City of Los Angeles

Coastal Transportation Corridor Specific Plan and West Los Angeles Transportation Improvement and Mitigation Specific Plan (CTCSP/WLA TIMP) - Specific Plans Amendment Project

Brentwood-Pacific Palisades, LAX, Palms-Mar Vista-Del Rey, Venice, Westchester-Playa Del Rey, West Los Angeles, and Westwood Community Plan areas

Draft Environmental Impact Report

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CHAPTER 1
INTRODUCTION

This chapter presents background and introductory information for the proposed Coastal Transportation Corridor Specific Plan (CTCSP) and West Los Angeles Transportation Improvement and Mitigation Specific Plan (WLA TIMP) Specific Plans Amendment Project (hereafter referred to as the "Proposed Project") in the western portion of the City of Los Angeles (the "Westside").

Approval of the specific plan amendments would require approval from the City of Los Angeles (City). Prior to that approval, the City Council must consider the Proposed Project's environmental effects, which are identified in this Draft Environmental Impact Report (EIR). As further described below, the EIR serves to inform decision-makers and the public about the environmental effects of the Proposed Project, and has been prepared in accordance with the requirements of the California Environmental Quality Act (CEQA) (California Public Resources Code [PRC] Section 21000 et seq.), the Guidelines for Implementation of the California Environmental Quality Act of 1970 (State CEQA Guidelines) (14 California Code of Regulations [CCR] Section 15000 et seq.), and the City of Los Angeles Environmental Quality Act Guidelines. The City is the lead agency responsible for CEQA review of the Proposed Project.

1.1 Purpose of the EIR

The purpose of an EIR is to inform the decision-makers, regulatory agencies, and the public about the potentially significant physical impacts of a proposed project prior to consideration of project approval. CEQA was enacted by the California Legislature in 1970 and requires public agency decision-makers to consider and document the environmental effects of their actions, whenever possible, to avoid adverse effects to the environment. When a state or local agency determines that a proposed project has the potential to significantly affect the environment, an EIR is prepared. In addition, an EIR identifies alternatives that can reduce the proposed project's significant effects while achieving the project objectives, and indicates the manner in which a proposed project's significant effects can be mitigated or avoided. A public agency must mitigate or avoid significant environmental impacts of projects it carries out or approves whenever feasible. In instances where significant impacts cannot be avoided or mitigated, the project could nonetheless be carried out or approved if the approving agency finds that economic, legal, social, technological, sustainable, or other benefits outweigh the unavoidable significant environmental effects.

1.2 Project Overview

The Proposed Project consists of amendments to the CTCSP and WLA TIMP. The amendments include updates to the lists of transportation improvements and mitigation measures to be funded, in part, by the impact fees collected from new development; an update to the Transportation Impact Assessment (TIA) fee program, including revisions to the fees, trip generation rates, exemptions, in-lieu credits, and affordable housing credits; and a new transit-oriented development (TOD) credit. The updated project lists include the following categories of transportation improvements: transit, bicycle and pedestrian, roadway & intelligent transportation systems (ITS), and trip reduction programs. Other proposed changes include administrative amendments and minor revisions that are consistent with recent California State legislation, transportation policies in the City's General Plan Elements, and City of Los Angeles Department of Transportation's (LADOT) Traffic Study Policies and Procedures, and are in line with current best planning practices.

1.3 Lead, Responsible and Trustee Agencies

The lead agency is the public agency that has the principal responsibility for carrying out or approving a project that may have a significant effect upon the environment (PRC Section 21067). The City of Los Angeles has the primary responsibility for approving the project as a whole and is the appropriate public agency to act as lead agency (State CEQA Guidelines Sections 15051 and 15367), including evaluating potential impacts and identifying mitigation measures under state CEQA laws. The EIR reflects the independent judgment of the City regarding the potential environmental impacts of the Proposed Project, the level of significance of the impacts before and after mitigation, and the mitigation measures proposed to reduce impacts.

This EIR has been prepared by the City of Los Angeles Department of City Planning (DCP), in conjunction with the LADOT. The contact person for the City of Los Angeles DCP is:

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1.4 Scope and Content of the Draft EIR

The scope of the Draft EIR was established based on the Notice of Preparation (NOP) prepared and circulated pursuant to CEQA, and responses received during the review period. The NOP was published on May 22, 2014, and is included in Appendix C, *Notice of Preparation/Scoping*, of this Draft EIR. The review period, originally lasting 30 days from May 22, 2014 to June 23, 2014, was later extended by an additional 30 days to July 23, 2014. Scoping meetings were held on June 5, 2014, and June 9, 2014 to receive community input on the Proposed Project and the scope of the Draft EIR, as well as give members of the community an update to the Westside Mobility Plan. A total of 32 comment letters were received via mail, electronic mail, and comment forms submitted at the scoping meetings. Copies of the comment letters are provided in Appendix C, *Notice of Preparation/Scoping*. The Draft EIR responds to environmental issues raised during the scoping process.

In the NOP, provided in Appendix C, *Notice of Preparation/Scoping,* the City determined, pursuant to State CEQA Guidelines Section 15060(d), that the Proposed Project would have no impacts or impacts that would be less than significant on the following environmental topics: aesthetics, agricultural and forestry resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, mineral resources, population and housing, public services, recreation, and utilities and service systems. As the Proposed Project would not result in any significant impacts to these resource areas, they are not evaluated further in this Draft EIR in accordance with State CEQA Guidelines Sections 15063(c)(3)(A) and 15128.

Based on the findings of the NOP, the following environmental topics are evaluated in this Draft EIR:

- Air Quality
- Biological Resources
- Greenhouse Gas Emissions
- Land Use and Planning
- Noise and Vibration
- Transportation

1.5 EIR Organization

The Draft EIR is organized as follows:

Chapter 1 – Introduction: This introduction describes the purpose and focus of the EIR, discusses the organization of the document, provides information regarding the availability of the Draft EIR and methods for providing comments, and identifies potential areas of controversy and issues to be resolved.

Chapter 2 – Executive Summary: This chapter contains a summary of the Proposed Project and allows the reader to easily reference the analysis of potentially significant impacts, proposed mitigation measures, and residual environmental impacts after mitigation. In addition, alternatives to the project that would reduce or avoid significant effects on the environment are summarized.

Chapter 3 – Project Description: The project description discusses the project background and location, identifies the project objectives, includes a description of the Proposed Project components, and summarizes related plans and programs.

Chapter 4 – Environmental Impacts: The introductory portion of Chapter 4 describes the analytical framework for the environmental review of the Proposed Project. The remainder of this chapter includes a detailed analysis of the environmental impacts of the project on air quality, biological resources, greenhouse gas emissions, land use and planning, noise and vibration, and transportation. Within each environmental topic section, discussion is provided of the setting (existing conditions and regulatory framework), impact assessment methodology, thresholds of significance, environmental impacts that could result from the Proposed Project, recommended mitigation measures that would eliminate or reduce the identified significant impacts, and the significance of the impact following mitigation.

Chapter 5 – Other CEQA Considerations: This chapter provides an assessment of cumulative impacts; evaluates growth-inducing impacts; and identifies significant irreversible environmental changes that would result from project implementation, significant environmental effects that cannot be avoided, and environmental effects of the Proposed Project found not to be significant.

Chapter 6 – Alternatives: This chapter evaluates a range of alternatives to the Proposed Project. It describes impacts that would result from each of the alternatives, compares the significant environmental impacts of the Proposed Project and project alternatives, and identifies the environmentally superior alternative. It also identifies alternatives initially considered but not carried forward for detailed review.

Chapter 7 – References and List of Acronyms: This chapter identifies the materials and documents referenced in this Draft EIR and provides definitions for acronyms and abbreviations used in the document.

Chapter 8 – List of Preparers: This chapter lists the individuals involved in preparing this Draft EIR.

Appendices: The NOP, as well as supporting background documents and technical information for the impact analyses, are presented in the Appendices.

1.6 Availability of the Draft EIR

The City solicits comments regarding environmental issues associated with project implementation from all interested parties requesting notice, responsible agencies, agencies with jurisdiction by law, trustee agencies, and other involved agencies in accordance with Section 15087 of the State CEQA Guidelines. The intent of the public review process is to provide the public and public agencies with the opportunity to comment on environmental issues associated with project implementation.

During the 60-day public review period, which begins on January 7, 2016, and ends on March 7, 2016, the Draft EIR will be available for general public review at the following locations:

City Hall
200 North Spring Street
Los Angeles, California 90012

Central Library
630 West 5th Street
Los Angeles, California 90071

West Los Angeles Regional Library
11360 Santa Monica Boulevard
Los Angeles, California 90025

Palms-Rancho Park Branch Library
2920 Overland Ave
Los Angeles, California 90064

Mar Vista Branch Library
12006 Venice Blvd
Los Angeles, California 90066

Westchester-Loyola Village Branch
7114 W Manchester Ave
Los Angeles, California 90045

Additionally, the EIR can be reviewed at, or downloaded from, the Department of City Planning's website: http://planning.lacity.org/ (click on "Environmental" and then "Draft Environmental Impact Reports"). The Draft EIR can also be purchased on CD-ROM for $7.50 per copy. Contact Conni Pallini-Tipton, AICP, Senior City Planner, at (213) 978-1179 or conni.pallini-tipton@lacity.org for purchase.

Please send your written/typed comments (including a name, telephone number, and contact information) on the Draft EIR to the following:

City of Los Angeles, Department of City Planning
Conni Pallini-Tipton, AICP, Senior City Planner
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Because of time limits mandated by state law, written comments must be provided to the City at the earliest possible date, but no later than 5:00 p.m. on March 7, 2016.

Upon completion of the public review period, written responses to all comments on environmental issues raised by commenters will be prepared and incorporated into the Final EIR. These comments, and their responses, will be included in the Final EIR for consideration by the City, as well as other public decision-makers.

1.7 Areas of Controversy/Issues to be Resolved

In accordance with Section 15123 of the State CEQA Guidelines, potential areas of controversy in the context of CEQA include environmental issue areas of concern known to the lead agency, including issues raised by agencies and members of the public. Issues to be resolved by the City's decision-makers include those environmental issue areas where the potential for an unavoidable and significant impact has been identified, which must be weighed against environmental benefits of the project, or where key decisions remain, such as the selection among alternatives and/or incorporation of alternative mitigation approaches.

For the Proposed Project, there is general agreement that mobility on the Westside is in need of improvement. Environmental issues of concern raised during the scoping process focused on aspects of transportation and traffic, including circulation, vehicle capacity, and congestion. A detailed analysis of transportation and traffic was conducted as part of this EIR. Results of this analysis are presented in Section 4.6, *Transportation*. Differing opinions were offered regarding the potential for changes in fees to affect future land use development, particularly the development of affordable housing. Potential impacts of the Proposed Project on land use, including potential impacts on the development of affordable housing, are evaluated in Section 4.4, *Land Use and Planning.* Other environmental issues of concern raised during scoping include safety (addressed in Section 4.6, *Transportation*), air quality (addressed in Section 4.1, *Air Quality*), and greenhouse gas emissions (addressed in Section 4.3, *Greenhouse Gas Emissions*).

Additional details related to areas of known controversy are provided in the comments letters on the NOP contained in Appendix C, *Notice of Preparation/Scoping*.

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CHAPTER 2
EXECUTIVE SUMMARY

2.1 Introduction

The purpose of the executive summary is to provide a clear and simple description of the project and its potential environmental impacts. Section 15123 of the State CEQA Guidelines requires the executive summary to identify each significant effect of a proposed project, along with proposed mitigation measure(s) and alternatives that would minimize or avoid that effect. The summary is also required to identify areas of controversy known to the Lead Agency, including issues raised by agencies and the public, and issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects.

2.2 Project Location and Setting

The Project study area is in the western portion of the City of Los Angeles (the "Westside") and encompasses the Coastal Transportation Corridor Specific Plan (CTCSP) area and the West Los Angeles Transportation Improvement and Mitigation Specific Plan (WLA TIMP) area (see **Figure 2-1**). The CTCSP area includes all or parts of the Westchester-Playa Del Rey, Palms-Mar Vista-Del Rey, and Venice Community Plan areas and the LAX Plan area. The CTCSP area is generally bounded by the City of Santa Monica on the north, Imperial Highway on the south, the San Diego Freeway (I-405) on the east, and the Pacific Ocean on the west. The WLA TIMP area includes all or parts of the Westwood, West Los Angeles, Brentwood-Pacific Palisades, and the Palms-Mar Vista-Del Rey community plan areas, and is generally bounded by the City of Beverly Hills/Beverwil Drive/Castle Heights Avenue/National Boulevard/Hughes Avenue on the east; Sunset Boulevard on the north; the City of Santa Monica and Centinela Avenue on the west; and Venice Boulevard on the south.

The Project study area is primarily highly urbanized with a variety of land uses including residential, industrial, office, public facilities, and commercial uses. The study area also encompasses open space and parks, including the Ballona Wetlands Ecological Reserve and the Los Angeles/El Segundo Dunes.

2.3 Project Description

The Proposed Project consists of amendments to the CTCSP and WLA TIMP. The amendments include an update to the list of transportation improvements and mitigation measures to be funded, in part, by the impact fees collected from new development; an update to the Transportation Impact Assessment (TIA) fee program, including revisions to the fees, trip generation rates, exemptions, in-lieu credits, and affordable housing credits; and a new transit-oriented development (TOD) credit. The Proposed Project's updated project lists include the following categories of transportation improvements: transit, bicycle and pedestrian, roadway & intelligent transportation system (ITS), and trip reduction programs. Other proposed changes include administrative amendments and minor revisions that are consistent with recent California State legislation, transportation policies in the City's General Plan Elements, and LADOT's Traffic Study Policies and Procedures, and are in line with current best planning practices.

The CTCSP and WLA TIMP were adopted in 1985 and 1997, respectively, with the purpose of establishing a TIA program to be assessed on new development and intended to assist in the implementation of future transportation improvements on the Westside. The TIA fees were established by Specific Plan ordinances and have been a part of the development approval process in the Westside since adoption.

2.3.1 Project Background

The west side of Los Angeles, like many other urban areas throughout the country, experiences significant traffic congestion. Despite an extensive street network, vehicular circulation continues to deteriorate due to historical over-reliance on the car as the primary mode of transportation. The combination of many regional destinations, oversaturated roadways, unreliable travel times for autos and transit, and limited north-south transit options underlie the need for creating a transportation plan for the Westside that will better serve all modes of transportation, improve the connectivity and person throughput of the overall system, and enhance the livability along major boulevards in Westside communities.

To address the transportation issues on the Westside, the Los Angeles City Council directed the Department of Transportation (LADOT), in conjunction with the Department of City Planning (DCP), to undertake a comprehensive study to develop potential short-term solutions and long-term plans to address congestion and mobility challenges within this geography of the City. The comprehensive study, called the Westside Mobility Plan (WMP), was undertaken to update the long range vision that would facilitate a more balanced modal approach toward improving mobility on the Westside. The WMP study area is made up of the combined boundaries of the CTCSP and WLA TIMP areas. The Community Plans for the project-area[1] cite the CTC and WLA TIMP as programs to help implement regional and sub-regional transportation projects.

The proposed amendments to the CTCSP and WLA TIMP, as derived from the WMP, are consistent with the City's multimodal approach to transportation planning and apply such principals to the Westside in a more targeted manner.

2.3.2 Proposed Specific Plan Amendments

Amendments to Impact Fee Assessment and Methodology

The Proposed Project would revise the TIA fees required under each Specific Plan and corresponding ordinance. To determine the appropriate fee updates, a study was conducted to establish the nexus between new development that occurs in the study area and the need for new and expanded transportation facilities and programs, which include transit, bicycle and pedestrian oriented improvements in addition to the more traditional roadway and signalization improvements. After establishing the nexus, the study calculated the TIA fees to be levied for each type of land use. The amount of the TIA fees is based on each land use's proportionate use of the transportation facilities in total. These updated fees have been incorporated into the proposed amendments to the Specific Plans.

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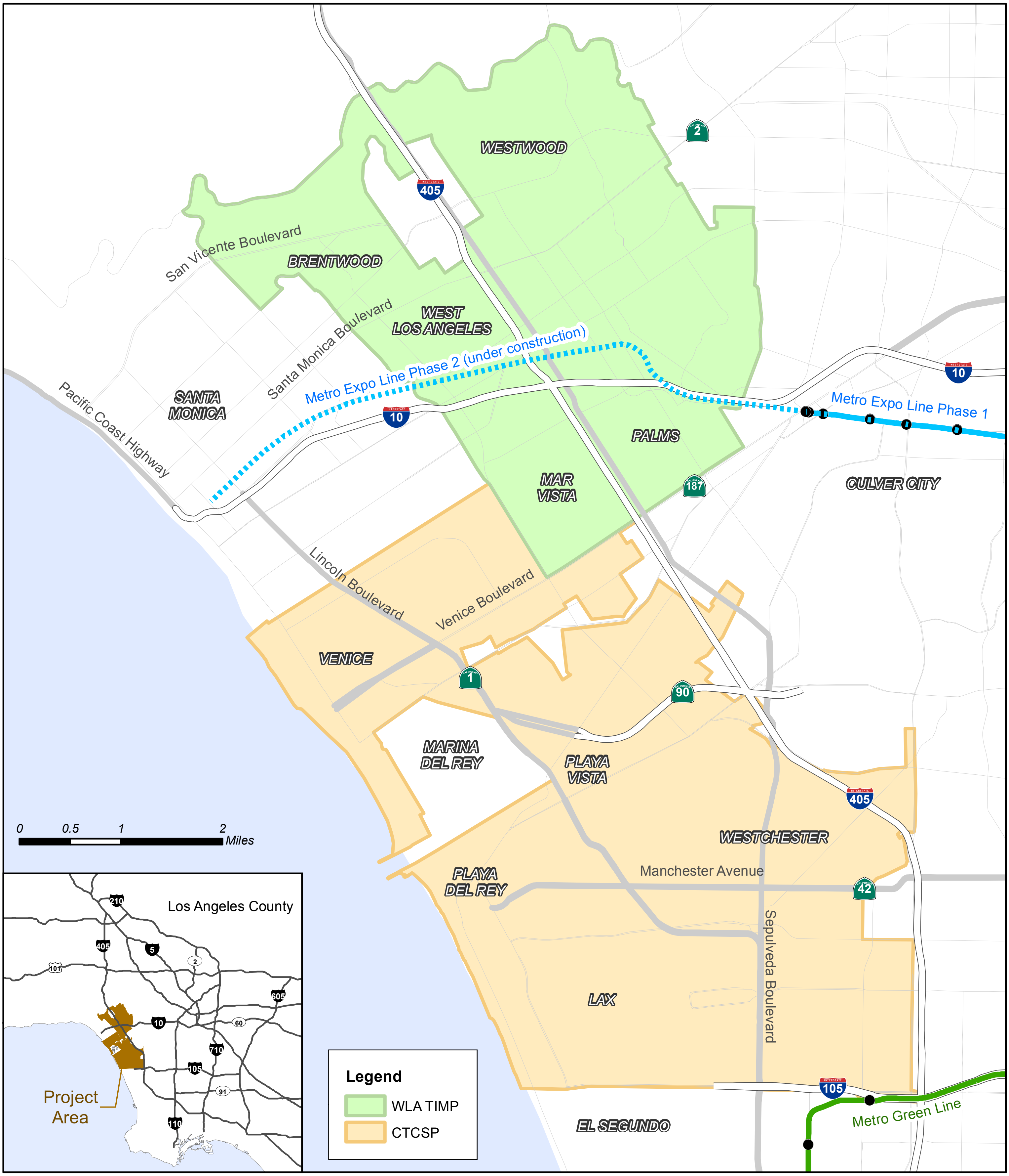
1 The following Community Plans in the project area cite the CTCSP and WLA TIMP: Brentwood-Pacific Palisades, Palms-Mar Vista-Del Rey, Venice, Westchester-Playa Del Rey, West Los Angeles, and Westwood.



Source: U.S. Census Bureau, Geography Division, 2010

Figure 2-1
Project Location Map

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The traditional approach to nexus studies has more often than not involved using automobile Level of Service (LOS) as a performance measure for the transportation system. As part of the proposed amendments to the CTCSP and WLA TIMP, alternative performance measures, such as vehicle miles of travel (VMT), person capacity and throughput, travel time, and accessibility have been used to gauge the effectiveness of the proposed mobility improvements. For this study, the nexus for the TIA fee updates is established using VMT per capita as a performance measure. The intent of this fee is to fund improvements for multiple modes of travel, such as motor vehicles, pedestrians, bicycles, and transit. Under the Proposed Project, the trip generation rates are proposed to be incorporated into the TIA fee tables for each Specific Plan area based on the nexus study.

The proposed amendments would also modify current TIA fee exemptions. In each Specific Plan area, some land uses, such as schools, residential uses, places of worship, and local serving uses, are currently exempt from paying the TIA fee. The proposed CTCSP and WLA TIMP amendments would remove the exemption for single-family and multi-family residential development, with the exception of affordable housing units. In addition, local serving uses, the first 30,000 square feet of shopping centers (currently exempt in the WLA TIMP), and freestanding commercial or medical office projects of less than 20,000 square feet (currently exempt in the CTCSP), would no longer be exempt from an impact fee. Amendments would also be made relative to in-lieu credits, affordable housing credits, and transit-oriented development credits. Details of these amendments are provided in Chapter 3, *Project Description*.

Amendments to the List of Transportation Improvements

The proposed amendments include updating the list of transportation improvements funded in part by the TIA fees in each Specific Plan area. The new projects, identified through an analysis of completed projects and a public outreach component of the WMP process (including consultation with neighboring jurisdictions, Metro, and the California Department of Transportation [Caltrans]), are aimed at improving the existing transportation network, enhancing system capacity, reducing vehicle trips and VMT, and improving transit connectivity. For purposes of the EIR analysis, the transportation improvements proposed for inclusion in the CTCSP and WLA TIMP amendments are assumed to be implemented by 2035. The Proposed Project’s updated project lists includes the following categories of transportation improvements: transit, bicycle and pedestrian, roadway & ITS, and trip reduction programs.

2.4 Project Objectives

The objectives of the transportation improvements that would be funded by the proposed amendments to the Specific Plans are as follows:

Primary Objectives of the Transportation Improvements:

- Provide transportation options and accommodations for multiple modes of travel (i.e., transit, bicycle, pedestrian, vehicle), within existing available right-of-way (ROW), as part of a transportation system that is consistent with the City of Los Angeles’ General Plan Framework Element and General Plan Mobility Element; Community Plans for the Westwood, Brentwood-Pacific Palisades, West Los Angeles, Palms-Mar Vista-Del Rey, Venice, and Westchester-Playa Del Rey communities; and the LAX Specific Plan.

- Produce fewer auto trips per capita and decrease VMT per capita by increasing multimodal transportation options and promoting best practices in transportation demand management.

- Reduce greenhouse gas emissions, as mandated by Assembly Bill (AB) 32 and Senate Bill (SB) 375, by reducing automobile dependence and offering multiple modes of transportation.
- Enhance mobility along key Westside transportation corridors within the Specific Plan areas, particularly by planning for dedicated transit lines that serve north-south corridors and provide connections to planned east-west transit lines.
- Enhance the transportation system by planning for better regional transit connectivity and "first mile-last mile" solutions (such as better pedestrian conditions, bike share/improved bicycle facilities, and circulator bus service).
- Encourage walking and bicycling as a means to safely and conveniently access transit and circulate within and between neighborhoods.
- Develop a multimodal transportation plan for the Westside that reflects the collective input of Westside community members, as gathered through a formal public outreach process.
- Develop transportation improvements that reflect consultation with multiple neighboring jurisdictions, transit service providers, and transportation planning agencies on the Westside.
- Develop a transportation system on the Westside that is efficient, sustainable, feasible, and fiscally responsible.

Secondary Objectives of the Transportation Improvements:

- Enhance the streetscape environment on portions of major arterials by improving neighborhood aesthetics and identity; implementing sustainable landscaping practices; bolstering local business patronage; and providing a pleasant and safe active transportation experience.
- Identify different types of parking strategies, such as demand-based pricing schemes, capacity management, travel demand management programs, and urban design guidelines, to manage parking supply.

The objectives of the proposed amendments to the Specific Plans include the following:

Primary Objectives of the Specific Plan Amendments:

- Develop amendments to the CTCSP and WLA TIMP that are aligned with city and state policies concerning transportation, including the City of Los Angeles' General Plan Framework Element, General Plan Mobility Element, LADOT Traffic Study Policies and Procedures, and State legislation (including AB 3005 and SB 743) that reprioritize transportation improvements to focus on access to transit and active transportation as strategies to reduce dependence on vehicular travel, and reduce VMT and associated greenhouse gas emissions.

- Develop amendments to the CTCSP and WLA TIMP that are aligned with City policies for the study area, as articulated in the Community Plans for the Westwood, Brentwood-Pacific Palisades, West Los Angeles, Palms-Mar Vista-Del Rey, Venice, and Westchester-Playa Del Rey communities, and the LAX Specific Plan.
- Ensure the costs for transportation improvements within the study area are fairly distributed among all future land uses that will contribute to transportation impacts.
- Update TIA fees to provide a mechanism to fund specific transportation improvements that aims to decrease the cumulative impacts of new development and increase person throughput by increasing mobility options within the Westside.
- Update the TIA fee methodology to better align with a multimodal approach to planning for future transportation improvements.
- Update the TIA fee methodology to reflect an improved approach for measuring and addressing transportation impacts.

Secondary Objectives of the Specific Plan Amendments:

- Establish TIA fees that do not hinder the development of housing for diverse income levels in the Westside, including affordable housing for moderate, low, and very low income levels.
- Streamline the Specific Plan implementation process by aligning the CTCSP and WLA TIMP Specific Plan procedures with established City procedures.
- Develop consistent policy language between the CTCSP and WLA TIMP in order to make them easier to implement and administer.

2.5 Alternatives to the Project

CEQA requires that an EIR describe a range of reasonable alternatives to a proposed project that could feasibly avoid or lessen any significant environmental impacts, while attaining the basic objectives of the project. The alternatives analyzed in this EIR are:

- **Alternative 1 – No Project**

  Section 15126.6(e) of the State CEQA Guidelines requires evaluation of the No Project Alternative. As described in the State CEQA Guidelines, the purpose of describing and analyzing the No Project Alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. Therefore, as required by the State CEQA Guidelines, the No Project Alternative consists of conditions that might be expected to occur in the foreseeable future if the Proposed Project was not approved.

  The No Project Alternative assumes continued implementation of current CTC and WLA TIMP Specific Plans, with continuation of current fees (with annual adjustments) and implementation of existing project lists. Under the No Project Alternative, select roadway widenings and intersection improvements would continue to remain on the project lists, and more projects aimed at increasing vehicle capacity in the Westside would be considered for implementation.

- **Alternative 2A – No Sepulveda Boulevard BRT Alternative**

  Under Alternative 2A, the proposed Bus Rapid Transit (BRT) on Sepulveda Boulevard would be eliminated from the CTCSP and WLA TIMP proposed transportation improvement lists. The current lane configuration on Sepulveda Boulevard would be maintained (i.e., no loss of vehicular capacity).

- **Alternative 2B – No Lincoln Boulevard BRT Alternative**

  Under Alternative 2B, the proposed BRT on Lincoln Boulevard would be eliminated from the CTCSP proposed transportation improvement list. The current lane configuration on Lincoln Boulevard would be maintained (i.e., no loss of vehicular capacity).

- **Alternative 3A – Reduced Parking Alternative**

  The Proposed Project assumes that when additional right-of-way for projects (such as BRT and bicycle facilities) is needed, it would be provided through a combination of vehicular capacity reductions (lane conversions) along with on-street parking removal. Under the Reduced Parking Alternative, when additional right-of-way is required, it would be provided solely by removing street parking, with no conversion of vehicle travel lanes. All of the transportation improvements associated with the Proposed Project are included in this alternative; this alternative offers a distinction as to how right-of-way would be utilized in order to implement the proposed transportation improvements.

- **Alternative 3B – Reduced Vehicle Capacity Alternative**

  The Proposed Project assumes that when additional right-of-way for projects (such as BRT and bicycle facilities) is needed, it would be provided through a combination of vehicular capacity reductions (lane conversions) along with on-street parking removal. Under this alternative, when additional right-of-way is required it would be provided solely by converting vehicle travel lanes into transit/bicycle facilities, with no removal of on-street parking. All of the transportation improvements associated with the Proposed Project are included in this alternative; this alternative offers a distinction as to how right-of-way would be utilized for the proposed transportation improvements.

2.6 Areas of Known Controversy

The State CEQA Guidelines require a Draft EIR to identify areas of controversy known to the lead agency, including issues raised by other agencies and the public. Comments were received from public agencies and interested parties in response to the Notice of Preparation (NOP), which was originally circulated from May 22, 2014 to June 23, 2014, with the review period later extended by an additional 30 days to July 23, 2014. In addition, the City held two scoping meetings, one on June 5, 2014 and the other on June 9, 2014, to solicit comments and to inform the public of the proposed EIR. The NOP, along with comments received in response to the published NOP, are presented in Appendix C, *Notice of Preparation/Scoping*. The following environmental topics of potential controversy were identified during the scoping meetings and/or NOP process:

- Traffic congestion that could result from removal of vehicular travel lanes in order to provide for multi-modal transportation improvements

- Diversion of traffic into adjacent neighborhoods
- Parking availability, including provision of parking to support transit ridership and replacement of parking that would be lost with project implementation
- Safety, including safety of bus transit riders accessing center-running BRTs and safety of pedestrians on sidewalks adjacent to curb-running BRT
- Land use impacts from changes in TIA fees including potential impacts on the development of affordable housing
- Construction in Ballona wetlands

In addition, the comments were provided on the following details of the project description:

- Fees, including opposition to fees on residential projects, support for fees on residential projects, and alternative fee structures
- Fee exemptions
- Alternative funding mechanisms for transportation improvements
- Density bonuses
- Requests to add specific transportation improvements to the Proposed Project lists
- Requests to remove specific transportation improvements from the Proposed Project lists

2.7 Issues to be Resolved

The State CEQA Guidelines require the summary section of an EIR to present issues to be resolved by the lead agency. These issues include the choice between alternatives and whether or how to mitigate potentially significant environmental impacts. The major issues to be resolved by the City of Los Angeles, as the Lead Agency for the Proposed Project, include the following:

- Whether the Proposed Project or an alternative should be approved
- Whether the recommended mitigation measures should be adopted or modified
- Whether additional mitigation measures need to be applied to the project

2.8 Summary of Project Impacts and Mitigation Measures

A summary of the environmental impacts associated with the Proposed Project and mitigation measures proposed to avoid or lessen the severity of potentially significant environmental impacts is provided in **Table 2-1,** below. The level of significance of environmental impacts after mitigation is also identified in the table.

