55**	**110**
City of Santa Monica												
41.	1242 20th St[23]		65,000	sf	Research & Development	527	66	13	79	11	59	70
			16,500	sf	Medical Office	596	31	8	39	17	42	59
			14,000	sf	Cultural Facilities	473	19	10	29	19	19	38
						1,596	**116**	**31**	**147**	**47**	**120**	**167**
42.	3025 Olympic Blvd[24]		172	du	Apartment	1,144	18	70	88	70	37	107
			75,247	sf	Office	830	103	14	117	19	93	112
			8,500	sf	Retail	377	5	3	8	10	13	23
						2,351	**126**	**87**	**213**	**99**	**143**	**242**
43.	3030 Nebraska Ave[25]		177	du	Apartment	1,177	18	72	90	72	38	110
			66,100	sf	Office	729	91	12	103	17	81	98
						1,906	**109**	**84**	**193**	**89**	**119**	**208**
44.	1802 Santa Monica Blvd [26]		23	du	Residential	96	1	5	6	5	2	6
			13,710	sf	Auto Dealer Showroom	189	11	9	20	6	9	15
			1,630	sf	Restaurant	133	3	3	6	5	4	9
			(8)	*du*	*Apartments to be removed*	*(52)*	*(1)*	*(3)*	*(4)*	*(3)*	*(1)*	*(4)*
						366	**14**	**14**	**28**	**13**	**14**	**27**
45.	2121 Santa Monica Blvd[27][31]	Providence Saint John's Health Center South Campus Master Plan	799,000	sf	Medical Office	**28,868**	**1,509**	**401**	**1,910**	**799**	**2,053**	**2,852**
46.	2834 Colorado Ave[28]		191,982	sf	Office	**2,118**	**263**	**36**	**299**	**49**	**237**	**286**
47.	2901 Santa Monica Blvd[25]		50	du	Apartment	333	5	21	26	20	11	31
			8,000	sf	Office	88	11	1	12	2	10	12
						421	**16**	**22**	**38**	**22**	**21**	**43**
48.	2930 Colorado Ave[29]	Village Trailer Park	243	du	Condominium	887	10	44	54	40	22	62
			134	du	Apartment	403	5	19	24	18	10	28
			24,940	sf	Retail	733	20	13	33	22	28	50
			(76)	*du*	*Mobile Homes to be removed*	*(230)*	*(3)*	*(11)*	*(14)*	*(11)*	*(6)*	*(17)*
						1,793	**32**	**65**	**97**	**69**	**54**	**123**
49.	1681 S 26th St[30]	Bergamot Transit Village Center	374,423	sf	Office	3,265	214	29	243	199	74	273
			498	du	Apartment	1,589	20	80	100	75	40	115
			15,500	sf	Restaurant	1,229	45	10	55	55	27	82
			13,891	sf	Retail	410	11	7	18	12	16	28

Table 6-1 – Related Project List (cont.)

Source:

[1] Project description and trip generation data from the Westfield Century City New Century Plan Modified Project Transportation Review, Linscott, Law & Greenspan, Engineers (October 2007).
[2] Project description and trip generation data from the LADOT database.
[3] Project description and trip generation data from the Traffic Impact Analysis for the Revised Hotel Alternative Wilshire Gayley Project, Gibson Transportation Consulting, Inc. (November 2009).
[4] Project description and trip generation data from the Sepulveda and Pico Mixed-Use Development Traffic Impact Analysis Report, by Hirsch/Green Transporation Consulting, Inc (December 2009).
[5] Project description and trip generation data from the Century Plaza Mixed-Use Project Option B Without Office Modified Scenario Supplemental Traffic Impact Study, Crain & Associates (March 2017).
[6] Project description and trip generation data from the LADOT database. Direction split based on ITE LUC 230 (Residential Condominium/Townhouse).
[7] Project description and trip generation data from the Transportation Study for the Century City Center Project, Gibson Transportation Consulting, Inc. (September 2012).
[8] Project descritpion and trip generation data from the Archer Forward: Campus Preservation and Improvement Plan Transportation Analysis Report, Fehr & Peers (February 2014). Trip generation data corresponds to nc school day trips.
[9] Project description and AM and PM peak-hour trip generation data from the Transportation Study for the Brentwood School, Gibson Transportation Consulting, Inc. (February 2015). Daily trip generation and directional sp based on ITE LUC 536 (Private School (K-12)).
[10] Project descritpion and trip generation data from the Transportation Study for the 11750 Wilshire Bouleavrd Project, Gibson Transportation Consulting, Inc. (June 2014).
[11] Project description and trip generation data from the Technical Addendum to the Martin Expo Town Center Transportation Impact Analysis, Fehr & Peers (September 2015).
[12] Project description and trip generation data from the LADOT database. Directional splits based on ITE LUC 710 (General Office) and LUC 720 (Medical Office).
[13] Project description and trip generation data from the Santa Monica-Westgate Project MND (May 2015).
[14] Project description and trip generation data from the LADOT database. Directional splits based on ITE LUC 220 (Apartment).
[15] Project description from the LADOT database. Trip generation data based on ITE LUC 710 (General Office).
[16] Project description and trip generation data from the Draft Fox Master Plan Transportation Impact Study, Crain & Associates (November 2017).
[17] Project description and trip generation data from the Brentwood Town Green Project, Hirsch, Green Transportation Consulting, Inc. (March 2010).
[18] Project description and trip generation data from the 10131 Constellation Boulevard Residential Project Traffic Study, Kaku Associates, Inc. (October 2005).
[19] Project description and trip generation data from the Augustson Brentwood Village Mixed-Use Project MOU, Crain & Associates (November 2017).
[20] Project description and trip generation data from the UCLA LRDP and Student Housing Projects Transportation Impact Analysis, Crain & Associates (August 2017).
[21] Project description and trip generation data from the Geffen Academy Project Traffic Impact Study, Crain & Associates (April 2016).
[22] Project description and trip generation data from the Westwood/VA Hospital Station Passenger Drop-off Facility Traffic Impact Study (December 2017).
[23] Project description from the City of Santa Monica Planning Department. Trip generation data based on ITE LUC 495 (Recreational Community Center), LUC 720 (Medical Office), and LUC 760 (Research & Developmen Center).
[24] Project description from the City of Santa Monica Planning Department. Trip generation data based on ITE LUC 220 (Apartment), LUC 710 (General Office), and LUC 826 (Specialty Retail).
[25] Project description from the City of Santa Monica Planning Department. Trip generation data based on ITE LUC 220 (Apartment) and LUC 710 (General Office).
[26] Project description and trip generation data from the Transportation Study for the 1802 Santa Monica Blvd Mixed-Use Project , Gibson Transportation Consulting, Inc. (November 2013)
[27] Project description from the City of Santa Monica Planning Department. Trip generation data based on ITE LUC 720 (Medical Office).
[28] Project description from the City of Santa Monica Planning Department. Trip generation data based on ITE LUC 710 (General Office).
[29] Project description and trip generation data from the Village Trailer Park Recirculated EIR (November 2012).
[30] Project description from City of Santa Monica Bergamont Transit Village Center FEIR (July 2013).
[31] All land uses for project included within model growth for respective zone. Excluded from additional related project analysis.

The WLA TIMP update identifies several bus transit improvements to be implemented in the Project study area. These improvements include curb-running bus-only lanes on Santa Monica Boulevard and an extension of Rapid bus service along Olympic Boulevard from Century City to Westwood Boulevard. The WLA TIMP also mentions a potential center-running BRT line on Sepulveda Boulevard between Wilshire Boulevard and the 96th Street Transit Station. This project is excluded from the analysis of the future roadway conditions because (1) Metro has yet to decide between BRT, light rail, and other transit options for the Sepulveda Corridor, (2) there is currently no reliable timeline for the completion of this project, and (3) fundamental design and engineering details (which will greatly influence lane configuration changes) have yet to be produced for this project.

In the Project vicinity, the Mobility Plan 2035 Neighborhood Bicycle Path Network indicates the following bicycle facilities are planned for future installation:

- Tier 3 bicycle lane on Bundy Drive, from San Vicente Boulevard to the Marina Freeway (SR-90)
- Bicycle Enhanced Network facility on Barrington Avenue, from Ohio Avenue to Venice Boulevard
- Bicycle Enhanced Network facility on Federal Avenue, from Wilshire Boulevard to Ohio Avenue
- Tier 2 bicycle lane on Butler Avenue, from Ohio Avenue to Santa Monica Boulevard
- Tier 2 bicycle lane on Sepulveda Boulevard, from Ventura Boulevard to Constitution Avenue
- Tier 3 bicycle lane on Sepulveda Boulevard, from approximately 750 feet north of Ohio Avenue to National Boulevard
- Tier 1 protected bicycle lane on Westwood Boulevard, from Le Conte Avenue to Santa Monica Boulevard
- Tier 3 bicycle lane on Westwood Boulevard, from Santa Monica Boulevard to National Boulevard
- Tier 1 protected bicycle lane on San Vicente Boulevard, from the Santa Monica city limits to Wilshire Boulevard
- Tier 2 bicycle lane on Wilshire Boulevard, from Centinela Avenue to Federal Avenue and from Veteran Avenue to the Beverly Hills city limits
- Bicycle Enhanced Network facility on Ohio Avenue, from Westgate Avenue to Federal Avenue
- Tier 1 protected bicycle lane on Ohio Avenue, from Federal Avenue to Westwood Boulevard
- Tier 1 protected bicycle lane on Santa Monica Boulevard, from Ohio Avenue to Westgate Avenue and from Westwood Boulevard to the Beverly Hills city limits

- Tier 3 bicycle lane on Santa Monica Boulevard, from Ohio Avenue to Sepulveda Boulevard

Some of these bicycle infrastructure improvements will likely require modifications to the lane configurations at affected study intersections. The changes at these bicycle-lane-impacted intersections were applied to the future year 2029 traffic conditions, and the existing lane configurations were assumed to prevail for the future conditions at the remaining study intersections.

A review of the City of Los Angeles Bureau of Engineering's "Uniform Project Reporting System" website found no street improvement projects that would affect any of the City of Los Angeles study intersections for future year analyses. Additionally, no potential future highway improvements have been identified for City of Santa Monica roadways located within the study area.

A list of all future highway improvements is included as *Appendix F*. Existing and future lane configurations that illustrate these future highway improvements in relation to the study intersections are shown in *Appendix E*.

6.5 Future Transit Improvements

Several future transit improvements are planned in West Los Angeles. The Metro Purple Line subway is being extended with the western terminus being located on the WLA Campus. At present, the Metro Purple Line subway connects from Koreatown to Los Angeles Union Station, via Downtown Los Angeles. Construction is now ongoing to add seven (7) new stations, including the Westwood/VA Hospital Station, as part of the Metro Purple Line Extension. The estimated year of completion for this subway expansion is dependent upon continued funding and the pace of construction activities; however, Metro currently aims to commence operations of the new station in 2026.

A subway station, the Westwood/VA Hospital Station, will be constructed on the WLA Campus, with the currently preferred location being the south side of Wilshire Boulevard between Bonsall Avenue and the I-405 Southbound On-Ramp. The Westwood/VA Hospital Station is currently programmed to be operational by approximately 2026. The Metro Purple Line VA Hospital Station is included in Table 6-1 Related Project List based upon data provided by Metro.

Future transit improvements identified in the WLA TIMP are mentioned above in Section 6.4.

7 TRAFFIC IMPACT ANALYSIS METHODOLOGY

As the Project study area encompasses multiple jurisdictions, the traffic impact analysis methodologies vary. This section describes the intersection and roadway segment analysis methodologies applied for determination of Project impacts.

7.1 Intersection Analysis Methodology

The 55 study intersections were evaluated using the analysis methodologies approved by the respective cities for both signalized and unsignalized intersections. The City of Los Angeles utilizes the CMA method and City of Santa Monica utilizes the HCM method to determine the level of service for signalized intersections. For the unsignalized study intersections located in the WLA Campus, the HCM method for unsignalized intersections was used since this is the generally accepted methodology for this type of analysis.

7.1.1 Intersection Analysis Scenarios

Traffic conditions and, as applicable, Project traffic impacts, were analyzed at the 55 study intersections for the following conditions:

- Existing (2017) Conditions;
- Existing (2017) Plus Project Conditions;
- Future (2029) Without Project Conditions; and
- Future (2029) With Project Conditions.

7.1.2 Intersection Impact Thresholds and Criteria

The significance of the potential impacts of Project traffic at each study intersection was identified according to the respective City traffic impact thresholds of significance. These thresholds define a significant project traffic impact considering the final V/C ratios. The significant impact criteria for both the City of Los Angeles and the City of Santa Monica are presented in Tables 7-1 and Table 7-2, respectively.

Table 7-1 – City of Los Angeles Criteria for Significant Intersection Traffic Impact – Signalized Intersection

LOS	Final V/C Ratio	Project-Related Increase in V/C Ratio
C	>0.700-0.799	Equal to or greater than 0.04
D	>0.800-0.899	Equal to or greater than 0.02
E,F	>0.900	Equal to or greater than 0.01

Table 7-2 – City of Santa Monica Criteria for Significant Intersection Traffic Impact – Signalized Arterial Intersection

LOS	Final Delay/Vehicle	Project-Related Increase in Average Vehicle Delay/LOS/V/C
A,B,C,D	>0 seconds	Equal to or greater than 15 seconds OR LOS E or F
E	>55 seconds	Any net increase
F	>80 seconds	HCM V/C ratio net increase equal to or greater than 0.005

In addition to the standard significance requirements dictated by the City of Los Angeles and the City of Santa Monica (shown above in Table 7-1 and Table 7-2, respectively), this report adopted a stricter significance criterion for intersections which are prone to frequent upstream blockages along Wilshire Boulevard, Santa Monica Boulevard, Sunset Boulevard, and Olympic Boulevard. Due to upstream queuing, many of the study intersections experience blockages in the receiving lanes which lower the number of vehicles able to pass through the intersection during each signal phase. This corridor-wide vehicular back-up along these four arterials lowers the number of vehicles passing through intersections and therefore creates artificially low V/C ratios. To correct for this phenomenon, a stricter significance impact threshold was applied at all intersections along these four corridors – Wilshire Boulevard, Santa Monica Boulevard, Sunset Boulevard, and Olympic Boulevard. For such intersections, a Project-related V/C increase equal to or greater than 0.01 (the strictest criterion, usually reserved only for intersections operating at LOS E or LOS F) was deemed to be the threshold of significance. This criterion was used at all intersections along these corridors, regardless of the calculated LOS at the intersection.

The unsignalized intersection significant impact criteria utilized in the determination of significant impacts for the two (2)-way stop controlled intersections located in the WLA Campus is presented in Table 7-3. LADOT does not have significant impact criteria for stop-controlled intersections. Therefore, for the purposes of this analysis, the LADOT criteria for transportation infrastructure projects were applied to the unsignalized intersections, as summarized in Table 7-3. It was assumed that a significant traffic impact attributable to a project would occur at a stop-controlled intersection if the increase in the average delay for the stopped movements were six (6) seconds or more when the final LOS is C, four (4) seconds or more when the final LOS is D, or two and one-half (2.5) seconds or more when the final LOS is E or F.

Table 7-3 – WLA Campus Significant Intersection Traffic Impact – Unsignalized (Stop-Controlled) Intersection

LOS	Final Delay/Vehicle	Project-Related Increase in Average Vehicle Delay/LOS
C	>15 seconds	Equal to or greater than 6.0 seconds
D	>25 seconds	Equal to or greater than 4.0 seconds
E or F	>35 seconds	Equal to or greater than 2.5 seconds

7.2 Roadway Segment Analysis Methodology

The Future Without and With Project average daily traffic (ADT) was calculated using the same general methodology used to calculate future intersection volumes, as described in Section 6. The Existing (2017) ADT volumes were collected for each of the 22 street segments over a 24-hour period. The street segment analysis examined Project-related trips for the future year 2029 scenario. Project-related ADT was calculated based on the distribution patterns modeled in the WLA TIMP, with minor alterations made as necessary based on field observations. The distribution pattern opted to determine the Project-related ADT assumed a slightly higher percentage of cut-through trips on residential streets than was depicted in the Model. The future year 2029 scenarios incorporated related project traffic volumes. The future year 2029 scenarios for the residential roadway segments also included a one (1) percent annual ambient growth rate, to account for general traffic growth in the surrounding region.

7.2.1 Residential Roadway Segment Analysis Scenarios

Traffic conditions for the residential roadway segments were analyzed under the same analysis scenarios as noted for study intersections.

7.2.2 Residential Roadway Segment Impact Thresholds and Criteria

According to the latest version of the *LADOT Traffic Study Policies and Procedures* (December 2016) a local residential street shall be deemed significantly impacted based on an increase in the projected ADT volumes as noted in Table 7-4.

Table 7-4 – Criteria for Significant Residential Roadway Segment Traffic Impact

Project ADT with Project (Final ADT)	Project-Related Increase in ADT
0 to 999	120 or more
1,000 to 1,999	12 percent or more of Final ADT
2,000 to 2,999	10 percent or more of Final ADT
3,000 or more	8 percent or more of Final ADT

Source: LADOT Traffic Study Policies and Procedures, 2016

7.2.3 WLA Campus Roadway Segment Analysis Scenarios

Traffic conditions were analyzed under the same analysis scenarios as noted for study intersections as for the internal roadway segments.

7.2.4 WLA Campus Roadway Segment Impact Thresholds and Criteria

The *LADOT Traffic Study Policies and Procedures* (December 2016) establishes criteria and requirements for analyzing roadway segments which are residential in nature. Since the internal roadway segments will be used to examine the impact of Project traffic traveling through the interior of the Project site (not through outside residential streets), LADOT roadway segment analysis criteria are not appropriate and therefore not required. Since no specific impact thresholds have been deemed applicable by any local government agency, internal roadway segments are analyzed without specific impact criteria in this report. However, an internal roadway segment analysis is included in this report to provide a more comprehensive examination of the influence of internal Project trips.

8 PROJECT TRAFFIC ANALYSIS

The summaries of Existing (2017), Existing (2017) Plus Project, and Future (2029) Without and With Project analyses are described below. The traffic analysis worksheets for the analyzed intersections are contained in *Appendix B*. The external and internal intersections are shown in Figure 1-2.

8.1 Existing (2017) Conditions

The Existing (2017) conditions for external study intersections indicate that 45 intersections are currently operating at LOS D or better during the weekday AM and PM peak hours, with the remaining two (2) intersections operating at LOS E or worse during one (1) or both peak periods. For the study intersections within the WLA Campus, all eight (8) intersections are currently operating at LOS D or better during the weekday AM and PM peak hours.

Table 8-1 summarizes the V/C ratios and LOS values for Existing (2017) conditions for the study intersections. The existing traffic volumes during the weekday AM and PM peak hours are presented in *Appendix D*, Figures D-1 and D-2.

8.2 Existing (2017) Plus Project Conditions

With the addition of Project trips, the V/C ratios for most study intersections would remain the same or experience a slight increase during one (1) or both weekday AM or PM peak hours. The LOS designations at four (4) of the 47 external study intersections would deteriorate during one (1) or both peak periods, before the application of mitigation measures. All four (4) intersections would deteriorate by a single level of service. Of the eight (8) internal study intersections, three (3) intersections would deteriorate during one (1) or both peak periods before the application of mitigation measures. Significant impacts attributable to the Project prior to mitigation would occur at a total of eight (8) study intersections. Of the eight (8) significant impacts prior to mitigation, six (6) are located within the City of Los Angeles and two (2) are located within the WLA Campus. (No significant impacts are ultimately anticipated at the final, Future [2029] with Project With Mitigation scenario [See Section 11.4.1].)

Table 8-1 summarizes the V/C ratios and LOS values for Existing (2017) Plus Project conditions for the study intersections. The weekday AM and PM peak hour volumes are provided in *Appendix D*, Figures D-6 through D-7 for the Existing (2017) Plus Project scenario.

Table 8-1 – Existing (2017) and Future (2029) Traffic Conditions, Without and With Project
Level of Service (LOS) Analysis Summary

			Existing (2017) Conditions								Future (2029) Conditions							
			Existing			Plus Project					Without Project			With Project				
No.	Intersection	Peak Hour	V/C	Delay	LOS	V/C	Delay	LOS	Impact	Sig.?	V/C	Delay	LOS	V/C	Delay	LOS	Impact	Sig.?
1	CENTINELA AVENUE & [a/b]	AM	0.450	6.0	A	0.455	6.0	A	0.005	No	0.485	5.9	A	0.489	5.9	A	0.004	No
	WILSHIRE BOULEVARD	PM	0.567	9.6	A	0.568	9.6	A	0.001	No	0.613	9.6	B*	0.614	9.5	B*	0.001	No
2	BUNDY DRIVE & [b]	AM	0.799	-	C	0.802	-	D	0.003	No	1.136	-	F	1.139	-	F	0.003	No
	WILSHIRE BOULEVARD	PM	0.780	-	C	0.783	-	C	0.003	No	1.139	-	F	1.142	-	F	0.003	No
3	BUNDY DRIVE & [b]	AM	0.668	-	B	0.669	-	B	0.001	No	0.826	-	D	0.827	-	D	0.001	No
	SANTA MONICA BOULEVARD	PM	0.734	-	C	0.736	-	C	0.002	No	0.883	-	D	0.884	-	D	0.001	No
4	BROCKTON AVENUE & [b]	AM	0.465	-	A	0.469	-	A	0.004	No	0.518	-	A	0.522	-	A	0.004	No
	WILSHIRE BOULEVARD	PM	0.427	-	A	0.430	-	A	0.003	No	0.489	-	A	0.492	-	A	0.003	No
5	BROCKTON AVENUE & [b]	AM	0.429	-	A	0.430	-	A	0.001	No	0.699	-	B	0.701	-	C	0.002	No
	SANTA MONICA BOULEVARD	PM	0.450	-	A	0.451	-	A	0.001	No	0.709	-	C	0.710	-	C	0.001	No
6	WESTGATE AVENUE & [b]	AM	0.439	-	A	0.443	-	A	0.004	No	0.505	-	A	0.509	-	A	0.004	No
	WILSHIRE BOULEVARD	PM	0.399	-	A	0.403	-	A	0.004	No	0.463	-	A	0.467	-	A	0.004	No
7	WESTGATE AVENUE & [b]	AM	0.463	-	A	0.463	-	A	0.000	No	0.773	-	C	0.774	-	C	0.001	No
	SANTA MONICA BOULEVARD	PM	0.487	-	A	0.490	-	A	0.003	No	0.727	-	C	0.730	-	C	0.003	No
8	GRANVILLE AVENUE & [b]	AM	0.435	-	A	0.439	-	A	0.004	No	0.496	-	A	0.499	-	A	0.003	No
	WILSHIRE BOULEVARD	PM	0.401	-	A	0.405	-	A	0.004	No	0.456	-	A	0.460	-	A	0.004	No
9	BARRINGTON PLACE & [b]	AM	0.775	-	C	0.775	-	C	0.000	No	0.855	-	D	0.855	-	D	0.000	No
	SUNSET BOULEVARD	PM	0.661	-	B	0.661	-	B	0.000	No	0.701	-	C	0.701	-	C	0.000	No
10	BARRINGTON AVENUE & [b]	AM	0.726	-	C	0.726	-	C	0.000	No	0.747	-	C	0.747	-	C	0.000	No
	SUNSET BOULEVARD	PM	0.597	-	A	0.597	-	A	0.000	No	0.618	-	B	0.618	-	B	0.000	No
11	BARRINGTON AVENUE &	AM	0.321	-	A	0.322	-	A	0.001	No	0.381	-	A	0.382	-	A	0.001	No
	BARRINGTON PLACE	PM	0.336	-	A	0.336	-	A	0.000	No	0.353	-	A	0.353	-	A	0.000	No
12	BARRINGTON AVENUE &	AM	0.635	-	B	0.636	-	B	0.001	No	0.706	-	C	0.706	-	C	0.000	No
	MONTANA AVENUE	PM	0.616	-	B	0.616	-	B	0.000	No	0.635	-	B	0.638	-	B	0.003	No
13	BARRINGTON AVENUE &	AM	0.670	-	B	0.675	-	B	0.005	No	0.767	-	C	0.772	-	C	0.005	No
	SAN VICENTE BOULEVARD	PM	0.620	-	B	0.622	-	B	0.002	No	0.665	-	B	0.667	-	B	0.002	No
14	BARRINGTON AVENUE & [b]	AM	0.752	-	C	0.758	-	C	0.006	No	0.831	-	D	0.838	-	D	0.007	No
	WILSHIRE BOULEVARD	PM	0.701	-	C	0.705	-	C	0.004	No	0.774	-	C	0.779	-	C	0.005	No
15	BARRINGTON AVENUE &	AM	0.559	-	A	0.566	-	A	0.007	No	0.595	-	A	0.602	-	B	0.007	No
	OHIO AVENUE	PM	0.647	-	B	0.652	-	B	0.005	No	0.683	-	B	0.687	-	B	0.004	No
16	BARRINGTON AVENUE & [b]	AM	0.691	-	B	0.694	-	B	0.003	No	0.979	-	E	0.983	-	E	0.004	No
	SANTA MONICA BOULEVARD	PM	0.613	-	B	0.621	-	B	0.008	No	0.809	-	D	0.817	-	D	0.008	No
17	SAN VICENTE BOULEVARD/FEDERAL AVENUE & [b]	AM	0.764	-	C	0.770	-	C	0.006	No	0.839	-	D	0.845	-	D	0.006	No
	WILSHIRE BOULEVARD	PM	0.705	-	C	0.710	-	C	0.005	No	0.747	-	C	0.752	-	C	0.005	No
18	FEDERAL AVENUE &	AM	0.373	-	A	0.379	-	A	0.006	No	0.406	-	A	0.411	-	A	0.005	No
	OHIO AVENUE	PM	0.375	-	A	0.379	-	A	0.004	No	0.395	-	A	0.399	-	A	0.004	No

Table 8-1 – Existing (2017) and Future (2029) Traffic Conditions, Without and With Project
Level of Service (LOS) Analysis Summary (cont.)

			Existing (2017) Conditions								Future (2029) Conditions							
		Peak	Existing			Plus Project					Without Project			With Project				
No.	Intersection	Hour	V/C	Delay	LOS	V/C	Delay	LOS	Impact	Sig.?	V/C	Delay	LOS	V/C	Delay	LOS	Impact	Sig.?
19	FEDERAL AVENUE & [b]	AM	0.529	-	A	0.529	-	A	0.000	No	0.795	-	C	0.795	-	C	0.000	No
	SANTA MONICA BOULEVARD	PM	0.423	-	A	0.425	-	A	0.002	No	0.618	-	B	0.621	-	B	0.003	No
20	SUNSET BOULEVARD & [b]	AM	0.654	-	B	0.654	-	B	0.000	No	0.699	-	B	0.699	-	B	0.000	No
	WOODBURN DRIVE	PM	0.639	-	B	0.640	-	B	0.001	No	0.677	-	B	0.678	-	B	0.001	No
21	COLBY AVENUE & [b]	AM	0.361	-	A	0.364	-	A	0.003	No	0.624	-	B	0.627	-	B	0.003	No
	SANTA MONICA BOULEVARD	PM	0.254	-	A	0.257	-	A	0.003	No	0.453	-	A	0.456	-	A	0.003	No
22	BUTLER AVENUE & [b]	AM	0.385	-	A	0.387	-	A	0.002	No	0.632	-	B	0.634	-	B	0.002	No
	SANTA MONICA BOULEVARD	PM	0.335	-	A	0.337	-	A	0.002	No	0.525	-	A	0.528	-	A	0.003	No
23	PURDUE AVENUE & [b]	AM	0.286	-	A	0.287	-	A	0.001	No	0.559	-	A	0.560	-	A	0.001	No
	SANTA MONICA BOULEVARD	PM	0.193	-	A	0.196	-	A	0.003	No	0.394	-	A	0.397	-	A	0.003	No
24	CORINTH AVENUE & [b]	AM	0.460	-	A	0.460	-	A	0.000	No	0.735	-	C	0.735	-	C	0.000	No
	SANTA MONICA BOULEVARD	PM	0.313	-	A	0.316	-	A	0.003	No	0.515	-	A	0.519	-	A	0.004	No
25	SAWTELLE BOULEVARD &	AM	0.708	-	C	0.775	-	C	0.067	YES	0.710	-	C	0.777	-	C	0.067	YES
	OHIO AVENUE	PM	0.598	-	A	0.685	-	B	0.087	No	0.599	-	A	0.686	-	B	0.087	No
26	SAWTELLE BOULEVARD & [b]	AM	0.523	-	A	0.573	-	A	0.050	YES	0.768	-	C	0.798	-	C	0.030	YES
	SANTA MONICA BOULEVARD	PM	0.466	-	A	0.520	-	A	0.054	YES	0.680	-	B	0.733	-	C	0.053	YES
27	SAWTELLE BOULEVARD &	AM	0.237	-	A	0.243	-	A	0.006	No	0.254	-	A	0.259	-	A	0.005	No
	LA GRANGE AVENUE	PM	0.289	-	A	0.308	-	A	0.019	No	0.306	-	A	0.325	-	A	0.019	No
28	SAWTELLE BOULEVARD &	AM	0.319	-	A	0.323	-	A	0.004	No	0.333	-	A	0.337	-	A	0.004	No
	MISSISSIPPI AVENUE	PM	0.436	-	A	0.452	-	A	0.016	No	0.447	-	A	0.463	-	A	0.016	No
29	SAWTELLE BOULEVARD & [b]	AM	0.773	-	C	0.784	-	C	0.011	YES	0.916	-	E	0.917	-	E	0.001	No
	OLYMPIC BOULEVARD	PM	0.760	-	C	0.765	-	C	0.005	No	0.881	-	D	0.888	-	D	0.007	No
30	BELOIT AVENUE/I-405 SOUTHBOUND RAMPS & [b]	AM	0.923	-	E	0.930	-	E	0.007	No	0.982	-	E	0.989	-	E	0.007	No
	SANTA MONICA BOULEVARD	PM	0.750	-	C	0.768	-	C	0.018	YES	0.893	-	D	0.909	-	E	0.016	YES
31	COTNER AVENUE/I-405 NORTHBOUND RAMPS & [b]	AM	0.649	-	B	0.663	-	B	0.014	YES	0.868	-	D	0.880	-	D	0.012	YES
	SANTA MONICA BOULEVARD	PM	0.569	-	A	0.572	-	A	0.003	No	0.846	-	D	0.864	-	D	0.018	YES
32	SEPULVEDA BOULEVARD &	AM	0.706	-	C	0.715	-	C	0.009	No	0.722	-	C	0.729	-	C	0.007	No
	MONTANA AVENUE	PM	0.628	-	B	0.635	-	B	0.007	No	0.653	-	B	0.659	-	B	0.006	No
33	SEPULVEDA BOULEVARD &	AM	0.454	-	A	0.487	-	A	0.033	No	0.483	-	A	0.517	-	A	0.034	No
	CONSTITUTION AVENUE	PM	0.607	-	B	0.607	-	B	0.000	No	0.653	-	B	0.653	-	B	0.000	No
34	SEPULVEDA BOULEVARD & [b]	AM	0.712	-	C	0.723	-	C	0.011	YES	0.733	-	C	0.745	-	C	0.012	YES
	WILSHIRE BOULEVARD	PM	0.848	-	D	0.858	-	D	0.010	YES	0.907	-	E	0.915	-	E	0.008	No
35	SEPULVEDA BOULEVARD &	AM	0.787	-	C	0.790	-	C	0.003	No	0.833	-	D	0.836	-	D	0.003	No
	OHIO AVENUE	PM	0.815	-	D	0.823	-	D	0.008	No	0.879	-	D	0.887	-	D	0.008	No
36	SEPULVEDA BOULEVARD & [b]	AM	0.837	-	D	0.843	-	D	0.006	No	0.938	-	E	0.944	-	E	0.006	No
	SANTA MONICA BOULEVARD	PM	0.740	-	C	0.749	-	C	0.009	No	0.885	-	D	0.896	-	D	0.011	YES
37	SEPULVEDA BOULEVARD &	AM	0.338	-	A	0.342	-	A	0.004	No	0.383	-	A	0.387	-	A	0.004	No
	NEBRASKA AVENUE	PM	0.438	-	A	0.442	-	A	0.004	No	0.508	-	A	0.513	-	A	0.005	No

Table 8-1 – Existing (2017) and Future (2029) Traffic Conditions, Without and With Project
Level of Service (LOS) Analysis Summary (cont.)

			Existing (2017) Conditions								Future (2029) Conditions							
			Existing			Plus Project					Without Project			With Project				
No.	Intersection	Peak Hour	V/C	Delay	LOS	V/C	Delay	LOS	Impact	Sig.?	V/C	Delay	LOS	V/C	Delay	LOS	Impact	Sig.?
38	SEPULVEDA BOULEVARD &	AM	0.365	-	A	0.369	-	A	0.004	No	0.406	-	A	0.410	-	A	0.004	No
	LA GRANGE AVENUE	PM	0.472	-	A	0.476	-	A	0.004	No	0.539	-	A	0.543	-	A	0.004	No
39	SEPULVEDA BOULEVARD & [b]	AM	0.873	-	D	0.878	-	D	0.005	No	1.011	-	F	1.016	-	F	0.005	No
	OLYMPIC BOULEVARD	PM	0.898	-	D	0.901	-	E	0.003	No	1.449	-	F	1.455	-	F	0.006	No
40	VETERAN AVENUE & [b]	AM	0.740	-	C	0.744	-	C	0.004	No	0.967	-	E	0.971	-	E	0.004	No
	WILSHIRE BOULEVARD	PM	0.693	-	B	0.700	-	C	0.007	No	0.848	-	D	0.855	-	D	0.007	No
41	VETERAN AVENUE &	AM	0.683	-	B	0.688	-	B	0.005	No	0.717	-	C	0.722	-	C	0.005	No
	OHIO AVENUE	PM	0.691	-	B	0.695	-	B	0.004	No	0.734	-	C	0.738	-	C	0.004	No
42	VETERAN AVENUE & [b]	AM	0.621	-	B	0.626	-	B	0.005	No	0.807	-	D	0.810	-	D	0.003	No
	SANTA MONICA BOULEVARD	PM	0.750	-	C	0.754	-	C	0.004	No	0.886	-	D	0.894	-	D	0.008	No
43	GAYLEY AVENUE & [b]	AM	0.756	-	C	0.761	-	C	0.005	No	0.865	-	D	0.870	-	D	0.005	No
	WILSHIRE BOULEVARD	PM	0.691	-	B	0.693	-	B	0.002	No	0.751	-	C	0.755	-	C	0.004	No
44	WESTWOOD BOULEVARD & [b]	AM	0.715	-	C	0.717	-	C	0.002	No	0.803	-	D	0.806	-	D	0.003	No
	WILSHIRE BOULEVARD	PM	0.637	-	B	0.640	-	B	0.003	No	0.716	-	C	0.718	-	C	0.002	No
45	WESTWOOD BOULEVARD & [b]	AM	0.939	-	E	0.941	-	E	0.002	No	1.323	-	F	1.325	-	F	0.002	No
	SANTA MONICA BOULEVARD	PM	0.915	-	E	0.924	-	E	0.009	No	1.275	-	F	1.282	-	F	0.007	No
46	GLENDON AVENUE & [b]	AM	0.628	-	B	0.630	-	B	0.002	No	0.681	-	B	0.683	-	B	0.002	No
	WILSHIRE BOULEVARD	PM	0.705	-	C	0.706	-	C	0.001	No	0.760	-	C	0.762	-	C	0.002	No
47	SELBY AVENUE & [b]	AM	0.538	-	A	0.541	-	A	0.0	No	0.601	-	B	0.604	-	B	0.003	No
	WILSHIRE BOULEVARD	PM	0.672	-	B	0.675	-	B	0.0	No	0.722	-	C	0.725	-	C	0.003	No
48	DEWEY AVENUE & [c]	AM	-	6.9	A	-	7.0	A	0.1	No	-	6.9	A	-	7.0	A	0.1	No
	EISENHOWER AVENUE	PM	-	7.0	A	-	7.0	A	0.0	No	-	7.0	A	-	7.0	A	0.0	No
49	BONSALL AVENUE & [c]	AM	-	8.4	A	-	8.4	A	0.0	No	-	8.4	A	-	8.4	A	0.0	No
	NIMITZ AVENUE	PM	-	8.4	A	-	8.4	A	0.0	No	-	8.4	A	-	8.4	A	0.0	No
50	BONSALL AVENUE & [c]	AM	-	9.2	A	-	9.8	A	0.6	No	-	9.2	A	-	9.8	A	0.6	No
	PERSHING AVENUE	PM	-	9.3	A	-	9.9	A	0.6	No	-	9.3	A	-	9.9	A	0.6	No
51	BONSALL AVENUE & [c]	AM	-	10.2	B	-	10.8	B	0.6	No	-	10.2	B	-	10.8	B	0.6	No
	EISENHOWER AVENUE	PM	-	12.6	B	-	14.3	B	1.7	No	-	12.6	B	-	14.3	B	1.7	No
52	BONSALL AVENUE & [c]	AM	-	10.3	B	-	11.3	B	1.0	No	-	10.5	B	-	11.5	B	1.0	No
	WILSHIRE BOULEVARD WB RAMPS	PM	-	13.8	B	-	14.7	B	0.9	No	-	13.9	B	-	14.9	B	1.0	No
53	BONSALL AVENUE & [c]	AM	-	12.0	B	-	13.6	B	1.6	No	-	14.0	B	-	16.5	C	2.5	No
	WILSHIRE BOULEVARD EB RAMPS	PM	-	19.3	C	-	36.2	E	16.9	YES	-	27.8	D	-	57.3	F	29.5	YES
54	BONSALL AVENUE & [c]	AM	-	9.3	A	-	10.0	B	0.7	No	-	9.3	A	-	10.0	B	0.7	No
	DOWLEN DRIVE	PM	-	10.0	B	-	11.6	B	1.6	No	-	10.0	B	-	11.6	B	1.6	No
55	SAWTELLE BOULEVARD & [c]	AM	-	13.7	B	-	25.8	D	12.1	YES	-	13.7	B	-	25.8	D	12.1	YES
	DOWLEN DRIVE	PM	-	8.9	A	-	11.4	B	2.5	No	-	8.9	A	-	11.4	B	2.5	No

Notes

a - Intersection shared between the cities of Los Angeles and Santa Monica.

b - Due to issues with upstream blockages, intersections along Santa Monica Boulevard, Wilshire Boulevard, Sunset Boulevard, and Olympic Boulevard were evaluated using a stricter significance impact threshold. A Project-related v/c increase equal to or greater than 0.01 was applied regardless of LOS. This threshold does not apply to the Wilshire Boulevard ramps on the WLA Campus. These are not mainline intersections.

c - WLA Campus intersection, unsignalized

* - Based on worst LOS for CMA/Delay

8.3 Future (2029) Without Project Conditions

Under Future (2029) Without Project conditions for the future scenario, which includes the addition of ambient growth and the related project traffic, 38 external study intersections are expected to operate at LOS D or better during both weekday AM and PM peak hours. The remaining nine (9) are expected to operate at LOS E or worse during one (1) or both weekday AM and PM peak hours. For the study intersections within the WLA Campus, all eight (8) intersections are expected to operate at LOS D or better during the weekday AM and PM peak hours.