Table 2-1 Summary of Impacts and Mitigation Measures Associated with the Proposed Project

Environmental Impacts	Impact Determination	Mitigation Measures	Impact after Mitigation
4.1 Air Quality			
Impact 4.1-1: Implementation of the Proposed Project would not conflict with or obstruct implementation of the applicable air quality plan.			
<u>Construction</u> Construction emissions would not exceed South Coast Air Quality Management District (SCAQMD) thresholds, and construction impacts would not conflict with or obstruct implementation of the Air Quality Management Plan (AQMP) or the City of Los Angeles Air Quality Element.	Less Than Significant Impact	None Required	Impact Would Remain Less Than Significant
<u>Operation</u> The transportation improvements would increase multi-modal mobility options and reduce VMT per Capita. As a result, the Proposed Project would be aligned with the goals of the 2012-2035 RTP/SCS as well as relevant air quality policy objectives of the City's Air Quality Element, Plan for a Healthy Los Angeles, and Mobility Plan 2035.	Less Than Significant Impact	None Required	Impact Would Remain Less Than Significant
Impact 4.1-2: Implementation of the Proposed Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.			
<u>Construction</u> Construction of the proposed transportation improvements would not exceed the SCAQMD maximum daily regional construction emissions thresholds for any pollutant.	Less Than Significant Impact	None Required	Impact Would Remain Less Than Significant
<u>Operation</u> The emphasis of the transportation improvements on alternative modes of transportation would result in a reduction in VMT per Capita. In addition, with technological advances in vehicle emission controls, maximum daily emissions of CO, VOC, NOx, PM10, PM2.5, and SOx with operation of the transportation improvements would be lower than existing conditions and would not exceed the SCAQMD regional operational thresholds.	Less Than Significant Impact	None Required	Impact Would Remain Less Than Significant

Environmental Impacts	Impact Determination	Mitigation Measures	Impact after Mitigation
Impact 4.1-3: Implementation of the Proposed Project would result in a cumulatively considerable net increase of criteria pollutants for which the air basin is in nonattainment (O_3 precursors [NOx and VOC], PM10, and PM2.5) under an applicable federal or state ambient air quality standard.			
<u>Construction – Regional Emissions</u> The regional construction emissions of the nonattainment pollutants PM10, PM2.5, and O3 precursors [NOx and VOC] would be less than the SCAQMD significance thresholds; regional construction emissions related to the Proposed Project would not be cumulatively considerable.	Less Than Significant Impact	None Required	Impact Would Remain Less Than Significant
<u>Construction – Localized Emissions</u> Localized construction-related peak daily particulate emissions associated with the Lincoln Boulevard Bridge Enhancement (PM10 and PM2.5), the Lincoln Boulevard and Sepulveda Boulevard BRTs (PM10), and the I-10 Ramp Reconfiguration at Bundy Drive improvements (PM10) could exceed SCAQMD's Localized Significance Thresholds (LSTs). Therefore, localized construction emissions would be cumulatively considerable.	Significant Impact – Lincoln Boulevard Bridge Enhancement, Lincoln Boulevard BRT, Sepulveda Boulevard BRT, and I-10 Ramp Reconfiguration at Bundy Drive Less than Significant Impact – Other Transportation Improvements	**MM-AQ-1: Tier 3 Emission Standards and Diesel Particulate Filters, MM-AQ-2: Fugitive Dust Control, and MM-AQ-3: Construction Electricity.** See text of measures in Impact 4.1-4 below.	Significant and Unavoidable Impact (Temporary and Short Term) – Lincoln Boulevard Bridge Enhancement, Lincoln Boulevard BRT, Sepulveda Boulevard BRT, and I-10 Ramp Reconfiguration at Bundy Drive Impact Would Remain Less Than Significant – Other Transportation Improvements
<u>Operation</u> Operation of the proposed transportation improvements would result in a decrease in emissions of the nonattainment pollutants (PM10, PM2.5, and O_3 precursors [NOx and VOC]) compared to existing conditions. The Proposed Project would reduce VMT in the project area in the future as compared to future conditions without the Proposed Project, with a resulting decrease in all pollutants. Therefore, operation of the Proposed Project would not be cumulatively considerable.	Less Than Significant Impact	None Required	Impact Would Remain Less Than Significant

Environmental Impacts	Impact Determination	Mitigation Measures	Impact after Mitigation
Impact 4.1-4: Implementation of the Proposed Project would expose sensitive receptors to substantial pollutant concentrations.			
Construction Onsite localized construction emissions from the majority of the transportation improvements would not exceed the LSTs for applicable criteria pollutants. However, localized PM10 and PM2.5 emissions from the Lincoln Boulevard Bridge Enhancement and localized PM10 emissions from the Lincoln Boulevard and Sepulveda Boulevard BRTs and from the I-10 Ramp Reconfiguration at Bundy Drive could exceed the LST thresholds. Toxic air contaminant (TAC) emissions related to construction of these high construction intensity transportation improvements are anticipated to exceed the SCAQMD thresholds.	Significant Impact – Lincoln Boulevard Bridge Enhancement, Lincoln Boulevard BRT, Sepulveda Boulevard BRT, and I-10 Ramp Reconfiguration at Bundy Drive Less than Significant Impact – Other Transportation Improvements	**MM-AQ-1: Tier 3 Emission Standards and Diesel Particulate Filters.** All off-road diesel-powered construction equipment greater than 50 horsepower shall meet USEPA Tier 3 emission standards when used during construction of the Lincoln Boulevard and Sepulveda Boulevard BRTs, Lincoln Boulevard Bridge Enhancement, reconfiguration of the I-10 ramps at Bundy Drive, and other projects that are demonstrated to result in significant impacts by project-specific modeling. If the contractor can demonstrate that a specific piece of Tier 3 equipment cannot be reasonably obtained, the contractor shall use equipment that meets USEPA Tier 2 emission standards and be equipped with a CARB-verified Diesel Emissions Control Strategies (VDECS). [Applies to Lincoln Boulevard Bridge Enhancement, Lincoln Boulevard BRT, Sepulveda Boulevard BRT, and I-10 Ramp Reconfiguration at Bundy Drive] **MM-AQ-2: Fugitive Dust Control.** In order to ensure compliance with, or exceedance of, the requirements associated with SCAQMD Rule 403, construction activities shall include watering disturbed soil at least 3 times daily, or as often as necessary to maintain or exceed a soil moisture content of approximately 12 percent. Additional steps shall be taken, if necessary, to stabilize disturbed soil and stock piles to eliminate visible dust emissions. [Applies to Lincoln Boulevard Bridge Enhancement, Lincoln Boulevard BRT, Sepulveda Boulevard BRT, and I-10 Ramp Reconfiguration at Bundy Drive] **MM-AQ-3: Construction Electricity.** Electricity for construction activities shall be obtained from power poles or portable diesel-fueled generators using “clean burning diesel” fuel and exhaust emission controls. [Applies to Lincoln Boulevard Bridge Enhancement, Lincoln Boulevard BRT, Sepulveda Boulevard BRT, and I-10 Ramp Reconfiguration at Bundy Drive]	Significant and Unavoidable Impact (Temporary and Short Term) – Lincoln Boulevard Bridge Enhancement, Lincoln Boulevard BRT, Sepulveda Boulevard BRT, and I-10 Ramp Reconfiguration at Bundy Drive Impact Would Remain Less Than Significant – Other Transportation Improvements
Operation Mobile source air toxics (MSAT) emissions in the study area are likely to be lower in the future as a result of vehicle emission control technologies. Future levels of all pollutants, except NOx, would be lower with the Proposed Project than without the project.	Less Than Significant Impact	None Required	Impact Would Remain Less Than Significant

Environmental Impacts	Impact Determination	Mitigation Measures	Impact after Mitigation
Impact 4.1-5: Implementation of the Proposed Project would not create objectionable odors affecting a substantial number of people.			
<u>Construction</u> Construction activities would be temporary and short-term in duration, and odors from diesel exhaust are not anticipated to affect a substantial number of people.	Less Than Significant Impact	None Required	Impact Would Remain Less Than Significant
<u>Operation</u> The only source of operational odors would be from vehicles and transit facilities. SCAQMD does not identify mobile sources as a significant source of odors.	Less Than Significant Impact	None Required	Impact Would Remain Less Than Significant
4.2 Biological Resources			
Impact 4.2-1: With mitigation, the Proposed Project would not have a substantial adverse effect, either directly or through habitat modification, on any species identified as candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS).			
<u>Construction</u> Construction of the Lincoln Boulevard Bridge Enhancement could result in the destruction or alteration of habitat such that there would be an adverse effect on special-status species. In addition, the temporary generation of noise, emissions of air pollutants, and discharges that could affect water quality would affect special status species. Transportation improvements, including the Lincoln Boulevard Bridge Enhancement, could result in the removal, trimming, or disturbance of street trees and ornamental landscaping which have the potential to support nesting migratory birds that are protected by the Migratory Bird Treaty Act and the California Fish and Game Code. Construction activities occurring within the nesting season have the potential to result in the removal or destruction of an active nest or direct mortality or injury of individual birds.	Significant Impact	**MM-BR-1: Migratory Birds.** To prevent the disturbance of nesting native and/or migratory bird species during construction, the City shall require that clearing of street trees or other vegetation take place between September 1 and January 30. If construction is scheduled or ongoing during bird or raptor nesting season (January 31 to August 31), the City of Los Angeles shall require that a qualified biologist conduct two nest surveys, one 15 days and the second 72 hours prior to the commencement of construction activities. Surveys shall be conducted in accordance with CDFW protocols, as applicable. If no active nests are identified on or within 200 feet of the construction activity, no further mitigation is necessary. A copy of the preconstruction survey shall be submitted to the Department of City Planning. If an active nest is identified, construction shall be suspended within 200 feet of the nest, or an alternative distance determined to be appropriate by a qualified ornithologist or biologist, until the nesting cycle is complete, as determined by a qualified ornithologist or biologist. **MM-BR-2: Special-Status Species and Habitat.** For CTCSP and WLA TIMP transportation improvement projects that would be constructed within 200 feet of a Significant Ecological Area designated by the County of Los Angeles, a project-specific biological resource survey and assessment shall be conducted by a qualified biologist and prepared prior to project construction that identifies the biological resources within 200 feet and any potential impacts to special status species and habitats. If it is determined during these biological resources surveys that special status species could occur and be impacted by the Proposed Project, focused surveys shall be conducted by a qualified or permitted biologist, as required, in coordination with USFWS and/or CDFW. If potential impacts are identified that cannot be avoided through modification of project design, species-	Less Than Significant

Environmental Impacts	Impact Determination	Mitigation Measures	Impact after Mitigation
		and habitat-specific mitigation measures shall be developed to avoid or reduce project-related impacts. Such measures could include seasonal restrictions on construction, monitoring by a qualified biological monitor during construction, salvage and replacement of native plants, and restoration of sensitive natural communities or habitat following construction. These measures shall be established through the permitting process under Federal and State Endangered Species Acts, as appropriate.	
<u>Operation</u> The proposed transportation improvements would operate within existing roadways, sidewalks, and right-of-ways and would not result in direct physical effects to candidate, sensitive, or special status species. The proposed transportation improvements, including the Lincoln Boulevard Bridge Enhancement, would not substantially alter the existing transportation infrastructure from its current condition in such a way that could indirectly affect special status species.	Less Than Significant Impact	None Required	Impact Would Remain Less Than Significant
Impact 4.2-2: With mitigation, the Proposed Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS.			
<u>Construction</u> Construction of the Lincoln Boulevard Bridge Enhancement could have an adverse effect on sensitive natural communities, such as Southern Coastal Salt Marsh, including direct alteration of habitat or hydrology by construction equipment, and release of soils or hazardous materials that could adversely affect water quality. Construction of the other proposed transportation improvements would occur within developed streets, sidewalks, and/or right-of-ways and would not affect any riparian habitats or sensitive natural communities.	Significant Impact – Lincoln Boulevard Bridge Replacement Less Than Significant Impact – Other Transportation Improvements	**MM-BR-2: Special-Status Species and Habitat.** See text of measure in Impact 4.2-1 above.	Less Than Significant – Lincoln Boulevard Bridge Enhancement Impact Would Remain Less Than Significant – Other Transportation Improvements
<u>Operation</u> The proposed transportation improvements, including the Lincoln Boulevard Bridge Enhancement, would operate within existing roadways, sidewalks, and right-of-ways and would not result in direct physical effects to riparian or other sensitive natural communities.	Less Than Significant Impact	None Required	Impact Would Remain Less Than Significant

Environmental Impacts	Impact Determination	Mitigation Measures	Impact after Mitigation
Impact 4.2-3: With mitigation, the Proposed Project would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means.			
Construction Construction activities associated with the Lincoln Boulevard Bridge Enhancement could result in discharge of dredged or fill material into federal and state jurisdictional waters. Construction of the replacement bridge could have an adverse effect on wetlands through direct alteration of habitat or hydrology by construction equipment, and release of soils or hazardous materials could adversely affect water quality.	Significant Impact – Lincoln Boulevard Bridge Replacement No Impact – Other Transportation Improvements	**MM-BR-3: Wetlands and Jurisdictional Waters.** For transportation improvements that may result in temporary or permanent impacts to federal and/or state jurisdictional waters or wetlands, all applicable permits shall be acquired. These permits include, but would not be limited to, Section 404 and Section 408 permits, a Section 401 Water Quality Certification, a Section 10 permit, and a Streambed Alteration Agreement. During design of the Lincoln Boulevard Bridge Enhancement, encroachment into jurisdictional waters and wetlands shall be minimized to the greatest extent feasible. All conditions of the Section 408 permit shall be met to address the alteration of the Ballona Creek flood control channel to ensure there would be no significant changes to the pre-project hydrology in order to maintain its capacity for flood management. All conditions of the Section 404 permit from the USACE and Streambed Alteration Agreement from the CDFW shall be met. As part of this compliance, compensatory mitigation may be required to offset the impact related to placement of permanent fill in jurisdictional waters. The exact compensatory mitigation ratio will be determined at the time the permit is issued and would be based on the type and value of the wetlands affected by the project; agency standards typically require a minimum of 1:1 for restoration and 3:1 for construction of new wetlands. In addition, all conditions of the Wetland Mitigation and Monitoring Plan as required by USACE for federal jurisdictional waters and CDFW for state jurisdictional waters shall be met. The Wetland Mitigation and Monitoring Plan shall include the following: Descriptions of the wetland types, and their expected functions and values. Performance standards and monitoring protocol to ensure the success of the mitigation wetlands over a period of five to ten years following completion of construction of the compensatory mitigation project. Engineering plans showing the location, size and configuration of wetlands to be created or restored. An implementation schedule showing that construction of mitigation areas shall commence prior to or concurrently with the initiation of construction. A description and proof of legal protection measures for the preserved wetlands (i.e., dedication of fee title, conservation easement, and/ or an endowment held by an approved conservation organization, government agency or mitigation bank).	Less Than Significant – Lincoln Boulevard Bridge Enhancement No Impact – Other Transportation Improvements

Environmental Impacts	Impact Determination	Mitigation Measures	Impact after Mitigation
Operation The Lincoln Boulevard Bridge Enhancement would operate within existing roadways, sidewalks, and right-of-ways and would not result in direct physical effects to a federally-protected wetland.	Less Than Significant Impact	None Required	Impact Would Remain Less Than Significant
Impact 4.2-4: With mitigation, the Proposed Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native residents or migratory wildlife corridors, or impede the use of native wildlife nursery sites.			
Construction The Lincoln Boulevard Bridge Enhancement and/or other proposed transportation improvements have the potential to result in direct mortality or injury to migratory birds; removal or destruction of nests, nestlings, or breeding habitat; or disturbance of nesting migratory birds from construction activities during the nesting season.	Significant Impact	**MM-BR-1: Migratory Birds.** See text of measure in Impact 4.2-1 above.	Less Than Significant
Operation Should any permanent structures, such as piles or other support infrastructure, be required for the Lincoln Boulevard Bridge Enhancement, this is expected to occupy only a small portion of the Ballona Creek channel and would not impede the movement of wildlife or use of the wetlands as a nursery site. Other transportation improvements would operate within existing roadways, sidewalks, and right-of-ways and would not result in adverse effects on the movement of wildlife species or the use of native wildlife nursery sites.	Less than Significant Impact	None Required	Impact Would Remain Less Than Significant
4.3 Greenhouse Gas Emissions			
Impact 4.3-1: Implementation of the Proposed Project would not exceed existing or Future without Project emission levels.			
Construction Construction of the proposed transportation improvements would not require substantial grading or excavation. Use of heavy duty construction equipment would be for relatively short durations. Construction-related GHG emissions associated with the Proposed Project would be a small portion of total construction emissions estimated in the 2012-2035 RTP/SCS, which themselves are expected to represent only 0.2 percent of countywide GHG emissions in	See Combined Emissions	See Combined Emissions	See Combined Emissions

Environmental Impacts	Impact Determination	Mitigation Measures	Impact after Mitigation
2035. GHG construction emissions associated with the Proposed Project are combined with operational emissions to evaluate significance. The combined emissions analysis is provided below.			
<u>Operation</u> The emphasis of the proposed transportation improvements on alternative modes of transportation would result in a reduction in VMT per Capita. In addition, with technological advances in vehicle emission controls, future GHG emissions with implementation of the Proposed Project would be lower than existing and Future without Project conditions. GHG operational emissions associated with the Proposed Project are combined with construction emissions to evaluate significance. The combined emissions analysis is provided below.	See Combined Emissions	See Combined Emissions	See Combined Emissions
<u>Combined Construction and Operations</u> Although daily VMT in the study area would be higher in the future with or without the Proposed Project, technological advances in vehicle emissions systems, projected turnover in the vehicle fleet, and future emission standards are expected to reduce the vehicle emission rates of CO_2. As a result, GHG emissions with implementation of the Proposed Project would be almost 500,000 metric tons (MT) lower than existing conditions, a reduction of 34 percent, and almost 10,000 MT lower than Future without Project conditions, a reduction of approximately 1 percent.	Less than Significant Impact	None Required	Impact Would Remain Less Than Significant

Environmental Impacts	Impact Determination	Mitigation Measures	Impact after Mitigation
Impact 4.3-2: Implementation of the Proposed Project would not impede attainment of SCAG's per capita GHG emission reduction targets as established in the 2012-2035 RTP/SCS.			
The proposed transportation improvements would increase mobility options, increase access to alternative modes of transportation, and reduce future transportation emissions. These improvements would advance the goals of the 2012-2035 RTP/SCS. In addition, the Proposed Project would be consistent with the 2012-2035 RTP/SCS regional CO_2 emission reduction targets and with SB 375.	Less than Significant Impact	None Required	Impact Would Remain Less Than Significant
Impact 4.3-3: Implementation of the Proposed Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.			
The Proposed Project would advance the goals of the 2012-2035 RTP/SCS, MP 2035, and Green LA Plan pertaining to GHG emissions. There would be no conflict between the goals and anticipated improvements associated with the Proposed Project and the goals, policies, targets, regulations, and requirements of these plans or the Plan for a Healthy Los Angeles.	Less than Significant Impact	None Required	Impact Would Remain Less Than Significant
4.4 Land Use and Planning			
Impact 4.4-1: Implementation of the Proposed Project would not physically divide an established community.			
<u>Construction</u> Construction of the proposed transportation improvements would result in temporary, short-term disruptions to adjacent land uses. Construction would occur within or adjacent to existing transportation right-of-ways and would not isolate communities or alter the existing land use conditions in the community. Construction impacts from the Proposed Project would not divide a community or affect land use compatibility.	Less than Significant Impact	None Required	Impact Would Remain Less Than Significant
<u>Operation</u> Implementation of the proposed updates to the TIA fee programs would not alter future land use patterns, materially affect the feasibility of development in the CTCSP and WLA TIMP areas, adversely affect development of affordable housing, or result in any direct or indirect physical impacts that would	Less than Significant Impact	None Required	Impact Would Remain Less Than Significant

Environmental Impacts	Impact Determination	Mitigation Measures	Impact after Mitigation
physically divide an established community. The transportation improvements would not result in any changes in General Plan land designations or zoning classifications or divide or isolate existing neighborhoods or communities. The improvements would be compatible with surrounding uses and would improve safety, access, and alternative modes of transportation in the surrounding area. Some of the transportation improvement projects would result in the removal of some on-street parking; however, the proposed loss of on-street parking is not anticipated to permanently prevent or disrupt access to surrounding land uses.			
Impact 4.4-2: Implementation of the Proposed Project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, community plans, specific plans, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.			
<u>Construction</u> Construction of the proposed transportation improvements would be temporary and of limited duration. All construction activities would comply with existing City regulations governing construction, including prohibitions on roadway construction during peak hours.	Less than Significant Impact	None Required	Impact Would Remain Less Than Significant
<u>Operation</u> The Proposed Project would not conflict with applicable state, regional, or local plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. The proposed list of transportation improvements and fees would support implementation of the City's adopted goals. The Proposed Project would be consistent with local and regional plans that encourage non-motorized transportation, which would result in a more sustainable transportation network and would benefit the health of residents by providing increased opportunities for bicycling and walking as well as improving air quality. The Proposed Project would be consistent with Community Plan policies aimed at improving mobility, increasing the availability of multimodal transportation infrastructure, and reducing vehicle trips in the Community Plan Areas. Overall, the Proposed Project would support existing	Less than Significant Impact	None Required	Impact Would Remain Less Than Significant

Environmental Impacts	Impact Determination	Mitigation Measures	Impact after Mitigation
and planned land uses in the Community Plan areas and would be consistent with, and supportive of, the intent of the Community Plan goals.			
4.5 Noise and Vibration			
Impact 4.5-1: Implementation of the Proposed Project would expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.			
<u>Construction</u> Construction activities associated with the Proposed Project could exceed ambient noise levels by 10 dBA or more for more than one day at a noise sensitive use or exceed ambient noise levels by 5 dBA or more for more than ten days over a three month period at a noise sensitive use.	Significant Impact	**MM-N-1: Construction Noise.** Prior to construction, a noise control plan (NCP) shall be developed by a qualified noise specialist, as approved by the City of Los Angeles Department of Building and Safety. The NCP shall identify the procedures for predicting construction noise levels at sensitive receptors and shall describe the reduction measures required to minimize construction noise. Construction activity lasting more than one day and increasing ambient noise by more than 10 dBA or more at a noise sensitive use, or resulting in increases in ambient noise of 5 dBA or more at a noise sensitive use more than ten days in a three-month period, shall incorporate noise-reducing measures. These measures may include, but are not limited to: Install temporary sound barriers (e.g., soundwall) between the construction site and sensitive receptors and/or place portable sound blankets around sandblasting and jackhammering operations, as well as around construction activities that involve vibratory rollers. Equip construction equipment with the most effective locally available commercial mufflers, along with any other suitable noise attenuation devices (e.g., acoustically attenuating shields, shrouds, or enclosures). Contractor shall be responsible for maintaining equipment consistent with the manufacturers' standards to assure that no additional noise would be generated due to improperly maintained and worn parts. Scheduling operations of high impact equipment (e.g., pile driver, vibratory roller, tractor/loader/backhoe, haul trucks) during the middle of the day so as to reduce early morning and late evening impacts when residents are likely to be home. Placing stationary construction equipment (e.g., compressors, generators) as far away from sensitive land uses, as feasible. Unnecessary idling of equipment and vehicles shall be prohibited. Idling of haul trucks shall be limited to five minutes or less, as required by the South Coast Air Quality Management District rules. The public shall be kept informed of the construction hours and days, especially those of pile driving. The public information shall provide contact information for complaints. Noise complaints shall be logged and construction activities shall be evaluated to determine if additional noise mitigation is necessary and feasible.	Significant and Unavoidable Impact (Temporary and Short Term)

Environmental Impacts	Impact Determination	Mitigation Measures	Impact after Mitigation
		A pre-construction meeting with contractors and project managers shall be conducted to confirm that noise mitigation procedures are in place.	
Operation Noise from increases in vehicle operations and increased vehicle speeds on some roadways during some time periods would not substantially affect overall ambient noise levels. Improvements to bus service, particularly curb-running BRT, could increase noise levels at some sensitive land uses by more than 3 dBA.	Significant Impact – Increased Bus Service Less than Significant Impact – Other Transportation Improvements	No feasible Mitigation Measures are available to address noise impacts from increased bus service	Significant and Unavoidable Impact – Increased Bus Service Impact Would Remain Less Than Significant – Other Transportation Improvements
Impact 4.5-2: Implementation of the Proposed Project would expose persons to or generate excessive groundborne vibration or groundborne noise levels.			
Construction Vibration caused by heavy construction activities near sensitive receptors could exceed the human annoyance vibration threshold for frequent events. Vibration impacts to the nearest structures would not exceed the significance thresholds for structural vibration damage.	Significant Impact	**MM-N-2**: **Construction Vibration.** An evaluation of project-specific vibration levels shall be completed by a qualified vibration specialist, as determined by the City of Los Angeles Department of Building and Safety for any project that is less than 81 feet from a residence. Vibration reducing measures, such as use of lighter weight equipment or use of equipment that produces less vibration, shall be implemented for potentially significant vibration impacts, if technically feasible. In addition, operation of high vibration impact equipment in proximity to sensitive receptors shall be scheduled during the middle of the day so as to reduce human annoyance in the early morning and late evening when residents are likely to be home.	Significant and Unavoidable Impact (Temporary and Short Term)
Operation Operation of the Proposed Project would not involve any stationary sources of vibration. Vehicular traffic could generate vibration during operation; vibration from road traffic is near the threshold of perception for humans.	Less than Significant Impact	None Required	Impact Would Remain Less Than Significant
Impact 4.5-3: Implementation of the Proposed Project would result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. (Only applies to operations)			
The increased frequency of bus service associated with the Proposed Project could result in a permanent increase in ambient noise levels that would exceed 3 dBA.	Significant Impact	No Feasible Mitigation Measures Available	Significant and Unavoidable Impact
Impact 4.5-4: Implementation of the Proposed Project would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. (Only applies to construction)			
Construction could exceed ambient noise levels by 10 dBA or more for more than one day at a noise sensitive use or by 5 dBA or more at a noise sensitive use for more than ten days over a three month period.	Significant Impact	**MM-N-1: Construction Noise.** See text of measure above.	Significant and Unavoidable Impact (Temporary and Short Term)

Environmental Impacts	Impact Determination	Mitigation Measures	Impact after Mitigation
Impact 4.5-5: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, implementation of the Proposed Project would not expose people residing or working in the study area to excessive noise levels.			
<u>Construction</u> Construction activity would not occur on airport property, and airport-related noise levels would be less than construction noise levels. Construction workers would not be exposed to excessive airport noise.	Less than Significant Impact	None Required	Impact Would Remain Less Than Significant
<u>Operation</u> The Proposed Project would not expose residents to excessive airport-related noise.	Less than Significant Impact	None Required	Impact Would Remain Less Than Significant
Impact 4.5-6: For a project within the vicinity of a private airstrip, implementation of the Proposed Project would not expose people residing or working in the study area to excessive noise levels. (Only applies to operations)			
There are no private airstrips located in the vicinity of the study area.	No Impact	None Required	No Impact
4.6 Transportation			
Impact 4.6-1: Implementation of the Proposed Project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.			
The proposed updates of the CTCSP and WLA TIMP would be consistent with the City's multi-modal approach to transportation planning and apply such principles to the Westside in a more targeted manner. The Proposed Project would not conflict with adopted City and State policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.	Less than significant Impact	None Required	Impact Would Remain Less Than Significant
Impact 4.6-2: Implementation of the Proposed Project would exceed thresholds relating to operation of the vehicular circulation system.			
The "volume-weighted" average of the volume-to-capacity (V/C) ratio under Future with Project conditions for all of the analyzed roadway segments would exceed that of existing and Future without Project conditions. In addition, the number of roadway links projected to operate at unsatisfactory levels of service (LOS E or F) under Future with Project	Significant Impact	**MM-T-1: Technology Upgrades and Intersection Improvements.** As the City of Los Angeles implements projects in the updated project lists that would impact vehicular operations by resulting in the removal of a vehicular travel lane along a roadway or the removal of a through lane or turn-lane at an intersection, LADOT shall implement ITS signal and corridor upgrades, major intersection improvements such as turn-lane or safety improvements, and/or congestion monitoring technology upgrades both along project routes and parallel roadways if traffic diversions have occurred as a result of the Proposed Project.	Significant and Unavoidable Impact

Environmental Impacts	Impact Determination	Mitigation Measures	Impact after Mitigation
conditions would exceed the number for existing and Future without Project conditions.		Improvements to be implemented shall be determined based on an analysis of project-specific impacts conducted according to LADOT Traffic Study Policies and Procedures guidelines.	
Impact 4.6-3: Implementation of the Proposed Project would exceed thresholds related to neighborhood traffic intrusion.			
The conversion of selected vehicle travel lanes to transit lanes or bicycle lanes would reduce the capacity available to vehicular traffic and congestion could increase on certain roadways, including neighborhood roadways.	Significant Impact	**MM-T-2: Neighborhood Protection Program.** As the City of Los Angeles implements projects in the updated project lists that would impact vehicular operations by resulting in the removal of a vehicular travel lane along a roadway that could potentially result in diversion of traffic to adjacent residential streets, LADOT shall implement the Neighborhood Protection Program on the impacted residential streets based on an analysis of project-specific impacts conducted according to LADOT Traffic Study Policies and Procedures guidelines.	Significant and Unavoidable Impact
Impact 4.6-4: Implementation of the Proposed Project would increase the volume to capacity ratio on some CMP and state freeway segments by more than 2 percent.			
On a regional level, traffic in the study area is anticipated to increase in conjunction with regional population, housing, and employment growth projected to occur in the future by SCAG. Consequently, when comparing traffic operations on the freeway system under Future with Project conditions to Existing conditions, peak period congestion would continue to increase as a result of background growth.	Significant Impact	**MM-T-3: Coordination with Other Agencies on Transportation Improvements and Funding.** As the City of Los Angeles implements projects in the updated project lists that could potentially impact vehicular operations as determined by LADOT on transportation systems managed by other agencies, such as Caltrans or Metro, or neighboring jurisdictions, the City of Los Angeles shall coordinate with these entities to identify transportation improvements and seek opportunities to jointly pursue funding. Mobility solutions shall be focused on safety, enhancing mobility options, improving access to active modes, and implementing TDM measures to achieve both local and regional transportation and sustainability goals.	Significant and Unavoidable Impact
Impact 4.6-5: Implementation of the Proposed Project would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service.			
The Proposed Project would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service.	Less than Significant	None Required	Impact Would Remain Less Than Significant
Impact 4.6-6: Implementation of the Proposed Project would not substantially disrupt existing public transit, bicycle, or pedestrian facilities or interfere with planned facilities, or create conflicts or inconsistencies with adopted public transit, bicycle, or pedestrian system plans, guidelines, policies, or standards.			
The Proposed Project would not disrupt any existing or planned transit, bicycle, or pedestrian facilities or create conflicts or inconsistencies with adopted transit and bicycle or pedestrian system plans, guidelines, policies, or standards.	Less than Significant	None Required	Impact Would Remain Less Than Significant

Environmental Impacts	Impact Determination	Mitigation Measures	Impact after Mitigation
Impact 4.6-7: Implementation of the Proposed Project would not substantially change physical conditions that would adversely affect transportation safety.			
None of the proposed transportation system improvements would introduce new safety hazards at intersections or along roadway segments; most improvements would be designed to improve safety for all roadway users.	Less than Significant	None Required	Impact Would Remain Less Than Significant
Impact 4.6-8: Implementation of the Proposed Project would result in a substantial disruption to traffic during construction, which could include temporary street closures, temporary loss of regular vehicular or pedestrian access to existing land uses, temporary loss of an existing bus stop or rerouting of bus lines, or creation of traffic hazards.			
Implementation of on-street improvements would mostly consist of roadway restriping and would result in limited changes to the physical configuration of curbs. Construction of the majority of the improvements would likely be short in duration, lasting up to a few weeks; other projects, including the Lincoln Boulevard Bridge Enhancement, center-running BRT corridors on Lincoln and Sepulveda boulevards, and I-10 Ramp Reconfiguration at Bundy Drive would require longer construction duration.	Significant Impact	**MM-T-4. Traffic Control Plan.** Construction activities that may result from the buildout of improvements on the proposed project lists will be evaluated on a project-by-project basis by DOT for construction-related impacts to traffic. Construction activities will be managed through the implementation of a traffic control plan, approved by DOT, to mitigate the impact of traffic disruption and to ensure the safety of all users of the affected roadway, including, as appropriate, through the use of temporary traffic signals, detours, or the use of flagmen adjacent to construction activities.	Significant and Unavoidable Impact (Temporary and Short Term)
New Transportation Performance Metrics: New transportation performance metrics are currently under consideration by the State Office of Planning and Research for inclusion in the State CEQA Guidelines. These potential metrics include Mode Split, Transit Boardings, Vehicle Trips, and Vehicle Miles Traveled. The City of Los Angeles has not developed thresholds of significance for these metrics.			
Mode Split: The Proposed Project would result in an overall reduction in auto mode share and an overall increase in mode shares for transit, biking, and walking.	Proposed Project would meet the intent of this potential new metric	None Required	Not Applicable
Transit Boardings: The Proposed Project would result in an overall increase in transit boardings.	Proposed Project would meet the intent of this potential new metric	None Required	Not Applicable
Vehicle Trips: The Proposed Project would result in an overall decrease in vehicle trips relative to Future without Project conditions.	Proposed Project would meet the intent of this potential new metric	None Required	Not Applicable

Environmental Impacts	Impact Determination	Mitigation Measures	Impact after Mitigation
Vehicles Miles Traveled: The Proposed Project would result in an overall decrease in VMT per Capita.	Proposed Project would meet the intent of this potential new metric	None Required	Not Applicable

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CHAPTER 3
PROJECT DESCRIPTION

This chapter provides a detailed description of the proposed amendments to the Coastal Transportation Corridor Specific Plan (CTCSP) and West Los Angeles Transportation Improvement and Mitigation Specific Plan (WLA TIMP), collectively referred to as the Proposed Project. The project description includes an overview and background of the Proposed Project, the project objectives, a description of the existing environment within the project area, and a detailed description of the Proposed Project.