Table 8-1 summarizes the V/C ratios or delay and LOS values for the Future (2029) Without Project conditions for the study intersections. The traffic volumes for the weekday AM and PM peak hours are provided in *Appendix D*, Figures D-10 and D-11.

8.4 Future (2029) With Project Conditions

With the addition of the Project traffic to Future (2029) Without Project volumes, the study intersections would generally continue to operate at the same LOS as under Future (2029) Without Project conditions. Of the 47 external study intersections, a total of five (5) intersections would experience deteriorating level of service. Of the eight (8) study intersections within the WLA Campus, three (3) intersections would experience deteriorating level of service.

There would be a total of eight (8) significant Project impacts with the completion of the Project under the Future (2029) With Project conditions, without mitigation. Of the eight (8) significant impacts prior to mitigation, six (6) are located within the City of Los Angeles and two (2) are located within the WLA Campus. Mitigation measures associated with these impacts are discussed at length in Section 11 (See Section 11.4 – Mitigation Effectiveness for a discussion of the reduced Project impacts with implementation of the Project traffic mitigation measures. No significant impacts are ultimately anticipated at the final, Future [2029] with Project With Mitigation scenario.)

Table 8-1 summarizes the study intersections and provides the V/C ratios or delay and LOS values for Future (2029) With Project conditions. The weekday AM and PM peak hour traffic volumes are provided in *Appendix D*, Figures D-12 and D-13.

8.5 Roadway Segment Impact Analysis

Roadway segment impact analyses were performed for nearby external residential roadway segments and Project internal roadways that have the most potential to be significantly impacted by Project generated traffic traveling through corridors without many signalized intersections as described in Section 7.2. A total of 22 roadway segments were analyzed: 12

external residential roadway segments and 10 internal roadway segments. These segments are shown in Figure 1-2.

A summary of the roadway segment impact analysis is provided in Table 8-2 for the residential street segments and Table 8-3 for the WLA Campus street segments. As shown, none of the analyzed external residential street segments are anticipated to be significantly impacted by Project traffic upon completion. As noted in Section 7.2.4, internal roadway segments were analyzed without specific impact criteria since no specific impact thresholds have been deemed applicable by any local government agency. Nevertheless, the Project-generated ADT shown in Table 8-3 indicates that the Project will likely cause potential intermittent traffic delays along portions of the internal roadway segments. Therefore, Project traffic is not expected to have a significant impact on external, residential street segments; however, Project trips will likely hinder traffic on several internal roadway segments within the WLA Campus.

To alleviate the internal roadway congestion, a set of measures were proposed (see Section 11.4 – Mitigation Effectiveness for a discussion of the reduced Project impacts with implementation of the Project traffic mitigation measures).

Table 8-2 – Residential Street Segment Analysis

			Future (2029)			
	Segment	Existing ADT (2017)	Project-Related ADT	Final ADT	Project % Increase in ADT	Significant?
1	Barrington Ave bet. Crescenda St & Chaparal St	3,538	29	4,016	1%	No
2	Barrington Place bet. Sunset Blvd & Chayote St	10,757	20	12,487	0%	No
3	Barrington Place bet. Barrington Ave & Chayote St	10,076	20	11,680	0%	No
4	Church Lane bet. Elderwood St & Montana Ave	6,707	30	7,588	0%	No
5	Montana Ave bet. Westgate Ave & Barrington Ave	9,866	29	11,282	0%	No
6	Montana Ave bet. Barrington Ave & Bringham Ave	4,511	40	5,123	1%	No
7	Bringham Ave bet. Darlington Ave & San Vicente Ave	6,822	39	7,746	1%	No
8	Rochester Ave bet. Federal Ave & Colby Ave	4,181	60	4,791	1%	No
9	Ohio Ave bet. Stoner Ave & Barrington Ave	7,149	78	8,273	1%	No
10	Butler Ave bet. Wyoming Ave & Ohio Ave	3,775	27	4,281	1%	No
11	Purdue Ave bet. Ohio Ave & Santa Monica Blvd	1,546	38	1,780	2%	No
12	Corinth Ave bet. Massachusetts Ave & Ohio Ave	2,787	50	3,190	2%	No

Table 8-3 – WLA Campus Street Segment Analysis

	Segment	Existing ADT (2017)	Future (2029) Project-Related ADT	Future (2029) Final ADT	Future (2029) Project % Increase in ADT
13	Patton Ave north of Bonsall Ave	261	-2	259	-1%
14	Bonsall Ave bet. Arnold Ave & Vandergrift Ave	2192	-12	2180	-1%
15	Nimitz Ave bet. MacArthur Ave & Bonsall Ave	1058	-8	1050	-1%
16	Constitution Ave east of Davis Ave	3629	-29	3600	-1%
17	Bonsall Ave bet. Pershing Ave & Grant Ave	3472	-24	3448	-1%
18	Dewey Ave bet. Eisenhower Ave & Grant Ave	1161	-3	1158	0%
19	Eisenhower Ave bet. Dewey Ave & Bonsall Ave	1157	-15	1142	-1%
20	Bonsall Ave bet. Eisenhower Ave & Wilshire Blvd Westbound Ramps	7398	-31	7367	0%
21	Bonsall Ave bet. Wilshire Blvd Eastbound Ramps & Dowlen Dr	7760	1651	10391	16%
22	Sawtelle Blvd bet. Dowlen Dr & Ohio Ave	5588	3336	8924	37%

9 CONGESTION MANAGEMENT PROGRAM (CMP) IMPACT ANALYSIS

The traffic impact guidelines of the current *2010 Congestion Management Program (CMP) for Los Angeles County* require analysis of all CMP arterial monitoring locations where a project could add a total of 50 or more trips during either peak hour. Additionally, all freeway monitoring locations where a project could add 150 or more trips in either direction during the peak hours are to be analyzed. Finally, consideration of potential transit impacts is required.

9.1 Arterial Monitoring Impact Analysis

The following five (5) CMP arterial monitoring locations are within or near the Project study area, and are illustrated in Figure 9-1 :

- Sepulveda Boulevard & Wilshire Boulevard (approximately one-quarter [0.25] mile east)
- Westwood Boulevard & Santa Monica Boulevard (approximately one [1] mile southeast)
- Bundy Drive & Santa Monica Boulevard (approximately one [1] mile southwest)
- Beverly Glen Boulevard & Wilshire Boulevard (approximately two [2] miles east)
- Santa Monica Boulevard & Wilshire Boulevard (approximately two-and-a-half [2.5] miles east)

Based on a review of the Project trip generation and trip distribution pattern, the Project traffic volumes were calculated for these five (5) CMP arterial monitoring locations. Table 9-1 displays the number of Project trips which are anticipated to pass through these CMP locations once the Project is completed.

Table 9-1 – CMP Arterial Monitoring Locations – Future (2029) Project Trips

CMP Arterial Monitoring Location	Peak Period	Total Project Trips (2029)	CMP Analysis Required?
Sepulveda Blvd & Wilshire Blvd	AM	83	**Yes**
	PM	91	**Yes**
Westwood Blvd & Santa Monica Blvd	AM	39	No
	PM	47	No
Bundy Dr & Santa Monica Blvd	AM	6	No
	PM	11	No
Beverly Glen Blvd & Wilshire Blvd	AM	17	No
	PM	17	No
Santa Monica Boulevard & Wilshire Boulevard	AM	21	No
	PM	20	No

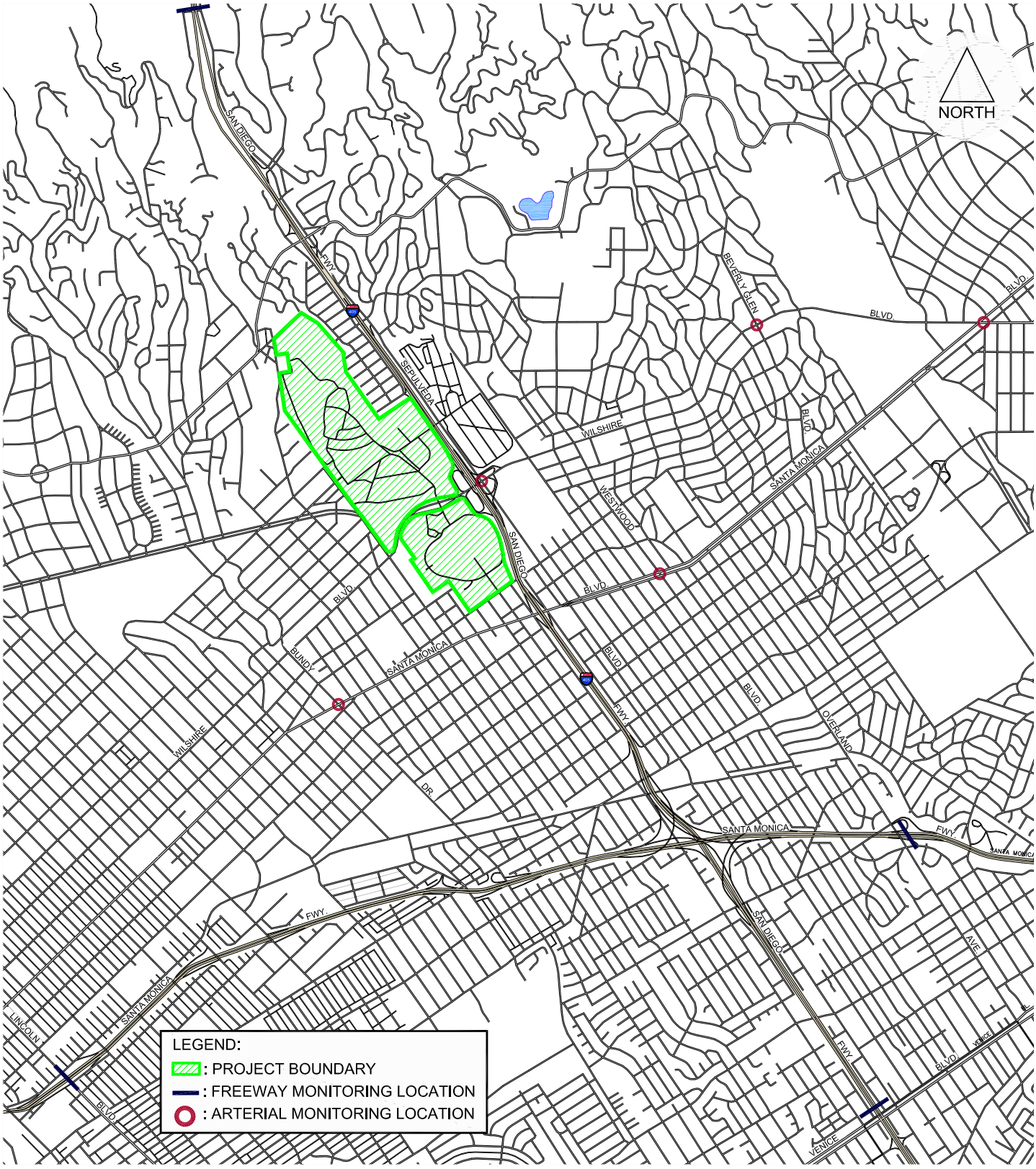


FIGURE 9-1

8/3/2018

FN: VAWLAHealthCareCtrEIS\CMP

CONGESTION MANAGEMENT PROGRAM
MONITORING LOCATIONS

CRAIN & ASSOCIATES
Transportation Planning
Traffic Engineering
300 Corporate Pointe, Suite 470
Culver City, California 90230
PH (310) 473 6508 F (310) 444 9771
www.crainandassociates.com

As shown, the Project is expected to contribute 50 or more peak-hour trips to one (1) of the CMP arterial monitoring locations closest to the Project: Sepulveda Boulevard & Wilshire Boulevard. This is a Project study intersection; consequently, the Project impact at this intersection is analyzed in detail in Section 8. The Project-generated traffic traveling through the impacted CMP arterial monitoring location is predominantly traveling east-west. Therefore, CMP arterial monitoring locations farther to the east and west of the Project site were included as part of the five (5) locations examined in this section. As shown in Table 9-1, the Project is not expected to contribute 50 or more peak-hour trips to any of the other CMP arterial monitoring locations near the Project site. Further, it is expected that Project traffic volume contributions to more distant CMP arterial monitoring locations would be even lower than the locations analyzed in this report, given that Project traffic would disperse across an increasing number of roadways when farther from the Project site.

9.2 Freeway Monitoring Impact Analysis

The following four (4) CMP freeway monitoring locations are located within the Project study area and are most likely to be impacted, and are illustrated in Figure 9-1:

- I-405 Freeway, south of Mulholland Drive (approximately four [4] miles north)
- I-405 Freeway, north of Venice Boulevard (approximately three [3] miles south)
- I-10 Freeway, at Lincoln Boulevard (approximately three [3] miles west)
- I-10 Freeway, east of Overland Boulevard (approximately three [3] miles east)

The traffic volumes that are anticipated to be added by the Project are shown in Table 9-2.

Table 9-2 – CMP Freeway Monitoring Locations – Future (2029) Project Trips

CMP Freeway Monitoring Location	Direction	Total Project Trips at Buildout (2029)	
		AM	*PM*
I-405 Fwy, s/o of Mulholland Dr	Northbound	8	16
	Southbound	22	7
	Total	30	23
I-405 Fwy, n/o Venice Blvd	Northbound	24	36
	Southbound	39	20
	Total	63	56
I-10 Fwy, at Lincoln Blvd	Eastbound	0	0
	Westbound	0	0
	Total	0	0
I-10 Fwy, e/o Overland Blvd	Eastbound	11	20
	Westbound	19	10
	Total	30	30

Upon Project completion, the Project is not expected to add close to 150 or more trips per hour in either direction during either the AM or PM peak hours. Therefore, no significant traffic impacts to CMP freeway monitoring locations are forecast, and no additional freeway analysis is necessary.

9.3 Transit Impact Analysis

The Project study area is served by a number of public transit operators, including Metro, LADOT, Santa Monica Big Blue Bus (BBB), Culver City Bus (CCB), and the Antelope Valley Transit Authority (AVTA). The Project site's relative proximity and frequent bus connectivity to multiple Metro Expo Rail stations links it to Amtrak, Metrolink, other Metro Rail services, Metro Transitway and numerous additional bus routes. It should be noted that once completed, the Metro Purple Line Extension has a planned Westwood/VA Hospital Station, which will be located on the WLA Campus, near Wilshire Boulevard approximately between the North Campus and the South Campus.

There are 11 bus lines that stop within a "comfortable walking distance" (approximately one-quarter mile [0.25 mile]) from the Project site. Of the 11 bus lines, five (5) are walkable from both North and South Campus, three (3) are walkable from the North Campus, three (3) are walkable from the South Campus. These routes, which are described in Section 3.2.1 of the report, have headways ranging from two (2) to 35 minutes for most service lines during peak hours. The section below analyzes the Project transit impacts on the transit system surrounding the Project site.

9.3.1 Existing Transit Service and Ridership

In order to estimate the Project impacts on the transit system, the existing transit ridership and service (used to estimate transit capacity) were first determined for the 11 bus lines operating within a one-quarter mile (0.25 mile) "comfortable walking distance" of the Project site. Current bus ridership information was requested from Metro, LADOT, BBB and CCB. The ridership information was provided in the following formats and utilized for this study:

- BBB ridership information was based on the average of daily counts conducted between August 20, 2017 and November 15, 2017. Boarding, alighting, and load data at bus stops were provided for each bus route, by direction. These data are provided for AM peak, midday, PM peak, and all-day time periods.
- CCB ridership information was based on the average of daily counts conducted between December 14, 2015 and May 15, 2016. Boarding, alighting, and load data at bus stops were provided for each bus route, by direction. These data are provided for AM peak, midday, PM peak, and all-day time periods.
- Metro ridership information was based on the average daily counts conducted in March 2017.

A summary of the bus ridership during the AM and PM peak hours is presented in *Appendix G*. In order to determine the peak-hour transit capacities, ridership information, and transit schedules provided by the transit operators were reviewed. A summary of the bus line service that serves the Project site, including the approximate number of peak-hour runs per direction, is provided in *Appendix G* with the ridership data.

9.3.2 Project Transit Impacts

The analysis of Project impacts on transit was performed by determining if the Project transit trips could be absorbed by the available capacity on the bus lines serving the area. Project transit impacts were analyzed using the trip generation data presented in Table 4-3. All trips assumed by the transit/walk-in/bicycle credit were assumed to only use transit. Per the 2010 CMP guidelines, total person transit trips generated by the Project can be estimated by multiplying the number of vehicle trips reduced due to transit usage by a conversion factor of 1.4. Therefore, on an average weekday, the Project when fully completed would generate an additional transit demand of approximately 1,098 person trips per day, including 98 person trips during the AM peak hour and 106 person trips during the PM peak hour.

Based on information provided through the websites and personnel of area transit operators, in addition to further research, the following assumptions were made to estimate passenger capacity on the 11 bus lines.

- Based on information provided by the operators and through research, the following capacities were assumed:
  - BBB 30-foot bus: 29 seats
  - BBB 40-foot bus: 39 seats
  - BBB 60-foot articulated bus: 56 seats
  - CCB 40-foot bus: 40 seats
  - Metro 45-ft bus: 46 seats
  - Metro 60-foot articulated bus: 57 seats
  - LADOT Commuter Express 40-foot coach bus: 49 seats
- Based on information provided by the operators and through research, the following bus sizes were assumed for each route:
  - BBB Route 1, 2, 14, 15, and 17: 100% 40-foot buses
  - BBB Route 18: 100% 30-foot buses
  - CCB Route 6: 100% 40-foot buses
  - Metro Route 4 and 20: 75% 45-foot buses, 25% 60-foot articulated buses
  - Metro Route 720: 100% 60-foot articulated buses
  - LADOT Commuter Express Route 431: 100% 40-foot coach buses
- The Metro loading standard of 120 percent of seat capacity was adopted to determine the seated plus standing (total) capacity of a bus. According to Metro, this 120 percent

factor, “express[es] the maximum desirable passenger load as a percentage of the available seats per vehicle.” This loading factor was used for all transit buses.

Following the above assumptions, the peak-hour seated plus standing (total) capacities were calculated for the transit system and are summarized in *Appendix G*. Based on the calculations, the transit system has a total capacity of approximately 3,439 passengers during the AM peak hour and 3,192 passengers during the PM peak hour. Adjustments to bus frequency for individual transit lines may be needed as travel patterns change over time; however, this Project is not anticipated to necessitate an increase in capacity.

The Project transit trips would utilize approximately 2.8 percent (98 Project transit users divided by 3,439-passenger transit capacity) of the available AM transit capacity and approximately 3.3 percent (106 Project transit users divided by 3,192-passenger transit capacity) of the available PM transit capacity. Existing transit ridership was determined from the maximum average passenger load per bus for every transit line. Based on the ridership, approximately 38.7 percent of the capacity is currently available in the AM peak hour and approximately 37.6 percent of the capacity is currently available in the PM peak hour. The lowest remaining capacities in either direction during either peak hour currently available for each transit line are as follows (See *Appendix G* for more details.):

- BBB Route 1: 25.8 percent
- BBB Route 2: 25.4 percent
- BBB Route 14: 19.3 percent
- BBB Route 15: 23.4 percent
- BBB Route 17: 49.1 percent
- BBB Route 18: 25.7 percent
- CCB Route 6: 10.4 percent
- Metro Route 4: 42.7 percent
- Metro Route 20: 26.5 percent
- Metro Route 720: 28.0 percent
- LADOT Commuter Express Route 431: 29.1 percent

Based on these percentages, these Project transit trips would not have significant impacts on the transit lines during the weekday AM and PM peak hours. The above analysis compares the Project transit demand with the available capacity in the existing transit system. The VA also provides additional shuttle services within the WLA Campus as well as to other VA clinical facilities with the Los Angeles, Kern, San Luis Obispo, Santa Barbara, and Ventura counties. These shuttles reduce the impact of the Project on the local transit network. In addition, between now and the proposed Project completion in year 2029, transit improvements to the area transit system are planned that include the Metro Purple Line Extension. The additional capacity will help meet the growing area transit demand irrespective of the Project. Any

capacity increases will further ensure that Project transit demand increases do not result in significant impacts.