3.1 Project Overview

The Proposed Project consists of amendments to the CTCSP and WLA TIMP. The amendments include an update to the list of transportation improvements and mitigation measures to be funded, in part, by the impact fees collected from new development; an update to the Transportation Impact Assessment (TIA) fee program, including revisions to the fees, trip generation rates, exemptions, in-lieu credits, and affordable housing credits; and a new transit-oriented development (TOD) credit. The Proposed Project's updated project lists include the following categories of transportation improvements: transit, bicycle and pedestrian, roadway & intelligent transportation system (ITS), and trip reduction programs. Other proposed changes include administrative amendments and minor revisions that are consistent with recent California State legislation, transportation policies in the City's General Plan Elements, and Los Angeles Department of Transportation's (LADOT) Traffic Study Policies and Procedures (LADOT, 2014), and are in line with current best planning practices.

The CTCSP and WLA TIMP were adopted in 1985 and 1997, respectively, with the purpose of establishing a TIA program to be assessed on new development and intended to assist in the implementation of future transportation improvements on the Westside. The TIA fees were established by Specific Plan ordinances and have been a part of the development approval process in the Westside since adoption.

The City of Los Angeles Department of City Planning (Lead Agency) has prepared a draft EIR for the proposed amendments to the CTCSP and WLA TIMP identified herein (Proposed Project).

3.2 Project Background

The west side of Los Angeles, like many other urban areas throughout the country, experiences significant traffic congestion. Despite an extensive street network, vehicular circulation continues to deteriorate due to historical over-reliance on the car as the primary mode of transportation. The combination of many regional destinations, oversaturated roadways, unreliable travel times for autos and transit, and limited north-south transit options underlie the need for creating a transportation plan for the Westside that will better serve all modes of transportation, improve the connectivity and person throughput of the overall system, and enhance the livability along major boulevards in Westside communities.

To address the transportation issues on the Westside, the Los Angeles City Council directed the Department of Transportation, in conjunction with the Department of City Planning, to undertake a comprehensive study to develop potential short-term solutions and long-term plans to address congestion and mobility challenges within this geography of the City. The comprehensive study, called the Westside Mobility Plan, was undertaken to update the long range vision that would facilitate a more balanced modal approach toward improving mobility on the Westside. The Westside Mobility Plan study area is made up of the combined boundaries of the CTCSP and WLA TIMP areas. These Specific Plan areas include all or parts of the Westwood, West Los Angeles, Brentwood-Pacific Palisades, Palms-Mar Vista-Del Rey, Westchester-Playa Del Rey, Venice Community Plan areas and the Los Angeles International Airport (LAX) Plan area. The Community Plans cite the CTC and WLA TIMP Specific Plans as programs to help implement regional and sub-regional transportation projects.

The Westside Mobility Plan focused on six components, of which two were the updates to the CTCSP and the WLA TIMP, that is, the Proposed Project.[2] The proposed amendments to the CTCSP and WLA TIMP are intended to increase mobility options and contribute to a multimodal transportation network on the Westside.

This EIR analyzes the proposed amendments to the CTCSP and WLA TIMP, specifically as they would result in reasonably foreseeable impacts to the environment through the ultimate construction and implementation of transportation improvements, as listed in the updated project lists for each Specific Plan. Impacts from the fee programs will be discussed to the extent that the fee program may have indirect impacts (e.g., an effect on influencing future development). The proposed amendments to the CTCSP and WLA TIMP are described briefly below:

1. *CTCSP* – An updated Coastal Transportation Corridor Specific Plan, including an updated list of transportation improvements and an updated TIA fee.

2. *WLA TIMP*– An updated West Los Angeles Transportation Improvement and Mitigation Specific Plan, including an updated list of transportation improvements and an updated TIA fee.

The proposed amendments to the WLA TIMP and CTCSP were informed by the other components of the Westside Mobility Plan, which are described briefly below. Note that these other components are not subject to CEQA review and, therefore, are not analyzed in this environmental document.

Livable Boulevards describe major streets in the Westside Mobility Plan with a focus on achieving the following goals: increased local identity, public safety, and economic revitalization. Livable Boulevards are envisioned as gathering places that accommodate those who travel by car, transit, bicycle, or on foot.

Streetscape Plans are a tool to help guide the long-term implementation of streetscape improvements. They also serve to document a community's vision for how a street looks and functions. A typical plan will 1) identify a consistent palette of streetscape amenities such as street benches, trash receptacles, street lighting, trees, and unique community identifiers; 2) define maintenance responsibilities for the city, businesses and community partners; and 3) develop a basis for pursuing funding opportunities. Typical goals of streetscape plans include enhancing walking and bicycling experiences on the street, improving pedestrian and bicyclist safety, bolstering local businesses, improving connections to nearby transit, implementing sustainable practices, and improving corridor aesthetics.

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2 The six components of the Westside Mobility Plan are: (1) the Westside Transportation Demand Model; (2) the Westside Mobility Rail Connectivity Study; (3) the Westside Parking Study; (4) the Coastal Transportation Corridor Specific Plan Update; (5) the West L.A. Transportation Specific Plan Update; and (6) the Livable Boulevards -- Streetscape Plans.

1. *Westside Transportation Demand Model* – An innovative transportation demand model used as a tool in the analysis of existing and future transportation system deficiencies and the analysis of potential transportation solutions. This tool was used in this EIR to analyze the transportation projects listed on the proposed CTCSP and WLA TIMP transportation improvement lists.

2. *Westside Mobility and Rail Connectivity Study* – Evaluation of rail transit options for the Green Line extension, the Lincoln Boulevard and Sepulveda Boulevard corridors, and for other potential connecting corridors. This study informed many of the corridor transit improvements listed on the proposed CTCSP and WLA TIMP transportation improvement lists.

3. *Westside Parking Study* – Documentation of existing parking conditions and deficiencies, an assessment of future parking demand and needs at select parking hot-spot areas, and recommendations for potential solutions including additional parking management and pricing strategies. This study informed the parking related Trip Reduction Programs included on the proposed transportation improvement lists.

4. *Livable Boulevards - Streetscape Plans* – An analysis of existing conditions along selected commercial corridors, public outreach to gather community feedback, and creation of streetscape plans for five corridor segments. These Streetscape Plans are included on the proposed transportation improvement lists and are identified below:

   - Centinela Avenue from Washington Boulevard to Jefferson Boulevard
   - Motor Avenue from Interstate 10 (I-10) to Venice Boulevard
   - Pico Boulevard from Centinela Avenue to Interstate 405 (I-405)
   - Pico Boulevard from the I-405 to Patricia Avenue
   - Venice Boulevard from Lincoln Boulevard to Inglewood Boulevard

In addition to the above components of the Westside Mobility Plan, the update to the WLA TIMP was also informed by station area planning efforts for the Exposition Line (Phase II), titled Exposition Corridor Transit Neighborhood Plan, conducted by the Department of City Planning. Specifically, the Transit Neighborhood Plans initiative resulted in streetscape planning for five additional street segments within the boundary of the WLA TIMP. These Streetscape Plans are included on the proposed WLA TIMP Specific Plan transportation improvements list and are identified below:

- Bundy Drive from Missouri Avenue to Pico Boulevard
- National Boulevard from Castle Heights Avenue to Mentone Avenue
- Olympic Boulevard from Centinela Avenue to Barrington Avenue
- Palms Boulevard from Motor Avenue to National Boulevard
- Sepulveda Boulevard from Olympic Boulevard to National Boulevard

CTCSP and WLA TIMP Fees

The purpose of the TIA fees, which are being updated as part of the Proposed Project, is to provide a funding mechanism for transportation improvements needed to address transportation impacts generated by new development within the Specific Plan areas, and to require that new development projects mitigate any project-related transportation impacts. Developers pay the impact fee to the City prior to the issuance of any building, grading, or foundation permit. A one-time fee is charged to new development based on the number of new trips generated by the new development within the Specific Plan areas. The fee is assessed on the amount of net new trips resulting from the project. A project's existing trips are credited toward the new building/development. The fees are deposited into trust funds for implementing the transportation improvements identified within the Specific Plans (Appendix B and Appendix C of the CTCSP and Appendix C of the WLA TIMP). Updating the CTCSP and WLA TIMP and the impact fee programs would ensure the continued collection of adequate fees to fund transportation improvements in the area and would continue to provide local control of a dependable funding source for leveraging federal and state monies. Commensurate with similar fee programs adopted by other surrounding cities, the TIA fee program helps mitigate impacts and assesses a fee on new development. Under the current Specific Plans, the fees are increased (or can also be decreased) on January 1 of each year by the amount of the percent change in the most recently available City Building Cost Index as determined by LADOT. The updated Specific Plans would retain this provision. The current fee programs (as of January 2015) are shown below in **Table 3-1**.

Table 3-1 Existing Transportation Impact Assessment Fee Program (2015)

Program	Year Established	Current Fee	Exemptions
Coastal Transportation Corridor Specific Plan	1985	$8,449 per PM peak hour trip	Exempt: neighborhood retail; schools/government facilities; residential (excluding hotels); Airport projects not on Airport property specifically not exempt
West Los Angeles Transportation Improvement and Mitigation Specific Plan	1997	$3,419 per PM peak hour trip	Exempt: neighborhood retail; first 30,000 square feet (SF) of other retail; schools/ government facilities; residential (excluding hotels)

Source: LADOT, 2015.

The TIA fee programs require new development to mitigate their project specific impacts and to contribute a fair share to complete regional improvements to mitigate the cumulative impacts. The fair share is based on a "nexus" and constitutes approximately 35 percent of the total cost of the identified improvements. The fair share payment (i.e., TIA fee) is calculated in direct proportion to the number of net new PM peak hour trips generated by new development. Because new development is not required to pay to improve traffic congestion caused by the existing traffic or by the cut-through traffic with destinations outside the Specific Plan areas, the TIA fees represent only a fraction of the costs for all of the total regional improvement needs. As a result, LADOT has relied on the strategy of leveraging the collected TIA fees to secure outside transportation grants to help pay for the remaining costs, primarily by submitting grant applications in the Los Angeles County Metropolitan Transportation Authority (Metro) Call for Projects process.

Currently, the TIA fees are used towards the capital cost of specific local projects with a regional benefit as identified within each Specific Plan, including:

- Roadway projects such as arterial widening and intersection improvements
- Signal synchronization and ITS
- Bus and rail transit capital and transit stop enhancements
- Travel Demand Management (TDM) strategies (e.g. rideshare, transit subsidies, flex schedules)

3.3 Project Location

As shown in **Figure 3-1** the study area is in the western portion of the City of Los Angeles (the "Westside") and encompasses the CTCSP area and the WLA TIMP area. As shown on **Figure 3-2**, the CTCSP area includes all or parts of the Westchester-Playa Del Rey, Palms-Mar Vista-Del Rey, and Venice community plan areas and the LAX Plan area. The CTCSP area is generally bounded by the City of Santa Monica on the north, Imperial Highway on the south, the San Diego Freeway (I-405) on the east, and the Pacific Ocean on the west. As shown in **Figure 3-3**, the WLA TIMP area includes all or parts of the Westwood, West Los Angeles, Brentwood-Pacific Palisades, and the Palms-Mar Vista-Del Rey community plan areas, and is generally bounded by the City of Beverly Hills/Beverwil Drive/Castle Heights Avenue/National Boulevard/Hughes Avenue on the east; Sunset Boulevard on the north; the City of Santa Monica and Centinela Avenue on the west; and Venice Boulevard on the south.

3.4 Project Objectives

The Proposed Project includes updated TIA fees, as well as a new list of transportation improvements to be funded, in part, by the TIA fees from new development. The overall objective of the Proposed Project is to provide a mechanism, based on current land use trends and infrastructure requirements, for funding transportation improvements that would mitigate the cumulative impacts of new development by increasing mobility options within the Westside. However, the Proposed Project would not, itself, entitle or otherwise approve any transportation projects. Nevertheless, the Proposed Project would result in a new list of transportation improvements for both the CTCSP and WLA TIMP areas. In recognition of this distinction, project objectives for the proposed transportation improvements included in the updated Specific Plan project lists are articulated separately from project objectives that relate to the proposed amendments to the Specific Plans.

The objectives of the transportation improvements that would be funded by the proposed amendments to the Specific Plans are as follows:

Primary Objectives of the Transportation Improvements:

- Provide transportation options and accommodations for multiple modes of travel (i.e., transit, bicycle, pedestrian, vehicle), within existing available right-of-way, as part of a transportation system that is consistent with the City of Los Angeles' General Plan Framework Element and General Plan Mobility Element; Community Plans for the Westwood, Brentwood-Pacific Palisades, West Los Angeles, Palms-Mar Vista-Del Rey, Venice, and Westchester-Playa Del Rey communities; and the LAX Specific Plan.
- Produce fewer auto trips per capita and decrease vehicle miles traveled (VMT) per capita by increasing multimodal transportation options and promoting best practices in transportation demand management.

- Reduce greenhouse gas emissions, as mandated by Assembly Bill (AB) 32 and Senate Bill (SB) 375, by reducing automobile dependence and offering multiple modes of transportation.
- Enhance mobility along key Westside transportation corridors within the Specific Plan areas, particularly by planning for dedicated transit lines that serve north-south corridors and provide connections to planned east-west transit lines.
- Enhance the transportation system by planning for better regional transit connectivity and "first mile-last mile" solutions (such as better pedestrian conditions, bike share/improved bicycle facilities, and circulator bus service).
- Encourage walking and bicycling as a means to safely and conveniently access transit and circulate within and between neighborhoods.
- Develop a multimodal transportation plan for the Westside that reflects the collective input of Westside community members, as gathered through a formal public outreach process.
- Develop transportation improvements that reflect consultation with multiple neighboring jurisdictions, transit service providers, and transportation planning agencies on the Westside.
- Develop a transportation system on the Westside that is efficient, sustainable, feasible, and fiscally responsible.

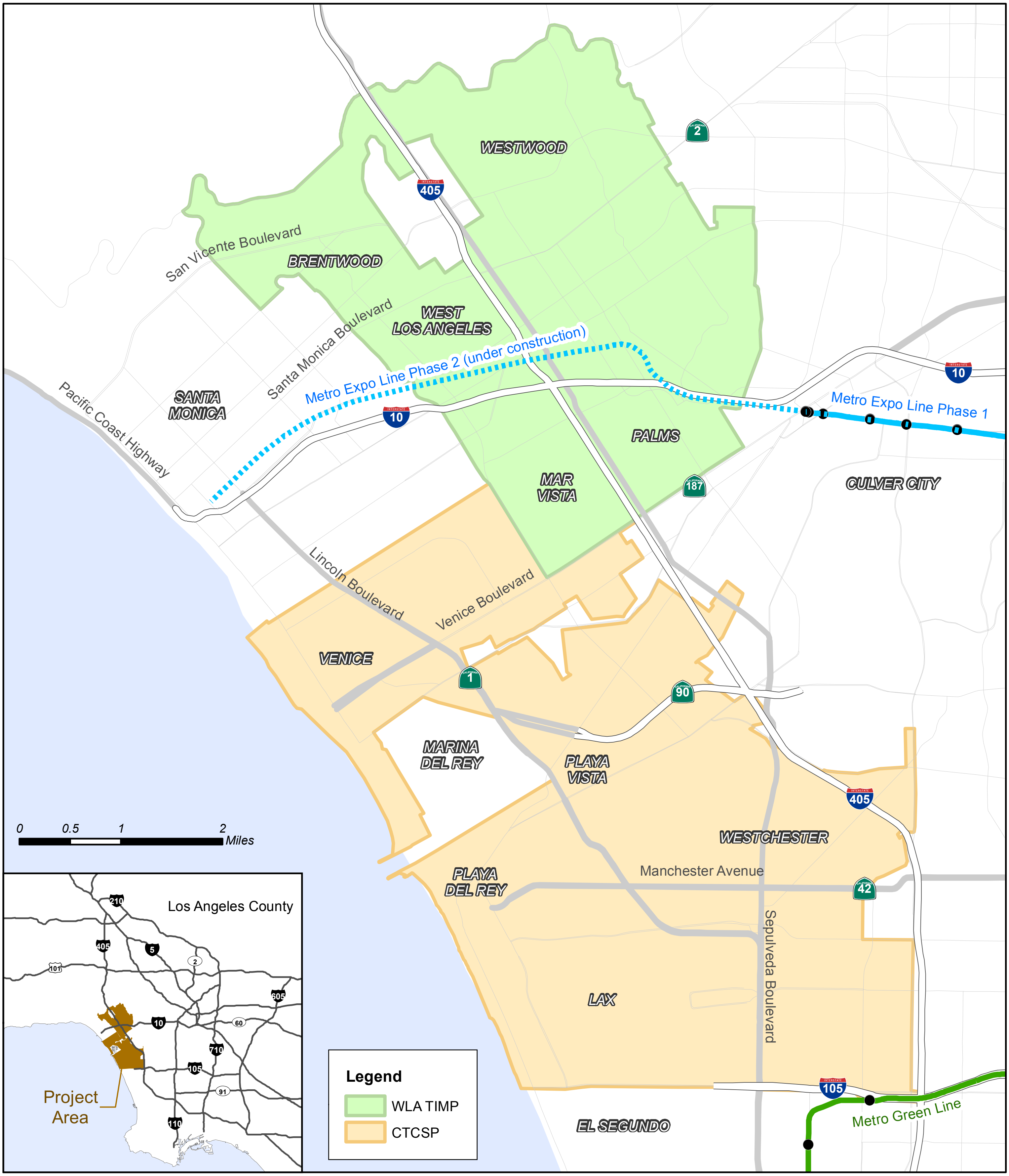
Secondary Objectives of the Transportation Improvements:

- Enhance the streetscape environment on portions of major arterials by improving neighborhood aesthetics and identity; implementing sustainable landscaping practices; bolstering local business patronage; and providing a pleasant and safe active transportation experience.
- Identify different types of parking strategies, such as demand-based pricing schemes, capacity management, travel demand management programs, and urban design guidelines, to manage parking supply.

The objectives of the proposed amendments to the Specific Plans include the following:

Primary Objectives of the Specific Plan Amendments:

- Develop amendments to the CTCSP and WLA TIMP that are aligned with city and state policies concerning transportation, including the City of Los Angeles' General Plan Framework Element, General Plan Mobility Element, LADOT Traffic Study Policies and Procedures, and State legislation (including AB 3005 and SB 743) that reprioritize transportation improvements to focus on access to transit and active transportation as strategies to reduce dependence on vehicular travel, and reduce VMT and associated greenhouse gas emissions.
- Develop amendments to the CTCSP and WLA TIMP that are aligned with City policies for the study area, as articulated in the Community Plans for the Westwood, Brentwood-Pacific Palisades, West Los Angeles, Palms-Mar Vista-Del Rey, Venice, and Westchester-Playa Del Rey communities, and the LAX Specific Plan.



Source: U.S. Census Bureau, Geography Division, 2010

Figure 3-1
Project Location Map

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Source: U.S. Census Bureau, Geography Division, 2010

Figure 3-2
CTC Specific Plan Area

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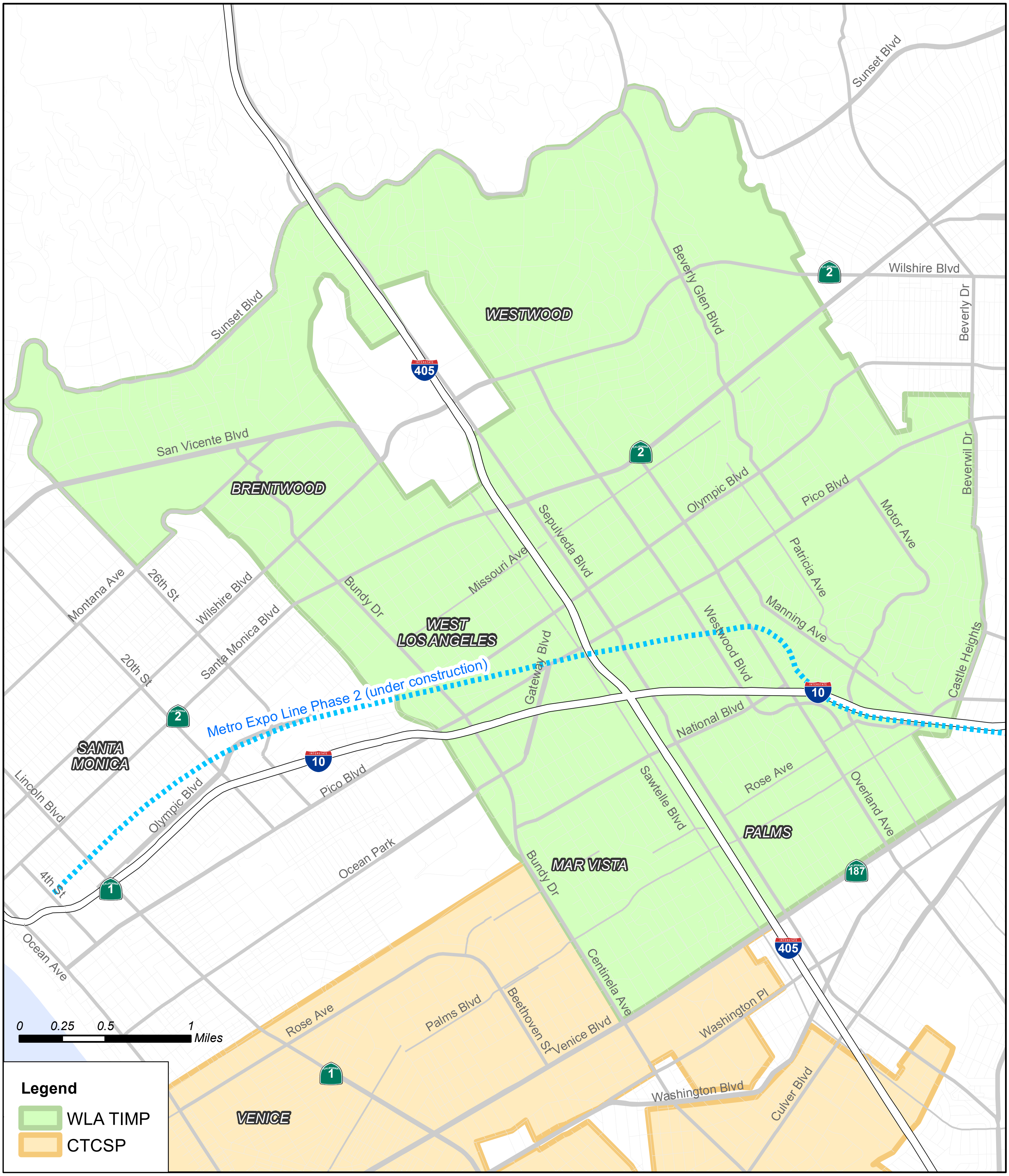

Source: U.S. Census Bureau, Geography Division, 2010

Figure 3-3
WLA TIMP Specific Plan Area

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- Ensure the costs for transportation improvements within the study area are fairly distributed among all future land uses that will contribute to transportation impacts.
- Update TIA fees to provide a mechanism to fund specific transportation improvements that aims to decrease the cumulative impacts of new development and increase person throughput by increasing mobility options within the Westside.
- Update the TIA fee methodology to better align with a multimodal approach to planning for future transportation improvements.
- Update the TIA fee methodology to reflect an improved approach for measuring and addressing transportation impacts.

Secondary Objectives of the Specific Plan Amendments:

- Establish TIA fees that do not hinder the development of housing for diverse income levels in the Westside, including affordable housing for moderate, low, and very low income levels.
- Streamline the Specific Plan implementation process by aligning the CTCSP and WLA TIMP Specific Plan procedures with established City procedures.
- Develop consistent policy language between the CTCSP and WLA TIMP in order to make them easier to implement and administer.

3.5 Detailed Summary of Proposed Changes

The Proposed Project consists of amendments to the CTCSP and WLA TIMP. The updates of the CTCSP and WLA TIMP are consistent with the City's multimodal approach to transportation planning and apply such principles to the Westside in a more targeted manner. The details are summarized below.

Amendments to Impact Fee Assessment and Methodology

Fees

The Proposed Project would revise the TIA fees required under each Specific Plan and corresponding ordinance. To determine the appropriate fee updates, a study was conducted to establish the nexus between new development that occurs in the study area and the need for new and expanded transportation facilities and programs, which include transit, bicycle and pedestrian oriented improvements in addition to the more traditional roadway and signalization improvements. After establishing the nexus, the study calculated the TIA fees to be levied for each type of land use. The amount of the TIA fees is based on each land use's proportionate use of the transportation facilities in total. These updated fees have been incorporated into the proposed amendments to the Specific Plans.

The traditional approach to nexus studies has more often than not involved using automobile Level of Service (LOS) as a performance measure for the transportation system. As part of the proposed amendments to the CTCSP and WLA TIMP, alternative performance measures, such as VMT, person capacity and throughput, travel time, and accessibility have been used to gauge the effectiveness of the proposed mobility improvements. For this study, the nexus for the TIA fee updates is established using VMT per capita as a performance measure. The intent of this fee is to fund improvements for multiple modes of travel, such as motor vehicles, pedestrians, bicycles, and transit.

The updated CTCSP and WLA TIMP TIA fees were calculated by dividing the total number of net new PM peak hour trips by a portion of the updated project list costs. **Table 3-2** presents the average "per trip" fees within each of the Specific Plan areas.

Table 3-2 TIA Fees per Average PM Peak Hour Trip

Measure	WLA TIMP	CTCSP
Total Cost:	$247,779,190	$334,513,746
35% of Total Cost:	$86,722,717	$117,079,811
PM Trip Growth:	8,721	13,234
Average Cost Per PM Trip:	$9,944	$8,847

Source: Fehr & Peers. 2015. Transportation Impact Assessment (TIA) Fee Program Study for Coastal Transportation Corridor Specific Plan (CTCSP) and West Los Angeles Transportation Improvement and Mitigation Specific Plan (WLA TIMP) Specific Plans Amendment Project.

Following the calculation of the average "per trip" cost, two variables were added to the fee calculations to further account for the transportation impacts of various land use types.

- **Average Vehicle-Trip Length:** The distance drivers are willing to travel is largely dependent on the purpose of their trip. For example, a person traveling to work may be willing to commute 10 miles each day (20 miles of total driving) but choose to shop and dine in their local community resulting in shorter trips.

  The average trip length data were used to generate a VMT factor. The VMT factor was based on the average trip length generated by a single family household. Since single family households generate a variety of trip types, such as work, school and shopping trips, they are thought to reflect an average of a variety of trip types. Therefore, the VMT factor for a single family household is 1.0, and uses with longer average trip lengths, such as office, are greater (> 1.0) while uses with shorter trip lengths, such as locally serving retail, are lower (< 1.0). The VMT factor was accounted for in the calculation of fees for each land use type. As a result, the trip fees for land use types with a higher VMT factor were adjusted upward to reflect the greater VMT associated with these uses, and the trip fees for land use types with a lower VMT factor were adjusted downward to reflect the lower VMT associated with these uses.

- **Percent of New Vehicle Trips:** Trips generated by housing, employment centers, schools and other unique generators (e.g., hospitals) are considered to generate all "new" trips. However, a portion of trips associated with retail uses are not considered to be new trips; these trips are often referred to as "pass-by" trips. Pass-by trips are vehicles that are already traveling along a corridor that stop at a use on the way to their ultimate destination. For example, a person traveling on Santa Monica Boulevard from work to home may stop at a grocery store located along the corridor for a gallon of milk. In this case, the grocery store is not generating a new trip as that vehicle would have already been traveling along the roadway. LADOT's Traffic Impact Study Guidelines (LADOT, 2014) report pass-by trip credits for various retail uses. These pass-by trip credits are reflect in the fee calculations.

The updated TIA fees by land use type for the CTCSP and WLA TIMP amendments are shown in **Table 3-3**.

Table 3-3 TIA Fees by Land Use Type

Land Use Category	Unit	ITE Code[1]	PM Trip Rate[1]	% New Trips[2]	Trip Length	VMT Factor	WLA TIMP TIA Fee per Unit	CTCSP TIA Fee per Unit
Residential Land Uses								
Single Family	DU	210	1.00	100%	7.4	1.0	$9,944	$8,847
Apartment	DU	221	0.58	100%	6.7	0.91	$5,222	$4,646
High Rise Apartment	DU	222	0.35	100%	6.7	0.91	$3,151	$2,804
Condominium/Townhouse	DU	231	0.78	100%	6.7	0.91	$7,023	$6,248
High-Rise Condominium/Townhouse	DU	232	0.38	100%	6.7	0.91	$3,421	$3,044
Senior Housing	DU	252	0.25	100%	6.7	0.91	$2,251	$2,003
Affordable Housing	DU	--	--	--	--	--	$0	$0
Hotel	Room	310	0.60	100%	7.6	1.03	$6,128	$5,452
Retail & Service Land Uses								
Retail =< 250 KSF	1,000 s.f.	820	4.43	70%	3.6	0.49	$15,001	$13,347
Retail >250 KSF - 800 KSF[3]	1,000 s.f.	820	Interpolate				Interpolate	Interpolate
Retail >800 KSF	1,000 s.f.	820	3.02	90%	5.2	0.70	$18,993	$16,897
Office & Medical Land Uses								
Office =< 50 KSF	1,000 s.f.	710	2.69	100%	9.8	1.32	$35,425	$31,517
Office >50 KSF - 250 KSF[4]	1,000 s.f.	710	Interpolate				Interpolate	Interpolate
Office > 250 KSF	1,000 s.f.	710	1.43	100%	9.8	1.32	$18,832	$16,754
Medical Office	1,000 s.f.	720	3.57	100%	9.3	1.26	$44,615	$39,693
Hospital	1,000 s.f.	610	1.16	100%	9.3	1.26	$14,497	$12,897
Industrial Land Uses								
Industrial	1,000 s.f.	130	0.85	100%	5.6	0.76	$6,396	$5,691
Manufacturing	1,000 s.f.	140	0.73	100%	5.6	0.76	$5,493	$4,887
Warehouse	1,000 s.f.	150	0.32	100%	5.6	0.76	$2,408	$2,142
Mini-Warehouse	1,000 s.f.	151	0.26	100%	5.6	0.76	$1,957	$1,741

Source: Fehr & Peers, 2015.