10 CALTRANS HIGHWAY IMPACT ANALYSIS SCREENING

Per the First Amendment to the Agreement between LADOT and Caltrans District 7 on Freeway Impact Analysis Procedures, December 2015, a freeway impact screening analysis must be performed as part of the Traffic Study Memorandum of Understanding (MOU) to determine if a more detailed Caltrans freeway impact analysis will be required. The screening criteria are as follows:

- The project's peak hour trips would results in a one percent (1%) or more increase to the freeway mainline and/or surface highway segment capacity of a segment operating at LOS E or F (based on an assumed capacity of 2,000 vehicles per hour per lane); or
- The project's peak hour trips would result in a two percent (2%) or more increase to the freeway mainline and/or surface highway segment capacity of a segment operating at LOS D (based on an assumed capacity of 2,000 vehicles per hour per lane); or
- The project's peak hour trips would result in a one percent (1%) or more increase to the capacity of a freeway off-ramp operating at LOS E or F (based on an assumed ramp capacity of 850 vehicles per hour per lane); or
- The project's peak hour trips would results in a two percent (2%) or more increase to the capacity of a freeway off-ramp operating at LOS D (based on an assumed ramp capacity of 850 vehicles per hour per lane).

The freeway screening analysis evaluated Caltrans facilities that included freeway mainline, surface highways and freeway off-ramp locations most likely to be impacted by Project traffic, based on the Project's trip generation and trip distribution patterns. Four (4) freeway mainline segments (per direction), two (2) surface highway segments (per direction), and nine (9) freeway off-ramps were analyzed for the Future (2029) With Project scenario. They included the following:

<u>Freeway Mainline Segments</u>

- I-405 Freeway, north of Sunset Boulevard
- I-405 Freeway, north of the I-10 Freeway
- I-10 Freeway, west of Centinela Avenue
- I-10 Freeway, east of the I-405 Freeway

<u>Surface Highway Segments</u>

- Santa Monica Boulevard, west of I-405
- Santa Monica Boulevard, east of Bundy Drive

<u>Freeway Off-Ramps</u>

- I-405 Southbound Off-Ramp to Church Lane/Sunset Boulevard

- I-405 Southbound Off-Ramp to Westbound Wilshire Boulevard
- I-405 Southbound Off-Ramp to Santa Monica Boulevard
- I-405 Southbound Off-Ramp to Sawtelle Boulevard/Tennessee Avenue
- I-405 Northbound Off-Ramp to Sunset Boulevard
- I-405 Northbound Off-Ramp to Westbound Wilshire Boulevard
- I-405 Northbound Off-Ramp to Santa Monica Boulevard
- I-10 Eastbound Off-Ramp to Pico Boulevard/34th Street
- I-10 Westbound Off-Ramp to Northbound Bundy Drive

As shown in Table 10-1, four (4) of the mainline segments, one (1) of the surface highway intersections, and seven (7) off-ramp locations under the Project would not meet the triggers for impact analysis based on the expected Project volume contributions at these locations. The mainline and surface highway segments and off-ramp locations that are beyond the trigger values and could potentially have impacts on a freeway facility not operating at an acceptable level are as follows:

Surface Highway Segments

- Santa Monica Boulevard, west of I-405

Freeway Off-Ramps

- I-405 Southbound Off-Ramp to Westbound Wilshire Boulevard
- I-405 Northbound Off-Ramp to Santa Monica Boulevard

However, mitigation measures associated with the Project intersection and segment impacts are discussed at length in Section 11. With the application of the mitigation measures proposed for the study intersections and segments, further impact analysis at the Caltrans facilities are no longer triggered (See Section 11.4 – Mitigation Effectiveness for discussion of the reduced Project impacts with implementation of the Project traffic mitigation measures). Further analysis and discussion of these impacts is included in *Appendix H*.

Table 10-1 – Caltrans Freeway Screening Analysis – Future (2029) With Project

Traffic Volume Contributions to State Freeway Mainline and Off-Ramp Facilities

PROJECT TRIP GENERATION

Direction	Net Project AM	Net Project PM
Inbound	224	127
Outbound	127	228

CALTRANS FREEWAY IMPACT ANALYSIS

Segment/Ramp Location	Direction	Proj. Trip Direction	Net Project AM Percentage	Net Project AM Trips	Net Project PM Percentage	Net Project PM Trips	Number of Lanes*	Capacity per Lane**	Total Capacity	Percentage Added by Project AM	Percentage Added by Project PM	Threshold Percentage For Screening**	Ramp LOS (If Over Threshold)	Requires Analysis?
FREEWAY MAINLINE VOLUME/ CAPACITY CALCULATIONS														
I-405 Fwy, n/o Sunset Blvd	Northbound	Outbound	-	8	-	16	4	2000	8000	0.10%	0.20%	1.00%	-	No
	Southbound	Inbound	-	22	-	7	4	2000	8000	0.28%	0.09%	1.00%	-	No
I-405 Fwy, n/o I-10 Fwy	Southbound	Outbound	-	24	-	36	4	2000	8000	0.30%	0.45%	1.00%	-	No
	Northbound	Inbound	-	39	-	20	4	2000	8000	0.49%	0.25%	1.00%	-	No
I-10 Fwy, w/o Centinela Ave	Westbound	Outbound	-	0	-	0	4	2000	8000	0.00%	0.00%	1.00%	-	No
	Eastbound	Inbound	-	0	-	0	4	2000	8000	0.00%	0.00%	1.00%	-	No
I-10 Fwy, e/o I-405 Fwy	Eastbound	Outbound	-	11	-	20	4	2000	8000	0.14%	0.25%	1.00%	-	No
	Westbound	Inbound	-	19	-	10	4	2000	8000	0.24%	0.13%	1.00%	-	No
SURFACE HIGHWAY VOLUME/CAPACITY CALCULATIONS														
Santa Monica Blvd West of I-405 Fwy	Eastbound	-	-	21	-	75	2	1375	2750	0.76%	2.73%	1.00%	-	**YES**
	Westbound	-	-	69	-	24	2	1375	2750	2.51%	0.87%	1.00%	-	**YES**
Santa Monica Blvd East of Bundy Dr	Westbound	-	-	2	-	5	2	1375	2750	0.07%	0.18%	1.00%	-	No
	Eastbound	-	-	4	-	4	2	1375	2750	0.15%	0.15%	1.00%	-	No
FREEWAY OFF-RAMP VOLUME/CAPACITY CALCULATIONS														
SB I-405 Off-Ramp to Church Ln/Sunset Blvd	Southbound	Inbound	-	1	-	0	1	850	850	0.12%	0.00%	1.00%	-	No
SB I-405 Off-Ramp to WB Wilshire Blvd	Southbound	Inbound	-	19	-	7	1	850	850	2.24%	0.82%	1.00%	F***	**YES**
SB I-405 Off-Ramp to Santa Monica Blvd	Southbound	Inbound	-	2	-	0	2	850	1700	0.12%	0.00%	1.00%	-	No
SB I-405 Off-Ramp to Sawtelle Blvd/Tenessee Ave	Southbound	Inbound	-	0	-	0	1	850	850	0.00%	0.00%	1.00%	-	No
NB I-405 Off-Ramp to Sunset Blvd	Northbound	Inbound	-	0	-	0	1	850	850	0.00%	0.00%	1.00%	-	No
NB I-405 Off-Ramp to WB Wilshire Blvd	Northbound	Inbound	-	8	-	10	1	850	850	0.94%	1.18%	1.00%	A***	No
NB I-405 Off-Ramp to Santa Monica Blvd	Northbound	Inbound	-	31	-	10	2	850	1700	1.82%	0.59%	1.00%	F***	**YES**
EB I-10 Off-Ramp to Pico Blvd/34th St	Eastbound	Inbound	-	0	-	0	1	850	850	0.00%	0.00%	1.00%	-	No
WB I-10 Off-Ramp to NB Bundy Dr	Westbound	Inbound	-	0	-	0	1	850	850	0.00%	0.00%	1.00%	-	No

NOTE: Project trips based on model trip distribution for North and South Campus. See Section 4: Traffic Forecasting Methodology. Further analysis for Freeway mainline segments and off-ramps presented in Appendix I. Further analysis of surface highway segments presented in Section 8: Traffic Analysis.

** Criteria and capacity for freeway mainline segments and off-ramps operating at LOS E or F per *Agreement Between City of Los Angeles and Caltrans District 7 On Freeway Impact Analysis Procedure, December 2015* . For surface highway intersections the criteria for ramps is used and capacity is based on CMA capacity assumptions.

*** LOS based on Volumes to Capacity ratio, assuming 850 vehicles per lane per hour. See attached counts.

11 RECOMMENDATIONS

The Project will increase transportation demand in the West Los Angeles area, causing impacts that, prior to mitigation, would be significant at eight (8) study intersections – six (6) intersections are located on public roads external to the Project site and two (2) are located internally within the Project site. Basic automobile traffic capacity increases for the external roadways through physical mitigation have been determined to be infeasible or inappropriate based on the aims of the City of Los Angeles Mobility Plan 2035 and numerous other documents. Additionally, the WLA Campus is not considered an appropriate location for a high traffic volume automobile network. Therefore, in order to mitigate the Project traffic impacts, measures have been developed to reduce the Project traffic generation and improve the efficiency of the area transportation system.

The recommendations below aim to mitigate Project traffic impacts by raising awareness of, and improving the attractiveness of, alternative-mode travel. Strategies have also been developed to increase automobile occupancy rates and improve the effectiveness of roadways.

To meet sustainability goals and reduce Project traffic impacts, the recommended Project mitigation has been tailored to take advantage of the following Project site characteristics:

- The Project site is surrounded by a diverse urban area, comprised of a myriad of land uses which can serve the needs of Project residents and employees;
- The community surrounding the Project includes a variety of residential opportunities for Project employees and staff;
- The Project is served by transit routes, bikeways, and other alternative-mode facilities that are in the process of being enhanced.

The mitigation measures also provide flexibility and allowances for the implementation of additional measures if and when new measures become available. Details and implementation strategies for the recommended mitigation measures are described below.

11.1 Transportation Demand Management Plan

To align with the City of Los Angeles Mobility Plan 2035 (which dictates planning decisions throughout the City of Los Angeles, including the area surrounding the Project site), mitigation measures should prioritize, to the extent possible, the reduction of Project vehicle trips. Therefore, as a first step, mitigation in the form of a Transportation Demand Management (TDM) Plan (the "TDM Plan") was analyzed. The purpose of the TDM Plan is to implement and maintain measures to reduce the number of vehicle trips generated by the Project (especially during the peak commute periods). TDM strategies encourage travelers to and from the Project to use alternative travel methods (modes other than single-occupancy vehicle travel), through the provision of information services and various programs and physical amenities. TDM measures are intended to increase the awareness and attractiveness of alternative mode

travel options. (The TDM incentives will also be available to travelers associated with the WLA Campus existing uses to remain, but no credit for their automobile trip reductions have been taken in this analysis.)

The Los Angeles Municipal Code, section 12.26-J, outlines requirements for TDM plans in the City of Los Angeles. Since the Project falls under federal jurisdiction, the Project is exempt from this TDM ordinance and is not required to create or implement a TDM Plan. However, in order to be consistent with surrounding land use regulations as well as to mitigate the significant traffic impacts, the Project proposes to enact a TDM Plan.

The TDM Plan for the Project will consist of several strategies. Potential TDM measures may include, but would not be limited, to the items listed below. The Project may provide:

- **Enhanced shuttle service**, in addition to the existing internal and regional shuttle service currently provided by the Project. The Project would bolster its shuttle service with better routing and/or more frequency with consideration of the new uses and their locations. Improved shuttle service would also aim to better connect people to and from the Metro Purple Line Westwood/VA Hospital Station. The shuttle alignments would be located to reduce vehicle traffic and provide a convenient, efficient, and safe way for veterans/employees/visitors to move throughout the Project site to reach the entirety of services available to them. This will make traveling by driving an automobile to, and having a private car available at, the WLA Campus less desirable.
    - Internal shuttle routes would incentivize people to utilize alternative modes of travel to reach to and from the Project site, since these internal routes would make it easier to navigate throughout the WLA Campus without a private vehicle. Potential internal routes to be rerouted and/or improved would include providing a shuttle circulator that would connect the North and South Campus. Further details of the proposed routes are provided in *Appendix L*.
    - In addition to the routes serving internal trips, new and/or improved routing on shuttle service connecting to the public transit system serving external origins and destinations are recommended as mitigation. The public transit system connects to important commercial, office, and/or residential centers. The expanded WLA Campus internal shuttle would also serve the external VA shuttle connecting to regional VA facilities as follows:
        - West Los Angeles
        - Downtown Los Angeles
        - Santa Monica
        - Culver City
        - Century City
        - Bakersfield
        - Santa Maria

- **An on-site Transportation Coordinator** (TC), responsible for the development, administration, implementation, and monitoring of the TDM Plan. The TC will be an appropriately trained member of the Project management/administrative staff who is available to employees, staff, residents, patients, and visitors at the Project site during normal business hours. The TC will be provided training through the Rule 2202 Employee Transportation Coordinator program operated by the SCAQMD. The contact information of the TC will be provided to all employees and staff working on site and residents living on site, and posted publicly on a transportation information display board. The TC will be located in a VA WLA management office, or otherwise conveniently and centrally located on the Project site. The TC will provide:
    - Up-to-date transit listing, stops near the Project site, routing, and schedule information.
    - Brochures and information on all alternative travel modes (including pedestrian and bicycle) services.
    - Locations of bicycle showers, lockers, and parking.
    - Details on all rideshare (carpool/vanpool) opportunities for residents and employees.
    - Locations of preferred parking for carpools/vanpools and electric vehicles.
    - Information on the Metro Business Transit Access Pass (BTAP) distribution program (if reasonably available to the Project).
    - Bike-to-Work Day, Walk-to-Work Day, and California Rideshare Week promotional materials.
    - Airport shuttle coordination.

  Given the size of the WLA Campus, the role of TC will require more than one staff person. The persons serving the role of TC will, in aggregate, meet the above and below requirements and functions for the TC.

- **Bulletin boards, display cases, or kiosks** (displaying transportation information) to be placed in areas where the greatest number of employee, staff, residents, patients and/or visitors are likely to see the information. The transportation information should include, but not be limited, to the following:
    - Current routes and schedules for public transit serving the site;
    - Telephone numbers for referrals on transportation information, including numbers for the regional ridesharing agency and local transit operations;
    - Ridesharing promotion material supplied by commuter-oriented organizations;
    - Regional/local bicycle route and facility information;
    - A listing of on-site services or facilities which are available for carpoolers, vanpoolers, bicyclists, and transit riders; and
    - The transportation information displayed will be maintained and updated by the TC.

- **A designated parking area for employee carpools and vanpools** as close as practical to the main pedestrian entrances of the buildings. The designated area shall include at least 10 percent of the parking spaces required for the building. A portion of the spaces within this area shall be signed and striped, sufficient to meet the employee demand for such spaces.
    - In this area there shall be permanent, clearly identified (signed and striped) carpool/vanpool parking spaces (One [1] such parking space for the first 50,000 to 100,000 square feet of gross floor area and one [1] additional such parking space for any buildings over 100,000 square feet of gross floor area).
    - Additional carpool/vanpool spaces within the designated preferential area shall be signed and striped for the use of ridesharing employees if dictated by demand.
    - Parking spaces clearly identified (signed and striped) shall be provided in the designated carpool/vanpool parking area at any time during the buildings' occupancy sufficient to meet employee demand for such spaces. Absent such demand, parking spaces within the designated carpool/vanpool parking area may be used by other vehicles.
    - No signed and striped parking spaces for carpool/vanpool parking shall displace any handicapped parking.
    - A statement that preferential carpool/vanpool spaces are available on-site and a description of the method for obtaining permission to use such spaces shall be included on the required transportation information board.
    - A minimum vertical clearance of seven (7) feet two (2) inches shall be provided for all parking spaces and access ways used by vanpool vehicles when located within a parking structure.
- **A safe and convenient area in which carpool/vanpool vehicles may load and unload passengers**, which will be easy to access for all users of the Project.
- **Sidewalks or other designated pathways** following direct and safe routes from each building in the Project to the external pedestrian circulation system, including pedestrian routes to and from transit stops.
- **Safe and convenient bicycle access** routes from the external bicycle circulation system to bicycle parking facilities on-site.
- **Electric Vehicle Charging station readiness**, with at least five percent (5%) of the total parking spaces provided for all types of parking facilities, but in no case less than one (1) location per newly constructed parking lot, capable of supporting future electric vehicle supply equipment.
- **Employee ridesharing coordination**, providing assistance to employees looking for vanpools to participate in, carpool partners, and bicycle commuter groups. Such coordination will be provided by the TC.

- **New employee and resident orientation**. Every new employee will be required to participate in an orientation, and every new resident will be offered the opportunity to participate in an orientation. This orientation will be offered during the hiring/move-in process and will be conducted by the TC. This orientation will include:
    - An introduction to the concept and goals of TDM, both in general and how it specifically relates to the Project;
    - The physical and programmatic resources and incentives available to all residents; and
    - The distribution of transportation welcome packages, with Metro pass promotional plans; detailed written information about the TDM strategies, resources, and incentives; and phone numbers and website links for further information.
- **Annual continuing employee and resident orientation**, offered on an annual basis to all employees and residents of the Project. This training will be in addition to the orientation offered to new residents, as described above. This training will be required for continuing employees and optional for continuing residents. This orientation will be conducted by the TC. This training will serve to:
    - Review all of the resources and services of the TDM Plan;
    - Address current strengths and shortcomings of the TDM Plan;
    - Solicit comments, complaints, and/or recommendations from residents; and
    - Discuss potential future changes and updates to the TDM Plan.
- **An Automated Web Site.** The existing VA Greater Los Angeles Healthcare System web-site or its successor will have one (1) or more pages dedicated to alternative transportation modes with all the information provided on the Project bulletin board. The information will be updated periodically by the TC or another person acting as webmaster. The Driving Directions section shall be preceded by descriptions of alternative travel modes serving the WLA Campus.
- **Commuter matching services** facilitated by the TC for all employees and residents on an annual basis and for all new employees upon hiring and all new residents upon move-in. These services will include carpool matching and bicycle group-ride matching, both with employees and residents of the Project and with other members of the public (via existing commuter matching services).
- **Bicycle tool and repair stands** provided on-site, in well-lit, employee- and/or resident-accessible areas at a ratio of one (1) per 250 bicycle parking spaces. The tool and repair stand will contain a working pump and other basic tools and be available at all hours of the day, but may be self-serve and not require supervision or assistance from any WLA Campus management or staff.
- **Parking spaces for a carsharing service**, if such a service is available from a third party provider on terms mutually and reasonably acceptable to all parties. Any carshare

service operating at the Project will be available to all members of the carshare service. The Project will offer the carshare space free of charge.

- **Free on-site shared bicycles**, to be used by Project residents, employees, staff, and their guests. These bicycles will be provided free of charge (with the submittal of a reasonable deposit) on an hourly or daily basis. Parking for these bicycles will be provided at select locations on the Project site, separate from other bicycle parking. The TC will maintain a contact list for people interested in forming bike-sharing user groups. Alternatively, a city- or region-wide bike-sharing entity, such as Metro Bike Share, may provide these bicycles, if agreeable terms are met between the Project and a bike-sharing entity and the bikes are available on the Project site or within 500 feet of Project pedestrian entrances.
- **Unbundled parking,** whereby the Project shall not require residents or employees to lease parking. The cost of any parking leased by such residents and/or employees shall be a separate line item in the terms of employment/residency. WLA Campus management may reconfigure the parking spaces and operations from time-to-time in order to facilitate the unbundling of parking. Residents will have the right of first refusal to parking spaces built for their dwelling unit or jobsite. Remaining unbundled parking spaces that are not leased or sold to on-site users may be leased to other on-site users or to off-site residential or commercial users on a month-to-month basis. New leaseholders shall have the opportunity to lease or purchase parking spaces built for their unit or use upon initial occupancy.
- **Proximity travel incentives** to encourage residents who work to work near the Project site and employees to live near the Project site, and all Project-goers conduct other activities (e.g., shopping) near the Project site. The TC will provide information and incentives for residents and employees to shorten their trips and to use alternative modes when feasible. This will include the posting of information about employment opportunities, housing vacancies, local restaurants, and retail outlets located in proximity to the Project site. This may also include information about the environmental, social, economic, and health benefits of commuting short distances. Emphasis will be placed on nearby locations with transit, bicycle, and other alternative mode linkages to the site.
- **An economic incentive to rideshare** such as parking cash-out of the parking cost. Under such a system, all employees will be given the option, on a monthly basis, to receive a subsidy for use towards an alternative mode and/or a cash payment in lieu of receiving an automobile access/parking pass. The in lieu parking alternative amount will be set to fully cover the price for a monthly permit for the transit providers directly serving West Los Angeles (i.e., a monthly Metro EZ-Transit Zone 1 Pass or its successor).
- **A transportation allowance** to be offered to every employee. The transportation allowance will be less than the cash out amount but equal to at least 50 percent of the

current cash out amount. The transportation allowance will be provided to employees who still receive a parking pass but agree to not commute via single occupancy vehicle for the majority (51 percent or greater) of their daily commute distance. The employee must demonstrate compliance as reasonably required by WLA Campus administration, such as through monitoring of the number of days the parking pass is used.

- **Pedestrian wayfinding information** to be displayed along pedestrian paths, as appropriate, to guide pedestrians to nearby alternative transportation locations. The locations shall include nearby bus/shuttle stops, bike parking, and bike share facilities. Wayfinding signs will include directional arrows, distances, and approximate walking times. In particular, guidance to the Metro Purple Line Westwood/VA Hospital Station shall be provided.
- **A guaranteed ride home/mid-day trip program** providing employees who bicycle, walk, ride transit, vanpool, or carpool to work an alternative, if needed. The guaranteed ride home will provide employees with a return trip to their point of commute origin at no additional cost to the employee for a personal emergency situation. Likewise, employees needing to travel for business purposes while at work shall be provided an alternative mode at no additional cost to the employee. This alternative mode may be through the restricted use of an outside service (e.g. Uber), use of Project-owned vehicles, or through a shared car service (e.g., Zip Car).
- **Flexible/alternative work schedules** to facilitate employee commutes by transit, carpools, or other alternative modes. The WLA Campus shall adopt a policy under which reasonable adjustments to work shift start times may be made.
- **Annual monitoring** of the Project, to demonstrate achievement towards the stated objectives of the Project. The report will include:
    - Employee surveys;
    - Average Vehicle Ridership calculation based on LADOT guidelines;
    - Specific programs to reduce trips; and
    - Site improvements, if any.

11.2 Transportation Systems Management

The Transportation Systems Management (TSM) Plan (the "TSM Plan") is recommended to further mitigate a Project traffic impact located at the intersection of Sawtelle Boulevard & Santa Monica Boulevard by contributing to the study area transportation improvements through increasing the effectiveness of the roadway system. The roadway system addressed by the TSM Plan is the portion that serves the West Los Angeles community, at large. The effectiveness of the roadway system, for purposes of the TSM Plan, is the roadway system's ability to accommodate person trips -- travel by individuals. The person trip capacity of the transportation network increase is to be achieved by shifting area travelers out of the drive-alone automobile mode of travel and improving the intersection roadway capacity.

The TSM Plan consists of Project assistance to the City of Los Angeles with the following measures:

- **Signal upgrades** such as Adaptive Traffic Control System (ATCS) improvements or other signal improvements including pole mounted cameras, mid-block detector loops, controller interconnect upgrades, etc.
- **An Expo Line/West Los Angeles and/or other Transit/West Los Angeles shuttle**. (This service could be provided through an existing transit agency, such as Metro or LADOT.) This shuttle would be available to all members of the general public and features stops throughout its routing, not just on the Project site. This service would be in addition to the internal shuttle service offered by the WLA Campus to be used exclusively by VA WLA travelers.
- **Enhancements to the shared-car programs** serving the West LA area where parking is usually the biggest issue. Additionally, this category may include a WLA Campus charging station for the LADOT electric-vehicle car sharing program.
- **Transit network improvements** such as Bus Rapid Transit (BRT) lanes and bus station improvements on Santa Monica Boulevard and Wilshire Boulevard. These improvements are to speed bus operations and better manage traffic flows. The transit systems improvements may include signal systems with transit preemption along corridors. The Project would contribute to funding for these system improvements.
- **Bicycle system upgrades** such as a West Los Angeles Bike Share Program or bicycle lane installation program. These improvements would be to implement the City of Los Angeles 2010 Bicycle Plan and the Mobility Plan 2035.
- **Pedestrian amenities** on nearby roadways, especially on routes to transit stops. These improvements may include participating in pedestrian amenity improvements between the future Metro Purple Line Westwood/VA Hospital Station and the Project/surrounding area.
- **Neighborhood Traffic Management (NTM) programs** to reduce through traffic intruding onto local streets. The NTM programs would help to implement traffic calming (speed controls) in surrounding neighborhoods. The NTM programs may also provide enforcement for turning movement prohibitions during peak hours. These programs would be created and managed in collaboration with LADOT, the Council Office, and/or neighborhood stakeholders.

11.3 Internal Circulation Plan

As noted in Section 8, the unmitigated Project is expected to create two (2) significant impacts at internal intersections and is likely to hinder traffic on internal roadway segments within the WLA Campus. Additionally, the new Metro Purple Line Westwood/VA Hospital Station could generate parking demand which may attempt to utilize, without authorization, Project parking supply. To help alleviate such vehicular disturbances, a Project Circulation Plan has been

recommended and is attached as *Appendix L*. This Circulation Plan aims to (1) promote the efficient and sustainable use of the roadway network within the Project site and (2) prevent non-Project vehicles from entering the Project site. The Circulation Plan also addresses the circulation needs for trips by other travel modes.

11.3.1 Promoting Efficient and Sustainable Roadway Use

The Circulation Plan outlines several strategies for improving the efficiency and sustainability of the internal roadway network at the Project site. Transit lines will be improved and rerouted to better accommodate WLA Campus travelers and to provide connections with the future Metro Purple Line Westwood/VA Hospital Station. Pedestrian sidewalks will be enhanced, offering wider pathways and ADA compliant slopes, where feasible. Bicycle infrastructure will be built in a manner to close existing gaps in the overall bicycle network and to offer direct connections to the future Westwood/VA Hospital Station.

In addition to the above-mentioned improvements, the Circulation Plan proposes one (1) physical measure which would change the vehicular roadway configuration. A northbound right-turn-only lane is proposed to be added at the intersection of Wilshire Boulevard Eastbound Ramps & Bonsall Avenue. This one (1) improvement is proposed based on an examination of the traffic analysis, which concluded this change would be feasible and provide substantial improvement to the expected level of delay at this intersection.

11.3.2 Preventing Non-Project Vehicles from Entering the Project Site

The Circulation Plan recommends measures be taken to prevent non-Project traffic from entering the Project site. Such restrictions would likely be best applied through the installation of a gating system on the entire WLA Campus.

A Campus wide gating/ticketing system would likely utilize automatic gate arms/barriers and allow badged/authorized or visitor vehicular traffic to enter the Project site through the use of a proximity card, license plate reader, a ticketing system or other similar technologies. To mitigate effectively, it is recommended that gates be placed at each of the vehicular access points for the WLA Campus: Bonsall Avenue at Eisenhower Avenue north of the Wilshire Boulevard Interchange, Constitution Avenue west of Sepulveda Boulevard, Bonsall Avenue at Dowlen Drive south of the Wilshire Boulevard Interchange, and Sawtelle Boulevard north of Dowlen Drive and Dowlen Drive east and west of Sawtelle Boulevard. The installation of these gates is proposed along with intersection configuration modifications at these intersections designed to accommodate the addition of access gates. More details on potential gate installation can be found in the Circulation Plans in *Appendix L*.

11.4 Mitigation Effectiveness

To determine the effectiveness of the TDM Plan implementation for the proposed Project, it was estimated that such a program would result in a 25 percent Project transit usage. Therefore, the TDM Plan would increase the anticipated Project transit use from 15 percent to 25 percent for buildings/facilities located south of Pershing Avenue/Constitution Avenue and from five (5) percent to 25 percent for buildings/facilities located north for proposed Project generated trips. This 25 percent transit credit was not applied to the existing buildings/facilities that will remain on the Project site. Although those employees and patients are not associated with this Project, the TDM program will be available to them. Therefore, not including a trip reduction for the non-project WLA Campus employees understates the trip reduction benefits of the TDM Plan.

The Project trip generation with the TDM Plan would be reduced to seven (7) trips (-34 inbound, 41 outbound) during the AM peak hour and -45 trips (11 inbound, -56 outbound) during the PM peak hour. Table 11-1 summarizes the Project trip generation with the TDM Plan.

On top of the TDM Plan, the TSM Plan will also improve traffic conditions. The TSM Plan is assumed to be sufficient to achieve a one (1) percent improvement in the efficiency of the surrounding roadway network. The TSM Plan was only applied to one (1) significantly impacted external study intersection - Sawtelle Boulevard & Santa Monica Boulevard.

Internal transportation improvements and Project access restrictions are anticipated to reduce the impact of vehicles traveling through the Project site. These improvements are anticipated to improve the internal traffic conditions at the intersections and on the roadway segments within the Project site. The proposed roadway improvements within the WLA Campus, as discussed in the Circulation Plan presented in *Appendix L*, were incorporated into the mitigation analysis to evaluate the effectiveness of the circulation improvement elements proposed.

11.4.1 Project Study Intersections After Recommended Measures

Using these Project volumes, a Future (2029) With Project With Mitigation condition was analyzed for the significantly impacted study intersections. The results of this analysis are shown in Table 11-2. As shown in the table, the TDM Plan and the proposed internal roadway improvements, outlined in the Circulation Plan in *Appendix L*, would reduce the number of intersections experiencing significant Project traffic impacts from eight (8) study intersections to one (1) study intersection - Sawtelle Boulevard & Santa Monica Boulevard. To conditions at the one (1) intersection which would remain significantly impacted after the TDM Plan, the TSM capacity increase was applied. The TSM Plan would further reduce the number of intersections experiencing significant Project traffic impacts from one (1) study intersection (with only the TDM Plan) to zero (0) study intersections (with the TDM Plan and TSM Plan).

Table 11-1
Project Trip Generation With TDM Plan

BUILDING/FACILITY	PARCEL	DESCRIPTION	USE	SIZE		ITE LAND USE	VEHICLE TRIPS						
								AM PEAK HOUR			PM PEAK HOUR		
							DAILY	I/B	O/B	TOTAL	I/B	O/B	TOTAL
PROPOSED													
NORTH CAMPUS													
Building 13 & 306	33	Town Center	Office	30,000	sf	710/General Office	292	30	5	35	6	29	35
Building 13 & 306	33	Town Center	Office	30,000	sf	710/General Office	292	30	5	35	6	29	35
Building 13 & 306	33	Town Center	Office	30,000	sf	710/General Office	292	30	5	35	6	29	35
Building 13 & 306	33	Town Center	Office	30,000	sf	710/General Office	292	30	5	35	6	29	35
Building 13 & 306	33	Town Center	Office	30,000	sf	710/General Office	292	30	5	35	6	29	35
Building 13 & 306	33	Town Center	Office	30,000	sf	710/General Office	292	30	5	35	6	29	35
Building 20	51	Adaptive Reuse	Chapel	5,350	sf	560/Church	37	1	1	2	1	2	3
Building 33	54	Adaptive Reuse	Office	1,200	sf	710/General Office	12	1	0	1	0	1	1
Building 66	29	Adaptive Reuse	Office	600	sf	710/General Office	6	1	0	1	0	1	1
Building 113	30	Residence	Residential	70	du	Supportive Housing [*/a]	89	4	4	8	5	3	8
Building 114	30	Residence	Residential	75	du	Supportive Housing [*/a]	95	4	5	9	5	4	9
Building 115	32	Residence	Residential	68	du	Supportive Housing [*/a]	86	4	4	8	5	3	8
Building 117	32	Residence	Residential/Open Space	16	du	Supportive Housing [*/a]	20	1	1	2	1	1	2
Building 156	13	Residence	Residential	55	du	Supportive Housing [*/a]	70	3	4	7	4	3	7
Building 157	13	Residence	Residential	38	du	Supportive Housing [*/a]	48	2	3	5	3	2	5
Building 158	13	Residence	Residential	56	du	Supportive Housing [*/a]	71	3	4	7	4	3	7
Building 199	27	Adaptive Reuse	Office	3,600	sf	710/General Office	35	3	1	4	1	3	4
Building 205	12	Residence	Residential	67	du	Supportive Housing [*/a]	85	4	4	8	5	3	8
Building 206	18	Residence	Residential	54	du	Supportive Housing [*/a]	69	3	3	6	4	2	6
Building 207	18	Residence	Residential	52	du	Supportive Housing [*/a]	66	3	3	6	4	2	6
Building 208	12	Residence	Residential	54	du	Supportive Housing [*/a]	69	3	3	6	4	2	6
Building 210	19	Residence	Residential	42	du	Supportive Housing [*/a]	53	2	3	5	3	2	5
Building 212	34	Residence	Multi-Use/Residential	79	du	Supportive Housing [*/a]	100	4	5	9	5	4	9
Building 222	58	Community Center	Community Center	22,266	sf	495/Recreational Community Center [b]	642	26	13	39	24	27	51
Building 233	20	Town Center	Office	30,000	sf	710/General Office	292	30	5	35	6	29	35
Building 236	22, 27	Town Center	Office	90,000	sf	710/General Office	877	89	15	104	17	87	104
Building 256	17	Residence	Residential	48	du	Supportive Housing [*/a]	61	3	3	6	4	2	6
Building 257	17	Residence	Multi-Use/Residential	62	du	Supportive Housing [*/a]	79	3	4	7	4	3	7
Building 258	13	Residence	Residential	66	du	Supportive Housing [*/a]	84	4	4	8	5	3	8
Building 259	6	Residence	Residential/Open Space	9	du	220/Apartment [a]	66	1	3	4	3	2	5
Building 264	25	Residence	Residential	12	du	Supportive Housing [*/a]	15	0	1	1	1	0	1
Building 300	13	Residence	Residential	71	du	Supportive Housing [*/a]	90	4	5	9	5	4	9
Building T1D1 - MacArthur Field	10	Residence	Residential	205	du	Supportive Housing [*/a]	260	11	14	25	15	10	25
Building T1D2 - Golf Course	6	Residence	Residential	333	du	Supportive Housing [*/a]	423	18	22	40	24	16	40
Building T1D3 - Infill S/O Cal Vet	23	Residence	Residential	135	du	Supportive Housing [*/a]	171	7	9	16	9	7	16
Building T1D4 - NEC Veterans Park	3	Residence	Residential	77	du	Supportive Housing [*/a]	98	4	5	9	5	4	9
Building T1D5 - Golf Course Adjac.	6	Residence	Residential	51	du	Supportive Housing [*/a]	65	3	3	6	4	2	6
Surface Parking Lot	28	Town Center	Central Square	-	-	-	-	-	-	-	-	-	-
Surface Parking Lot	21	Town Center	Office	30,000	sf	710/General Office	292	30	5	35	6	29	35
Surface Parking Lot	22	Town Center	VA Campus Police Station	30,000	sf	710/General Office	292	30	5	35	6	29	35
Surface Parking Lot	29	Town Center	Office	30,000	sf	710/General Office	292	30	5	35	6	29	35
Athletic Fields	11,66	Town Center	Office	30,000	sf	710/General Office	292	30	5	35	6	29	35
Athletic Fields	11,66	Town Center	Office	30,000	sf	710/General Office	292	30	5	35	6	29	35
Columbarium/Cemetery Expansion	63,64, 68-71	Columbarium/Cemetery Expansion	Columbarium	13.0	ac	566/Cemetery	783	18	4	22	19	41	60

Table 11-1
Project Trip Generation With TDM Plan (cont.)