Notes:

1. ITE Trip Generation, 9th Edition per LADOT Traffic Study Policies and Procedures.
2. Pass-by Trips per LADOT Traffic Study Policies and Procedures.
3. For retail uses greater than 250 KSF but less or equal to 800 KSF, interpolate between the lower (=< 250 KSF) and higher (>800 KSF) rates provided.
4. For office uses greater than 50 KSF but less or equal to 250 KSF, interpolate between the lower (=< 50 KSF) and higher (>250 KSF) rates provided.

Special Generators: LADOT will have the discretion to determine the appropriate data for input to the TIA Fee calculation; this will likely require a study to determine the trip rate, trip length, and pass-by rate data for the proposed use.

Trip Generation Tables

Each Specific Plan has trip generation tables (Appendix D in the CTCSP and Appendix A in the WLA TIMP) which assign trip generation rates for specific land uses. The trip generation rates are used to project the number of future trips associated with a new development and that trip number is one of the factors used to assess the TIA fee. Under the Proposed Project, the trip generation rates are proposed to be incorporated into the TIA fee tables for each Specific Plan area based on the nexus study discussed above. Trip generation rates for application in traffic impact studies would continue to be based on the procedures outlined in LADOT's Traffic Impact Study Guidelines (LADOT, 2014).

Transportation Impact Assessment Fee Exemption

In each Specific Plan area, some land uses, such as schools, residential uses, places of worship, and local serving uses, are currently exempt from paying the TIA fee. The proposed CTCSP and WLA TIMP amendments would remove the exemption for single-family and multi-family residential development, with the exception of affordable housing units. In addition, local serving uses, the first 30,000 square feet of shopping centers[3] and freestanding commercial or medical office projects of less than 20,000 square feet[4] would no longer be exempt from an impact fee.

In-Lieu Credits

The opportunities to receive in-lieu credit against the TIA fee would be updated to include affordable housing in both Specific Plans for projects that include affordable housing onsite. Previously, in-lieu credit for affordable housing units were only eligible in the CTCSP. Transit oriented developments that meet the criteria outlined per AB 3005 would also be eligible for a discount off their TIA fee. In addition, TDM Plans would no longer be eligible for in-lieu credit or be subject to noncompliance fees. Previously, in-lieu credit could be awarded for meeting TDM objectives, and noncompliance fees could be assessed for failing to sustain the achievement of TDM goals.

Affordable Housing Credit

Affordable housing proposed within the CTCSP and WLA TIMP area would be exempt from paying a TIA fee. If the proposed affordable housing units were part of a larger development project, the applicant could receive an in-lieu credit towards their TIA fees for other uses proposed as part of the project site. The updated TIA fees related to affordable housing are as follows:

- Definition: Affordable Housing is to be defined by the Housing Authority of the City of Los Angeles (HACLA)
- Fee Exemption: Affordable Housing would be exempt from paying the CTCSP and WLA TIMP TIA Fee. This fee exemption is offered in the current CTCSP and WLA TIMP.
- Fee Credits: A fee credit would be applied to the total TIA fees for a project for all Affordable Housing units provided on-site; the fee credit would apply to all Affordable Housing types (very low income, low income and moderate income). For every affordable housing unit provided, the developer would receive an in-lieu credit of 2.0 VMT adjusted trip credits per multi-family

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3 Currently, the first 30,000 square feet of shopping centers is only exempted from the TIA in the existing WLA TIMP Specific Plan.

4 Currently, freestanding commercial or medical office projects of less than 20,000 square feet are only exempted from the TIA in the existing CTCSP.

dwelling unit (MFDU). The current CTCSP allows a fee credit for affordable housing both on- and off-site, while the current WLA TIMP does not offer the same credit.

Affordable Housing Dwelling Units (DU) provided on-site	**=**	**2.0 VMT adjusted trip credits/MFDU Credited to trip fees for other uses onsite**

- Maximum Credits: In no case shall the housing in-lieu credits exceed 50 percent of the TIA fee for a project. The affordable housing in-lieu credit shall not be granted until issuance of the certificate of occupancy for the dwelling units. This policy of maximum credits remains consistent with the current CTCSP.

Transit-Oriented Development Credit

AB 3005 was signed by the Governor on September 30, 2008. The legislation requires a local agency, when imposing a fee for the purpose of mitigating vehicular traffic impacts on a housing development located near a transit station and meeting other specified characteristics, to set the fee at a rate that reflects reduced automobile trip generation, unless the local agency finds that the development would not significantly reduce automobile trip generation.

Many of the transportation improvements that have been identified as part of the updated CTCSP and WLA TIMP project lists are projects that would improve transit, bicycling, and walking in the Specific Plan areas. The implementation of the projects on the updated project lists would allow TOD sites to have the infrastructure needed to result in reduced vehicle-trip generation. Without the identified improvements, such as high quality transit service and an enhanced pedestrian environment adjacent to the transit stations, the TOD sites may not achieve their full potential for reductions in vehicle-trip generation.

To respond to AB 3005, TOD fee credits are included in the proposed amendments to the Specific Plans. The methodology for calculating the proposed TOD fee credits is detailed in the Nexus Study.

Amendments to the Lists of Transportation Improvements

The proposed amendments include updating the list of transportation improvements funded in part by the TIA fees in each Specific Plan area (Appendix B and Appendix C of the CTCSP and Appendix C of the WLA TIMP). The new projects, identified through an analysis of completed projects and a public outreach component of the Westside Mobility Plan process (including consultation with neighboring jurisdictions, Metro, and the California Department of Transportation [Caltrans]), are aimed at improving the existing transportation network, enhancing system capacity, reducing vehicle trips and VMT, and improving transit connectivity. For purposes of the EIR analysis, the transportation improvements proposed for inclusion in the CTCSP and WLA TIMP amendments are assumed to be implemented by 2035. The Proposed Project's updated lists of transportation improvements include the following categories of improvements: transit, bicycle and pedestrian, roadway and ITS, and trip reduction programs. The lists of transportation improvements may be revised every two years with substitute or additional improvements if the City Council, upon recommendation by LADOT and Los Angeles Department of City Planning (LADCP), has determined that the improvements are consistent with the objectives of the CTCSP and WLA TIMP and that a substitute improvement(s) fulfills the transportation objectives of the improvement(s) which it is to replace.

The types of projects and programs that would be included as transportation improvements for each Specific Plan are described below in **Tables 3-4** and **3-5**. These tables are not exhaustive but are representative of the types of improvements proposed for inclusion in the Specific Plan amendments.

Key components of the CTCSP Proposed Project list are illustrated in **Figure 3-4.** Key components of the West LA TIMP Specific Plan Proposed Project list are illustrated in **Figure 3-5.**

Table 3-4 CTCSP Proposed Project List (see Figure 3-4)

Transit

Lincoln BRT
Center Running Bus Rapid Transit (BRT) on Lincoln Boulevard from the border of the City of Santa Monica to 96th Street Transit Station

Sepulveda BRT
Center Running BRT on Sepulveda Boulevard from Wilshire Boulevard to 96th Street Transit Station

Venice Rapid Bus Enhancements
Rebrand existing Rapid bus service on Venice Boulevard to serve Venice Beach area, increase service frequency, and implement stop improvements

Circulator/Shuttle Service
Circulator bus/shuttle to connect activity centers to major transit stations, such as:

- Loyola Marymount / Westchester Circulator
- Venice / Playa Vista / Fox Hills Circulator
- Venice Circulator

Bus Rapid Transit (BRT)
A bus system that operates in a dedicated right of way, typically either center running, or in a curb side dedicated bus lane. BRT also can feature platform boarding, and off vehicle payment, similar to light rail.

Bicycle and Pedestrian

Mobility Hubs
Install a full-service Mobility Hub at or adjacent to major transit stations and Satellite Hubs surrounding the stations. A hub may include secure bike parking and car/bike sharing to bridge the first/last mile of a transit user's commute.

Venice Streetscape Improvements
Implement streetscape improvements along Venice Boulevard between Lincoln Boulevard and Inglewood Boulevard

Centinela Streetscape Improvements
Implement streetscape improvements along Centinela Avenue between Washington Boulevard and Jefferson Boulevard

Centinela Creek Multi-Use Path
Centinela Creek path from Ballona Creek to Centinela Avenue east of I-405

Sepulveda Channel Multi-Use Path
Sepulveda Channel path from Ballona Creek to Washington Boulevard

Multi-Use Path
A Multi-Use path is a facility that provides a completely separate right-of-way and is designated for the exclusive use of bicycles and pedestrians with vehicles cross-flow minimized.

Citywide Bicycle Plan
Per Mobility Plan 2035, implement bicycle facilities to provide a system of streets linking to major employment centers, transit stations and stops, and educational, retail, entertainment and recreational resources

Beethoven Street / McConnell Avenue Neighborhood Enhanced Network (NEN) Street
Implement neighborhood enhanced design features as described in Mobility Plan 2035as alternate route to major corridors

Venice Boulevard Cycle Track
Venice Boulevard throughout the CTCSP area

Neighborhood Enhanced Network (NEN) Street
Neighborhood enhanced streets may include a range of bicycle and pedestrian treatments and traffic calming elements from simple signage and pavement markings to mini traffic circles to traffic diverters.

Washington Boulevard Cycle Track
Washington Boulevard from Admiralty Way to Pacific Avenue

Lincoln Boulevard Cycle Track
Lincoln Boulevard from Jefferson Boulevard to Fiji Way (as part of the reconstruction of the Lincoln Boulevard Ballona Creek Bridge project)

Culver Boulevard Bike Lane
Culver Boulevard from McConnell Avenue to Playa Del Rey

Bicycle Transit Centers
Bike transit centers that offer bicycle parking, bike rentals, bike repair shops, lockers, showers and transit information and amenities

Bikesharing
Provide public bicycle rental in "pods" located throughout the Westside

Sample Bike Share Station

Enhance Pedestrian Access to Major Transit Stations
Implement pedestrian connectivity improvements at major transit stations by providing enhanced sidewalk amenities, such as landscaping, shading, lighting, directional signage, shelters, curb extensions, enhanced crosswalks, as feasible

Sepulveda Boulevard Pedestrian Improvements
Implement sidewalk and streetscape improvements, bus stop lighting at transit stops, and enhanced crosswalks on Sepulveda Boulevard between 76th Street and 80th Street

Sidewalk Network & Pedestrian Enhancements
Complete gaps in the sidewalk network and provide pedestrian enhancements

Roadway & ITS

Culver Boulevard Corridor
Improve traffic flow along Culver Boulevard between Centinela Avenue and I-405 Freeway including providing left-turn lanes at key signalized intersections (including Inglewood Boulevard)

Lincoln Boulevard Bridge Enhancement
Improve Lincoln Boulevard between Jefferson Boulevard and Fiji Way to remove the existing bottleneck by providing an additional southbound lane, transit lanes and on-street bike lanes. Improvements to serve all modes of travel would be implemented as follows: 1) an additional southbound lane for vehicles would be provided (currently, Lincoln narrows from three to two travel lanes in the southbound direction just south of Fiji Way whereas three travel lanes are provided in the northbound direction), 2) bus-only lanes would be provided in the median, 3) cycle tracks would be provided on both sides of the roadway to connect the existing bicycle lanes to the south with the Ballona Creek bicycle path, and 4) sidewalks would be provided on both sides of the street (the existing bridge does not provide sidewalks).

Access Improvements to LAX
On-going coordination with Los Angeles World Airports (LAWA) on airport related improvements, which may include a combination of roadway capacity enhancements, streetscape improvements, and multi-modal improvements

Neighborhood Protection Program
The objective of this Program is to discourage through-traffic from using local streets and to encourage, instead, use of the arterial street system. The Program will establish measures to make the primary arterial routes more attractive and local routes less attractive for through traffic, and establish measures designed to facilitate vehicular and pedestrian egress from local streets in the adjacent neighborhoods onto the primary arterial street and highways system.

ITS Corridor & Signal Upgrades
Install ITS improvements along major corridors. Install signal upgrades as part of the next evolution of ATSAC, including detector loops for traffic volume data and monitoring

Congestion Monitoring
Install a closed circuit television (CCTV) camera and necessary infrastructure to improve LADOT's ability to monitor and respond to real-time traffic conditions

Major Intersection Improvements
Funding for spot intersection improvements, such as turn-lane or safety improvements

Trip Reduction Programs

ExpressPark
Implement an on-street intelligent parking program that includes vehicle sensors, dynamic demand-based pricing and a real-time parking guidance system to reduce VMT and congestion and improve flow for cars/buses

Strategic Parking Program
Implement a Westside parking program and update parking requirements to reflect mixed-use developments, shared parking opportunities, and parking needs at developments adjacent to major transit stations

Rideshare Toolkit
Develop an online Transportation Demand Management (TDM) Toolkit with information for transit users, cyclists, and pedestrians as well as ridesharing. Include incentive programs for employers, schools, and residents. Toolkit would be specific to City businesses, employees, and visitors and would integrate traveler information and also include carpooling/vanpooling and alternative work schedules.

Parking Utilization Improvements & Reduced Congestion
Develop an on-line system for real-time parking information, including GIS database and mapping. Improve parking, wayfinding and guidance throughout commercial areas.

Transportation Demand Management Program
The program would provide start-up costs for Transportation Management Organizations/Associations (TMOs/TMAs) as well as provide guidance and implementation of a TDM program

Table 3-5 West LA TIMP Proposed Project List (see Figure 3-5)

Transit

Sepulveda BRT
Center Running BRT on Sepulveda Boulevard from Wilshire Boulevard to 96th Street Transit Station

Concept of Center Running BRT

Santa Monica BRT
Curb-running peak hour bus-only lanes on Santa Monica Boulevard within the WLA TIMP boundary with enhanced bus stop amenities

Olympic Rapid Bus Enhancements
Extend Rapid bus service along Olympic Boulevard from its current terminus in Century City to the future Metro Exposition Line station at Westwood Boulevard

Venice Rapid Bus Enhancements
Rebrand existing Rapid bus service to serve Venice Beach area with increased service frequency on Venice Boulevard and stop improvements

Pico Rapid Bus Enhancements
Improve existing Rapid service through increased frequency, stop improvements, and construction of a new rapid stop in Century City

Circulator/Shuttle Service
Circulator bus/shuttle to connect activity centers to major transit stations, such as:

- Sawtelle service between Wilshire Boulevard and the Expo Sepulveda Station
- Bundy service between Brentwood, the Expo Bundy Station, and National Boulevard
- Palms Circulator to connect to Expo Station
- Century City Circulator to connect to Expo Station

> **Circulator**
> A circulator bus is a type of local bus that operates in small geographical areas. Like typical local buses, the circulators operate in mixed flow traffic with frequent stops.

Bicycle and Pedestrian

Mobility Hubs
Install a full-service Mobility Hub at or adjacent to Major Transit Stations and Satellite Hubs surrounding the station. A hub may include secure bike parking and car/bike sharing to bridge the first/last mile of a transit user's commute.

Mobility Hub Car Share Concept

Enhance Pedestrian Access to Major Transit Stations through Streetscape Improvements
Implement the following streetscape plans currently being developed through various planning efforts in West LA:

- Olympic Boulevard from Centinela Avenue to Barrington Avenue (Expo Transit Neighborhood Plan)
- Bundy Drive from Missouri Avenue to Pico Boulevard (Expo Transit Neighborhood Plan)
- Sepulveda from Olympic Boulevard to National Boulevard (Expo Transit Neighborhood Plan)

- National Boulevard from Castle Heights Avenue to Mentone Avenue (Expo Transit Neighborhood Plan)
- Palms Boulevard from Motor Avenue to National Boulevard (Expo Transit Neighborhood Plan)
- Pico Boulevard from I-405 to Patricia Avenue (Westside Mobility Plan)
- Pico Boulevard from Centinela Avenue to I-405 (Westside Mobility Plan)
- Motor Avenue from I-10 to Venice Boulevard (Westside Mobility Plan)

Illustration of Streetscape Improvements

Westwood Boulevard
Improvements along Westwood Boulevard between the future Expo light rail transit (LRT) station, Westwood Village, and University of California, Los Angeles (UCLA) could include transit, bicycle and pedestrian enhancements (that do not require removal of vehicular travel lanes or on-street parking) or bicycle enhancements on parallel roadways

Prosser/Westholme Avenue NEN Street
Implement neighborhood enhanced design features as described in Mobility Plan 2035 as alternate route to major corridors, such as Westwood Boulevard, connecting Expo Bike Path to UCLA

Veteran Avenue NEN
Implement neighborhood enhanced design features as described in Mobility Plan 2035 as alternate route to major corridors, such as Westwood Boulevard

Gayley Avenue/Montana Avenue (east of I-405) NEN
Implement neighborhood enhanced design features as described in Mobility Plan 2035 as alternate route to major corridors

Cycle Track
A cycle track is an on-street dedicated bicycle facility that provides a physical separation for the bicycle lane from vehicular travel lanes and sidewalks via raised curbs/medians, bollards and striping, on-street parking, or some combination of these features.

Montana Avenue (west of I-405) NEN
Implement neighborhood enhanced design features as described in Mobility Plan 2035 as alternate route to major corridors

Barrington Avenue/McLaughlin Avenue NEN
Implement neighborhood enhanced design features as described in Mobility Plan 2035 as alternate route to major corridors

Ohio Avenue NEN
Implement neighborhood enhanced design features as described in Mobility Plan 2035 as alternate route to major corridors, including gap closure at Santa Monica Boulevard

Motor Avenue Cycle Track
Motor Avenue between I-10 and Venice Boulevard
Santa Monica Boulevard Cycle Track
Santa Monica Boulevard in the "parkway" section east of Sepulveda Boulevard

Venice Boulevard Cycle Track
Venice Boulevard within the WLA TIMP boundary

Gateway Boulevard to Ocean Park Bike Lane
Gateway Boulevard to Ocean Park Boulevard gap closure

Illustration of Cycle Track

Bicycle Transit Centers
Bike transit centers that offer bicycle parking, bike rentals, bike repair shops, lockers, showers and transit information and amenities

Bikesharing
Provide public bicycle rental in "pods" located throughout the Westside

Sidewalk Network & Pedestrian Enhancements
Complete gaps in the sidewalk network and provide pedestrian enhancements

Exposition Light Railway Greenway Improvement Project
The project proposes to transform existing city-owned vacant parcels into a neighborhood greenway that includes construction of a multi-use path with drought tolerant landscaping, simulated stream to treat urban runoff, educational amenities and interpretive signs. Project is located along Exposition Boulevard between Westwood and Overland along future Expo LRT Westwood Station.

Roadway & ITS
Olympic Boulevard Operations Implement operational improvements along Olympic Boulevard adjacent to I-405
Bundy Drive/I-10 Ramp Improvements Operational improvements at the I-10 ramp connections to Bundy Drive
Sunset Boulevard Operations Implement operational improvements along Sunset Boulevard. Improvements could include the following: ITS corridor improvements; signal upgrades as part of the next evolution of ATSAC; intersection improvements, such as turn-lane or safety improvements.
Neighborhood Protection Program The objective of this Program is to discourage through-traffic from using local streets and to encourage, instead, use of the arterial street system. The Program will establish measures to make the primary arterial routes more attractive and local routes less attractive for through traffic, and establish measures designed to facilitate vehicular and pedestrian egress from local streets in the adjacent neighborhoods onto the primary arterial street and highways system.
Major Intersection Improvements Funding for spot intersection improvements, such as turn-lane or safety improvements
ITS Corridor & Signal Upgrades Install ITS improvements along major corridors. Install signal upgrades as part of the next evolution of ATSAC, including detector loops for traffic volume data and monitoring
Congestion Monitoring
Install a CCTV camera and necessary infrastructure to improve DOT's ability to monitor and respond to real-time traffic conditions
Trip Reduction Programs
ExpressPark Implement an on-street intelligent parking program that includes vehicle sensors, dynamic demand-based pricing and a real-time parking guidance system to reduce VMT, congestion and to improve flow for cars/buses.
Strategic Parking Program Implement a Westside parking program and update parking requirements to reflect mixed-use developments, shared parking opportunities, and parking needs at developments adjacent to major transit stations.
Rideshare Toolkit Develop an online TDM Toolkit with information for transit users, cyclists, and pedestrians as well as ridesharing. Include incentive programs for employers, schools, and residents. Toolkit would be specific to City businesses, employees, and visitors and would integrate traveler information and also include carpooling/vanpooling and alternative work schedules.
Parking Utilization Improvements & Reduced Congestion Develop an on-line system for real-time parking information, including GIS database and mapping. Improve parking, wayfinding and guidance throughout commercial areas.
Transportation Demand Management Program The program would provide start-up costs for TMOs/TMAs as well as provide guidance and implementation of a TDM program.

Source: Fehr & Peers, 2015

Figure 3-4
Key Components of CTCSP Proposed Project List

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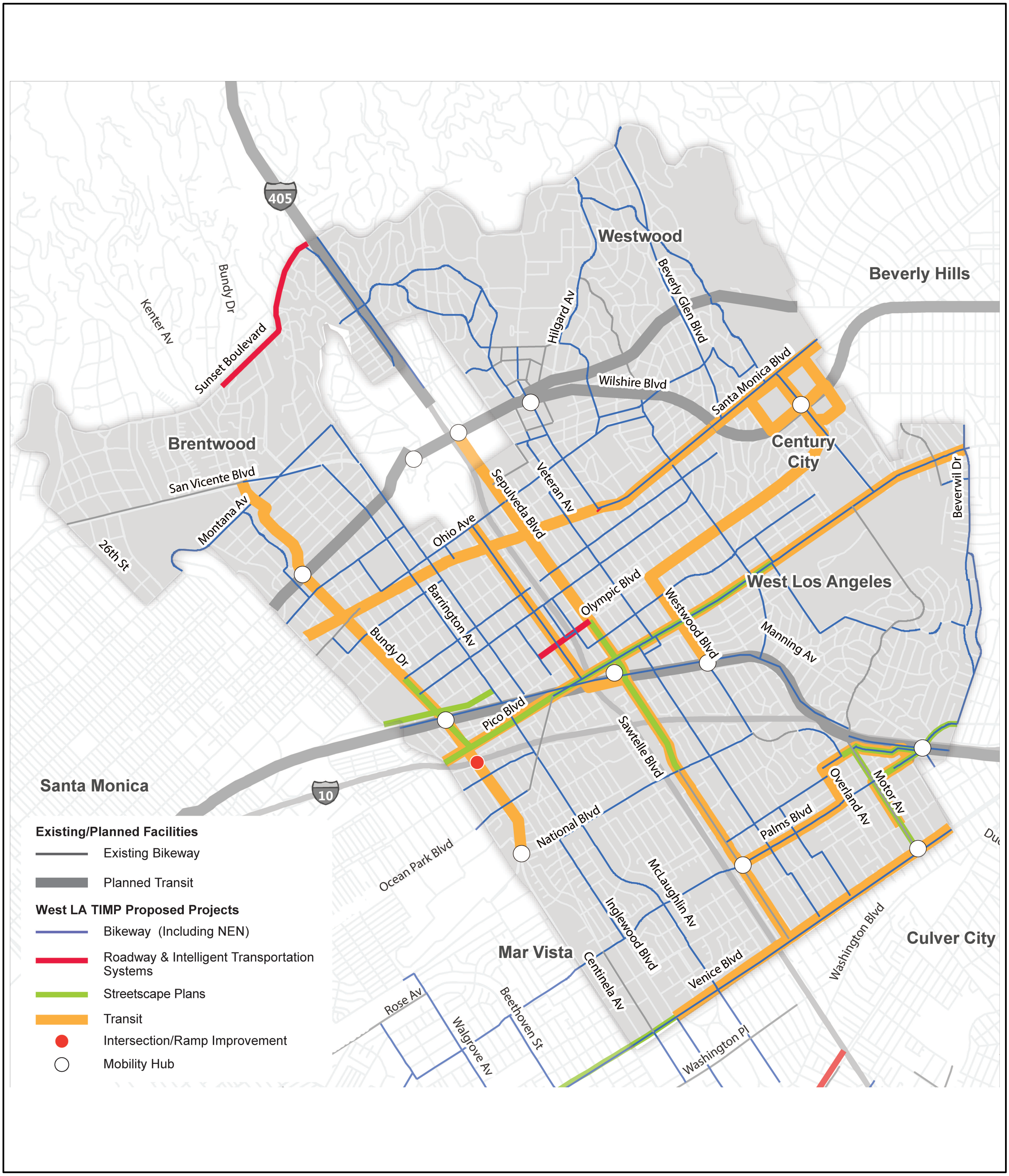

Source: Fehr & Peers, 2015

Figure 3-5
Key Components of WLA TIMP Proposed Project List

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Summary of Amendments to the Specific Plans by Section

The following is a summary of the proposed amendments organized by sections in the WLA TIMP and CTCSP Specific Plans. The following sections are listed in the proposed order that would be identical in both the WLA TIMP and CTCSP. Currently the two existing Specific Plans do not follow the same order. Reference to each Specific Plan's original section are cited in the text description. The exact language of the amendments would be determined upon review and approval by various decision-making bodies, including the Los Angeles City Council.

Section 1. Repeal of the 1993 Coastal Transportation Corridor Specific Plan, Ordinance No. 168,999; Repeal of the 1997 West Los Angeles Transportation Improvement and Mitigation Specific Plan, Ordinance No. 171,492

This section would repeal the existing plan ordinances and establish the updated Specific Plan ordinances. This section would replace Section 1 in the existing CTCSP, and would establish a new section in the existing WLA TIMP.

Section 2. Establishment of Coastal Transportation Corridor Specific Plan; Establishment of the West Los Angeles Transportation Improvement and Mitigation Specific Plan

This section would be revised to ensure that both Specific Plans' objectives reflect the goals of lowering the study area's vehicle miles traveled per capita and emphasizing multimodal transportation improvements. This section would replace Section 2 in the existing CTCSP and Section 1 in the existing WLA TIMP.

Section 3. Relationship to Provisions of the Los Angeles Municipal Code

This section would be revised to ensure that references to the Los Angeles Municipal Code are consistent with the current Los Angeles Municipal Code. Any outdated references would be corrected accordingly. This section would replace Section 3 in the existing CTCSP and replace Section 2 in the existing WLA TIMP.

Section 4. Definitions

This section would be revised to remove outdated definitions that no longer pertain to the implementation of the plans (e.g., Level of Service, Trip Cost Factor, City Building Cost Index, Larger Transportation Improvement, Super Major Highway, Supermarket, V/C Ratio). This section would also update existing definitions (e.g. Affordable Dwelling Unit, Neighborhood Traffic Mitigation Program [NTMP], Project Serving Improvements, Significant Transportation Impact, Transportation Demand Management, Trip). New definitions would also be introduced (e.g., Car Share, Consumer Price Index, Dedicated Transit Line, High Occupancy Vehicle, Multi-modal, Streetscape Plan, Transportation Demand Management [TDM] Plan, VMT [Vehicle Miles Traveled]). This section would replace Section 4 in the existing CTCSP and replace Section 3 in the existing WLA TIMP.

Section 5. Initial Assessment

This section would be added to clarify the process by which applicants initiate an application with the City in order to fulfill the requirements of the ordinance. The application filing requirement and exemptions from the CTCSP and WLA TIMP ordinances would be described in this section. In the existing plans, application filing requirements and exemptions from the ordinances are described in the Transportation Mitigation and Procedures Section. Exemptions would be revised to ensure that exemptions in both plans are consistent with one another. The existing exemption for single-family dwelling projects would be removed, while an exemption for additions or alterations of residential uses that do not add net new dwelling units would be added. This is a new section in both the existing CTCSP and the existing WLA TIMP.

Section 6. Transportation Mitigation Procedures

This section would be revised to now direct the applicant to LADOT's Traffic Study Policies and Procedures for the purposes of meeting traffic study and traffic impact mitigation requirements. This section would be revised to clarify how the CTCSP and WLA TIMP relate to CEQA. This section would no longer describe exemptions from the CTCSP and WLA TIMP ordinances. This section would replace Section 5 in the existing CTCSP and replace Section 4 in the existing WLA TIMP.

Section 7. Transportation Demand Management Plan

Previously listed under the "Transportation Mitigation Standards and Procedures" in the existing WLA TIMP (Section 4.G) and CTCSP (Section 5.G), this section would now be a standalone section. This section would be revised to include additional TDM elements that did not exist previously in the current Specific Plans.

Section 8. Transportation Impact Assessment Fee

This section would be revised to reflect a new methodology for calculating the TIA fee. This section would also revise the annual indexing method by using the Construction Cost Index instead of the City Building Cost Index.[5] The section would also revise the exemptions list to include affordable dwelling units, while no longer exempting the following: single family and multi-family dwellings, local serving uses, the first 30,000 square feet of shopping centers, freestanding commercial or medical office projects of less than 20,000 square feet, and telework facilities. These exemptions would no longer be needed under the new methodology. Education-related exemptions are clarified to include child care facilities and K-12 educational institutions. This section would replace Section 6 in the existing CTCSP and replace Section 5 in the existing WLA TIMP.

Section 9. Credits from the TIA Fee

This section would be revised to ensure the requirements for receiving trip credits for existing uses are consistent with the current guidelines described in LADOT's Traffic Study Policies and Procedures. This section would also revise the opportunities for in-lieu credit. Credit against the TIA fee would be awarded for the provision of affordable housing units and for eligible transit-oriented developments. Additionally, in-lieu credit granted based on the effectiveness of a TDM program would no longer be offered. This section would replace Section 7 in the existing CTCSP and replace Section 6 in the existing WLA TIMP.

Section 10. Phasing Program

Minimal clarifying amendments are anticipated to be required to this section. In addition to the existing requirements of Phasing Programs, TDM programs will also be required. This section is located in Section 8 in the existing CTCSP and in Section 7 in the existing WLA TIMP.

Section 11. Appeals

This section would be revised to establish a uniform appeals process in both plans, where the first level of appeal is reconsideration by LADOT, and the second level of appeal is outlined in Los Angeles

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[5] Any change to the proposed fees other than the annual indexing method using the Consumer Price Index would require a new fee study and fee adoption.

Municipal Code Section 11.5.7C.6. This section would replace Section 9 in the existing CTCSP and replace Section 8 in the existing WLA TIMP.