BUILDING/FACILITY	PARCEL	DESCRIPTION	USE	SIZE	ITE LAND USE	VEHICLE TRIPS						
						DAILY	AM PEAK HOUR			PM PEAK HOUR		
							I/B	O/B	TOTAL	I/B	O/B	TOTAL
PROPOSED												
NORTH CAMPUS												
					NORTH CAMPUS PROPOSED USES SUBTOTAL	*8,229*	*597*	*213*	*810*	*265*	*597*	*862*
					INTERNAL TRIP CAPTURE FOR RESIDENTIAL USES TRAVELING TO THE SOUTH CAMPUS (10%) [a]	*(233)*	*(10)*	*(12)*	*(22)*	*(13)*	*(9)*	*(22)*
					TRANSIT/WALK-IN/BICYCLE CREDIT (25%)	*(1,999)*	*(147)*	*(50)*	*(197)*	*(63)*	*(147)*	*(210)*
					NORTH CAMPUS PROPOSED PROJECT TRIPS (INCLUDING INTERNAL CAPTURE + TRANSIT/WALK-IN/BICYCLE CREDIT) SUBTOTAL	***5,997***	***440***	***151***	***591***	***189***	***441***	***630***
SOUTH CAMPUS												
Building 23	76/76A	Adaptive Reuse	Residential	1 du	220/Apartment	7	0	0	0	1	0	1
Building 345	85											
Building 401	85											
Building 402	85											
Building 507	81	Outpatient Clinic	Outpatient Clinic	600,000 sf	720/Medical Office	20,880	1,301	367	1,668	581	1,495	2,076
Surface Parking Lot	84	Bed Tower	Hospital	450,000 sf	610/Hospital	4,824	273	128	401	140	297	437
Surface Parking Lot	84	Surge Building	Hospital	75,000 sf	610/Hospital	804	46	21	67	23	50	73
Surface Parking Lot	84	Kitchen	Kitchen	26,500 sf	610/Hospital	284	16	8	24	8	18	26
Surface Parking Lot	86-87	Research Building NRD1	Research	200,000 sf	760/Research & Development Ctr	2,252	63	21	84	15	83	98
					SOUTH CAMPUS PROPOSED USES SUBTOTAL	*29,051*	*1,699*	*545*	*2,244*	*768*	*1,943*	*2,711*
					INTERNAL TRIPS FROM RESIDENTIAL USES ON THE NORTH CAMPUS (10%) [a]	*(233)*	*(12)*	*(10)*	*(22)*	*(9)*	*(13)*	*(22)*
					INTERNAL TRIP CAPTURE FROM KITCHEN USE TRAVELING IN SOUTH CAMPUS (90%) [b]	*(256)*	*(14)*	*(8)*	*(22)*	*(7)*	*(16)*	*(23)*
					INTERNAL TRIP CAPTURE TO KITCHEN USE TRAVELING IN SOUTH CAMPUS (BASED TRIPS ON FROM KITCHEN)	*(256)*	*(8)*	*(14)*	*(22)*	*(16)*	*(7)*	*(23)*
					TRANSIT/WALK-IN/BICYCLE CREDIT (25%)	*(7,077)*	*(416)*	*(129)*	*(545)*	*(184)*	*(477)*	*(661)*
					SOUTH CAMPUS PROPOSED PROJECT TRIPS (INCLUDING INTERNAL CAPTURE + TRANSIT/WALK-IN/BICYCLE CREDIT) SUBTOTAL	***21,229***	***1,249***	***384***	***1,633***	***552***	***1,430***	***1,982***
PROPOSED PROJECT TRIPS FOR THE NORTH AND SOUTH CAMPUS												
					NORTH CAMPUS							
					PROPOSED USES SUBTOTAL	*8,229*	*597*	*213*	*810*	*265*	*597*	*862*
					INTERNAL TRIP CAPTURE FOR RESIDENTIAL USES TRAVELING TO THE SOUTH CAMPUS (10%) [a]	*(233)*	*(10)*	*(12)*	*(22)*	*(13)*	*(9)*	*(22)*
					TRANSIT/WALK-IN/BICYCLE CREDIT FOR BUILDINGS/FACILITIES LOCATED SOUTH OF CONSTITUTION AVENUE/PERSHING AVENUE (25%)	*(1,999)*	*(147)*	*(50)*	*(197)*	*(63)*	*(147)*	*(210)*
					NORTH CAMPUS PROPOSED PROJECT TRIPS (INCLUDING INTERNAL CAPTURE + TRANSIT CREDIT) SUBTOTAL	***5,997***	***440***	***151***	***591***	***189***	***441***	***630***
					SOUTH CAMPUS							
					PROPOSED USES SUBTOTAL	*29,051*	*1,699*	*545*	*2,244*	*768*	*1,943*	*2,711*
					INTERNAL TRIPS FROM RESIDENTIAL USES ON THE NORTH CAMPUS (10%) [a]	*(233)*	*(12)*	*(10)*	*(22)*	*(9)*	*(13)*	*(22)*
					INTERNAL TRIP CAPTURE FROM KITCHEN USE TRAVELING IN SOUTH CAMPUS (90%) [b]	*(256)*	*(14)*	*(8)*	*(22)*	*(7)*	*(16)*	*(23)*
					INTERNAL TRIP CAPTURE TO KITCHEN USE TRAVELING IN SOUTH CAMPUS (BASED ON TRIPS FROM KITCHEN)	*(256)*	*(8)*	*(14)*	*(22)*	*(16)*	*(7)*	*(23)*
					TRANSIT/WALK-IN/BICYCLE CREDIT (25%)	*(7,077)*	*(416)*	*(129)*	*(545)*	*(184)*	*(477)*	*(661)*
					SOUTH CAMPUS PROPOSED PROJECT TRIPS (INCLUDING INTERNAL CAPTURE + TRANSIT/WALK-IN/BICYCLE CREDIT) SUBTOTAL	***21,229***	***1,249***	***384***	***1,633***	***552***	***1,430***	***1,982***
					OVERALL PROPOSED PROJECT TRIPS	***37,280***	***2,296***	***758***	***3,054***	***1,033***	***2,540***	***3,573***
					OVERALL PROPOSED PROJECT TRIPS (INCLUDING INTERNAL CAPTURE + TRANSIT/WALK-IN/BICYCLE CREDIT)	***27,226***	***1,689***	***535***	***2,224***	***741***	***1,871***	***2,612***
EXISTING USES TO BE REMOVED/RENOVATED												
NORTH CAMPUS												
Building 13	33	Campus Facilities	Storage	55,542 sf	150/Warehousing	97	7	2	9	3	8	11
Building 20	51	Wadsworth Chapel	Vacant	5,350 sf	-	0	0	0	0	0	0	0
Building 33	54	Superintendent's Home	Vacant	1,200 sf	-	0	0	0	0	0	0	0
Building 66	29	Trolley Station	Vacant	600 sf	-	0	0	0	0	0	0	0
Building 113	30	Research Lab	Research	57,875 sf	760/Research & Development Ctr	652	18	6	24	4	24	28
Building 114	30	Research Lab	Research	60,938 sf	760/Research & Development Ctr	686	20	6	26	5	25	30
Building 115	32	Research Lab	Research	54,234 sf	760/Research & Development Ctr	611	17	6	23	4	23	27

Table 11-1
Project Trip Generation With TDM Plan (cont.)

BUILDING/FACILITY	PARCEL	DESCRIPTION	USE	SIZE	ITE LAND USE	VEHICLE TRIPS						
						DAILY	AM PEAK HOUR			PM PEAK HOUR		
							I/B	O/B	TOTAL	I/B	O/B	TOTAL
Building 117	32	Research Lab	Research	15,299 sf	760/Research & Development Ctr	172	5	1	6	1	6	7
Building 156	13	Vacant	Vacant	48,122 sf	-	0	0	0	0	0	0	0
Building 157	13	Vacant	Vacant	30,928 sf	-	0	0	0	0	0	0	0
			Vacant	17,798 sf	-	0	0	0	0	0	0	0
Building 158	13	VA North Campus Operations	VA North Campus Operations	26,996 sf	710/General Office	263	27	4	31	5	26	31
Building 199	27	Hoover Barracks	Vacant	3,600 sf	-	0	0	0	0	0	0	0
Building 205	12	Vacant	Vacant	45,379 sf	-	0	0	0	0	0	0	0
Building 206	18	VA North Campus Operations	VA North Campus Operations	43,122 sf	710/General Office	420	43	7	50	8	42	50
Building 207	18	Vacant	Vacant	43,698 sf	-	0	0	0	0	0	0	0
Building 208	12	VA North Campus Operations	VA North Campus Operations	41,050 sf	710/General Office	400	41	7	48	8	39	47
Building 210	19	VA North Campus Operations	VA North Campus Operations	32,548 sf	710/General Office	317	33	5	38	6	31	37
Building 212	34	Vacant	Vacant	65,081 sf	-	0	0	0	0	0	0	0
Building 222	58	Facilities Management	Command Center; Pharmacy; Supplies	22,266 sf	710/General Office	217	22	4	26	4	22	26
Building 233	20	Campus Facilities	Hazmat Building	840 sf	710/General Office	8	1	0	1	0	1	1
Building 236	22	Campus Facilities	Police Headquarters	8,626 sf	710/General Office	84	9	1	10	2	8	10
Building 256	17	VA North Campus Operations	VA North Campus Operations	37,990 sf	720/Medical Office	1,322	83	23	106	37	94	131
Building 257	17	VA North Campus Operations	VA North Campus Operations	43,761 sf	720/Medical Office	1,523	95	27	122	42	109	151
Building 258	13	VA North Campus Operations	VA North Campus Operations	53,389 sf	710/General Office	520	53	9	62	10	51	61
Building 259	6	Facilities Management	Facilities Management	7,747 sf	710/General Office	75	8	1	9	1	8	9
Building 264	25	Vacant	Vacant	9,587 sf	-	0	0	0	0	0	0	0
Building 300	13	Dietetics	Kitchen & Office of Information & Technology	59,195 sf	110/General Light Industrial	294	36	5	41	5	32	37
Building 306	36	Campus Facilities	Services	16,769 sf	710/General Office	163	16	3	19	3	16	19
Building 337	23	Vacant	Vacant	12,941 sf	-	0	0	0	0	0	0	0
Building T1D1 - MacArthur Field	16	MacArthur Field	Athletic Fields	2 fields	488/Soccer Complex	143	1	1	2	22	11	33
Building T1D2 - Golf Course	6	Golf Course	Golf Course	9 hole	430/Golf Course	273	13	3	16	14	12	26
Building T1D4 - NEC Veterans Park	3	Park	Park	12 ac	411/City Park	9	0	0	0	1	0	1
					EXISTING USES TO BE REMOVED/RENOVATED SUBTOTAL	*8,249*	*548*	*121*	*669*	*185*	*588*	*773*
					INTERNAL TRIP CAPTURE FOR RESIDENTIAL USES TRAVELING TO THE SOUTH CAMPUS (10%) [a]	*0*	*0*	*0*	*0*	*0*	*0*	*0*
					TRANSIT/WALK-IN/BICYCLE CREDIT FOR BUILDINGS/FACILITIES LOCATED SOUTH OF CONSTITUTION AVENUE/PERSHING AVENUE (15%)	*(390)*	*(16)*	*(4)*	*(20)*	*(4)*	*(18)*	*(22)*
					TRANSIT/WALK-IN/BICYCLE CREDIT FOR BUILDINGS/FACILITIES LOCATED NORTH OF CONSTITUTION AVENUE/PERSHING AVENUE (5%)	*(283)*	*(22)*	*(5)*	*(27)*	*(8)*	*(23)*	*(31)*
					NORTH CAMPUS EXISTING USES TO BE REMOVED/RENOVATED (INCLUDING INTERNAL CAPTURE + TRANSIT/WALK-IN/BICYCLE CREDIT) SUBTOTAL	***7,576***	***510***	***112***	***622***	***173***	***547***	***720***
Building 23	76/76A	Governor's Mansion	Vacant	1 du	-	0	0	0	0	0	0	0
Building 304	81	Healthcare	Medical	74,852 sf	720/Medical Office	2,605	162	46	208	73	186	259
Building 345 & Building 507	85, 81	Healthcare	Medical	18,446 sf	720/Medical Office	642	40	11	51	18	46	64
Building 401	85	Healthcare	Medical	29,495 sf	720/Medical Office	1,026	64	18	82	29	73	102
Building 402	85	Healthcare	Medical	23,725 sf	720/Medical Office	826	51	15	66	23	59	82
Building 500 & 501 - Outpatient Clinc Component	82	Healthcare	Medical	396,476 sf	720/Medical Office	13,797	860	242	1,102	384	988	1,372
Building 500 & 501 - Hospital Component	82	Healthcare	Hospital	412,659 sf	610/Hospital	4,424	250	117	367	128	272	400
					EXISTING USES TO BE REMOVED/RENOVATED SUBTOTAL	*23,320*	*1,427*	*449*	*1,876*	*655*	*1,624*	*2,279*
					INTERNAL TRIPS FROM RESIDENTIAL USES ON THE NORTH CAMPUS [a]	*0*	*0*	*0*	*0*	*0*	*0*	*0*
					TRANSIT/WALK-IN/BICYCLE CREDIT (15%)	*(3,498)*	*(214)*	*(67)*	*(281)*	*(98)*	*(244)*	*(342)*
					SOUTH CAMPUS EXISTING USES TO BE REMOVED/RENOVATED (INCLUDING INTERNAL CAPTURE + TRANSIT/WALK-IN/BICYCLE CREDIT) SUBTOTAL	***19,822***	***1,213***	***382***	***1,595***	***557***	***1,380***	***1,937***

Table 11-1
Project Trip Generation With TDM Plan (cont.)

BUILDING/FACILITY	PARCEL	DESCRIPTION	USE	SIZE	ITE LAND USE	VEHICLE TRIPS						
							AM PEAK HOUR			PM PEAK HOUR		
						DAILY	I/B	O/B	TOTAL	I/B	O/B	TOTAL
PROJECT TRIPS FOR EXISTING USES TO BE REMOVED/RENOVATED FOR THE NORTH AND SOUTH CAMPUS												
NORTH CAMPUS												
EXISTING USES TO BE REMOVED/RENOVATED SUBTOTAL						*8,249*	*548*	*121*	*669*	*185*	*588*	*773*
INTERNAL TRIP CAPTURE FOR RESIDENTIAL USES TRAVELING TO THE SOUTH CAMPUS (10%) [a]						*0*	*0*	*0*	*0*	*0*	*0*	*0*
TRANSIT/WALK-IN/BICYCLE CREDIT FOR BUILDINGS/FACILITIES LOCATED SOUTH OF CONSTITUTION AVENUE/PERSHING AVENUE (15%)						*(390)*	*(16)*	*(4)*	*(20)*	*(4)*	*(18)*	*(22)*
TRANSIT/WALK-IN/BICYCLE CREDIT FOR BUILDINGS/FACILITIES LOCATED NORTH OF CONSTITUTION AVENUE/PERSHING AVENUE (5%)						*(283)*	*(22)*	*(5)*	*(27)*	*(8)*	*(23)*	*(31)*
NORTH CAMPUS EXISTING USES TO BE REMOVED/RENOVATED (INCLUDING INTERNAL CAPTURE + TRANSIT/WALK-IN/BICYCLE CREDIT) SUBTOTAL						***7,576***	***510***	***112***	***622***	***173***	***547***	***720***
SOUTH CAMPUS												
EXISTING USES TO BE REMOVED/RENOVATED SUBTOTAL						*23,320*	*1,427*	*449*	*1,876*	*655*	*1,624*	*2,279*
INTERNAL TRIPS FROM RESIDENTIAL USES ON THE NORTH CAMPUS [a]						*0*	*0*	*0*	*0*	*0*	*0*	*0*
TRANSIT/WALK-IN/BICYCLE CREDIT CREDIT (15%)						*(3,498)*	*(214)*	*(67)*	*(281)*	*(98)*	*(244)*	*(342)*
SOUTH CAMPUS EXISTING USES TO BE REMOVED/RENOVATED (INCLUDING INTERNAL CAPTURE + TRANSIT CREDIT) SUBTOTAL						***19,822***	***1,213***	***382***	***1,595***	***557***	***1,380***	***1,937***
OVERALL EXISTING USE TO BE REMOVED/RENOVATED PROJECT TRIPS						***31,569***	***1,975***	***570***	***2,545***	***840***	***2,212***	***3,052***
OVERALL EXISTING USE TO BE REMOVED/RENOVATED PROJECT TRIPS (INCLUDING INTERNAL CAPTURE + TRANSIT/WALK-IN/BICYCLE CREDIT)						***27,398***	***1,723***	***494***	***2,217***	***730***	***1,927***	***2,657***

NET PROJECT TRIPS FOR THE NORTH AND SOUTH CAMPUS												
NET PROJECT TRIPS FOR FUTURE USES - EXISTING USES (NORTH CAMPUS)						**(1,579)**	**(70)**	**39**	**(31)**	**16**	**(106)**	**(90)**
NET PROJECT TRIPS FOR FUTURE USES - EXISTING USES (SOUTH CAMPUS)						**1,407**	**36**	**2**	**38**	**(5)**	**50**	**45**
OVERALL NET PROJECT TRIPS						**(172)**	**(34)**	**41**	**7**	**11**	**(56)**	**(45)**

Notes

* - Rates are based on LADOT rates in the Transprotation Impact Study Guidelines (December 2016)

a - 10% internal trip capture applied to North Campus residential uses that would travel to the South Campus for work or hospital purposes.

b - 90% internal trip capture applied since the kitchen will mainly serve the hospital on site.

There may be potential rounding errors

Table 11-2
Critical Movement Analysis (CMA) & Level of Service (LOS) Summary
Future (2029) With Mitigation

			Existing (2017) Conditions								Future (2029) Conditions								Future (2029) Conditions With Mitigation									
		Peak	Existing			Plus Project					Without Project			With Project					TDM Plan + Circulation Plan					TSM Plan				
No.	Intersection	Hour	V/C	Delay	LOS	V/C	Delay	LOS	Impact	Sig.?	V/C	Delay	LOS	V/C	Delay	LOS	Impact	Sig.?	V/C	Delay	LOS	Impact	Sig.?	V/C	Delay	LOS	Impact	Sig.?
1	CENTINELA AVENUE & [a/b]	AM	0.450	6.0	A	0.455	6.0	A	0.005	No	0.485	5.9	A	0.489	5.9	A	0.004	No										
	WILSHIRE BOULEVARD	PM	0.567	9.6	A	0.568	9.6	A	0.001	No	0.613	9.6	B*	0.614	9.5	B*	0.001	No										
2	BUNDY DRIVE & [b]	AM	0.799	-	C	0.802	-	D	0.003	No	1.136	-	F	1.139	-	F	0.003	No										
	WILSHIRE BOULEVARD	PM	0.780	-	C	0.783	-	C	0.003	No	1.139	-	F	1.142	-	F	0.003	No										
3	BUNDY DRIVE & [b]	AM	0.668	-	B	0.669	-	B	0.001	No	0.826	-	D	0.827	-	D	0.001	No										
	SANTA MONICA BOULEVARD	PM	0.734	-	C	0.736	-	C	0.002	No	0.883	-	D	0.884	-	D	0.001	No										
4	BROCKTON AVENUE & [b]	AM	0.465	-	A	0.469	-	A	0.004	No	0.518	-	A	0.522	-	A	0.004	No										
	WILSHIRE BOULEVARD	PM	0.427	-	A	0.430	-	A	0.003	No	0.489	-	A	0.492	-	A	0.003	No										
5	BROCKTON AVENUE & [b]	AM	0.429	-	A	0.430	-	A	0.001	No	0.699	-	B	0.701	-	C	0.002	No										
	SANTA MONICA BOULEVARD	PM	0.450	-	A	0.451	-	A	0.001	No	0.709	-	C	0.710	-	C	0.001	No										
6	WESTGATE AVENUE & [b]	AM	0.439	-	A	0.443	-	A	0.004	No	0.505	-	A	0.509	-	A	0.004	No										
	WILSHIRE BOULEVARD	PM	0.399	-	A	0.403	-	A	0.004	No	0.463	-	A	0.467	-	A	0.004	No										
7	WESTGATE AVENUE & [b]	AM	0.463	-	A	0.463	-	A	0.000	No	0.773	-	C	0.774	-	C	0.001	No										
	SANTA MONICA BOULEVARD	PM	0.487	-	A	0.490	-	A	0.003	No	0.727	-	C	0.730	-	C	0.003	No										
8	GRANVILLE AVENUE & [b]	AM	0.435	-	A	0.439	-	A	0.004	No	0.496	-	A	0.499	-	A	0.003	No										
	WILSHIRE BOULEVARD	PM	0.401	-	A	0.405	-	A	0.004	No	0.456	-	A	0.460	-	A	0.004	No										
9	BARRINGTON PLACE & [b]	AM	0.775	-	C	0.775	-	C	0.000	No	0.855	-	D	0.855	-	D	0.000	No										
	SUNSET BOULEVARD	PM	0.661	-	B	0.661	-	B	0.000	No	0.701	-	C	0.701	-	C	0.000	No										
10	BARRINGTON AVENUE & [b]	AM	0.726	-	C	0.726	-	C	0.000	No	0.747	-	C	0.747	-	C	0.000	No										
	SUNSET BOULEVARD	PM	0.597	-	A	0.597	-	A	0.000	No	0.618	-	B	0.618	-	B	0.000	No										
11	BARRINGTON AVENUE &	AM	0.321	-	A	0.322	-	A	0.001	No	0.381	-	A	0.382	-	A	0.001	No										
	BARRINGTON PLACE	PM	0.336	-	A	0.336	-	A	0.000	No	0.353	-	A	0.353	-	A	0.000	No										
12	BARRINGTON AVENUE &	AM	0.635	-	B	0.636	-	B	0.001	No	0.706	-	C	0.706	-	C	0.000	No										
	MONTANA AVENUE	PM	0.616	-	B	0.616	-	B	0.000	No	0.635	-	B	0.638	-	B	0.003	No										
13	BARRINGTON AVENUE &	AM	0.670	-	B	0.675	-	B	0.005	No	0.767	-	C	0.772	-	C	0.005	No										
	SAN VICENTE BOULEVARD	PM	0.620	-	B	0.622	-	B	0.002	No	0.665	-	B	0.667	-	B	0.002	No										
14	BARRINGTON AVENUE & [b]	AM	0.752	-	C	0.758	-	C	0.006	No	0.831	-	D	0.838	-	D	0.007	No										
	WILSHIRE BOULEVARD	PM	0.701	-	C	0.705	-	C	0.004	No	0.774	-	C	0.779	-	C	0.005	No										
15	BARRINGTON AVENUE &	AM	0.559	-	A	0.566	-	A	0.007	No	0.595	-	A	0.602	-	B	0.007	No										
	OHIO AVENUE	PM	0.647	-	B	0.652	-	B	0.005	No	0.683	-	B	0.687	-	B	0.004	No										
16	BARRINGTON AVENUE & [b]	AM	0.691	-	B	0.694	-	B	0.003	No	0.979	-	E	0.983	-	E	0.004	No										
	SANTA MONICA BOULEVARD	PM	0.613	-	B	0.621	-	B	0.008	No	0.809	-	D	0.817	-	D	0.008	No										
17	SAN VICENTE BOULEVARD/FEDERAL AVENUE & [b]	AM	0.764	-	C	0.770	-	C	0.006	No	0.839	-	D	0.845	-	D	0.006	No										
	WILSHIRE BOULEVARD	PM	0.705	-	C	0.710	-	C	0.005	No	0.747	-	C	0.752	-	C	0.005	No										
18	FEDERAL AVENUE &	AM	0.373	-	A	0.379	-	A	0.006	No	0.406	-	A	0.411	-	A	0.005	No										
	OHIO AVENUE	PM	0.375	-	A	0.379	-	A	0.004	No	0.395	-	A	0.399	-	A	0.004	No										
19	FEDERAL AVENUE & [b]	AM	0.529	-	A	0.529	-	A	0.000	No	0.795	-	C	0.795	-	C	0.000	No										
	SANTA MONICA BOULEVARD	PM	0.423	-	A	0.425	-	A	0.002	No	0.618	-	B	0.621	-	B	0.003	No										
20	SUNSET BOULEVARD & [b]	AM	0.654	-	B	0.654	-	B	0.000	No	0.699	-	B	0.699	-	B	0.000	No										
	WOODBURN DRIVE	PM	0.639	-	B	0.640	-	B	0.001	No	0.677	-	B	0.678	-	B	0.001	No										
21	COLBY AVENUE & [b]	AM	0.361	-	A	0.364	-	A	0.003	No	0.624	-	B	0.627	-	B	0.003	No										
	SANTA MONICA BOULEVARD	PM	0.254	-	A	0.257	-	A	0.003	No	0.453	-	A	0.456	-	A	0.003	No										
22	BUTLER AVENUE & [b]	AM	0.385	-	A	0.387	-	A	0.002	No	0.632	-	B	0.634	-	B	0.002	No										
	SANTA MONICA BOULEVARD	PM	0.335	-	A	0.337	-	A	0.002	No	0.525	-	A	0.528	-	A	0.003	No										

Table 11-2
Critical Movement Analysis (CMA) & Level of Service (LOS) Summary
Future (2029) With Mitigation (cont.)

			Existing (2017) Conditions								Future (2029) Conditions								Future (2029) Conditions With Mitigation									
		Peak	Existing			Plus Project					Without Project			With Project					TDM Plan + Circulation Plan					TSM Plan				
No.	Intersection	Hour	V/C	Delay	LOS	V/C	Delay	LOS	Impact	Sig.?	V/C	Delay	LOS	V/C	Delay	LOS	Impact	Sig.?	V/C	Delay	LOS	Impact	Sig.?	V/C	Delay	LOS	Impact	Sig.?
23	PURDUE AVENUE & [b]	AM	0.286	-	A	0.287	-	A	0.001	No	0.559	-	A	0.560	-	A	0.001	No										
	SANTA MONICA BOULEVARD	PM	0.193	-	A	0.196	-	A	0.003	No	0.394	-	A	0.397	-	A	0.003	No										
24	CORINTH AVENUE & [b]	AM	0.460	-	A	0.460	-	A	0.000	No	0.735	-	C	0.735	-	C	0.000	No										
	SANTA MONICA BOULEVARD	PM	0.313	-	A	0.316	-	A	0.003	No	0.515	-	A	0.519	-	A	0.004	No										
25	SAWTELLE BOULEVARD &	AM	0.708	-	C	0.775	-	C	0.067	YES	0.710	-	C	0.777	-	C	0.067	YES	0.721	-	C	0.011	No					
	OHIO AVENUE	PM	0.598	-	A	0.685	-	B	0.087	No	0.599	-	A	0.686	-	B	0.087	No	0.616	-	B	0.017	No					
26	SAWTELLE BOULEVARD & [b]	AM	0.523	-	A	0.573	-	A	0.050	YES	0.768	-	C	0.798	-	C	0.030	YES	0.772	-	C	0.004	No	0.764	-	C	-0.004	No
	SANTA MONICA BOULEVARD	PM	0.466	-	A	0.520	-	A	0.054	YES	0.680	-	B	0.733	-	C	0.053	YES	0.691	-	B	0.011	YES	0.684	-	B	0.004	No
27	SAWTELLE BOULEVARD &	AM	0.237	-	A	0.243	-	A	0.006	No	0.254	-	A	0.259	-	A	0.005	No										
	LA GRANGE AVENUE	PM	0.289	-	A	0.308	-	A	0.019	No	0.306	-	A	0.325	-	A	0.019	No										
28	SAWTELLE BOULEVARD &	AM	0.319	-	A	0.323	-	A	0.004	No	0.333	-	A	0.337	-	A	0.004	No										
	MISSISSIPPI AVENUE	PM	0.436	-	A	0.452	-	A	0.016	No	0.447	-	A	0.463	-	A	0.016	No										
29	SAWTELLE BOULEVARD & [b]	AM	0.773	-	C	0.784	-	C	0.011	YES	0.916	-	E	0.917	-	E	0.001	No										
	OLYMPIC BOULEVARD	PM	0.760	-	C	0.765	-	C	0.005	No	0.881	-	D	0.888	-	D	0.007	No										
30	BELOIT AVENUE/I-405 SOUTHBOUND RAMPS & [b]	AM	0.923	-	E	0.930	-	E	0.007	No	0.982	-	E	0.989	-	E	0.007	No	0.982	-	E	0.000	No					
	SANTA MONICA BOULEVARD	PM	0.750	-	C	0.768	-	C	0.018	YES	0.893	-	D	0.909	-	E	0.016	YES	0.896	-	D	0.003	No					
31	COTNER AVENUE/I-405 NORTHBOUND RAMPS & [b]	AM	0.649	-	B	0.663	-	B	0.014	YES	0.868	-	D	0.880	-	D	0.012	YES	0.870	-	D	0.002	No					
	SANTA MONICA BOULEVARD	PM	0.569	-	A	0.572	-	A	0.003	No	0.846	-	D	0.864	-	D	0.018	YES	0.849	-	D	0.003	No					
32	SEPULVEDA BOULEVARD &	AM	0.706	-	C	0.715	-	C	0.009	No	0.722	-	C	0.729	-	C	0.007	No										
	MONTANA AVENUE	PM	0.628	-	B	0.635	-	B	0.007	No	0.653	-	B	0.659	-	B	0.006	No										
33	SEPULVEDA BOULEVARD &	AM	0.454	-	A	0.487	-	A	0.033	No	0.483	-	A	0.517	-	A	0.034	No										
	CONSTITUTION AVENUE	PM	0.607	-	B	0.607	-	B	0.000	No	0.653	-	B	0.653	-	B	0.000	No										
34	SEPULVEDA BOULEVARD & [b]	AM	0.712	-	C	0.723	-	C	0.011	YES	0.733	-	C	0.745	-	C	0.012	YES	0.732	-	C	-0.001	No					
	WILSHIRE BOULEVARD	PM	0.848	-	D	0.858	-	D	0.010	YES	0.907	-	E	0.915	-	E	0.008	No	0.901	-	E	-0.006	No					
35	SEPULVEDA BOULEVARD &	AM	0.787	-	C	0.790	-	C	0.003	No	0.833	-	D	0.836	-	D	0.003	No										
	OHIO AVENUE	PM	0.815	-	D	0.823	-	D	0.008	No	0.879	-	D	0.887	-	D	0.008	No										
36	SEPULVEDA BOULEVARD & [b]	AM	0.837	-	D	0.843	-	D	0.006	No	0.938	-	E	0.944	-	E	0.006	No	0.936	-	E	-0.002	No					
	SANTA MONICA BOULEVARD	PM	0.740	-	C	0.749	-	C	0.009	No	0.885	-	D	0.896	-	D	0.011	YES	0.884	-	D	-0.001	No					
37	SEPULVEDA BOULEVARD &	AM	0.338	-	A	0.342	-	A	0.004	No	0.383	-	A	0.387	-	A	0.004	No										
	NEBRASKA AVENUE	PM	0.438	-	A	0.442	-	A	0.004	No	0.508	-	A	0.513	-	A	0.005	No										
38	SEPULVEDA BOULEVARD &	AM	0.365	-	A	0.369	-	A	0.004	No	0.406	-	A	0.410	-	A	0.004	No										
	LA GRANGE AVENUE	PM	0.472	-	A	0.476	-	A	0.004	No	0.539	-	A	0.543	-	A	0.004	No										
39	SEPULVEDA BOULEVARD & [b]	AM	0.873	-	D	0.878	-	D	0.005	No	1.011	-	F	1.016	-	F	0.005	No										
	OLYMPIC BOULEVARD	PM	0.898	-	D	0.901	-	E	0.003	No	1.449	-	F	1.455	-	F	0.006	No										
40	VETERAN AVENUE & [b]	AM	0.740	-	C	0.744	-	C	0.004	No	0.967	-	E	0.971	-	E	0.004	No										
	WILSHIRE BOULEVARD	PM	0.693	-	B	0.700	-	C	0.007	No	0.848	-	D	0.855	-	D	0.007	No										
41	VETERAN AVENUE &	AM	0.683	-	B	0.688	-	B	0.005	No	0.717	-	C	0.722	-	C	0.005	No										
	OHIO AVENUE	PM	0.691	-	B	0.695	-	B	0.004	No	0.734	-	C	0.738	-	C	0.004	No										
42	VETERAN AVENUE & [b]	AM	0.621	-	B	0.626	-	B	0.005	No	0.807	-	D	0.810	-	D	0.003	No										
	SANTA MONICA BOULEVARD	PM	0.750	-	C	0.754	-	C	0.004	No	0.886	-	D	0.894	-	D	0.008	No										
43	GAYLEY AVENUE & [b]	AM	0.756	-	C	0.761	-	C	0.005	No	0.865	-	D	0.870	-	D	0.005	No										
	WILSHIRE BOULEVARD	PM	0.691	-	B	0.693	-	B	0.002	No	0.751	-	C	0.755	-	C	0.004	No										
44	WESTWOOD BOULEVARD & [b]	AM	0.715	-	C	0.717	-	C	0.002	No	0.803	-	D	0.806	-	D	0.003	No										
	WILSHIRE BOULEVARD	PM	0.637	-	B	0.640	-	B	0.003	No	0.716	-	C	0.718	-	C	0.002	No										
45	WESTWOOD BOULEVARD & [b]	AM	0.939	-	E	0.941	-	E	0.002	No	1.323	-	F	1.325	-	F	0.002	No										
	SANTA MONICA BOULEVARD	PM	0.915	-	E	0.924	-	E	0.009	No	1.275	-	F	1.282	-	F	0.007	No										
46	GLENDON AVENUE & [b]	AM	0.628	-	B	0.630	-	B	0.002	No	0.681	-	B	0.683	-	B	0.002	No										
	WILSHIRE BOULEVARD	PM	0.705	-	C	0.706	-	C	0.001	No	0.760	-	C	0.762	-	C	0.002	No										

Table 11-2
Critical Movement Analysis (CMA) & Level of Service (LOS) Summary
Future (2029) With Mitigation (cont.)

			Existing (2017) Conditions								Future (2029) Conditions								Future (2029) Conditions With Mitigation									
			Existing			Plus Project					Without Project			With Project					TDM Plan + Circulation Plan					TSM Plan				
No.	Intersection	Peak Hour	V/C	Delay	LOS	V/C	Delay	LOS	Impact	Sig.?	V/C	Delay	LOS	V/C	Delay	LOS	Impact	Sig.?	V/C	Delay	LOS	Impact	Sig.?	V/C	Delay	LOS	Impact	Sig.?
47	SELBY AVENUE & [b]	AM	0.538	-	A	0.541	-	A	0.0	No	0.601	-	B	0.604	-	B	0.003	No										
	WILSHIRE BOULEVARD	PM	0.672	-	B	0.675	-	B	0.0	No	0.722	-	C	0.725	-	C	0.003	No										
48	DEWEY AVENUE & [c]	AM	-	6.9	A	-	7.0	A	0.1	No	-	6.9	A	-	7.0	A	0.1	No										
	EISENHOWER AVENUE	PM	-	7.0	A	-	7.0	A	0.0	No	-	7.0	A	-	7.0	A	0.0	No										
49	BONSALL AVENUE & [c]	AM	-	8.4	A	-	8.4	A	0.0	No	-	8.4	A	-	8.4	A	0.0	No										
	NIMITZ AVENUE	PM	-	8.4	A	-	8.4	A	0.0	No	-	8.4	A	-	8.4	A	0.0	No										
50	BONSALL AVENUE & [c]	AM	-	9.2	A	-	9.8	A	0.6	No	-	9.2	A	-	9.8	A	0.6	No										
	PERSHING AVENUE	PM	-	9.3	A	-	9.9	A	0.6	No	-	9.3	A	-	9.9	A	0.6	No										
51	BONSALL AVENUE & [c]	AM	-	10.2	B	-	10.8	B	0.6	No	-	10.2	B	-	10.8	B	0.6	No										
	EISENHOWER AVENUE	PM	-	12.6	B	-	14.3	B	1.7	No	-	12.6	B	-	14.3	B	1.7	No										
52	BONSALL AVENUE & [c]	AM	-	10.3	B	-	11.3	B	1.0	No	-	10.5	B	-	11.5	B	1.0	No										
	WILSHIRE BOULEVARD WB RAMPS	PM	-	13.8	B	-	14.7	B	0.9	No	-	13.9	B	-	14.9	B	1.0	No										
53	BONSALL AVENUE & [c]	AM	-	12.0	B	-	13.6	B	1.6	No	-	14.0	B	-	16.5	C	2.5	No	-	11.5	B	-2.500	No					
	WILSHIRE BOULEVARD EB RAMPS	PM	-	19.3	C	-	36.2	E	16.9	YES	-	27.8	D	-	57.3	F	29.5	YES	-	13.7	B	-14.100	No					
54	BONSALL AVENUE & [c]	AM	-	9.3	A	-	10.0	B	0.7	No	-	9.3	A	-	10.0	B	0.7	No										
	DOWLEN DRIVE	PM	-	10.0	B	-	11.6	B	1.6	No	-	10.0	B	-	11.6	B	1.6	No										
55	SAWTELLE BOULEVARD & [c/d]	AM	-	13.7	B	-	25.8	D	12.1	YES	-	13.7	B	-	25.8	D	12.1	YES	-	12.6	B	-1.100	No					
	DOWLEN DRIVE	PM	-	8.9	A	-	11.4	B	2.5	No	-	8.9	A	-	11.4	B	2.5	No	-	9.5	A	0.600	No					

Notes

a - Intersection shared between the cities of Los Angeles and Santa Monica.

b - Due to issues with upstream blockages, intersections along Santa Monica Boulevard, Wilshire Boulevard, Sunset Boulevard, and Olympic Boulevard were evaluated using a stricter significance impact threshold. A Project-related v/c increase equal to or greater than 0.01 was applied regardless of LOS. This threshold does not apply to the Wilshire Boulevard ramps on the WLA Campus. These are not mainline intersections.

c - WLA Campus intersection, unsignalized

d - Analyzed based on proposed stop control design presented in Option 1. Refer to *Appendix L* for more information.

* - Based on worst LOS for CMA/Delay

Therefore, the mitigation measures are expected in total to decrease the number of intersections significantly impacted by the Project from eight (8) (with no mitigation) to zero (0) (with the TDM Plan, the proposed internal roadway improvement, and TSM Plan).

11.4.2 Project Roadway Segments After Recommended Measures

The Future (2029) With Project With Mitigation condition was analyzed for the external residential roadway segments and Project-internal roadways using the Project volumes determined from the application of the TDM Plan. The results of this analysis are shown in Table 11-3 and Table 11-4 for the external residential roadway segments and internal street segments, respectively. As shown, the implementation of the recommended mitigation measures would reduce the percent increase in ADT along all external segments. The increase in ADT to the external residential roadway segments did not surpass significant impact thresholds prior to the TDM credit. Thus, none of the external residential roadway segments are anticipated to be significantly impacted by the reduced Project volumes after the application of recommended measures. Additionally, the TDM Plan would reduce the impact along all internal roadway segments. Although internal roadway segments were analyzed without specific impact criteria and despite these reductions, the Project-generated ADT would likely continue to create considerable traffic congestion within the WLA Campus, especially along segments on the South Campus. Therefore, Project With Mitigation traffic is not expected to have a significant impact on external, residential street segments; however, traffic disturbances along the internal roadway segments due to Project trips are still anticipated after the application of the recommended mitigation measures. To alleviate the traffic congestion within the WLA Campus, as proposed in Section 11.3.2, a WLA Campus gating system would likely utilize automatic arm barrier gates and allow authorized vehicular traffic to enter the Project site through the use of a proximity card, license plate reader, or other similar technique. The installation of the gates would reduce the congestion within the WLA Campus. More details on potential gate installation can be found in the Circulation Plan in *Appendix L*.

Table 11-3 – Residential Street Segment Analysis

	Segment	Existing ADT (2017)	Future (2029) Project + Mitigation-Related ADT	Final ADT	Project + Mitigation % Increase in ADT	Significant?
1	Barrington Ave bet. Crescenda St & Chaparal St	3,538	-1	3,986	0%	No
2	Barrington Place bet. Sunset Blvd & Chayote St	10,757	0	12,467	0%	No
3	Barrington Place bet. Barrington Ave & Chayote St	10,076	0	11,660	0%	No
4	Church Lane bet. Elderwood St & Montana Ave	6,707	-1	7,557	0%	No
5	Montana Ave bet. Westgate Ave & Barrington Ave	9,866	-5	11,248	0%	No
6	Montana Ave bet. Barrington Ave & Bringham Ave	4,511	-2	5,081	0%	No
7	Bringham Ave bet. Darlington Ave & San Vicente Ave	6,822	-2	7,705	0%	No
8	Rochester Ave bet. Federal Ave & Colby Ave	4,181	-2	4,729	0%	No
9	Ohio Ave bet. Stoner Ave & Barrington Ave	7,149	-4	8,191	0%	No
10	Butler Ave bet. Wyoming Ave & Ohio Ave	3,775	-13	4,241	0%	No
11	Purdue Ave bet. Ohio Ave & Santa Monica Blvd	1,546	-10	1,732	-1%	No
12	Corinth Ave bet. Massachusetts Ave & Ohio Ave	2,787	-2	3,138	0%	No

Table 11-4 – WLA Campus Segment Analysis

	Segment	Existing ADT (2017)	Future (2029) Project + Mitigation-Related ADT	Final ADT	Project + Mitigation % Increase in ADT
13	Patton Ave north of Bonsall Ave	261	-68	193	-35%
14	Bonsall Ave bet. Arnold Ave & Vandergrift Ave	2,192	-270	1922	-14%
15	Nimitz Ave bet. MacArthur Ave & Bonsall Ave	1,058	-270	788	-34%
16	Constitution Ave east of Davis Ave	3,629	-666	2963	-22%
17	Bonsall Ave bet. Pershing Ave & Grant Ave	3,472	-249	3223	-8%
18	Dewey Ave bet. Eisenhower Ave & Grant Ave	1,161	0	1161	0%
19	Eisenhower Ave bet. Dewey Ave & Bonsall Ave	1,157	-397	760	-52%
20	Bonsall Ave bet. Eisenhower Ave & Wilshire Blvd Westbound Ramps	7,398	-734	6664	-11%
21	Bonsall Ave bet. Wilshire Blvd Eastbound Ramps & Dowlen Dr	7,760	540	9280	6%
22	Sawtelle Blvd bet. Dowlen Dr & Ohio Ave	5,588	1374	6962	20%

11.4.3 Project Transit Impact After Recommended Measures

Since the mitigation measures are expected to increase alternative mode trips to the WLA Campus, it is anticipated that the mitigation efforts will increase the transit ridership generated by the Project. To ensure that this increase in transit ridership can be absorbed by the available capacity of the transit routes serving the area, the impacts of the Project with the implementation of mitigation measures on the surrounding transit network were evaluated. This analysis was completed using the same methodology and assumptions described in Section 9.3.2, which analyzed the unmitigated Project impacts on the surrounding transit network.