Section 12. Review of the Specific Plan

This section would be revised to include the Department of City Planning as a recipient of the status report submitted by LADOT and to clarify how the monitoring requirements of the Mitigation Fee Act shall be met. This section would replace Section 10 in the existing CTCSP and replace Section 9 in the existing WLA TIMP.

Section 13. Severability

No amendments are anticipated to be required to this section. This section would remain the same as its equivalent section in the existing CTCSP (i.e., Section 12), while replacing Section 10 in the existing WLA TIMP.

Appendix A

This appendix would be revised be to establish a new list of transportation improvements that reflect a multimodal approach. This section would replace Appendix B and C in the existing CTCSP and replace Appendix C in the existing WLA TIMP.

Appendix B (Livable Boulevards Streetscape Plan)

This Appendix would be added to document the community's desired streetscape improvements to five street segments in the study area.

TIA Fee Table (Separate Resolution)

Appendix A in the existing CTCSP and Appendices A and B in the existing WLA TIMP include TIA fee tables. These existing fee tables would be revised to establish new fee tables based on an updated fee methodology. These tables would be adopted by a separate resolution and would not be included as appendices to the Specific Plan ordinances. A resolution with new fee tables would replace Appendix A in the existing CTCSP and replace Appendices A and B in the existing WLA TIMP.

3.6 Related Plans and Programs

The proposed amendments to the CTCSP and WLA TIMP represent just one of several planning efforts currently being undertaken by the City and regional agencies aimed at improving overall mobility and transportation options within the Westside. These initiatives include the update to the City's Mobility Element, the statewide Complete Streets Directive, Mayor Garcetti's Great Streets Initiative, Metro's Exposition Light Rail Transit project, and the Exposition Corridor Transit Neighborhood Plan. Each of these plans is briefly described below, as well as their relation to the Project for purposes of CEQA.

Mobility Plan 2035

The City recently updated the Transportation Element of the City's General Plan, referred to as Mobility Plan 2035 or MP 2035, to reflect policies and programs that will lay the policy foundation for safe, accessible, and enjoyable streets for pedestrians, bicyclists, transit users, and vehicles throughout the City of Los Angeles, including the Westside (City of Los Angeles, 2015a). The Updated Mobility Plan and Recirculated Draft EIR were released on February 19, 2015. The Plan was initially adopted by City Council on August 11, 2015, at which time the Final EIR was certified, and was readopted in November 2015. MP 2035 was prepared in compliance with the 2008 Complete Streets Act (AB 1358), which mandates that the circulation element of a city's General Plan be modified to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan. MP 2035 provides the framework for future planning documents, such as the proposed amendments to the CTCSP and WLA TIMP, which take a closer look at the transportation system in specific areas of the City and recommend more detailed implementation strategies to realize MP 2035. The proposed updates to the CTCSP and WLA TIMP project lists reflect the vision of MP 2035, however, they do not reflect full buildout of MP 2035. Rather, many of the projects contained in the updated project lists provide a first-step in implementing MP 2035. Full implementation of MP 2035 is considered in the cumulative impact analysis (see Chapter 5, *Other CEQA Considerations*).

Complete Streets' Directive

Caltrans enacted Complete Streets: Integrating the Transportation System (Complete Streets Directive) in October 2008, which required cities to plan for a "balanced, multimodal transportation network that meets the needs of all users of streets" (California Department of Transportation [Caltrans], 2014). A complete street is a transportation facility that is planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians, transit vehicles, truckers, and motorists, appropriate to the function and context of the facility. Every complete street looks different, according to its context, community preferences, the types of road users, and their needs. As noted above, MP 2035, upon which the Proposed Project is based, was prepared in compliance with the Complete Streets Act, thus, the Proposed Project is also in compliance with the Act.

Exposition Corridor Transit Neighborhood Plan

The Exposition Corridor Transit Neighborhood Plan (ECTNP) is a City of Los Angeles project, currently in progress, to plan for development around five new light rail stations within the boundaries of the City currently in the construction phase as part of the Metro's Exposition Line (Expo) Phase 2 project (City of Los Angeles, 2015b). The intent of the project is to encourage new infill development around the future transit stations, with the goal of promoting transit ridership and creating an active, mixed-use environment in the station areas. Of the five new transit stations planned along this portion of the Exposition Corridor, four are located within the WLA TIMP Specific Plan area. Implementation of the ECTNP project is considered in the cumulative impact analysis (see Chapter 5, *Other CEQA Considerations*).

Metro Exposition Light Rail Transit

The Metro Exposition light rail transit project (Expo LRT) is a 15.2-mile-long transit line running between Downtown Los Angeles and the City of Santa Monica. The majority of the line runs along the Exposition right-of-way, roughly parallel to the Santa Monica Freeway (I-10). Phase 1 of the line, completed in 2012, extends from Downtown to Culver City. Phase 2, which will extend an additional 6.6 miles from the Phase 1 terminus in Culver City to Santa Monica, is currently under construction and scheduled for completion in 2016 (Los Angeles Metropolitan Transportation Authority, 2015). Operation of the Expo LRT was assumed in the Future without Project and Future with Project scenarios evaluated in this EIR. In addition, as noted above, development surrounding Expo LRT stations was considered in the cumulative impact analysis.

Great Streets

Mayor Eric Garcetti enacted the Great Streets Initiative in October 2013 to activate public spaces, provide economic revitalization, increase public safety, enhance local culture, and support neighborhoods (City of Los Angeles, 2015c). The Great Street projects will add bike racks, medians, plazas, sidewalk repairs, bus stops, pocket parks, crosswalks and other improvements aimed at attracting pedestrians and new businesses. Two Great Street projects are located within the project area, the improvement of Venice Boulevard between Beethoven Street and Inglewood Boulevard and Westwood Boulevard between Le Conte Avenue and Wilshire Boulevard. This project would be supplemented with the creation of a long-term streetscape plan that is proposed to be incorporated into the CTCSP updated project list.

3.7 Construction Schedule and Phasing

While a wide range of transportation improvements are contemplated in the proposed amendments to the CTCSP and WLA TIMP, including bus rapid transit and others, as noted above, these improvements would not be entitled or constructed as part of this Proposed Project; rather, these improvements will be analyzed further at the project level through separate environmental analyses and approval processes. As the individual improvements are not proposed for construction at this time, a schedule and phasing plan have not been developed for the set of improvements included in the CTCSP and WLA TIMP amendments. The City does not otherwise have information or reason to reasonably forecast which improvements would be constructed or implemented in the near term. Therefore, for purposes of the EIR analysis, the transportation improvements proposed for inclusion in the CTCSP and WLA TIMP amendments are assumed to be implemented by 2035.

3.8 Discretionary Actions and Approvals

The Proposed Project would require approval of the proposed amendments to the CTC and WLA TIMP Specific Plans by the City Planning Commission and City Council. Council actions to approve the CTC and WLA TIMP Specific Plans, including the associated transportation improvement lists, would include the adoption of ordinances. The TIA fee schedules and fee exemptions may be adopted by a separate resolution. Affected General Plan elements, including but not limited to, the Mobility Element, and affected Community Plans, would be updated to reflect these amendments and consistency with the updated goals and objectives of the Specific Plan amendments (see Appendix H, *Updated Community Plan Text*).

Entitlements for the transportation improvement projects on the Proposed Project list are not included in this adoption process. The Proposed Project would not, itself, entitle or otherwise approve any transportation projects. Projects on the proposed transportation improvement list would be individually subject to review in accordance with local, state and federal procedures; in addition, the individual projects would be subject to CEQA and, potentially, National Environmental Policy Act (NEPA) requirements. For example, it is anticipated that bus rapid transit (BRT) projects would be subject to analysis in project-level CEQA documents, while other projects, such as some pedestrian improvements, may be determined to be exempt under CEQA. In addition, some of the proposed improvements (such as the installation of street furniture) may not be considered to be “projects” under CEQA; these improvements would not require any CEQA analysis.

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CHAPTER 4
ENVIRONMENTAL IMPACTS

Introduction

The purpose of Chapter 4 is to inform decision makers and the public of the type and magnitude of the changes to the existing environment that could result from implementation of the Proposed Project described in Chapter 3, *Project Description*. Chapter 4 describes the physical environment in the study area that may be affected by the project, the potential impacts to that physical environment, and the measures proposed to mitigate those impacts, as required.

Environmental issues addressed in this Draft EIR are those that were determined to be potentially significant pursuant to the Notice of Preparation (NOP) (included in Appendix C, *Notice of Preparation/Scoping*, to this EIR), as informed by input from the community in their comment letters on the NOP and comments provided at the scoping meetings. Through this process, the City has determined that the EIR analysis should focus on the following resource areas:

- Air Quality
- Biological Resources
- Greenhouse Gas Emissions
- Land Use and Planning
- Noise and Vibration
- Transportation

Organization of the Chapter

The analysis of each environmental issue includes the following components:

- The **Introduction** briefly describes the environmental issues addressed in the analysis and identifies related topics. The Introduction also identifies any specific issue area that is not being addressed in the EIR and provides a discussion explaining the reasons why. In many cases, a number of specific issue areas were evaluated, and impacts determined to be less than significant, in the NOP, included as Appendix C, *Notice of Preparation/Scoping*, of this EIR. In accordance with Sections 15063(c)(3)(A) and 15128 of the State CEQA Guidelines, further analysis of specific issue areas where impacts were determined to be less than significant in the NOP is not required and is not provided in this chapter.
- The **Regulatory Framework** presents an overview of the federal, state, regional, and local laws and regulations applicable to each environmental review topic.
- The **Existing Setting** presents the environmental setting for this EIR by generally describing the physical conditions that existed at the time the NOP was published (May 2014). A discussion of the environmental baseline is provided below under *Analytical Framework*.

- The **Methodology** describes how the issue was approached from an environmental analysis standpoint, including explanations of any assumptions, equations, or calculations, and identification of information sources used for the analysis.

- **Thresholds of Significance** are quantitative or qualitative criteria used to determine the significance of the project's impacts. In general, and unless otherwise noted, the thresholds of significance used in the analysis of impacts reflect guidance provided in Appendix G of the State CEQA Guidelines and/or criteria or guidance included in the L.A. CEQA Thresholds Guide (City of Los Angeles, 2006).

- The **Impacts** section presents the analysis of impacts and determination of significance for each individual impact (using terms detailed below in *Terminology Used in This Environmental Analysis*) prior to mitigation. Impacts were compared to the thresholds of significance to determine whether they would be significant or less than significant under CEQA. In order to determine significance, potential impacts were compared to the environmental baseline conditions, as further described in the *Analytical Framework* below. For purposes of this EIR, it is assumed that all of the proposed improvements on the updated project lists would be implemented by 2035.

- **Mitigation Measures** are specified procedures, plans, policies, or activities proposed for adoption by the lead agency to reduce or avoid the significant impacts identified in the analysis of environmental impacts. This section presents mitigation measures proposed to reduce significant impacts that would occur with implementation of the Proposed Project. In accordance with the requirements of CEQA, a Mitigation Monitoring and Reporting Program (MMRP) would be adopted as part of the project approvals to ensure that implementation of mitigation measures is properly monitored and documented.

- **Significance of Impacts After Mitigation** presents the level of impact remaining after the implementation of mitigation measures, if applicable, and identifies significant unavoidable impacts, if any, that could not be reduced to a less than significant level through any feasible mitigation measure(s). These "significant unavoidable impacts" are also listed in Section 5.4, *Significant Environmental Effects that Cannot be Avoided if the Proposed Project is Implemented*, of this EIR.

Terminology Used in This Environmental Analysis

In evaluating the potential impacts of the Proposed Project and the project alternatives, the level of significance is determined by applying the threshold of significance (significance criteria) presented for each resource evaluation area. The following terms are used to describe each impact and, where significant impacts are determined, how mitigation measures are addressed:

- No Impact: A designation of no impact is made when no adverse or beneficial changes in the environment are expected.

- Less than Significant Impact: An impact is identified as less than significant when the Proposed Project would not cause a change in the environment that would exceed the threshold of significance.

- Significant Impact: A significant impact would create a substantial or potentially substantial adverse change in any of the physical conditions within the area affected by the Proposed Project. Such an impact would exceed the applicable significance threshold.
- Significant Unavoidable Impact: As required by Section 15126.2(b) of the State CEQA Guidelines, a significant unavoidable impact is identified when a significant impact could not be reduced to a less than significant level through any feasible mitigation measure(s).
- Mitigation: Mitigation refers to measures that could be implemented to avoid or lessen potentially significant impacts. Mitigation includes:
    - avoiding the impact completely by not taking a certain action or parts of an action
    - minimizing the impact by limiting the degree or magnitude of the action and its implementation
    - rectifying the impact by repairing, rehabilitating, or restoring the affected environment
    - reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action
    - compensating for the impact by replacing or providing substitute resources or environments

  The recommended mitigation measures would be proposed as a condition of project approval and would be monitored to ensure compliance and implementation.
- Significance of Impacts after Mitigation: This is the level of impact after the implementation of mitigation measures.

Analytical Framework

Focus of the Environmental Analysis

Pursuant to CEQA Guidelines Section 15064(d), direct physical changes and reasonably foreseeable indirect physical changes in the environment that may be caused by the project should be considered in evaluating the significance of an environmental effect.

The Proposed Project would not approve or entitle any improvements to the transportation system. However, the Proposed Project includes updates to the lists of transportation improvements to be funded, in part, by the Transportation Impact Assessment (TIA) fees collected under the specific plans. Implementation of the transportation improvements could result in direct and/or indirect physical changes to the environment (e.g., direct impacts associated with construction of new sidewalks or other physical features and indirect impacts associated with implementing limits on street parking). Therefore, pursuant to Section 15064(d) of the State CEQA Guidelines, the EIR evaluates potential environmental impacts associated with the future implementation of the new list of transportation improvements.

As noted above, the transportation improvements on the specific plan project lists are not proposed to be implemented, and would not be entitled or constructed, as part of this project. These improvements are conceptual at this time, and no detailed designs or implementation plans have been developed for the individual components. Therefore, the potential for significant impacts to occur is assessed at a programmatic, regional scale. As individual transportation improvements move forward for implementation, they would be subject to review and approval in accordance with CEQA.

The proposed updates to the Coastal Transportation Corridor Specific Plan (CTCSP) and West Los Angeles Transportation Improvement and Mitigation Specific Plan (WLA TIMP) TIA fee programs and the administrative revisions to the specific plans would not result in any direct physical changes in the environment. However, these updates have the potential to result in reasonably foreseeable indirect physical changes in the environment. These potential indirect changes in the environment are addressed in this EIR.

Environmental Baseline

Section 15125 of the State CEQA Guidelines requires that an EIR describe the physical environmental conditions in the vicinity of a proposed project "as they exist at the time the notice of preparation is published…." and further states that "[t]his environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant."

The NOP for the CTCSP/WLA TIMP Specific Plans Amendment EIR was first published in May 2014. Therefore, in accordance with the provisions of CEQA, 2014 is the baseline date for characterizing existing conditions in the environmental analysis.

Two recent CEQA cases address the issue of the appropriate baseline to use for the analysis of project impacts: 1) Sunnyvale West Neighborhood Assoc. v. City of Sunnyvale City Council (6th Dist. 2010) 190 Cal.App.4th 1351 (Sunnyvale West) and 2) Neighbors for Smart Rail v. Exposition Metro Line Construction Authority (2013) 57 Cal.4th 439 (Expo II). The first case indicated that project impacts should be compared directly to existing conditions. The second case clarified that the lead agency has discretion concerning the appropriate baseline to use for comparison, and emphasized an EIR's role as an informational document. The case further states that "nothing in CEQA law precludes an agency… from considering both types of baseline—existing and future conditions—in its primary analysis of the project's significant adverse effects."

For purposes of this EIR, existing (2014) conditions are used as the baseline against which the impacts of the project are compared for the purpose of determining significant impacts. In addition, for those environmental topics that are based on activity levels—namely, transportation, air quality, greenhouse gas emissions, and noise/vibration—future conditions with the project are compared to future conditions without the project for informational purposes, as described further below.

Analysis Scenarios

CEQA requires an EIR to identify a project's significant effects on the environment. Typically, an EIR evaluates only the impacts of the project, and then compares those impacts to existing conditions (often called an "Existing with Project" analysis). However, for a planning project that would be implemented over time, such as the Proposed Project, isolating the impacts of the project from other changes in the environment would yield an analysis that could be misleading. For example, an Existing with Project analysis of this nature would assume that there are no additional changes to the transportation network in the future, even though many such projects are currently under construction or have been approved. Moreover, an analysis that narrowly focused on project impacts would assume that activity levels would not change from existing (2014) conditions, even though population and growth is expected to occur over time. In summary, in an Existing with Project scenario, the analysis would evaluate the impacts of existing traffic volumes on a transportation network that would include only project-related transportation improvements.

In reality, as noted above, there are a number of transportation improvements that will be in place in 2035 with or without implementation of the Proposed Project. Moreover, on a regional level, traffic in the study area is anticipated to increase in conjunction with regional population, housing, and employment growth projected to occur in the future by the Southern California Association of Governments (SCAG). This growth will occur with or without implementation of the Proposed Project, and is sometimes referred to as "background growth." The background growth not only influences the transportation analysis, it also influences those environmental topics whose analysis is based on transportation volumes and patterns (i.e., activity levels), including air quality, greenhouses gas, and noise. If the CTCSP/WLA TIMP Specific Plans Amendment EIR were to strictly evaluate project-related environmental conditions in the future without including future background growth, and then were to compare that project-related future condition to the existing conditions in 2014, the analysis would not account for the overall cumulative nature of the potential impacts and could understate the expected future conditions. By assuming lower activity levels than the Future with Project scenario, an Existing with Project scenario would represent a less conservative approach to identifying impacts.

Instead, the EIR analyzes future conditions, including background growth, with project implementation (referred to as "Future with Project" conditions), and compares these conditions to existing conditions in 2014. The future year used for this analysis for these topics is 2035, the horizon year of SCAG's 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (SCAG,2012), which provides the forecasts used to represent regional background growth in this EIR. Use of a Future with Project scenario is a more realistic comparison scenario for a long-range transportation planning project where improvements will be implemented gradually over time.

A second future scenario was also studied. This scenario, called the "Future without Project" scenario, assumes that planned transportation improvements, such as those identified in SCAG's 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), would be in place by 2035, and that background growth would occur as forecasted by SCAG. However, this scenario does not include any changes to the transportation network associated with the Proposed Project, nor does it assume that projects from the original Specific Plans that have not yet been implemented would be constructed. This EIR compares the Future without Project scenario to Existing Conditions (2014) and also to Future with Project conditions. These comparisons are provided for informational purposes only. The comparison of Future with Project conditions to Future without Project conditions is intended to inform the decision-maker as to how impacts would change in the future with the Proposed Project compared to reasonably-foreseeable conditions without implementation of the Proposed Project. The comparison of Future with Project conditions to Existing Conditions (2014) is the primary comparison that is used to reach a determination of significance under CEQA.

The following scenarios are analyzed:

1. Existing Conditions (2014)
2. Future without Project (2035) (includes background growth)
3. Future with Project (2035) (include background growth)

In addition, the following comparisons between scenarios are provided:

1. Future with Project (2035) vs. Existing Conditions (2014) (CEQA required comparison)
2. Future with Project (2035) vs. Future without Project (2035) (informational comparison)
3. Future Without Project (2035) vs. Existing Conditions (2014) (informational comparison)

The City believes that the comparison of Future with Project (2035) to Existing Conditions (2014) provides the most realistic and conservative analysis. This EIR also provides a comparison of Existing with Project to Existing Conditions (2014) in Appendix G, *Analysis of Project Impacts Compared to Existing Conditions.* The latter comparison is typically the primary comparison expected under CEQA analysis; however, in this case, Existing with Project is determined to be a less realistic scenario. It should be noted that the EIR includes two environmental topics—Biological Resources and Land Use and Planning—that are not affected by background activity levels. For these analyses, project impacts are compared to Existing Conditions (2014).

Section 4.1

Air Quality

4.1.1 Introduction

The air quality analysis addresses criteria pollutant emissions from operational activities (project-related mobile sources and off-site regional traffic) that would occur at build out in the horizon year of 2035. As described in the introduction to Chapter 4, the analysis of project-related emissions includes a comparison of Future with Project (2035) conditions to the air pollutant emissions associated with baseline (2014) conditions; a comparison to Future without Project (2035) conditions is provided for additional information. Impacts from toxic air contaminants (TACs) and odors are also addressed.

This section presents an overview of air quality regulations, identifies existing conditions pertaining to air quality, describes the methodology used in the analysis, and evaluates the construction and operational air quality impacts associated with the Coastal Transportation Corridor Specific Plan (CTCSP) and West Los Angeles Transportation Improvement and Mitigation Specific Plan (WLA TIMP) Specific Plans Amendment Project (Proposed Project).

4.1.1.1 Organization of the Section

The section is organized as follows:

- **Regulatory Framework** summarizes the regulated pollutants and the applicable federal, state, and local regulations, policies, and guidelines pertaining to air quality.
- **Existing Setting** describes the existing ambient air quality in the project area.
- **Methodology** describes the approach and models used to evaluate project impacts.
- **Thresholds of Significance** lists the thresholds used in identifying significant impacts as identified in Appendix G of the State CEQA Guidelines and the L.A. CEQA Thresholds Guide (City of Los Angeles, 2006), and as established by the South Coast Air Quality Management District (SCAQMD).
- **Impacts and Mitigation Measures** discusses the effects of project implementation on air quality in the project area. Where appropriate, recommended mitigation measures are identified to reduce significant impacts. The **Significance of Impacts After Mitigation** is also identified.

4.1.1.2 Definitions of Technical Terminology

This section uses technical terminology to describe air quality. Definitions of these terms are provided in **Table 4.1-1.**

Table 4.1-1 Key Air Quality Terminology

Term	Acronym	Definition
California Ambient Air Quality Standards	CAAQS	Health- and welfare-based standards for outdoor air which identify the maximum acceptable average concentrations of air pollutants during a specified period of time
Carbon Monoxide	CO	An odorless, colorless gas often formed in the process of incomplete combustion of organic substances, which can reduce the body's ability to carry oxygen and results in numerous adverse health effects
California Emissions Estimator Model	CalEEMod	A statewide land use emissions computer model used to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects
California Clean Air Act	CCAA	A California law passed in 1988 which provides the basis for air quality planning and regulation independent of federal regulations. A major element of the Act is the requirement that local air districts in violation of the CAAQS must prepare attainment plans that identify air quality problems, causes, trends and actions to be taken to attain and maintain California's air quality standards by the earliest practicable date.
Clean Air Act	CAA	Federal law passed in 1970 which forms the basis for national air pollution control. The act includes national ambient air quality standards for major air pollutants, mobile and stationary control measures, and air toxics standards.
Criteria Air Pollutant	--	Six common air pollutants for which acceptable levels of exposure can be determined and for which an ambient air quality standard has been set. Examples include: ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, PM10 and PM2.5.
Diesel Particulate Matter	DPM	A component of diesel exhaust considered to be a major contributor to human health impacts
Emission Factors Model	EMFAC	Model developed by CARB to evaluate vehicle emissions
Hazardous Air Pollutants	HAP	Pollutants regulated by the federal CAA and known or suspected to cause cancer or other serious health effects or adverse environmental effects
National Ambient Air Quality Standards	NAAQS	National standards established by the U.S. Environmental Protection Agency under the authority of the federal CAA addressing pollutants considered harmful to public health and the environment
National Emission Standards for Hazardous Air Pollutants	NESHAP	Federal stationary source standards for hazardous air pollutants
Nitrogen Dioxide	NO_2	Poisonous reactive gas that is formed during high-temperature combustion processes, such as those occurring in vehicle engines, that can cause adverse respiratory effects
Ozone	O_3	Highly reactive and unstable gas that is formed in the atmosphere through complex reactions with NOx and VOCs in the presence of sunlight that can cause adverse respiratory effects and environmental damage; ozone is a major component of smog
Particulate Matter	PM	Particles of dust, soot, aerosols, and other matter that can become embedded in the lungs with adverse health effects
Reactive Organic Gases	ROG	Photochemically reactive chemical gas that may contribute to the formation of smog
South Coast Air Basin	SoCAB	Air basin regulated by SCAQMD and including all of Orange County and the urban, non-desert portions of Los Angeles, Riverside, and San Bernardino counties

Term	Acronym	Definition
Sulfur Dioxide	SO_2	Chemical compound that is linked to a number of adverse effects on the respiratory system
Toxic Air Contaminants	TAC	Air pollutants regulated by the State of California that may cause or contribute to an increase in mortality or serious illness, or which may pose a present and potential hazard to human health
Volatile Organic Compounds	VOC	Compounds released into the atmosphere which are involved in photochemical pollution

Source: CARB, undated; CDM Smith, 2015.

4.1.2 Regulatory Framework

Air quality within the project area is regulated by the U.S. Environmental Protection Agency (USEPA), California Air Resources Board (CARB), South Coast Air Quality Management District (SCAQMD), and the City of Los Angeles. Each of these agencies develops rules, regulations, policies, and/or goals to comply with applicable legislation. Although USEPA regulations may not be superseded, both state and local regulations may be more stringent. The regulatory requirements cited below focus on those regulations that pertain to the transportation improvements that would be associated with the Proposed Project. As the Proposed Project would not modify land use designations or zoning and would not involve the construction of new residential facilities, regulations and guidelines pertaining to health effects associated with siting of new land uses, use of renewable energy in new buildings, and building codes aimed at sustainable construction that would, among other things, reduce air emissions associated with building energy consumption, are not discussed in this section.

4.1.2.1 Federal

Criteria Air Pollutants

The USEPA is responsible for implementation of the Clean Air Act (CAA). The CAA in its current form was enacted in 1970 and has been amended a number of times, most recently in 1997. Under authority of the CAA, USEPA established National Ambient Air Quality Standards (NAAQS) for carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO_2), ozone (O_3), inhalable particulate matter with diameter of ten microns[6] or less (PM10), fine particulate matter with diameter of 2.5 microns or less (PM2.5), and sulfur dioxide (SO_2). The CAA identifies two types of NAAQS: 1) primary standards define concentrations that are necessary, with an adequate margin of safety, to protect the public health; and 2) secondary standards define concentrations that are necessary to protect the public welfare from any known or anticipated adverse effects of the pollutant (40 Code of Federal Regulations [CFR] 50.2(b)). **Table 4.1-2** presents the current primary and secondary NAAQS for the criteria pollutants.

6 A micron is a unit of measurement that is one-millionth of a meter. A meter is slightly larger than 3 feet.

Table 4.1-2 National Ambient Air Quality Standards

Pollutant	Averaging Time	NAAQS Primary	NAAQS Secondary	Violation Criteria
CO	1 Hour	35 ppm (40 mg/m^3)	N/A	Not to be exceeded more than once per year
	8 Hour	9 ppm (10 mg/m^3)		
NO_2	1 Hour	100 ppb (188 µg/m^3)	N/A	98th percentile of 1-hour daily maximum concentrations, averaged over three years
	Annual	53 ppb (100 µg/m^3)	Same as Primary Standard	Annual mean
O_3	8 Hour	0.075 ppm (147 µg/m^3)	Same as Primary Standard	Annual fourth-highest daily maximum 8-hour concentration, averaged over three years
PM10	24 Hour	150 µg/m^3	Same as Primary Standard	Not to be exceeded more than once per year on average over three years
PM2.5	24 Hour	35 µg/m^3	Same as Primary Standard	98th percentile, averaged over three years
	Annual	12 µg/m^3	15 µg/m^3	Annual mean, averaged over three years
SO_2	1 Hour	75 ppb (196 µg/m^3)	N/A	99th percentile of 1-hour daily maximum concentrations, averaged over three years
	3 Hour	N/A	0.5 ppm (1,300 µg/m^3)	Not to be exceeded more than once per year
	24 Hour[1]	0.14 ppm (366 µg/m^3)	N/A	Not to be exceeded more than once per year
	Annual[1]	0.030 ppm (79 µg/m^3)		Annual mean
Pb	Rolling 3-Month Average	0.15 µg/m^3	Same as Primary Standard	Not to be exceeded

Source: USEPA, 2014f.

Notes:

1. On June 22, 2010, the 24-hour and annual primary SO2 NAAQS were revoked (75 Federal Register [FR] 35520). The 1971 SO2 NAAQS (0.14 parts per million [ppm] and 0.030 ppm for 24-hour and annual averaging periods) remain in effect until one year after an area is designated for the 2010 1-hour primary standard. USEPA has designated parts of 16 states as nonattainment based on 2009-2011 monitoring data, effective October 4, 2013, but deferred action on all other areas (78 FR 47191). CARB recommended to USEPA in June 2011 to designate all areas of California as in attainment (CARB, 2011). USEPA has not yet designated attainment status for the Los Angeles County subarea of the South Coast Air Basin.

Key:

µg/m^3 = micrograms per cubic meter
CO = carbon monoxide
mg/m^3 = milligrams per cubic meter
N/A = not applicable
NAAQS = National Ambient Air Quality Standard
NO_2 = nitrogen dioxide
O_3 = ozone
Pb = lead
PM10 = inhalable particulate matter
PM2.5 = fine particulate matter
ppb = parts per billion
ppm = parts per million
SO_2 = sulfur dioxide

Toxic Air Contaminants

Section 112 of the CAA (42 USC 7412(b)(1)) established an initial list of 187 hazardous air pollutants (HAPs) and required the USEPA to publish a list of all categories and subcategories of major sources[7] and area sources[8] that could emit each HAP. Section 112 also establishes the National Emissions Standards for Hazardous Air Pollutants (NESHAP) program (40 CFR 61 and 40 CFR 63). The 1990 CAA Amendments established NESHAPs that require the application of technology-based emission standards, called maximum achievable control technology (MACT), that are based on emission levels already achieved by similar industries (40 CFR 63). The MACT standards cover 45 stationary source industries, such as chemical plants, oil refineries, aerospace manufacturers, and steel mills.

Mobile source toxic air contaminants (also referred to as mobile source air toxics or MSATs) are emitted from highway vehicles and nonroad equipment, such as those used in construction activities. Typical mobile source air toxics include benzene, 1,3-butadiene, formaldehyde, acetaldehyde, acrolein, and diesel particulate matter (DPM). In February 2007, the USEPA adopted controls on gasoline, passenger vehicles, and portable fuel containers to reduce emissions of benzene and other HAPs (72 FR 8428). Section 211 of the CAA (42 USC 7545(k)(3)(B)) also requires reformulated gasoline to be used during the high O_3 season to reduce emissions of both volatile organic compounds (VOCs) and HAPs. Various regulations also govern efforts to reduce DPM emissions.

Odors

There are no federal laws, regulations, or policies pertaining to odors.

4.1.2.2 State

Criteria Air Pollutants

The California Clean Air Act (CCAA), signed into law in 1988, substantially added to the authority and responsibilities of the State's air pollution control districts. The CCAA establishes an air quality management process that generally parallels the federal process. The CCAA, however, focuses on attainment of the California Ambient Air Quality Standards (CAAQS) that, for certain pollutants and averaging periods, are typically more stringent than the comparable NAAQS; however, in the case of short-term standards for NO_2 and SO_2, the CAAQS are less stringent than the NAAQS.[9] **Table 4.1-3** summarizes the CAAQS.

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7 A "major source" is defined as "any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit, considering controls, in the aggregate, 10 tons per year or more of any HAP or 25 tons per year or more of any combination of HAPs" (42 USC 7412(a)(1)).

8 An "area source" is defined as "any stationary source of HAPs that is not a major source." Motor vehicles and nonroad vehicles subject to regulation are excluded from the definition (42 USC 7412(a)(2)).

9 The numerical value of the 1-hour CAAQS for NO_2 and SO_2 are higher than those for the NAAQS; however, the criteria used to determine a violation of these standards are different. The CAAQS are never to be exceeded, while the NAAQS criteria are based on the 98th percentile and 99th percentile (respectively for NO_2 and SO_2) of the daily maximum values, thus maximum measured 1-hour NO_2 and SO_2 values do not necessarily indicate a violation of the NAAQS.

Table 4.1-3 California Ambient Air Quality Standards

Pollutant	Averaging Time	CAAQS	Violation Criteria
CO	1 Hour	20 ppm (23 mg/m^3)	Not to be exceeded
	8 Hour	9.0 ppm (10 mg/m^3)	
NO_2	1 Hour	0.18 ppm (339 µg/m^3)	Not to be exceeded
	Annual	0.030 ppm (57 µg/m^3)	
O_3	1 Hour	0.09 ppm (180 µg/m^3)	Not to be exceeded
	8 Hour	0.070 ppm (137 µg/m^3)	
PM10	24 Hour	50 µg/m^3	Not to be exceeded
	Annual	20 µg/m^3	
PM2.5	Annual	12 µg/m^3	Not to be exceeded
SO_2	1 Hour	0.25 ppm (655 µg/m^3)	Not to be exceeded
	24 Hour	0.04 ppm (105 µg/m^3)	
Pb	30-Day Average	1.5 µg/m^3	Not to be equaled or exceeded
Visibility Reducing Particles	8 Hour	Extinction of 0.23 per kilometer within 10 miles	Not to be exceeded
Sulfates	24 Hour	25 µg/m^3	Not to be equaled or exceeded
Hydrogen sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Not to be equaled or exceeded
Vinyl chloride	24 Hour	0.01 ppm (26 µg/m^3)	Not to be equaled or exceeded

Source: CARB, 2013.

Key:
µg/m^3 = micrograms per cubic meter
CAAQS = California Ambient Air Quality Standard
CO = carbon monoxide
mg/m^3 = milligrams per cubic meter
NO_2 = nitrogen dioxide
O_3 = ozone
Pb = lead
PM10 = inhalable particulate matter
PM2.5 = fine particulate matter
ppm = parts per million
SO_2 = sulfur dioxide

The CCAA requires that the CAAQS be met as expeditiously as practicable, but does not set precise attainment deadlines. Instead, the act established increasingly stringent requirements for areas that will require more time to achieve the standards.

The air quality attainment plan requirements established by the CCAA are based on the severity of air pollution problems caused by locally generated emissions. Upwind air pollution control districts are required to establish and implement emission control programs commensurate with the extent of pollutant transport to downwind districts.

CARB has been granted jurisdiction over a number of air pollutant emission sources that operate in the state. Specifically, CARB is responsible for developing emission standards for on-road motor vehicles and some off-road equipment in the state. In addition, CARB develops guidelines for the local districts to use in establishing air quality permit and emission control requirements for stationary sources subject to the local air district regulations.

Toxic Air Contaminants

The Toxic Air Contaminant Identification and Control Act (Assembly Bill [AB] 1807) established a process for both identifying TACs and then managing any risk associated with each substance. AB 2728 further amended AB 1807 by requiring CARB to identify all federal HAPs as TACs. CARB works collaboratively with the Office of Environmental Health Hazard Assessment (OEHHA) to assess the potential for human exposure to a potential TAC (CARB) and to evaluate any possible health effects (OEHHA). An independent Scientific Review Panel eventually reviews all findings following a series of public workshops (CARB, 2014d).

The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) requires stationary sources (facilities) to report the types and quantities of TACs released into the atmosphere (CARB, 2014c). Following the preparation of TAC emission inventories, local air districts then rank (prioritize) the facilities based on three main parameters: emissions, potency or toxicity, and the proximity of potential receptors. Local air districts then use these three factors to calculate a score that determines if a facility should complete a health risk assessment (California Air Pollution Control Officers Association, 1990). AB 2588 also contains provisions that require air districts to notify the public of significant risks associated with nearby facilities. Senate Bill (SB) 1731 further amends AB 2588 by requiring the reduction of significant risks (CARB, 2014c).

CARB promulgated several mobile and stationary source Airborne Toxic Control Measures (ATCMs) that are codified in the California Code of Regulations (CCR). Examples of mobile source ATCMs include limits on DPM emissions from portable engines and limits on diesel-fueled commercial motor vehicle idling. Stationary source ATCMs include limits on specific industries like retail service stations, non-ferrous metal melting, and dry cleaners. Additional stationary source ATCMs cover asbestos emissions from construction, grading, quarrying, and surface mining operations and criteria pollutant emissions from stationary compression ignition engines (CARB, 2015c).

CARB identified DPMs as TACs in August 1998. The Diesel Advisory Committee of CARB finalized the documents Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles, and the Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines on September 28, 2000. Statewide regulations were then developed and continue to be developed to reduce DPM from diesel-fueled engines (CARB, 2000a; CARB, 2000b).

In March 2015, OEHHA released the Air Toxics Hot Spots Program Risk Assessment Guidelines: Guidance Manual for the Preparation of Health Risk Assessments (referred to as the Guidance Manual; OEHHA, 2015). As described on CARB's website, the Guidance Manual is designed to improve estimates of potential lifetime cancer and noncancer risks from air toxics by refining data for individuals of all ages, and reflecting new science about the increased childhood sensitivity to air toxics. The new risk methodologies will result in higher estimated risks for many situations than would have been calculated by the previous risk methodology (CARB, 2015).

Odors

There are no state laws, regulations, or policies pertaining to odors.

4.1.2.3 Regional

Air Quality Plans and Guidance

Air Quality Management Plan

The SCAQMD, in association with CARB and the Southern California Association of Governments (SCAG), is responsible for preparing the Air Quality Management Plan (AQMP) that details how the region intends to attain or maintain the state and federal ambient air quality standards (SCAQMD, 2013).

The purpose of the 2012 AQMP is to provide updated air pollution control strategies to bring the South Coast Air Basin (SoCAB) into compliance with various federal ambient air quality standards. The 2012 AQMP relied upon the most recent planning assumptions from jurisdictions within SoCAB, as well as SCAG's forecast assumptions based on its 2012 Regional Transportation Plan. It is expected that implementing the 2012 AQMP control measures will provide benefits of improved air quality, with a resulting improvement in public health. Other anticipated benefits include improved visibility, reduced destruction of materials and buildings, reduced damage to agricultural crops and habitat for wildlife, and more efficient land use patterns and transportation systems. Finally, control measures incorporated into the 2012 AQMP have the potential to reduce reliance on traditional petroleum fuels, with reductions in greenhouse gas emissions (GHG) (SCAQMD, 2012a; SCAQMD, 2012b).

The 2012 AQMP describes the SCAQMD's plan to attain the federal 24-hour PM2.5 standard by 2014[10] and to continue improving O_3 levels. Proposed control measures include reducing PM2.5 and nitrogen oxides (NOx) emissions from on- and off-road vehicle engines and locomotives. In 2007, CARB adopted a regulation to reduce DPM and NOx emissions from in-use (existing) off-road heavy-duty diesel vehicles. The 2012 AQMP proposes to carry forward control measures for O_3 presented in the Final 2007 AQMP, which includes requiring the use of cleaner (as compared to "baseline") off-road equipment.

Regional Transportation Plan/Sustainable Communities Strategy

SCAG adopted the 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) on April 4, 2012, and subsequent amendments of project lists were approved on June 6, 2013 and September 11, 2014. The 2012-2035 RTP/SCS aims to reduce emissions from transportation source to comply with SB 375[11], improve public health, and meet the NAAQS. The following goals are included in the 2012-2035 RTP/SCS:

- Align the plan investments and polices with improving regional economic development and competitiveness;
- Maximize mobility and accessibility for all people and goods in the region;
- Ensure travel safety and reliability for all people and goods in the region;

10 According to the board meeting agenda for June 5, 2015, SCAQMD analysis of 2013-2014 and preliminary 2015 showed that attainment of the 2006 24-hour PM2.5 NAAQS had not occurred by the 2012 AQMP goal of 2014 nor is likely to occur by the CAA requirement of 2015 due to the drought. If the SoCAB does not attain the NAAQS by 2016, the basin would be reclassified as a serious nonattainment area. Attainment of the 2012 annual PM2.5 NAAQS will be addressed in the 2016 AQMP, and SCAQMD is planning to include a serious area 24-hour state implementation plan in the 2016 AQMP (SCAQMD 2015b).

11 SB 375 required CARB to develop regional GHG reduction targets for passenger vehicles for 2020 and 2035.

- Preserve and ensure a sustainable regional transportation system;
- Maximize the productivity of our transportation system;
- Protect the environment and health for our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking);
- Actively encourage and create incentives for energy efficiency, where possible;
- Encourage land use and growth patterns that facilitate transit and non-motorized transportation; and
- Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.

SCAQMD CEQA Air Quality Handbook

SCAQMD prepared the CEQA Air Quality Handbook (SCAQMD, 1993) to provide guidance regarding methodologies to be used in the evaluation of air quality impacts associated with proposed projects and thresholds for determining the significance of project-related impacts. Portions of the Handbook are currently obsolete, due to changes in air quality models and analytical methodologies, trip generation characteristics of land uses, emission factors, and significance thresholds. SCAQMD is currently in the process of developing a new guidance handbook to replace the 1993 Handbook, and has published various supplements[12] that provide updated methodologies for analyzing air quality impacts as well as updated thresholds of significance.

SCAQMD Rules and Regulations

All projects in the SCAQMD jurisdiction are subject to SCAQMD rules and regulations. The following rules are applicable to the Proposed Project:

- Rule 401, Visible Emissions, prohibits an air discharge that results in a shade that is as dark or darker than what is designated as No. 1 Ringelmann Chart by the United States Bureau of Mines for an aggregate of three minutes in any one hour.
- Rule 402, Nuisance, prohibits the discharge of "air contaminants or other materials which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public."
- Rule 403, Fugitive Dust, would require the proposed transportation projects to control fugitive dust from any active operation, open storage pile, or disturbed surface area.

4.1.2.4 Local

City of Los Angeles California Environmental Quality Act Thresholds Guide

The L.A. CEQA Thresholds Guide (2006) describes significance thresholds to be used in air quality analyses and outlines methodologies for determining significance. It refers to the SCAQMD CEQA Air Quality Handbook (1993) for appropriate thresholds. Although SCAQMD has not published an updated Handbook, as noted above, various supplements have been published that provide updated

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12 Current supplements to the SCAQMD CEQA Air Quality Handbook are available online at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook.

methodologies for analyzing air quality impacts as well as updated thresholds of significance. These current SCAQMD methodologies and significance thresholds were used in this analysis and are presented in detail below.

City of Los Angeles General Plan – General Plan Framework Element

The General Plan's guiding document is the Framework Element, which provides a strategy for long-range growth and development focused around the following guiding principles: economic opportunity, equity, environmental quality, strategic investment, clear and consistent rules, and effective implementation. These principles provide direction around topics such as Land Use, Housing, Economic Development, and Transportation, among others, that are further developed in related Elements in the General Plan. The Framework Element establishes the big-picture goals that are then further refined in other planning documents, such as community plans, specific plans, and the zoning code.

City of Los Angeles General Plan – Air Quality Element

The City of Los Angeles adopted an Air Quality Element that is part of the General Plan in 1992. The following goals, objectives, and policies from the Air Quality Element are applicable to the Proposed Project.

- Goal 1: Good air quality and mobility in an environment of continued population growth and healthy economic structure.
  - Objective 1.1: It is the objective of the City of Los Angeles to reduce air pollutants consistent with the Regional AQMP, increase traffic mobility, and sustain economic growth citywide.
  - Objective 1.3: It is the objective of the City of Los Angeles to reduce particulate air pollutants emanating from unpaved areas, parking lots, and construction sites.
- Goal 3: Efficient management of transportation facilities and system infrastructure using cost-effective system management and innovative demand-management techniques.
  - Objective 3.2: It is the objective of the City of Los Angeles to reduce vehicular traffic during peak periods.
  - Objective 3.3: It is the objective of the City of Los Angeles to install Automated Traffic Surveillance and Control Systems, utilize channelization of streets and other capital programs commensurate with the City's portion of regional goals.
- Goal 4: Minimal impact of existing land use patterns and future land use development on air quality by addressing the relationship between land use, transportation, and air quality.
  - Objective 4.2: It is the objective of the City of Los Angeles to reduce vehicle trips and vehicle miles traveled associated with land use patterns.
    - *Policy 4.2.2: Improve accessibility for the City's residents to places of employment, shopping centers, and other establishments.*
    - *Policy 4.2.3: Ensure that new development is compatible with pedestrians, bicycles, transit, and alternative fuel vehicles.*

- *Policy 4.2.4: Require that air quality impacts be a consideration in the review and approval of all discretionary projects.*
- *Policy 4.2.5: Emphasize trip reduction, alternative transit and congestion management measures for discretionary projects.*

City of Los Angeles General Plan – Mobility Plan 2035

The City of Los Angeles updated the Transportation Element of the City's General Plan, now referred to as Mobility Plan 2035 or MP 2035, to reflect policies and programs that will lay the policy foundation for safe, accessible, and enjoyable streets for pedestrians, bicyclists, transit users, and vehicles throughout the City of Los Angeles, including the Westside. The MP 2035 and Final EIR were adopted on August 11, 2015. MP 2035 is compliant with the 2008 Complete Streets Act (AB 1358), which mandates that the circulation element of a city's General Plan be modified to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan.

The following goals, objectives, and policy topics from the MP 2035 are applicable to the Proposed Project.

- **Goal: Clean Environment and Healthy Communities** focuses on topics related to environment, health, clean air, clean fuels and fleets, and open street events.
  - Objective: Decrease vehicle miles traveled (VMT) per capita by 5 percent every five years, to 20 percent by 2035.
  - Objective: Meet a 9 percent per capita GHG reduction for 2020 and a 16 percent per capita reduction for 2035 (SCAG RTP).
  - Objective: Reduce the number of unhealthy air quality days to zero by 2025.
  - Policy Topic 5.1: Sustainable Transportation. Encourage the development of a sustainable transportation system that promotes environmental and public health.
  - Policy Topic 5.2: VMT. Support ways to reduce VMT per capita.

City of Los Angeles General Plan – Plan for A Healthy Los Angeles (General Plan Health and Wellness Element)

The City of Los Angeles adopted the Plan for A Healthy Los Angeles as part of the General Plan in 2015. The following goals, objectives, and policy topics from the Plan for A Healthy Los Angeles are applicable to the Proposed Project.

- **Goal 5: An Environment Where Life Thrives**
  - Objective: Decrease the respiratory disease mortality rate citywide by 20 percent and reduce the disparity between the City Council Districts with the highest and lowest respiratory disease mortality rates by at least 50 percent.

- Objective: Decrease the rate of asthma-related emergency department (ED) visits among children citywide by 20 percent and reduce the disparity between the Community Plan Areas with the highest and lowest rates of ED by at least 50 percent.
- Objective: Reduce the disparity in communities that are impacted by a high Pollution Exposure Score (exposure to six exposures indicators, including ozone, and PM2.5 concentrations, diesel, PM concentrations, pesticide use, toxic releases from facilities, and traffic density) so that every zip code has a score less than 1.7 (current citywide average).
- Policy Topic 5.1: Air pollution and respiratory health. Reduce air pollution from stationary and mobile sources; protect human health and welfare and promote improved respiratory health.

4.1.3 Existing Setting

The amount of emissions released by sources and the atmosphere's ability to transport and dilute such emissions determine ambient concentrations of criteria air pollutants, TACs, and odors. Natural factors that affect transport and dilution include terrain, wind, atmospheric stability, and sunlight. Therefore, natural factors like topography, meteorology, and climate determine existing air quality conditions in the area, as does the amount of emissions released by existing sources.

CARB divided California into regional air basins according to common topographic and meteorological features. The Proposed Project is located in the Los Angeles County subarea of the SoCAB, which is under the jurisdiction of the SCAQMD. The SCAQMD is the regional agency responsible for air quality regulations within the SoCAB including enforcing the CAAQS and implementing strategies to improve air quality and to mitigate effects from new growth.

4.1.3.1 Climate

The climate of the SoCAB is determined primarily by terrain and geography. Regional meteorology is dominated by a persistent high pressure area that commonly resides over the eastern Pacific Ocean. Seasonal variations in the strength and position of this pressure cell cause changes in area weather patterns. Local climactic conditions are characterized by warm summers, mild winters, infrequent rainfall, moderate daytime on-shore breezes, and moderate humidity. The SoCAB's normally mild climate is occasionally interrupted by periods of hot weather, winter storms, and hot, easterly Santa Ana winds.

The SoCAB area has high levels of air pollution, particularly from June through September. Factors leading to high levels of pollution include a large amount of pollutant emissions, light winds, and shallow vertical atmospheric mixing. These factors reduce pollutant dispersion, exacerbating elevated air pollution levels. Pollutant concentrations in the SoCAB vary by location, season and time of day. Concentrations of O_3, for example, tend to be lower along the coast and in far inland areas of the basin and adjacent desert, and higher in and near inland valleys.

4.1.3.2 Air Monitoring Data

Criteria Pollutants

Air quality data from a monitoring station near the project area are summarized in **Table 4.1-4 through Table 4.1-6**. Monitoring data from the three monitoring stations in Los Angeles (Veteran's Administration Hospital, CARB Number 70091, USEPA Number 060370113; Los Angeles International Airport [LAX], CARB Number 70111, USEPA Number 060375005; and North Main Street, Los Angeles, CARB Number 70087, USEPA Number 060371103) are presented (CARB, 2015b; USEPA, 2014d). These stations best represent air quality conditions in the project area.

Table 4.1-4 Air Monitoring Data – West Los Angeles

Pollutant[1]	2012	2013	2014
CO			
1st high 1-hour concentration, ppm	2.1	1.9	2.2
2nd high 1-hour concentration, ppm	1.7	1.9	2.0
1st high 8-hour concentration, ppm	1.15	1.3	1.3
2nd high 8-hour concentration, ppm	1.15	1.2	1.2
NO_2			
1st high 1-hour concentration, ppb	61	51	63
98th percentile 1-hour concentration, ppb	54	49	54
Annual average, ppb	13	*	*
O_3			
1st high 1-hour concentration, ppm	0.093	0.088	0.116
1st high 8-hour concentration, ppm	0.074	0.076	0.095
4th high 8-hour concentration, ppm	0.065	0.059	0.077

Source: CARB, 2015b; USEPA, 2014d.

Notes:

1. State and national statistics may differ for the following reasons: State statistics are based on California-approved samplers, whereas national statistics are based on samplers using federal reference or equivalent methods. State and national statistics may therefore be based on different samplers.

Key:

* = There was insufficient (or no) data available to determine this value.
CO = carbon monoxide
NO_2 = nitrogen dioxide
O_3 = ozone
ppb = parts per billion
ppm = parts per million

Table 4.1-5 Air Monitoring Data – Los Angeles International Airport

Pollutant[1]	2012	2013	2014
CO			
1st high 1-hour concentration, ppm	2.8	3.1	2.7
2nd high 1-hour concentration, ppm	2.6	3.0	2.6
1st high 8-hour concentration, ppm	1.73	2.5	1.9
2nd high 8-hour concentration, ppm	1.51	2.5	1.8
NO_2			
1st high 1-hour concentration, ppb	77	77	87
98th percentile 1-hour concentration, ppb	55	58	66
Annual average, ppb	*	12	12
O_3			
1st high 1-hour concentration, ppm	0.106	0.105	0.114
1st high 8-hour concentration, ppm	0.075	0.082	0.080

Pollutant[1]	2012	2013	2014
4th high 8-hour concentration, ppm	0.059	0.060	0.071
PM10			
1st high 24-hour concentration, μg/m³	30	37	45
2nd high 24-hour concentration, μg/m³	30	35	40
Annual average, μg/m³			
SO_2			
1st high 1-hour concentration, μg/m³	0.005	0.010	0.015
99th percentile 1-hour concentration, μg/m³	0.005	0.007	0.009
1st high 24-hour concentration, μg/m³	0.002	0.002	0.003
2nd high 24-hour concentration, μg/m³	0.001	0.002	0.002
Pb			
1st high 24-hour concentration, μg/m³	0.008	0.007	0.011

Source: CARB, 2015b; USEPA, 2014d.
Notes:
1. State and national statistics may differ for the following reasons: State statistics are based on California-approved samplers, whereas national statistics are based on samplers using federal reference or equivalent methods. State and national statistics may therefore be based on different samplers.

Key:
* = There was insufficient (or no) data available to determine this value.
μg/m3 = micrograms per cubic meter
CO = carbon monoxide
NO_2 = nitrogen dioxide
O_3 = ozone
Pb = lead
PM10 = inhalable particulate matter
ppb = parts per billion
ppm = parts per million
SO_2 = sulfur dioxide

Table 4.1-6 Air Monitoring Data – Downtown Los Angeles

Pollutant[1]	2012	2013	2014
CO			
1st high 1-hour concentration, ppm	2.2	2.5	2.5
2nd high 1-hour concentration, ppm	2.1	2.5	2.4
1st high 8-hour concentration, ppm	1.91	2	2
2nd high 8-hour concentration, ppm	1.74	1.8	1.9
NO_2			
1st high 1-hour concentration, ppb	77	90	82
98th percentile 1-hour concentration, ppb	69	63	69
Annual average, ppb	25	22	22
O_3			
1st high 1-hour concentration, ppm	0.093	0.081	0.113
1st high 8-hour concentration, ppm	0.077	0.070	0.095
4th high 8-hour concentration, ppm	0.068	0.060	0.072
PM10			
1st high 24-hour concentration, μg/m³	90.9	74.5	86.8
2nd high 24-hour concentration, μg/m³	74	46	61
Annual average, μg/m³	30	35.3	30.2
PM2.5			
98th percentile 24-hour concentration, μg/m³	32	29	35
Annual average (National), μg/m³	12.5	12	12.4
Annual average (California), μg/m³	12.7	19	*

Pollutant[1]	2012	2013	2014
SO_2			
1st high 1-hour concentration, µg/m^3	5	6	5
99th percentile 1-hour concentration, µg/m^3	5	5	4
1st high 24-hour concentration, µg/m^3	2	2	1
2nd high 24-hour concentration, µg/m^3	1	1	1
Pb			
1st high 24-hour concentration, µg/m^3	0.024	0.019	0.019

Source: CARB, 2015b; USEPA, 2014d.

Notes:

1. State and national statistics may differ for the following reasons: State statistics are based on California-approved samplers, whereas national statistics are based on samplers using federal reference or equivalent methods. State and national statistics may therefore be based on different samplers.

Key:

* = There was insufficient (or no) data available to determine this value.
µg/m3 = micrograms per cubic meter
CO = carbon monoxide
NO_2 = nitrogen dioxide
O_3 = ozone
Pb = lead
PM10 = inhalable particulate matter
PM2.5 = fine particulate matter
ppb = parts per billion
ppm = parts per million
SO_2 = sulfur dioxide

Toxic Air Contaminants

CARB maintains a network of 17 air quality monitoring stations that measure ambient concentrations of 64 TACs. The closest monitoring station to the study area is located in downtown Los Angeles. DPM is not monitored at the stations because there is no widely accepted monitoring method available. As such, CARB uses studies from the San Joaquin Valley, South Coast, and San Jose to obtain speciated PM10 ambient data, ambient 1990 PM10 monitoring network data, and 1990 PM10 emissions inventory data to estimate outdoor ambient exposures to DPM. Simple ratios between the 1990 data and the current inventory year's data are then used to estimate the current year's DPM ambient concentration (CARB, 2000a).

Regions of the state that have not met one or more of the CAAQS are known as nonattainment areas, while regions that meet the CAAQS are known as attainment areas. The Proposed Project is located in the Los Angeles County sub-area of the SoCAB. Los Angeles County is designated as a state nonattainment area for O_3, PM10, and PM2.5, and a state attainment or unclassified area for CO, NO_2, SO_2, Pb, sulfates, hydrogen sulfide, and visibility reducing particles (CARB, 2014b). The project location in Los Angeles County is also federally designated as an extreme nonattainment area for O_3, moderate nonattainment area for PM2.5, nonattainment area for Pb, maintenance area for CO, NO_2, and PM10, and attainment area for SO_2 (USEPA, 2015a). Attainment status for the Los Angeles County subarea of the SoCAB is summarized in **Table 4.1-7**.

Table 4.1-7 Attainment Status for Los Angeles County Subarea of SoCAB

Pollutant	National Standards	California Standards
CO	Maintenance	Attainment
NO_2	Maintenance	Attainment
O_3	Extreme Nonattainment	Nonattainment
PM10	Maintenance	Nonattainment
PM2.5	Moderate Nonattainment	Nonattainment
SO_2	Attainment	Attainment
Pb	Nonattainment	Attainment
Sulfates	N/A	Attainment
Hydrogen Sulfide	N/A	Unclassified
Visibility Reducing Particles	N/A	Unclassified

Source: CARB, 2014b; USEPA, 2015a.

Key:
CO = carbon monoxide
N/A = not applicable (not regulated)
NO_2 = nitrogen dioxide
O_3 = ozone
Pb = lead
PM10 = inhalable particulate matter
PM2.5 = fine particulate matter
SoCAB = South Coast Air Basin
SO_2 = sulfur dioxide

4.1.3.3 Sensitive Receptors

Various land uses exist within the project area, including residential developments of various densities; commercial, industrial, institutional, and public facilities; and open space. Some populations, such as children, the elderly, and those with respiratory diseases, are more likely to be affected by air pollution. SCAQMD defines sensitive receptors to include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent homes, and retirement homes (SCAQMD, 2005).

4.1.4 Methodology

4.1.4.1 Pollutants of Interest

Criteria Pollutants

USEPA regulates seven common pollutants called criteria pollutants. They include CO, Pb, NO_2, ozone O_3, PM10, PM2.5, and SO_2 (USEPA, 2015d). Each pollutant is described below.

Carbon Monoxide

CO is a colorless, odorless gas that is highly toxic. It is formed by the incomplete combustion of fuels. In Los Angeles County, over 94 percent of CO emissions occur from mobile sources (USEPA, 2015b). Exposure to CO can reduce the body's ability to carry oxygen. CO exposure can cause people with heart disease to experience chest pain (angina) when exercising or under increased stress. Extremely high levels of CO can cause death (USEPA, 2014e).

Nitrogen Dioxide

NO_2 is a poisonous reactive gas that is formed during high-temperature combustion processes, such as those occurring in vehicle engines and power plants. NO_2 forms when nitric oxide (NO) reacts with atmospheric oxygen. Most sources of NO_2 are man-made; the primary source of NO_2 is high-temperature combustion. For purposes of this analysis, emissions of nitrogen oxides (NOx), which include NO and NO_2, were used to determine NO_2 impacts. Mobile sources (85 percent) and fuel combustion (11 percent) make up the majority of sources of NOx in Los Angeles County (USEPA, 2015b).

Exposure to NOx can cause adverse respiratory effects including airway inflammation. NOx can react with ammonia, moisture, and other compounds to form small particles that can lodge deeply into sensitive parts of the lungs. This action can cause or worsen respiratory disease like emphysema and bronchitis and can aggregative existing heart disease (USEPA, 2014c).

Ozone

Ozone, commonly referred to as smog, is a highly reactive and unstable gas that is formed in the atmosphere through complex reactions with NOx and VOCs in the presence of sunlight. Hot, sunny, and calm days promote O_3 formation. USEPA regulates ground-level O_3, which is not to be confused with stratospheric O_3. Ground-level O_3 exists in the air close to where people live, breathe, and exercise and can cause adverse health effects; stratospheric O_3 is high in the atmosphere and reduces the amount of ultraviolet light entering the earth's atmosphere, which actually helps protect animal and plant life.

Certain people are particularly sensitive to the effects of O_3 including people with lung disease, children, older adults, and active people. Generally, as O_3 concentrations increase, both the number of people affected and the seriousness of the health effects increase. The effects of exposure to ground-level O_3 include cough, chest tightness, and pain upon taking a deep breath; worsening of wheezing and other asthma symptoms; reduced lung function; and increase hospitalizations for respiratory causes.

O_3 also has detrimental effects on the environment. O_3 exposure can damage cells and leaf tissue, reducing plants' ability to photosynthesize and produce food. Plants will grow more leaves in an attempt to produce more food, but this response has the net effect of making plants more susceptible to disease, pests, cold, and drought. O_3 can also damage materials like rubber, plastics, fabrics, paint and metals (USEPA, 2003; USEPA, 2009).

Ozone is a regional pollutant and ambient concentrations can only be predicted using regional photochemical models that account for all sources of precursors, which is beyond the scope of this analysis. Therefore, no photochemical O_3 modeling was conducted. Rather, following standard industry practice, the evaluation of O_3 was conducted by evaluating emissions of VOC and NOx, which are precursors in the formation of O_3. Mobile sources (36 percent), biogenics (29 percent), and solvents (24 percent) are the main sources of VOC in Los Angeles County (USEPA, 2015b).

Sulfur Dioxide

SO_2 is formed when fuel containing sulfur (typically, coal and oil) is burned. Certain industrial processes, such as petroleum refining and metal processing, also contribute to SO_2 emissions. Mobile emissions (38 percent), industrial processes (32 percent), and fuel combustion (27 percent) account for most of SO_2 emissions in Los Angeles County (USEPA, 2015b). Health effects of SO_2 exposure includes bronchoconstriction and increased asthma symptoms. SO_2 can also react with other compounds in the atmosphere to form small particles. Exposure to the resulting particles can aggravate existing heart disease, leading to increased hospital admissions and premature death (USEPA, 2015c).

Lead

Pb is a soft and chemically resistant metal that is naturally found in the environment. It has historically been found in motor vehicle gasoline, paints, lead-acid batteries, and secondary lead smelters. USEPA's efforts to remove Pb from gasoline in 1980 and beyond has substantially reduced airborne Pb. The aviation sector continues to be a major source of Pb emissions from piston aircraft, as are certain industrial sectors like ore and metals processing (USEPA, 2014g).

In addition to Pb exposure through air, Pb can also accumulate in soils and other sediments, especially in urban environments where it would have accumulated from years of exposure to leaded gasoline. Pb exposure can adversely affect the nervous system, kidney function, immune system, reproductive and development systems, and the cardiovascular system. Pb exposure may also contribute to behavioral problems, learning deficits, and lowered IQ in infants and young children (USEPA, 2014b). Emissions of Pb from the study area are minimal (USEPA, 2015b).

Inhalable and Fine Particulate Matter

PM consists of solid and liquid particles of dust, soot, aerosols, and other matter small enough to remain suspended in the air for a long period of time. PM is divided into two size classes of particles: particles up to 10 microns (PM10) and particles up to 2.5 microns (PM2.5). To place the sizes in perspective, a human hair is approximately 60 microns in diameter, which makes it six times larger than the largest coarse particle and over 20 times larger than the largest fine particle.

Particles smaller than 10 microns (i.e., PM10 and PM2.5) represent that portion of PM thought to represent the greatest hazard to public health because they can become deeply embedded in someone's lungs. This can lead to adverse health effects, including premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms (e.g., irritation of the airways, coughing, or difficulty breathing). Aside from adverse health effects, PM2.5 is primarily responsible for reduced visibility (haze) in the United States. PM can also cause aesthetic damage by staining or damaging stone and other materials (USEPA, 2013; USEPA, 2014a).