Net transit trips added by the Project with the recommended measures were calculated by subtracting the existing number of transit trips from the new number of total transit trips created by the Project after the implementation of the mitigation measures. Details on the

calculations are provided in *Appendix G*. All trips assumed by the transit/walk-in/bicycle credit were assumed to use transit only. The Project With Mitigation is expected to add roughly 6,867 daily transit trips with approximately 580 AM peak hour trips and 666 PM peak hour trips. Therefore, Project With Mitigation transit trips would utilize approximately 16.9 percent (580 Project transit users divided by 3,439-passenger transit capacity) of the AM transit capacity and approximately 20.9 percent (666 Project transit users divided by 3,192-passenger transit capacity) of the PM transit capacity. Based on ridership levels on transit lines near the Project site, approximately 38.7 percent of the capacity is currently available in the AM peak hour and approximately 37.6 percent of the capacity is currently available in the PM peak hour. The lowest remaining capacity in either direction during either peak hour currently available for each transit line is as follows (See *Appendix G* for more details):

- BBB Route 1: 25.8 percent
- BBB Route 2: 25.4 percent
- BBB Route 14: 19.3 percent
- BBB Route 15: 23.4 percent
- BBB Route 17: 49.1 percent
- BBB Route 18: 25.7 percent
- CCB Route 6: 10.4 percent
- Metro Route 4: 42.7 percent
- Metro Route 20: 26.5 percent
- Metro Route 720: 28.0 percent
- LADOT Commuter Express Route 431: 29.1 percent

Based on these percentages, the transit trips generated by the Project after the implementation of the recommended measures would not have significant impacts on the transit lines during the weekday AM and PM peak hours. Adjustments to bus frequency for individual transit lines may be needed as travel patterns change over time; however, this Project With Mitigation is not anticipated to necessitate an overall increase in capacity.

The above analysis compares the Project transit demand with the available capacity in the existing transit system. In addition, between now and the proposed Project completion in year 2029, several improvements to the area transit system are expected to occur, which are not included in the transit impact analysis.

The Metro Purple Line is currently being extended and will have a stop located on the WLA Campus just south of Wilshire Boulevard. The Metro Purple Line Extension is already under construction with a tentative opening scheduled for 2026. Currently, the Metro Purple Line operates on weekday AM and PM peak-hour headways of 10 minutes with high-capacity, heavy-rail subway trains. It is expected that this frequency of service will improve after the extension is complete. Metro Purple Line will offer reliable and frequent service near the

Project site with trains expected to run every four (4) minutes during peak periods. It is estimated that there would be a heavy-rail capacity of approximately 15,000 with a projected ridership of 1,116 (boardings and alightings) during the peak hours based on data from the *Westside Subway Extension Updated Direct Ridership Forecasting Report* (2011). Therefore, even with consideration of the alightings included as part of the ridership, there would be approximately 93% available capacity for the extension. With the addition of the Metro Purple Line, there is an expectation that automobile users along with existing transit riders will decide to shift modes, thereby reducing automobile trips and potentially even shifting existing transit users from parallel bus service. With the consideration of future Purple Line, Project With Mitigation transit trips would utilize approximately 3.1 percent (580 Project transit users divided by 18,439-passenger transit capacity with Purple Line extension) of the AM transit capacity and approximately 3.7 percent (666 Project transit users divided by 18,192-passenger transit capacity with Purple Line extension) of the PM transit capacity. Based on these percentages, the transit trips generated by the Project after the implementation of the recommended measures and the buildout of Metro Purple Line Extension would not have significant impacts on the transit lines during the weekday AM and PM peak hours.

In addition to the Metro Purple Line Extension, many of the bus-related improvements listed in the WLA TIMP will receive assistance through the City of Los Angeles TSM Plan that the Project would contribute to, as well as through other private and government entities. These improvements are expected to be operational upon Project Buildout. These projects will include BRT lanes on Santa Monica Boulevard and bus station improvements on Pico Boulevard and Olympic Boulevard. The transit systems improvements will also likely include signal systems with transit preemption along these corridors. These improvements will likely increase bus travel speeds and decrease dwell times at stops, which will allow the buses to shorten route times and travel more efficiently, thus increasing capacity by having more runs per bus in each peak hour. The additional capacity provided through these expansions and improvements will help meet the growing area transit demand irrespective of the Project. No capacity increase for these improvements was included in the analysis, and any capacity increases will further ensure that Project transit demand increases do not result in significant impacts.

11.4.4 Project Caltrans Freeway Screening Analysis After Recommended Measures

The Caltrans freeway screening analysis was conducted for the Future (2029) With Project With Mitigation condition. The results of this analysis are shown in Table 11-5. Prior to mitigation, the Project traffic would require a more detailed Caltrans facility analysis at one (1) surface highway impact and two (2) freeway off-ramps. As shown, the implementation of the recommended mitigation measures would reduce the Project traffic to below a level that would require more detailed impact analysis at the Caltrans facilities. Further information pertaining to the screening analysis is included in *Appendix H*.

Table 11-5 – Caltrans Freeway Screening Analysis
Future (2029) With Project With Mitigation

Traffic Volume Contributions to State Freeway Mainline and Off-Ramp Facilities

PROJECT TRIP GENERATION

Direction	Net Project AM	Net Project PM
Inbound	-34	11
Outbound	41	56

CALTRANS FREEWAY IMPACT ANALYSIS

Segment/Ramp Location	Direction	Proj. Trip Direction	Net Project AM Percentage	Net Project AM Trips	Net Project PM Percentage	Net Project PM Trips	Number of Lanes*	Capacity per Lane**	Total Capacity	Percentage Added by Project AM	Percentage Added by Project PM	Threshold Percentage For Screening**	Ramp LOS (If Over Threshold)	Requires Analysis?
FREEWAY MAINLINE VOLUME/ CAPACITY CALCULATIONS														
I-405 Fwy, n/o Sunset Blvd	Northbound	Outbound	-	2	-	-2	4	2000	8000	0.03%	-0.03%	1.00%	-	No
	Southbound	Inbound	-	-1	-	0	4	2000	8000	-0.01%	0.00%	1.00%	-	No
I-405 Fwy, n/o I-10 Fwy	Southbound	Outbound	-	7	-	-11	4	2000	8000	0.09%	-0.14%	1.00%	-	No
	Northbound	Inbound	-	-8	-	2	4	2000	8000	-0.10%	0.03%	1.00%	-	No
I-10 Fwy, w/o Centinela Ave	Westbound	Outbound	-	0	-	0	4	2000	8000	0.00%	0.00%	1.00%	-	No
	Eastbound	Inbound	-	0	-	0	4	2000	8000	0.00%	0.00%	1.00%	-	No
I-10 Fwy, e/o I-405 Fwy	Eastbound	Outbound	-	3	-	-4	4	2000	8000	0.04%	-0.05%	1.00%	-	No
	Westbound	Inbound	-	-3	-	1	4	2000	8000	-0.04%	0.01%	1.00%	-	No
SURFACE HIGHWAY VOLUME/CAPACITY CALCULATIONS														
Santa Monica Blvd West of I-405 Fwy	Eastbound	-	-	1	-	-3	2	1375	2750	0.04%	-0.11%	1.00%	-	No
	Westbound	-	-	13	-	0	2	1375	2750	0.47%	0.00%	1.00%	-	No
Santa Monica Blvd East of Bundy Dr	Westbound	-	-	0	-	1	2	1375	2750	0.00%	0.04%	1.00%	-	No
	Eastbound	-	-	0	-	0	2	1375	2750	0.00%	0.00%	1.00%	-	No
FREEWAY OFF-RAMP VOLUME/CAPACITY CALCULATIONS														
SB I-405 Off-Ramp to Church Ln/Sunset Blvd	Southbound	Inbound	-	-2	-	0	1	850	850	-0.24%	0.00%	1.00%	-	No
SB I-405 Off-Ramp to WB Wilshire Blvd	Southbound	Inbound	-	0	-	1	1	850	850	0.00%	0.12%	1.00%	-	No
SB I-405 Off-Ramp to Santa Monica Blvd	Southbound	Inbound	-	0	-	0	2	850	1700	0.00%	0.00%	1.00%	-	No
SB I-405 Off-Ramp to Sawtelle Blvd/Tenessee Ave	Southbound	Inbound	-	0	-	0	1	850	850	0.00%	0.00%	1.00%	-	No
NB I-405 Off-Ramp to Sunset Blvd	Northbound	Inbound	-	0	-	0	1	850	850	0.00%	0.00%	1.00%	-	No
NB I-405 Off-Ramp to WB Wilshire Blvd	Northbound	Inbound	-	-11	-	2	1	850	850	-1.29%	0.24%	1.00%	-	No
NB I-405 Off-Ramp to Santa Monica Blvd	Northbound	Inbound	-	5	-	-1	2	850	1700	0.29%	-0.06%	1.00%	-	No
EB I-10 Off-Ramp to Pico Blvd/34th St	Eastbound	Inbound	-	0	-	0	1	850	850	0.00%	0.00%	1.00%	-	No
WB I-10 Off-Ramp to NB Bundy Dr	Westbound	Inbound	-	0	-	0	1	850	850	0.00%	0.00%	1.00%	-	No

NOTE: Project trips based on model trip distribution for North and South Campus. See Section 4: Traffic Forecasting Methodology. Further analysis for Freeway mainline segments and off-ramps presented in Appendix I. Further analysis of surface highway segments presented in Section 8: Traffic Analysis.

** Criteria and capacity for freeway mainline segments and off-ramps operating at LOS E or F per *Agreement Between City of Los Angeles and Caltrans District 7 On Freeway Impact Analysis Procedure, December 2015* . For surface highway intersections the criteria for ramps is used and capacity is based on CMA capacity assumptions.

12 CONCLUSIONS

A total of 55 study intersections were analyzed as part of this transportation study. There were 47 study intersections within the City of Los Angeles [including one (1) shared study intersection within the City of Santa Monica] and eight (8) internal study intersections. The selected intersections were analyzed for detailed level of service analyses under Existing (2017), Existing (2017) Plus Project, and Future (2029) Without and With Project traffic conditions.

In addition to the 55 study intersections, a total of 22 roadway segments were analyzed. These included a total of 12 residential roadway segments as they represent residential streets closest to the Project site that have the most potential to be significantly impacted by the Project along with a total of 10 internal roadway segments.

The Project would generate approximately 3,949 net daily trips, including 351 (224 inbound/127 outbound) trips during the AM peak hour and 355 trips (127 inbound/228 outbound) during the PM peak hour.

Based on the trip generation for the Project Buildout, the Project is projected to cause eight (8) significant traffic impacts after Project completion in year 2029. As outlined above, the implementation of the TDM Plan, the proposed roadway improvement within the WLA Campus, and the installation of potential signal system upgrades would help reduce the Project impacts. After the implementation of mitigation measures, all eight (8) impacted intersections will be reduced to less-than-significant levels. Therefore, the proposed mitigation measures would reduce Project traffic impacts at all study intersections to less than significant levels.

With respect to the roadway segments, no residential street segments are anticipated to be significantly impacted by Project traffic. For roadway segments within the WLA Campus, the increase in Project traffic is likely to increase the potential for intermittent vehicular delays on the WLA Campus internal roadways. To minimize these potential delays, WLA Campus access points and internal circulation system improvements were proposed to increase the efficiency of the internal roadway network.

A summary of the transportation analysis as it relates to Project specific conditions are detailed below:

Project Site Access and Circulation – Access to the proposed Project site would be improved for pedestrians, bicycles, transit/shuttles, deliveries, and private automobiles. The Project would maintain the four (4) existing vehicular access points currently provided around the WLA Campus from Bonsall Avenue, Constitution Avenue, and Sawtelle Boulevard. Access improvements were evaluated to determine the feasibility and effectiveness in providing increased efficiency of the internal roadway network. These measures include consideration of entry gates for the WLA Campus along with traffic calming measures such as speed humps, chockers, and traffic circles.

The bicycle and pedestrian access to the Project site would be enhanced through planned improvements adjacent to the site at Bonsall Avenue north and south of Wilshire Boulevard. The Project would also provide sidewalk and crosswalk improvements that would provide enhanced pedestrian connectivity, including connections to the existing and future bus stops on Wilshire Boulevard. There are significant improvements to the public transportation network scheduled for implementation by the Project Buildout year 2029. These include the extension of the Metro Purple Line subway, with a transit facility to be located at the WLA Campus, fronting Wilshire Boulevard and Bonsall Avenue. The Project would have great potential to take advantage of the opportunities to increase pedestrian and bicycle connectivity which arise from these new transit services.

Project Parking – It is estimated that once the Project is completed the necessary number of parking spaces would be provided on the WLA Campus.

Existing (2017) Plus Project Traffic Conditions – With the addition of Project trips, the level of service values for most study intersections would remain the same or incur a single level of service grade degradation during one (1) or both weekday AM or PM peak hours. With Project completion, but without mitigation or additional changes to the traffic conditions, a total of four (4) of the 47 external study intersections and three (3) of the eight (8) internal study intersections would experience LOS designations that would worsen by one (1) or more level of service grades during one (1) or both peak periods. Prior to the application of mitigation, there would be a total of eight (8) significantly impacted intersections (six [6] are located within the City of Los Angeles and two [2] within the WLA Campus). (No significant impacts are ultimately anticipated at the final, Future [2029] With Project With Mitigation scenario.)

Future (2029) With Project Traffic Conditions – With the addition of the Project traffic to Future (2029) Without Project volumes, and without implementing any mitigation measures, the study intersections would generally continue to operate at the same LOS as under Future (2029) Without Project conditions with the exception of eight (8) intersections that would experience LOS designations that would worsen by one (1) or more level of service grades during one (1) or both peak periods. A total of five (5) external study intersections and three (3) study intersections within the WLA Campus would experience deteriorating level of service during one (1) or both peak periods. Prior to the application of mitigation, there would be a total of eight (8) significantly impacted intersections (six [6] are located within the City of Los Angeles and two [2] within the WLA Campus). (No significant impacts are ultimately anticipated at the final, Future [2029] With Project With Mitigation scenario.)

Roadway Segment Analysis – Roadway segment analyses were conducted for residential street segments and internal roadway segments. The residential street segment impact analysis at 12 roadway segments was performed to address the potential for residential streets to be used as cut-through routes for Project traffic. No residential street segments are anticipated to be

significantly impacted by Project traffic. Additionally, 10 roadway segments within the WLA Campus were analyzed to determine potential Project impacts to the internal circulation. The increase in Project traffic is likely to increase the potential for intermittent vehicular delays on the WLA Campus internal roadways. To alleviate the internal roadway congestions, WLA Campus access points and internal circulation system improvements were proposed to increase the efficiency of the internal roadway network.

Congestion Management Program (CMP) Impact Analysis – It is estimated that the Project at full build-out would result in significant impact at one (1) arterial monitoring location – Sepulveda Boulevard & Wilshire Boulevard. With the application of mitigation measures, this intersection would be fully mitigated. No significant impacts are expected at any freeway monitoring locations or to transit per the CMP criteria.

Caltrans Freeway Screening Analysis – The screening analysis evaluated four (4) freeway mainline segments (per direction), two (2) surface highway segments (per direction), and nine (9) freeway off-ramps. Of the locations analyzed, prior to the application of the Project TDM program, one (1) surface highway segment, and two (2) freeway off-ramps would meet the triggers for a further impact analysis based on the expected Project volume contributions at these locations. With the application of the proposed Project TDM program, none of these freeway segments, highway segments, and freeway off-ramp locations would trigger further impact analysis based on the expected Project volume contributions at these locations.

Mitigation Measures – Several mitigation measures were developed to address the significant traffic impacts of the Project. They include the Transportation Demand Management (TDM) Plan, the Transportation Systems Management (TSM) Plan, along with measures developed solely for the WLA Campus with the development of a WLA Campus Circulation Plan that outlines strategies for improving roadway use, with both physical and transit related enhancements.

The measures under the TDM Plan are designed to accomplish the reduction of Project vehicle trips through various measures and strategies that encourage use of alternative modes over drive-alone automobile travel. Under the TDM Plan, at Project Buildout, mitigation measures are expected to increase the WLA Campus transit/walk-in/bicycle usage, from 15 percent to 25 percent for buildings/facilities located south of Pershing Avenue/Constitution Avenue and from five (5) percent to 25 percent for buildings/facilities located north for proposed Project generated trips. This 25 percent alternative mode credit was not applied to the existing buildings/facilities that will remain on the Project site since they are not associated with this Project. However, the TDM program will be available for use by employees from the existing buildings and is anticipated to reduce their trip generation.

The TSM Plan will increase the person trip capacity of the transportation system in West Los Angeles. These TSM improvements will increase the person trip capacity of the transportation

network by employing measures to shift area travelers out of the drive-alone automobile mode of travel and by improving the intersection roadway capacity. It is estimated that the Project's contribution to improving the effectiveness of the roadway system along with other area improvements will increase the capacity of the impacted intersection by one (1) percent in terms of person-trip capacity.

As part of the WLA Campus Circulation Plan, several strategies for improving the efficiency and sustainability of the internal roadway network were evaluated. The Circulation Plan includes recommendations for improving internal circulation via roadway reconfigurations; improved transit accessibility and connectivity, especially with the future Metro Purple Line Westwood/VA Hospital Station; enhanced pedestrian sidewalks; and, bicycle infrastructure to be built in a manner to close existing gaps in the overall bicycle network, to be consistent with the City of Los Angeles Mobility Plan 2035, and to offer direct connections to the future Westwood/VA Hospital Station. Additionally, one (1) physical mitigation measure is proposed as this would improve the projected level of delay at the intersection - a northbound right-turn-only lane to be added at the intersection of Bonsall Avenue & the Wilshire Boulevard Eastbound Ramps. Lastly, the Circulation Plan recommends measures to prevent non-Project traffic from entering the Project site and to improve motor vehicle traffic flow around the WLA Campus. These measures include consideration of entry gates for the WLA Campus; traffic calming measures, such as speed humps, chokers, and traffic circles; and additional turn lanes at heavily utilized intersections.

The combination of mitigation measures were evaluated for the intersections that were identified as being potentially significantly impacted. The volume-to-capacity analysis conducted for the Without and With Project scenarios were adjusted and run for the With Project With Mitigation scenario. That analysis concluded that these mitigation measures would reduce the significant impacts at the eight (8) study intersections to a less than significant level under the Existing With Project With Mitigation and Future With Project With Mitigation conditions.

Vehicle Miles Traveled (VMT) Analysis – A supplemental VMT analysis was conducted to determine the resultant VMT from the Project. The VMT was calculated both without and with the inclusion of the TDM mitigation measure. The Project VMT growth was compared to VMT growth with the employment increases in typical Los Angeles County and West Los Angeles locations. As shown in the analysis, continuing growth in employment will result in an increase in VMT. The increase in employment for the Project, if it were to occur in an average Los Angeles County location, would result in an increase in Los Angeles County VMT of 79,770 at Project completion. At an average location in West Los Angeles, the increase in the VMT would be 32,382 upon completion. At the WLA Campus, the increase in VMT would be 28,630. With the TDM, the VMT is anticipated to decrease by 1,247.

Construction Traffic Analysis – There is a high likelihood that users of the area roadway network would experience the effects of construction-related traffic during some periods. While sometimes inconvenient, the construction-related traffic effects will be temporary, lasting until the completion of the Project and will be less than the traffic impact of the Project Buildout.