Primary particles are those that are directly emitted from a source, such as construction sites, unpaved roads, fields, smokestacks, or fires. Burning fuels primarily produces PM2.5, while other sources, like windblown dust, contribute to PM10 emissions. Secondary formation of PM2.5 can occur from complex reactions in the atmosphere of pollutants like NOx, sulfur oxides (SOx),[13] VOCs, and ammonia, which interact with other compounds in the air to form particulate matter. Most of the PM2.5 pollution in the United States occurs from these secondary reactions as opposed to direct (primary) emissions. The majority of PM10 in Los Angeles County is attributed to dust (39 percent), mobile emissions (23 percent), and industrial processes (22 percent). Main sources of PM2.5 in Los Angeles County are mobile sources (33 percent), industrial processes (21 percent), and fuel combustion (18 percent) (USEPA, 2015b).

Toxic Air Contaminants (TACs)

TACs are defined as air pollutants that may cause or contribute to an increase in mortality or serious illness, or which may pose a present and potential hazard to human health (California Health & Safety

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13 The term SOx accounts for distinct but related compounds, primarily SO_2 and, to a far lesser degree, sulfur trioxide (SO_3). As a conservative assumption for this analysis, it was assumed that all SOx is emitted as SO_2, therefore SOx and SO_2 are considered equivalent in this document and only the latter term is used henceforth.

Code Section 39655(a)). Toxic air pollutants are called HAPs in federal terms; however, the lists of TACs and HAPs are not the same. For example, California recognizes DPM and environmental tobacco smoke as toxic air pollutants, while the federal government does not (42 United States Code [USC] 7412(b)).

The health effects associated with TACs vary, but can generally be broken down into three main categories: cancer risks, chronic noncancer risks, and acute noncancer risks. Health risks are a measure of the chance that an individual will experience health problems. The California Almanac of Emissions and Air Quality Data (CARB, 2009b) indicates that ten TACs contribute the greatest health risk to California based on ambient air quality data. These TACs are acetaldehyde, benzene, 1,3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and DPM. Of these TACs, DPM is of the greatest concern because it is estimated to be responsible for approximately 70 percent of the total ambient air toxics risk in the state (CARB, 2000a).

Motor vehicles and airports in and around the project area contribute to DPM and other TAC emissions.

Odors

Odors are generally regulated as nuisances and do not typically pose a health risk. Odorous processes or facilities often lead to citizen complaints to local governments. Odor impacts are subjective because different people have different sensitivities to odor.

4.1.4.2 Analytical Methods

This analysis evaluated potential temporary construction impacts and long-term operational impacts to air quality resulting from changes to the transportation system that would occur with implementation of the projects on the proposed CTCSP and WLA TIMP project lists. The air quality impact analyses for criteria pollutants include evaluations of emission inventories (i.e., the quantities of specific pollutants, typically expressed in pounds per day or tons per year) based on emission modeling. The criteria pollutant emissions inventories were developed using standard industry software/models and federal, state, and locally-approved methodologies. Results of the emission inventories from emission modeling were compared to daily thresholds established SCAQMD for the SoCAB. Modeling results are provided in Appendix D, *Air Quality/Greenhouse Gas Emissions*.

For the purpose of this analysis, potential construction-related emissions were estimated programmatically, because detailed plans have not been developed for implementation of any of the projects on the proposed CTCSP or WLA TIMP project lists. The projects most likely to require a substantial amount of heavy construction equipment include: (1) the Lincoln Boulevard Bridge Enhancement, (2) the center-running Bus Rapid Transit (BRTs) on Lincoln and Sepulveda boulevards, particularly the construction of BRT platforms, and (3) the I-10 Ramp Reconfiguration at Bundy Drive. In addition to the widening of the Lincoln Bridge over Ballona Channel, the Lincoln Boulevard Enhancement also includes widening the Lincoln Boulevard approaches on either side of the bridge, and modifications to Culver Boulevard, including widening of the Culver Boulevard Bridge over Lincoln Boulevard and modifications to the Culver Boulevard/ Lincoln Boulevard interchange. For purposes of the air quality analysis, it was assumed that the Lincoln Boulevard and Sepulveda Boulevard BRTs would require excavation down to the subsurface to install appropriate foundations for the BRT platforms. One set of modeling was done that estimates emissions associated with the two BRT improvement projects. While this methodology overstates impacts associated with each individual project, it accounts for potential concurrent construction. Similar to the Lincoln Boulevard and Sepulveda Boulevard BRT improvements, it was assumed that the I-10 Ramp Reconfiguration at Bundy Drive would require excavation down to the subsurface to remove and replace off-ramps. Because the construction activities associated with the Lincoln Boulevard and Sepulveda Boulevard BRT improvements would be similar to the activities associated with the I-10 Ramp Reconfiguration at Bundy Drive, the results of the BRT modeling were used to represent emissions associated with the I-10 ramp reconfiguration improvement. It should be noted that it is likely that the BRT results may overstate impacts associated with the ramp reconfiguration improvement, because the BRT improvements would entail construction at multiple platform sites.

Based on these assumptions, screening level emissions estimates were developed for these project types using the Roadway Construction Emissions Model, Version 7.1.5.1, provided by the Sacramento Air Quality Management District.[14] This spreadsheet model was developed specifically to estimate emissions from new roadway construction, roadway widening, and bridge construction projects. The model identifies the equipment and emissions associated with clearing and grubbing, grading and excavation, subsurface utilities installation, paving, soil cut and fill hauling, fugitive dust, and construction working trips. It develops the estimates based on limited input data: the length of the roadway or bridge, the project site acreage, and the volume of soil imported and exported. **Table 4.1-8** provides the list of construction equipment along with the default horsepower and number of units used in the Roadway Construction Emissions Model for the Lincoln Boulevard Bridge Enhancement, Lincoln Boulevard and Sepulveda Boulevard BRT platforms (combined impacts), and I-10 Ramp Reconfiguration at Bundy Drive.

Table 4.1-8 Roadway Construction Emissions Model Equipment

Equipment Type	Horsepower	Number of Units	
		Lincoln Boulevard Bridge Enhancement	Lincoln and Sepulveda BRTs (combined)/I-10 Ramp Reconfiguration at Bundy Drive
Air Compressors	106	1	1
Cranes	226	1	1
Crawler Tractors	208	1	1
Excavators	163	1-2	1-2
Generator Sets	66	1	1
Graders	175	1-2	1
Pavers	126	1	1
Paving Equipment	131	1	1
Plate Compactors	8	1	1
Pumps	53	1	1
Rollers	81	1-2	1-2
Rough Terrain Forklifts	100	1	1
Rubber Tired Loaders	200	1	1
Scrapers	362	1-2	1
Signal Boards	20	1-2	1-20
Tractor/Backhoes	98	1-2	1-3

Sources: SMAQMD, 2015; CDM Smith, 2015.

14 The Sacramento Air Quality Management District is the district that developed the Roadway Construction Emissions Model. This model was developed using emission factors that are applicable statewide, therefore, the model can be used to estimate roadway construction emissions in other air districts within the state.

Other transportation improvements included on the proposed CTCSP and WLA TIMP project lists would require a much lower intensity of construction than the Lincoln Boulevard Bridge Enhancement and the Lincoln Boulevard and Sepulveda Boulevard BRTs. For these projects, the California Emissions Estimator Model (CalEEMod), Version 2013.2.2, was used to estimate criteria and precursor pollutant emissions (VOCs, NOx, CO, SO_2, PM10, and PM2.5) associated with project-related construction and operations (California Air Pollution Control Officers Association, 2013). CalEEMod is a statewide land use emissions computer model that estimates construction and operational emissions from a variety of land use projects. CalEEMod also contains mitigation measures to reduce criteria pollutant emissions, if necessary. It was assumed that reactive organic gases (ROG) emissions from CalEEMod and the Emissions Factors Model (EMFAC), described below, are equivalent to VOC emissions (CARB, 2009a). The analysis does not estimate lead emissions because no major sources of lead would occur from project-related construction or operations.

For these lower intensity projects, it was assumed that construction of a typical improvement project would involve a rubber tired loader, an air compressor to power a jackhammer, a concrete mixer, and a paver. This equipment is typically used for construction activities that would be required by these projects, such as removal and replacement of asphalt and concrete that may be associated with the construction of cycle tracks, sidewalk improvements, traffic calming features, and bicycle transit centers, or the installation of minor new facilities, such as bus shelters, signage, streetscape improvements, and ITS equipment. In addition to the off-highway equipment, it was assumed that there would be haul and delivery truck trips and daily construction worker commute trips associated with the construction projects.

Because SCAQMD Rule 403 would be implemented to minimize fugitive dust, it was assumed that 61 percent of fugitive particulate matter emissions would be mitigated with implementation of each construction project. It was assumed that portions of the construction activities associated with the Lincoln Boulevard Bridge Enhancement would occur approximately 25 meters (82 feet) or less from the nearest sensitive receptor.[15] Other construction activities, including construction of the Lincoln Boulevard and Sepulveda Boulevard BRT improvements and the I-10 Ramp Reconfiguration at Bundy Drive, may also occur close to sensitive receptors. The construction-related air quality impacts of individual improvement projects will be evaluated at a project-level of detail prior to approval and implementation of the specific improvement. Total and onsite construction emission were calculated using the Roadway Construction Emissions Model for the Lincoln Boulevard Bridge Enhancement, the Lincoln/Sepulveda BRT stations, and the I-10 Ramp Reconfiguration at Bundy Drive; CalEEMod was used for the other transportation improvements.

CARB's EMFAC2014 Mobile Source Emission Inventory Model was used to calculate regional emissions from motor vehicles in the study area. EMFAC2014 provides emission rates for various on-road vehicle types at different speeds within different counties in California. The default EMFAC2014 fleet mix for the South Coast Air Basin portion of Los Angeles County was used to determine the county-wide emission factors (CARB, 2015a) by speed, summarized in 5 mph speed bins (5 mph, 10 mph, 15 mph, etc., through 60 mph). These emission factors were then multiplied by projected traffic volumes by speed bin to determine emissions. Fugitive road dust emissions were calculated using the USEPA's Compilation of Air Pollutant Emission Factors (AP-42) (USEPA, 2011).

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15 Twenty-five meters is the lowest distance in the model.

CARB's size fractions were used to calculate PM2.5 emission rates from PM10 emission rates for fugitive dust (CARB, 2014a). Study area VMT was obtained from the traffic analysis.

4.1.5 Thresholds of Significance

4.1.5.1 State Thresholds of Significance

The significance criteria described below were developed consistent with the State CEQA Guidelines to determine the significance of potential impacts on air quality that could result from implementation of the project. Impacts on air quality would be considered potentially significant if the project would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the air basin is nonattainment (O_3 precursors [NOx and VOC], PM10, and PM2.5[16]) under an applicable federal or state ambient air quality standard;
- Expose sensitive receptors to substantial pollutant concentrations; and/or
- Create objectionable odors affecting a substantial number of people.

4.1.5.2 Local Thresholds of Significance

Mass Emissions Thresholds

The L.A. CEQA Thresholds Guide refers to the SCAQMD CEQA Air Quality Handbook for significance thresholds. If the Proposed Project were to result in substantial emissions that would exceed the significance criteria, then a significant impact would occur. **Table 4.1-9** summarizes the SCAQMD mass daily thresholds for construction and operation.

Table 4.1-9 SCAQMD Mass Daily Pollutant Emission Thresholds

Pollutant	Construction	Operation
NO_x	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM10	150 lbs/day	150 lbs/day
PM2.5	55 lbs/day	55 lbs/day
SO_x	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day

Source: SCAQMD, 2015a.

Key:
CO = carbon monoxide
lbs/day = pounds per day
NO_x = nitrogen oxides
PM10 = inhalable particulate matter
PM2.5 = fine particulate matter
SO_x = sulfur oxides
VOC = volatile organic compounds

16 Although the project location in Los Angeles County is also federally designated as a nonattainment area for lead (Pb) (see Table 4.1-7), as discussed in Section 4.1.4.2, *Analytical Methods*, the air quality analysis in this EIR does not estimate lead emissions because no major sources of lead would occur from project-related construction or operations.

Localized Significance Thresholds

The SCAQMD also developed thresholds for local air quality impacts from construction activity (2008). Localized Significance Thresholds (LSTs) are only applicable to the following criteria pollutants: NOx, CO, PM10, and PM2.5. LSTs are intended to assist public agencies in determining whether or not a project may generate significant adverse localized air quality impacts. They represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor.

SCAQMD recommends using the equipment type to determine the maximum daily disturbed acreage when analyzing air emissions with CalEEMod: each crawler tractor, grader, or rubber tired dozer operating at the project site could disturb 0.5 acres per workday; a scraper could disturb one acre per workday. It is anticipated that less than one acre would be disturbed per day for this project; therefore, one-acre LSTs were used for this project (SCAQMD, 2011).

Table 4.1-10 summarizes the allowable emissions for construction emissions from a one-acre project located in the Northwest Coastal Los Angeles County Source-Receptor Area. LSTs consider ambient concentrations of pollutants for each source receptor area and distances to the nearest sensitive receptor. The closest portion of the Lincoln Boulevard Bridge Enhancement is estimated to be 25 meters (82 feet)[17] or less from the nearest sensitive receptor. Other proposed improvements (including the Lincoln Boulevard and Sepulveda Boulevard BRTs, I-10 Ramp Reconfiguration at Bundy Drive, and other improvements) may also be within 25 meters (82 feet) from a sensitive receptor. Therefore, the thresholds for this distance in the LST lookup tables (i.e. 25 meters, or approximately 82 feet) were used.

Table 4.1-10 Localized Significance Thresholds

Pollutant	Construction	Operation
CO	562 lbs/day	562 lbs/day
NOx	103 lbs/day	103 lbs/day
PM10	4 lbs/day	1 lbs/day
PM2.5	3 lbs/day	1 lbs/day

Source: SCAQMD, 2010.

Note: Localized significance thresholds presented in this table are for one-acre projects in Northwest Coastal LA County Source-Receptor Area that are 25 meters from the nearest sensitive receptor. This is the shortest distance provided in the LST lookup tables.

Key:
CO = carbon monoxide
lbs/day = pounds per day
NOx = nitrogen oxides
PM10 = inhalable particulate matter
PM2.5 = fine particulate matter

As described in SCAQMD's LST Methodology, only on-site emissions, which include fugitive dust and off-road construction equipment, were included in the LST analysis and not off-site mobile emissions from the project (e.g., construction worker commuting).

17 Twenty-five meters is the lowest distance in the lookup tables.

Toxic Air Contaminant Thresholds

For TACs, the SCAQMD significance thresholds are emissions of TACs that exceed the maximum incremental cancer risk of 10 in a million, a cancer burden of 0.5 excess cancer cases, or a chronic or acute hazard index of 1.0 for the project increment.

Odors

The L.A. CEQA Thresholds Guide considers a significant impact to occur if a project creates an objectionable odor at the nearest sensitive receptor. Similarly, SCAQMD considers a project that creates an odor nuisance to be significant.

4.1.6 Impacts and Mitigation Measures

The proposed update to the Transportation Impact Assessment Fee program and the administrative and minor revisions of the Specific Plans would not result in any physical impacts that could affect air quality. Therefore, the following analysis addresses whether implementation of the proposed updates to the lists of transportation improvements in the CTCSP and WLA TIMP would result in significant impacts on air quality. No specific construction projects would be implemented based on this EIR; rather, the transportation improvements are evaluated at a conceptual level of detail.

Impact 4.1-1: Implementation of the Proposed Project would not conflict with or obstruct implementation of the applicable air quality plan. This would be a *less than significant* impact.

The applicable air quality plans are the 2012 AQMP, the 2013-2035 RTP/SCS, and the City's General Plan, including the Air Quality Element, Mobility Plan 2035, and the Plan for a Healthy Los Angeles (Health and Wellness Element).

Generally, the 2012 AQMP, 2013-2035 RTP/SCS, and the City of Los Angeles Air Quality Element and Mobility Plan 2035, aim to minimize air quality impacts as a result of growth in the region while supporting mobility in the region. The Plan for a Healthy Los Angeles also acknowledges the relationship between public health and transportation with policies aimed at reducing air pollution through expanding public transit and active transportation modes. Potential transportation improvements related to the Proposed Project include enhancing transit service, bicycle facilities, and pedestrian accommodations to promote multi-modal transportation in the project area; roadway projects to improve intersections, safety, and traffic flow; installation of automated traffic surveillance and control systems and cameras; and trip reduction programs. The improvement projects are intended to encourage the use of alternative modes of transportation and to minimize the increase in vehicle travel in the region. The potential for construction and operation of these proposed improvements to conflict with or obstruct implementation of these plans is addressed below.

Construction

The Proposed Project would conflict with the AQMP if it were to hinder strategies intended to bring the SoCAB into compliance with federal ambient air quality standards and it would conflict with the City's Air Quality Element if it were inconsistent with the objective of reducing particulate air pollutants from construction sites.

The Proposed Project would not result in any alterations in land use and would not affect future regional development anticipated by SCAG in the 2013-2035 RTP/SCS or incorporated as assumptions in the AQMP. The proposed transportation improvements would be consistent with the regional growth anticipated by these plans. **Table 4.1-11** identifies the types of transportation improvements associated with the Proposed Project and the level of construction associated with each type. As shown in the table, the majority of the proposed improvements would result in a low level of construction activity. Projects with the greatest level of construction activity would include the addition of center-running BRT on Sepulveda Boulevard and Lincoln Boulevard; and roadway projects, such as the Lincoln Boulevard Bridge Enhancement and reconfiguring the I-10 ramps at Bundy Drive.

The emissions associated with the proposed transportation improvements would be at the low end of the intensity range of construction activities that occur in the region. As indicated in Table 4.1-11, the majority of the transportation improvements would not require substantial construction. Generally, project-related construction would take place within existing roadways, sidewalks, and right-of-ways and, with the exception of the projects identified above, would not involve construction of major new facilities or infrastructure. Rather, the majority of the projects would involve only minor construction activities, such as removal and replacement of asphalt and concrete, which would be associated with the construction of cycle tracks, sidewalk improvements, traffic calming features, and bicycle transit centers for example; restriping, which would be associated with implementation of curb-running BRT, enhanced pedestrian cross-walks, and turn-lane designations, for example; or the installation of minor new facilities, such as bus shelters, signage, streetscape improvements, and ITS equipment. Even the more notable construction projects, (i.e., the Lincoln Boulevard Bridge Enhancement, Lincoln Boulevard and Sepulveda Boulevard BRTs, and reconfiguration of the I-10 ramps at Bundy Drive), would be at a lesser intensity than many large construction projects in the region, some of which involve construction of substantial new facilities on large project sites.

The 2012 AQMP includes proposed control measures to reduce DPM and NOx emissions from off-road heavy duty diesel vehicles. In addition, SCAQMD's Rule 403 requires construction projects to control fugitive dust. All construction projects related to the proposed transportation improvements would be required to operate in compliance with these control measures and would be subject to oversight by the City's Department of Building and Safety. In addition, as discussed in Impact 4.1-2, construction emissions would not exceed SCAQMD thresholds. Therefore, construction impacts would not conflict with or obstruct implementation of the AQMP or the Air Quality Element's objective of reducing particulate air pollutants from construction sites. For these reasons, the Proposed Project would not conflict with or obstruct implementation of applicable plans with respect to construction-related air quality and the impact would be ***less than significant***.

Operations

The purpose of the 2012 AQMP is to provide updated air pollution control strategies to bring the SoCAB into compliance with various federal ambient air quality standards. The 2012 AQMP relied upon the most recent planning assumptions from jurisdictions within SoCAB, as well as SCAG's forecast assumptions based on its 2012 Regional Transportation Plan. The project would conflict with or obstruct implementation of the AQMP if it would be inconsistent with the strategies adopted for the purpose of attaining federal ambient air quality standards or if it were to conflict with the SCAG's forecast assumptions upon which the AQMP was based. With regards to other air-quality related plans, generally, a project that promotes a sustainable transportation system that emphasizes transit and non-motorized transportation and is planned in a way that increases mobility options while minimizing VMT both within the project area and the surrounding community would (1) also minimize air pollutant emissions, and (2) be consistent with the AQMP as well as the goals of the

RTP/SCS, the City's Air Quality Element, and Mobility Plan 2035. Moreover, a project that would decrease community exposure to air quality pollutants from mobile sources would be consistent with the City's Plan for a Healthy Los Angeles.

Table 4.1-11 Construction Emission Intensity

Project Type	Project Description	Construction Intensity
Transit Improvements	New center-running bus rapid transit on Sepulveda Boulevard and Lincoln Boulevard; curb-running bus rapid transit on other corridors, including enhanced stop amenities	High/Medium
	Enhance bus service through expanded service routes and frequency as well as bus stop improvements	Low
	Establish circulator/shuttles to connect activity centers to major transit centers	None
Bicycle and Pedestrian Improvements	Improve connectivity at major Metro stations (shading, lighting, directional signage, shelters, crosswalks)	Low
	Implement bicycle friendly street design as an alternate route to major corridors	Low/Medium
	Install mobility hubs near Metro stations and satellite hubs (bike parking, car/bicycle sharing)	Low
	Implement streetscape plans	Low
	Implement bicycle lanes, cycle tracks, multi-use tracks	Low/Medium
	Complete gaps in sidewalk network and provide pedestrian enhancements	Medium
	Establish bikesharing and bicycle transit centers that offer bicycle parking, rentals, repairs, lockers, showers, and transit information	Low/Medium
Roadway Projects	Turn-lane or safety improvements at major intersections	Medium
	Improve traffic flow along major arterials, including changes to lane configurations	Medium
	Widen Lincoln Boulevard Bridge	High
	Establish measures to encourage use of arterials and discourage through-traffic from using local streets	Low
	Reconfigure I-10 ramps at Bundy Drive	High
Intelligent Transportation Systems	Implement traffic signal updates as part of the automated traffic surveillance and control system that provides real-time monitoring and adjustment of signal timing	Low
	Install CCTV cameras & associated infrastructure	Low
Trip Reduction Programs	Update parking requirements, establish systems for real-time parking information	Low
	Provide guidance and implementation of travel demand management programs	None
	Develop online TDM Toolkit with information for transit users, cyclists, and pedestrians	None

Source: CDM Smith, 2015.

Key:
Low = Involves a small area (less than one acre) and minimal disturbance of the ground/existing pavement, including installation of minor new facilities.
Medium = Involves an area generally ranging from less than one acre to approximately three acres in size and requires removal and replacement of some asphalt and concrete.
High = Involves an area generally greater than one acre in size and requires construction of substantial new facilities/infrastructure.

As noted above, the Proposed Project would not result in any alterations in land use in the project area and would not affect future regional development anticipated by SCAG in the 2013-2035 RTP/SCS or incorporated as assumptions in the AQMP. The project would improve mobility in the Westside by providing more transportation options and conditions that would promote use of alternative forms of transportation, including public transit, bicycles, and walking.

As discussed in Section 4.6, *Transportation*, although the total VMT in the study area would increase due to regional growth (see **Table 4.1-12**), the Proposed Project is anticipated to reduce the project area VMT by more than 3 percent as compared to the Future without Project conditions. Specifically, peak hour VMT would decrease by 4.3 percent in the project area, off peak period VMT would decrease by 2.3 percent, and daily VMT would decrease by 3.4 percent. Moreover, per capita VMT in the project area would be 4.4 percent lower compared to existing conditions, and 3.4 percent lower than future conditions without the project.

Table 4.1-12 Vehicle Miles Traveled in the Project Area

Location	Vehicle Miles Traveled			Percent Change		
	Peak Period (7-Hour)	Off Peak Period (17-Hour)	Daily	Peak Period (7-Hour)	Off Peak Period (17-Hour)	Daily
Existing Conditions (2014)						
CTCSP	1,075,337	883,200	1,958,536	-	-	-
WLA TIMP	1,179,549	839,570	2,019,119	-	-	-
Surface Streets	**2,254,885**	**1,722,770**	**3,977,655**	**-**	**-**	**-**
Freeways (Mainline)	*792,436*	*879,696*	*1,672,132*	-	-	-
Study Area	**3,047,321**	**2,602,466**	**5,649,787**	-	-	-
Future Without Project (Comparison to Existing)						
CTCSP	1,178,199	1,009,164	2,187,362	9.6%	14.3%	11.7%
WLA TIMP	1,241,692	893,368	2,135,059	5.3%	6.4%	5.7%
Surface Streets	**2,419,891**	**1,902,531**	**4,322,422**	**7.3%**	**10.4%**	**8.7%**
Freeways (Mainline)	*876,989*	*991,068*	*1,868,056*	*10.7%*	*12.7%*	*11.7%*
Study Area	**3,296,879**	**2,893,599**	**6,190,478**	**8.2%**	**11.2%**	**9.6%**
Future With Project (Comparison to Existing)						
CTCSP	1,107,419	980,852	2,088,271	3.0%	11.1%	6.6%
WLA TIMP	1,192,318	883,875	2,076,193	1.1%	5.3%	2.8%
Surface Streets	**2,299,737**	**1,864,728**	**4,164,465**	**2.0%**	**8.2%**	**4.7%**
Freeways (Mainline)	*856,730*	*961,080*	*1,817,810*	*8.1%*	*9.3%*	*8.7%*
Study Area	**3,156,467**	**2,825,808**	**5,982,275**	**3.6%**	**8.6%**	**5.9%**
Future With Project (Comparison to Future Without Project)						
CTCSP	1,107,419	980,852	2,088,271	-6.0%	-2.8%	-4.5%
WLA TIMP	1,192,318	883,875	2,076,193	-4.0%	-1.1%	-2.8%
Surface Streets	**2,299,737**	**1,864,728**	**4,164,465**	**-5.0%**	**-2.0%**	**-3.7%**
Freeways (Mainline)	*856,730*	*961,080*	*1,817,810*	*-2.3%*	*-3.0%*	*-2.7%*
Study Area	**3,156,467**	**2,825,808**	**5,982,275**	**-4.3%**	**-2.3%**	**-3.4%**

Source: Fehr & Peers, Westside Travel Demand Forecasting Model, 2015.

With its reduction in project area VMT, and its consistency with other AQMP control measures, the project would be consistent with the goals of the 2012 AQMP.

The transportation improvements would increase mobility options and increase accessibility to alternative transportation modes. The improvements would provide for a safe, reliable, and sustainable transportation system, and protect the environment and improve public health by contributing to air quality improvements through an increase in non-motorized transportation and a reduction in VMT. Therefore, the Proposed Project would be aligned with the 2012-2035 RTP/SCS as well as relevant air quality policy objectives of the City's Air Quality Element, Plan for a Healthy Los Angeles, and Mobility Plan 2035.

By reducing per capita VMT, the proposed transportation improvements would be consistent with the City of Los Angeles General Plan Air Quality Element's goal of good air quality and mobility in an environment of continued population growth. The project would also be consistent with objectives of reducing vehicle trips, VMT, and vehicular traffic during peak periods, and providing ATSAC and other capital programs to advance regional transportation goals.

For these reasons, the Proposed Project would be consistent with the Air Quality Element of the General Plan.

As discussed above, operation of the proposed transportation improvements would not obstruct or conflict with applicable air quality plans. The impact would be ***less than significant***.

Mitigation Measures

No mitigation measures are required.

Significance of Impacts After Mitigation

Impacts related to consistency with air quality plans from the Proposed Project would be ***less than significant.***

Impact 4.1-2: Implementation of the Proposed Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. This would be a *less than significant* impact.

Construction

Construction of the proposed transportation improvements may result in temporary increases in regional air emissions. Implementation of the transportation improvement projects would be subject to available funding collected through the proposed Transportation Improvement Assessment (TIA) Fee, which would be dependent on the rate of development within the project area, as well as funding obtained from other sources; therefore, the implementation schedules and specific designs of these transportation improvement projects are not yet available. Instead, potential regional air emissions were estimated based on anticipated construction equipment and construction-related trips, as explained in Section 4.1.4.2 above.

Regional construction emissions would be associated with construction equipment, construction-related truck trips, and worker commute trips. As shown in Table 4.1-11 above, most of the proposed transportation improvement projects would not involve substantial construction activity. **Table 4.1-13** shows the estimated daily regional construction emissions associated with construction of transportation improvement types. As shown in the table, construction of the proposed transportation improvements would not exceed the maximum daily regional construction emissions thresholds for any pollutant. Moreover, improvement projects with a low level of construction activity are estimated to result in less emissions than those presented in Table 4.1-13. As a result, the impact of the Proposed Project on air quality standards from construction activities would be ***less than significant***.

Table 4.1-13 Construction Emissions Summary

	Maximum Daily Emissions (pounds per day)					
	CO	VOC	NOx	PM10	PM2.5	SOx
Lincoln and Sepulveda BRT/I-10 Ramp Reconfiguration at Bundy	34	4.9	48	5.0	2.6	<1
Lincoln Boulevard Bridge	35	5.7	73	13	4.7	<1
Other Transportation Improvements	9	2	17	3	2	<1
Regional Construction Threshold	550	75	100	150	55	150
Significant Impact?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CDM Smith, 2015.

Note:
Emissions from different improvement projects are not additive for purposes of determining significance; rather, each individual project is compared to the regional construction threshold to determine significance.

Key:
CO = carbon monoxide
NOx = nitrogen oxides
PM10 = inhalable particulate matter
PM2.5 = fine particulate matter
SO_2 = sulfur dioxide
VOC = volatile organic compounds

Operations

A change in vehicle operations in the study area as a result of project implementation could impact air quality in the project area. The existing (2014) daily VMT in the project area is approximately 5.6 million. As shown in Table 4.1-12, in 2035, without implementation of the Proposed Project, the daily VMT in the study area is anticipated to increase to 6.2 million, an increase of 9.6 percent over existing conditions. With implementation of the Proposed Project, daily VMT would increase to approximately 6 million, an increase of 5.9 percent over existing conditions, but a reduction of 3.4 percent compared to conditions in the future without the project. The emphasis of the proposed transportation improvements on alternative modes of transportation would result in a reduction in VMT per capita (which includes both project area residents and employees) of 4.4 percent compared to existing conditions and a reduction of 3.4 percent compared to future conditions without the project.

The total VMT in the project area under the Existing, Future with Project, and Future without Project conditions, summarized in Table 4.1-12 above, have been delineated by speed category (or speed bin, such as 5 mph, 10 mph, 15 mph). The VMT by speed bin for each scenario is presented in **Table 4.1-14**.

Table 4.1-14 Daily Vehicle Miles Traveled by Speed in the Project Area

Speed (mph)	Existing Conditions (2014)		Future Without Project		Future With Project	
5	58,230	1%	66,238	1%	85,295	1%
10	593,908	11%	658,074	11%	741,352	12%
15	1,528,036	27%	1,585,164	26%	1,506,935	25%

Speed (mph)	Existing Conditions (2014)		Future Without Project		Future With Project	
20	1,486,858	26%	1,639,537	26%	1,514,297	25%
25	823,120	15%	933,529	15%	869,071	15%
30	434,912	8%	481,913	8%	473,887	8%
35	168,231	3%	183,503	3%	169,585	3%
40	137,748	2%	116,362	2%	101,478	2%
45	257,242	5%	292,714	5%	288,404	5%
50	76,657	1%	148,838	2%	143,791	2%
55	68,110	1%	68,348	1%	69,683	1%
60	16,736	0%	16,257	0%	18,498	0%
Totals	**5,649,787**	**100%**	**6,190,478**	**100%**	**5,982,275**	**100%**

Source: Fehr & Peers, Westside Travel Demand Forecasting Model, 2015.

Operational vehicle emissions from the project area based on projected daily VMT were estimated and are presented in **Table 4.1-15**.

Table 4.1-15 Operational Emissions Summary

	Maximum Daily Emissions (pounds per day)					
	CO	VOC	NOx	PM10	PM2.5	SOx
Existing Conditions (2014)	44,616	5,160	11,468	2,531	705	85
Future Without Project (Compared to Existing)						
Future Without Project	12,369	1,627	4,801	2,543	586	56
Future Without Project Compared to Existing	*-32,247*	*-3,532*	*-6,668*	*12*	*-119*	*-29*
Regional Operational Threshold	550	55	55	150	55	150
Significant Impact?	**No**	**No**	**No**	**No**	**No**	**No**
Future With Project (Compared to Existing)						
Future With Project	12,147	1,591	4,918	2,459	567	55
Future With Project Compared to Existing	*-32,468*	*-3,568*	*-6,550*	*-72*	*-138*	*-30*
Regional Operational Threshold	550	55	55	150	55	150
Significant Impact?	**No**	**No**	**No**	**No**	**No**	**No**
Future With Project Compared to Future Without Project						
Future Without Project	12,369	1,627	4,801	2,543	586	56
Future With Project	12,147	1,591	4,918	2,459	567	55
Future With Project Compared to Future Without Project	*-222*	*-36*	*118*	*-84*	*-19*	*-1*
Regional Operational Threshold	550	55	55	150	55	150

Source: CDM Smith, 2015.

Note: Emissions generating operations include: engine running, startup, and idling for all pollutants; evaporative losses for VOC; and tire wear, brake wear, and paved road dust for PM10 and PM2.5.

Key:

CO = carbon monoxide

NOx = nitrogen oxides

PM10 = inhalable particulate matter

PM2.5 = fine particulate matter

SOx = sulfur oxides

VOC = volatile organic compounds

Although daily VMT in the study area would be higher in the future with or without the Proposed Project, emission rates per mile would be lower because of technological advances in vehicle emission control, turnover in the vehicle fleet, and new emission standards. As a result, maximum daily emissions of CO, VOC, NOx, PM10, PM2.5, and SOx with implementation of the proposed transportation improvements (i.e. Future with Project) would be lower than existing conditions and, therefore, would not exceed regional operational thresholds of significance. With implementation of the Proposed Project, impacts related to operational vehicle emissions in the study area would be ***less than significant.***

In the future, the Proposed Project would result in a decrease in daily VMT in the study area as compared to the Future without Project scenario. The decrease in VMT would provide a corresponding reduction in emissions for CO, VOC, PM10, PM2.5, and SOx. However, the speed profile of the VMT in the Future with Project scenario would be different than the speed profile associated with the Future without Project scenario. This difference in speed profiles would result in an increase in NOx emissions under the Future with Project conditions as compared to the Future without Project conditions. However, the increase would be minor and NOx emissions would remain less than significant based on the advances in vehicle emission control technologies, as discussed above.

As discussed above, impacts of the Proposed Project compared to existing (2014) conditions would not violate any air quality standard or contribute substantially to an existing or projected air quality violation and, thus, the impact would be ***less than significant***.

Mitigation Measures

No mitigation measures are required.

Significance of Impacts After Mitigation

Impacts related to violations of air quality standards from the Proposed Project would be ***less than significant.***

Impact 4.1-3: Implementation of the Proposed Project would result in a cumulatively considerable net increase of criteria pollutants for which the air basin is in nonattainment (O_3 precursors [NOx and VOC], PM10, and PM2.5) under an applicable federal or state ambient air quality standard. This would be a *less than significant* impact for operations, a *less than significant* impact for regional construction emissions, and a *significant and unavoidable* impact for localized construction emissions.

Construction

Cumulative impacts occur when the impact of one project, when added to other past, present, or reasonably foreseeable probable future projects, could cause a significant impact. In other words, although an individual project would be less than significant, the combined impacts from other projects could cause a significant impact. According to the SCAQMD (2003), projects that do not exceed the significance thresholds are generally not considered to be cumulatively significant.

As shown in Table 4.1-13, the regional construction emissions of the nonattainment pollutants (PM10, PM2.5, and O_3 precursors [NOx and VOC]) would be less than the SCAQMD significance thresholds. Therefore, regional construction emissions related to the Proposed Project would not be cumulatively considerable and the impact associated with regional construction emissions would be ***less than significant***.

However, as described in Impact 4.1-4 below, localized construction-related peak daily particulate emissions associated with the Lincoln Boulevard Bridge Enhancement (PM10 and PM2.5), the Lincoln Boulevard and Sepulveda Boulevard BRTs (PM10), and the I-10 Ramp Reconfiguration at Bundy Drive improvements (PM10) would be significant. Therefore, localized construction emissions would be cumulatively considerable. This would be a ***significant impact***.

Operations

Operation of the proposed transportation improvements would result in a decrease in emissions of the nonattainment pollutants PM10, PM2.5, and O_3 precursors (NOx and VOC) compared to existing conditions, as discussed above and shown in Table 4.1-15. In addition, the Proposed Project would reduce VMT in the project area in the future as compared to future conditions without the Proposed Project, with a resulting decrease in all pollutants. Therefore, the operation of the Proposed Project would not be cumulatively considerable. This impact would be ***less than significant.***

Mitigation Measures

Mitigation Measures (MM) MM-AQ-1, MM-AQ-2, and MM-AQ-3, identified in association with Impact 4.1-4 below, would reduce localized construction emissions associated with the Lincoln Boulevard Bridge Enhancement, the Lincoln Boulevard and Sepulveda Boulevard BRTs, and the I-10 Ramp Reconfiguration at Bundy Drive improvements.

Significance of Impacts After Mitigation

Construction

The Proposed Project's regional emission impacts related to cumulatively considerable contributions to air quality pollution would be ***less than significant***.

Mitigation Measures MM-AQ-1, MM-AQ-2, and MM-AQ-3, identified in association with Impact 4.1-4 below, would reduce construction emissions associated with the Lincoln Boulevard Bridge Enhancement, Lincoln Boulevard and Sepulveda Boulevard BRTs, and reconfiguration of the I-10 ramps at Bundy Drive. However, even with implementation of these measures, it is anticipated that localized construction impacts, specifically PM10 and PM2.5 from the Lincoln Boulevard Bridge Enhancement, and PM10 from the Lincoln Boulevard and Sepulveda Boulevard BRTs and the I-10 Ramp Reconfiguration at Bundy Drive, would remain ***significant and unavoidable***. The localized construction impacts from the other transportation improvements associated with the Proposed Project would be ***less than significant***.

Operation

The Proposed Project's operational impacts related to cumulatively considerable contributions to air quality pollution would be ***less than significant***.

Impact 4.1-4: Implementation of the Proposed Project would expose sensitive receptors to substantial pollutant concentrations. This would be a *less than significant* impact for operations and a *significant and unavoidable temporary* impact for construction.

Construction

Construction activities would result in emissions of criteria pollutants and TACs. Impacts associated with construction-related criteria pollutant emissions, as evaluated using SCAQMD's LST methodology, and TAC emissions are evaluated below.

Criteria Pollutants

Localized effects from daily emissions associated with implementation of the proposed transportation improvements were evaluated at sensitive receptor locations in accordance with SCAQMD's LST methodology. The SCAQMD LST analysis was conducted to evaluate the peak daily onsite construction emissions. **Table 4.1-16** shows the onsite localized construction emissions for the combined Lincoln Boulevard and Sepulveda Boulevard BRT construction (which also is used to represent impacts associated with the I-10 Ramp Reconfiguration at Bundy Drive), **Table 4.1-17** shows the onsite localized construction emissions for the proposed Lincoln Boulevard Bridge Enhancement construction, and **Table 4.1-18** shows the onsite localized construction emissions for other transportation improvements. As shown in Table 4.1-18, onsite localized construction emissions from the majority of the transportation improvements would not exceed the LSTs. However, localized PM10 and PM2.5 emissions from the Lincoln Boulevard Bridge Enhancement, and localized PM10 emissions from the Lincoln Boulevard and Sepulveda Boulevard BRTs and from the I-10 Ramp Reconfiguration at Bundy Drive, could exceed the LST thresholds, due to the potential proximity of these improvements to sensitive receptors. These localized emissions would be from a combination of fugitive dust and engine exhaust. The localized construction peak daily emissions would be significant for PM10 and PM2.5 from the Lincoln Boulevard Bridge Enhancement, and for PM10 from the Lincoln Boulevard and Sepulveda Boulevard BRTs and the I-10 Ramp Reconfiguration at Bundy Drive. This would be a potentially ***significant impact***.

Table 4.1-16 Lincoln Boulevard/Sepulveda Boulevard BRT Construction LST Analysis

Year	On-Site Maximum Daily Emissions (pounds per day)					
	CO	VOC	NOx	PM10	PM2.5	SOx
Lincoln/Sepulveda BRTs Engine Exhaust	31	4.6	45	2.1	1.9	<1
Lincoln/Sepulveda BRTs Fugitive Dust	N/A	N/A	N/A	2.8	0.6	N/A
Lincoln/Sepulveda BRTs Total Onsite	**31**	**4.6**	**45**	**4.9**	**2.5**	**<1**
Localized Significance Threshold	562	N/A	103	4	3	N/A
Significant Impact?	**No**	**No**	**No**	**Yes**	**No**	**No**

Source: CDM Smith, 2015.

Note: For purposes of this analysis, the construction LST analysis conducted for the Lincoln Boulevard and Sepulveda Boulevard BRTs is considered to be representative of construction of the I-10 Ramp Reconfiguration at Bundy Drive.

Key:
CO = carbon monoxide
N/A = not applicable
NOx = nitrogen oxides
PM10 = inhalable particulate matter
PM2.5 = fine particulate matter
SO_2 = sulfur dioxide
VOC = volatile organic compounds

Table 4.1-17 Lincoln Boulevard Bridge Enhancement Construction LST Analysis

Year	On-Site Maximum Daily Emissions (pounds per day)					
	CO	VOC	NOx	PM10	PM2.5	SOx
Lincoln Blvd Bridge Engine Exhaust	29	4.9	51	2.5	2.3	<1
Lincoln Blvd Bridge Fugitive Dust	N/A	N/A	N/A	10	2.1	N/A
Lincoln Blvd Bridge Total Onsite	**29**	**4.9**	**51**	**13**	**4.4**	**<1**
Localized Significance Threshold	562	N/A	103	4	3	N/A
Significant Impact?	**No**	**No**	**No**	**Yes**	**Yes**	**No**

Source: CDM Smith, 2015.

Key:
CO = carbon monoxide
N/A = not applicable
NOx = nitrogen oxides
PM10 = inhalable particulate matter
PM2.5 = fine particulate matter
SO_2 = sulfur dioxide
VOC = volatile organic compounds

Table 4.1-18 Other Transportation Improvements Construction LST Analysis

Year	On-Site Maximum Daily Emissions (pounds per day)					
	CO	VOC	NOx	PM10	PM2.5	SOx
Other Transportation Improvements	8	2	16	3	2	<1
Localized Significance Threshold	562	N/A	103	4	3	N/A
Significant Impact?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CDM Smith, 2015.

Key:
CO = carbon monoxide
N/A = not applicable
NOx = nitrogen oxides
PM10 = inhalable particulate matter
PM2.5 = fine particulate matter
SO_2 = sulfur dioxide
VOC = volatile organic compounds

Toxic Air Contaminants

The greatest potential for TAC emissions during construction would be DPM emitted from heavy-duty diesel powered equipment. DPM is the engine exhaust particulate matter from diesel engines and equipment and is a component of PM10 and PM2.5. Construction activity would vary in location and duration but, for most of the transportation improvements, would generally occur only for a few days in the immediate vicinity of a sensitive receptor. The majority of the proposed transportation improvement projects are anticipated to have low intensity and, therefore, exposure to DPM and other TACs is anticipated to be low. The LSTs do not include a threshold for DPM. However, as shown in Tables 4.1-16, 4.1-17 and 4.1-18, the component of the PM10 and PM2.5 emissions from onsite engine exhaust would be at or lower than the respective LST thresholds. Since DPM emissions are a component of PM10 and PM2.5, it can be expected that DPM emissions would be typical for urban environments in the study area. Nevertheless, based on findings that children may be substantially more susceptible than adults to health impacts caused by exposure to DPM and other TACs (OEHHA, 2001), as well as OEHHA's recently adopted methodology for estimating risk, the transportation improvements with higher use of heavy diesel equipment, including the Lincoln Boulevard and Sepulveda Boulevard BRTs, the Lincoln Boulevard Bridge Enhancements, and reconfiguration of the I-10 ramps at Bundy Drive could generate emissions that would exceed the SCAQMD thresholds for TACs (maximum incremental cancer risk of 10 in one million, cancer burden of 0.5 excess cancer cases, or an incremental chronic or acute hazard index of 1.0). In the absence of detailed project information about these improvements, it is assumed that TAC emissions related to construction of these high construction intensity improvements would be a potentially ***significant***

impact. The impacts from the other transportation improvements associated with the Proposed Project on ambient concentrations at sensitive receptors would be ***less than significant***.

Operations

Operation of the proposed transportation improvements would result in emissions of criteria pollutants and TACs from mobile sources (i.e., MSAT). Impacts associated with operational criteria pollutant emissions and MSAT emissions are evaluated below.

Although the study area VMT is anticipated to grow in the future (see Table 4.1-12), as shown in Table 4.1-15, operational emissions of all criteria pollutants in the Future with Project scenario would be lower than present levels as a result of vehicle emission control technologies. These same technologies are projected to reduce annual MSAT emissions by over 80 percent from 2010 to 2050 (FHWA, 2012). Local conditions may differ from USEPA's national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the USEPA-projected reductions is so great, even after accounting for VMT growth, that MSAT emissions in the study area are likely to be lower in the future in virtually all locations. Furthermore, future levels of all pollutants, except NOx, would be lower with the Proposed Project than without the project. As a result, operations associated with the Proposed Project would not expose sensitive receptors to substantial pollutant concentrations. Impacts from operations would be ***less than significant.***

Mitigation Measures

The following mitigation measures would apply to projects that are determined to result in significant construction-related impacts based on project-level analysis. It is assumed that these measures will be applicable to the Lincoln Boulevard Bridge Enhancement, the Lincoln Boulevard and Sepulveda Boulevard BRTs, and the I-10 Ramp Reconfiguration at Bundy Drive.

Mitigation Measure (MM)-AQ -1: Tier 3 Emission Standards and Diesel Particulate Filters. All off-road diesel-powered construction equipment greater than 50 horsepower shall meet USEPA Tier 3 emission standards when used during construction of the Lincoln Boulevard and Sepulveda Boulevard BRTs, Lincoln Boulevard Bridge Enhancement, reconfiguration of the I-10 ramps at Bundy Drive, and other projects that are demonstrated to result in significant impacts by project-specific modeling. If the contractor can demonstrate that a specific piece of Tier 3 equipment cannot be reasonably obtained, the contractor shall use equipment that meets USEPA Tier 2 emission standards and be equipped with a CARB-verified Diesel Emissions Control Strategies (VDECS).

MM-AQ-2: Fugitive Dust Control. In order to ensure compliance with, or exceedance of, the requirements associated with SCAQMD Rule 403, construction activities shall include watering disturbed soil at least 3 times daily, or as often as necessary to maintain or exceed a soil moisture content of approximately 12 percent. Additional steps shall be taken, if necessary, to stabilize disturbed soil and stock piles to eliminate visible dust emissions.

MM-AQ-3: Construction Electricity. Electricity for construction activities shall be obtained from power poles or portable diesel-fueled generators using "clean burning diesel" fuel and exhaust emission controls.

Significance of Impacts After Mitigation

Construction

Mitigation Measures MM-AQ-1, MM-AQ-2, and MM-AQ-3 would reduce localized construction emissions associated with the Lincoln Boulevard Bridge Enhancement, Lincoln Boulevard and Sepulveda Boulevard BRTs, and reconfiguration of the I-10 ramps at Bundy Drive. However, even with implementation of these measures, it is anticipated that localized construction emissions, specifically PM10 and PM2.5 from the Lincoln Boulevard Bridge Enhancement, and PM10 from the Lincoln Boulevard and Sepulveda Boulevard BRTs and the I-10 Ramp Reconfiguration at Bundy Drive, could result in construction concentration impacts that would remain ***significant and unavoidable***. In addition, it is anticipated that TAC emissions from these project would remain ***significant and unavoidable***. Impacts associated with localized construction emissions and TAC emissions from the other transportation improvements associated with the Proposed Project on ambient concentrations at sensitive receptors would be ***less than significant***.

Operation

The Proposed Project's operational impacts related to pollutant concentrations would be ***less than significant***.

Impact 4.1-5: Implementation of the Proposed Project would not create objectionable odors affecting a substantial number of people. This would be a *less than significant* impact.

Construction

The use of diesel equipment during construction may generate near-field odors that are considered to be a nuisance. Diesel equipment emits a distinctive odor that may be considered offensive to certain individuals. Construction activities would be temporary and short in duration, and odors from diesel exhaust are not anticipated to affect a substantial number of people. These odors would be similar to those resulting from typical construction that occurs in the project area. Impacts associated with odors during construction would be ***less than significant***.

Operations

The Proposed Project would not result in any alterations in land use, therefore, the only source of operational odors would be from vehicles and transit facilities. SCAQMD does not identify mobile sources as a significant source of odors. Therefore, operation of the Proposed Project would not create objectionable odors and the impact would be ***less than significant***.

Mitigation Measures

No mitigation measures are required.

Significance of Impacts After Mitigation

The Proposed Project's impacts related to odors would be ***less than significant***.

Section 4.2

Biological Resources

4.2.1 Introduction

This section provides an overview of biological resources within the project area and evaluates the effects of the Proposed Project on biological resources during construction and operation. The section is organized as follows:

- **Regulatory Framework** describes the applicable federal, state, and local laws and guidelines relative to biological resources.
- **Existing Setting** provides a general summary and overview of biological resources within the project area.
- **Methodology** describes the approach used to evaluate project impacts
- **Thresholds of Significance** lists the thresholds used in determining significant impacts as identified in Appendix G of the State CEQA Guidelines and the City of Los Angeles CEQA Thresholds Guidelines.
- **Impacts and Mitigation Measures** discusses the effects of the implementation of the Proposed Project on existing biological resources. Mitigation measures are identified as necessary and feasible to reduce significant impacts. The **Significance of Impacts After Mitigation** discussion identifies residual impacts after application of mitigation measures.

As discussed in the Notice of Preparation, provided in Appendix C, *Notice of Preparation/Scoping*, any potential tree removal/replacement would occur in accordance with the Los Angeles Municipal Code, including the Native Tree Protection Ordinance No. 177,404, and the recommendations of the Department of Public Works Urban Forestry Division, and thus no conflict with local policies or ordinances protecting biological resources would occur. Further, there are no County Habitat Conservation Plans (HCP) or Natural Community Conservation Plans (NCCP) within the project area. Therefore, impacts related to conflicts with local policies or ordinances protecting biological resources and adopted habitat conservation plans, natural community conservation plans or other adopted local, regional, or state habitat conservation plans do not require analysis in the EIR and are not addressed herein.

4.2.2 Regulatory Framework

4.2.2.1 Federal

Federal Endangered Species Act

The Federal Endangered Species Act (ESA) of 1973, as amended, protects species listed as endangered or threatened. The ESA also regulates actions that would modify or degrade habitat to an extent that would significantly impair essential activities of listed species (breeding, feeding, and shelter). The U.S. Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration (NOAA) administer the ESA. Section 7 of the ESA requires federal agencies to aid in the conservation of listed species, and to ensure that federal agencies that undertake projects or issue permits will not jeopardize the continued existence of listed species or adversely modify designated critical habitat. The law also prohibits actions that cause a "taking" of any listed species of endangered fish or wildlife.

Federal Clean Water Act

The federal Clean Water Act (CWA) (33 United States Code [USC] Section 1344) is the primary law regulating wetlands and waters. Section 404 (b) prohibits the discharge of dredged or fill materials into the waters of the United States, including wetlands, except as permitted under separate regulations by the U. S. Army Corps of Engineers (USACE) and U. S. Environmental Protection Agency (USEPA).

Under Section 404 of the CWA, the USACE regulates discharges of dredged or fill material into "Waters of the United States," including wetlands. "Waters of the United States" includes all waters which are currently used, or were used in the past, or may be susceptible to use, in interstate or foreign commerce; all interstate waters including interstate wetlands; all other waters such as intrastate lakes, rivers, streams (including intermittent streams), the use, degradation, or destruction of which could affect interstate or foreign commerce; and impoundment of waters otherwise defined as Waters of the U. S. under the definition; and tributaries of waters defined previously.

Rivers and Harbors Act

The Rivers and Harbors Appropriation Act of 1899 (33 USC 403), commonly known as the Rivers and Harbors Act, prohibits the construction of any bridge, dam, dike, or causeway over or in navigable waterways of the United States without congressional approval. Section 10 requires authorization from the USACE for the construction of any structure in or over any navigable water of the U.S. The law applies to any dredging or disposal of dredged materials, excavation, filling, rechannelization, or any other modification of a navigable water of the U.S., and applies to all structures.

Section 14 of the Rivers and Harbors Act, codified in 33 USC 408 (commonly referred to as "Section 408") authorizes the USACE to grant permission for the alteration or occupation or use of a USACE civil works project if it is determined that the activity will not be injurious to the public interest and will not impair the usefulness of the project.

Federal Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) (16 USC Sections 703-711) protects most native bird species from destruction or harm, including the non-permitted take of migratory birds under authority of the USFWS and the California Department of Fish and Wildlife (CDFW). This protection extends to individuals as well as any part, nest, or eggs of any bird listed as "migratory." Nearly all native North American bird species are on the MBTA list. The MBTA decrees that all migratory birds and their parts (including eggs, nests and feathers) are fully protected. Under the act, taking, killing, or possessing migratory birds is unlawful. Activities that would result in an impact to migratory birds include, but are not limited to, the destruction of migratory bird nesting habitat during the nesting season when eggs or young are likely to be present. Under the Act, surveys are required to determine if nests will be disturbed and, if so, a buffer area with a specified radius around the nest must be established so that no disturbance or intrusion occurs until the young have fledged and left the nest. The size of the buffer area varies with species and local circumstances (e.g., presence of busy roads), and is based on the professional judgment of the monitoring biologist, in coordination with CDFW.

Executive Order for Wetland Protection 11990

Executive Order for Wetland Protection 11990 (EO 11990) regulates the activities of federal agencies with regard to wetlands. EO 11990 states that a federal agency, such as the Federal Highway Administration, cannot undertake or provide assistance for new construction located in wetlands unless the head of the agency finds: (1) that there is no practicable alternative to the construction, and (2) the proposed project includes all practicable measures to minimize harm.

Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act of 1994, as amended, (16 USC Section 661-667e) requires that whenever waters or a channel of a stream or other body of water are proposed or authorized to be modified by a public or private agency under a federal license or permit, the federal agency must first consult with the USFWS and/or NOAA Fisheries Service and with the head of the agency exercising administration over the wildlife resources of the state (i.e., CDFW) where construction would occur, relative to conservation of birds, fish, mammals, and all other classes of wild animals and all types of aquatic and land vegetation upon which wildlife is dependent.

4.2.2.2 State

California Endangered Species Act

Sections 2050 through 2089 of the California Fish and Game Code comprise the California Endangered Species Act (CESA). The CDFW is responsible for the administration of CESA. Unlike the federal Endangered Species Act, there are no state agency consultation procedures under the California Endangered Species Act. For projects that affect both a state- and federally-listed species, compliance with the federal ESA will satisfy the CESA if CDFW determines that the federal incidental take authorization is "consistent" with CESA. Projects that result in a take of a listed species require a take permit under CESA. CESA protection extends to species proposed for listing (i.e., candidate species) in some circumstances. The federal and/or state acts also lend protection to species that are considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations, nesting or den locations, communal roosts, and other essential habitat.

Migratory Bird Protection

Section 3500 of the California Fish and Game Code is analogous to the federal MBTA. Specifically, sections 3500 through 3705 prohibit the taking of nesting birds, their nests, eggs, or any portion thereof during the nesting season. Typically, the breeding/nesting season is from February 15 through August 30.[18] Depending on each year's seasonal factors, the breeding season can start earlier and/or end later.

Wetland Regulation

At the state level, wetlands and waters are regulated primarily by the CDFW and the Regional Water Quality Control Boards (RWQCBs). The RWQCBs were established under the Porter Cologne Water Quality Control Act to oversee water quality. The RWQCB also issues water quality certifications in compliance with Section 401 of CWA. Section 401 requires states to certify that any action subject to a permit issued by a federal agency, such as a Section 404 permit issued by the USACE, meets all state water quality standards. Sections 1600 through 1607 of the California Fish and Game Code (CFGC)

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18 The nesting season varies according to species, but is generally February 15 through August 15 for most birds and January 31 through August 31 for raptors.

require any agency that proposes a project that will substantially divert or obstruct the natural flow of, or substantially change the bed or bank of, a river, stream, or lake to notify the CDFW before beginning construction. If the CDFW determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement is required. CDFW jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider. Wetlands under jurisdiction of the USACE may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the CDFW.

California Coastal Act

The California Coastal Act is implemented by the California Coastal Commission, which works in partnership with local governments to protect shoreline public access and recreation, terrestrial and marine habitats, views of the coast and scenic coastal areas, and other coastal resources. Development within the coastal zone is subject to permitting through issuance of a Coastal Development Permit by the California Coastal Commission and/or the Local Coastal Program.

4.2.2.3 Local

Urban Forestry Division

The City of Los Angeles Department of Public Works includes an Urban Forestry Division responsible for developing policies for a reforestation program for City parks. The Recreation and Parks Tree Preservation Policy is the primary regulatory tool that gives direction for orderly protection of specified trees, maintains their value, and avoids significant negative impact to the ecosystem.

Native Tree Protection Ordinance

The City of Los Angeles enacted an oak tree protection ordinance in 1982 to protect oak trees in the City. Although the ordinance slowed the oak tree decline, the oak population, as well as that of other native tree species, continued to decline. In an effort to further slow the decline of native tree habitat, the City passed an amended Native Tree Protection Ordinance (Ordinance No. 177,404), which became law on April 23, 2006. The Native Tree Protection Ordinance protects all native oak tree species (*Quercus spp*), California Sycamore (*Platanus racemosa*) (also known as western sycamore), California Bay (*Umbellularia californica*), and California Black Walnut (*Juglans californica*) measuring 4 inches or more in cumulative diameter, 4 1/2 feet above the ground level at the base of the tree.

The removal of protected trees requires a removal permit by the Board of Public Works. Any act that may cause the failure or death of a protected tree requires inspection by the City's Department of Public Works (DPW), Bureau of Street Services, and Urban Forestry Division. Although the law does not require a permit for the pruning of protected trees, the City recommends consultation with a registered consulting arborist or certified arborist prior to the pruning of protected trees (City of Los Angeles DPW, 2015).

Heritage Trees

The City of Los Angeles has identified a collection of trees with historical, commemorative, or horticultural significance. The list of designated Heritage trees remains open for new designations and the Department of Parks and Recreation is responsible for the maintenance and protection of these trees.

City of Los Angeles Conservation Element

The City's General Plan is a comprehensive declaration of purposes, policies, and programs for the development of the City of Los Angeles. The Citywide General Plan Framework Element (Framework Element) establishes the overall policy and direction for the General Plan (City of Los Angeles, 2001). It includes a long-range strategy to guide the comprehensive update for the General Plan's other elements. Chapter 6, Open Space and Conservation, of the Framework Element includes goals, objectives, and policies for the provision, management, and conservation of the City's open space resources, including Sensitive Ecological Areas (SEAs), as identified by the County of Los Angeles, wildlife corridors, and natural animal ranges. The Conservation Element of the General Plan addresses endangered species, habitats, wildlife corridors, and wetlands occurring in the City and identifies policies intended to protect, restore, and enhance these biological resources. Goals, objectives, and policies from the Framework and Conservation Elements related to biological resources and relevant to the Proposed Project are listed below in **Table 4.2-1**.

4.2.3 Existing Setting

The project area is a highly developed area in the western portion of the City of Los Angeles, consisting primarily of commercial, residential, office, and industrial development. The project area is also generally surrounded by dense urban development, with the exception of the northern WLA TIMP boundary located at the foothills of the Santa Monica Mountains and the western CTCSP boundary located along the Santa Monica Bay. The proposed transportation improvements would occur within this urbanized setting, primarily along existing rights-of-way (e.g., roadways and sidewalks) that have limited, if any, biological resources. However, throughout the project area, some plant and animal habitat does exist. These habitats are confined to open space areas that are generally surrounded by urban development. Examples include the Ballona Wetlands, Penmar Golf Course, Cheviot Hills Park, and several undeveloped areas on the federal property in the unincorporated area of Sawtelle, including the Los Angeles National Cemetery.

Habitats are areas that support the survival of wild animals and native plants, including native plant environments and trees that serve as stopovers and nesting places for migratory birds. Habitat types within the project area include: inland habitats, wildlife corridors, coastal wetlands, sandy beaches, and SEAs. Inland habitats are natural or artificially created refuges or water bodies that provide habitats for resident species or stopovers for migratory birds. Inland habitats include undeveloped areas, park and open space areas, and other areas with extensive natural or introduced vegetation. Wildlife corridors are land segments that connect two or more large habitat areas and provide a habitat for movement between those areas. Wetlands are transitional lands between water and land systems where the water table is usually at or near the surface, or the land is covered by shallow water. Sandy beaches are located along the Santa Monica Bay. They are relatively unstable habitats due to daily sand movement associated with waves, currents, wind, and seasonal cycles of sand movement.

Table 4.2-1 Relevant General Plan Biological Resources Goals, Objectives, and Policies

Goal/ Objective/ Policy	Goal/Objective/Policy Description
Framework Element – Chapter 6 Open Space and Conservation	
Goal 6A	An integrated Citywide/regional public and private open space system that serves and is accessible by the City's population and is unthreatened by encroachment from other land uses.
Objective 6.1	Protect the City's natural settings from the encroachment of urban development, allowing for the development, use, management, and maintenance of each component of the City's natural resources to contribute to the sustainability of the region.
Policy 6.1.1	Consider appropriate methodologies to protect significant remaining open spaces for resource protection and mitigation of environmental hazards, such as flooding, in and on the periphery of the City, such as the use of tax incentives for landowners to preserve their lands, development rights exchanges in the local area, participation in land banking, public acquisition, land exchanges, and Williamson Act contracts.
Policy 6.1.2	Coordinate City operations and development policies for the protection and conservation of open space resources, by: a. Encouraging City departments to take the lead in utilizing water re-use technology, including graywater and reclaimed water for public landscape maintenance purposes and such other purposes as may be feasible; b. Preserving habitat linkages, where feasible, to provide wildlife corridors and to protect natural animal ranges; and c. Preserving natural viewsheds, whenever possible, in hillside and coastal areas.
Policy 6.1.3	Reassess the environmental importance of the County of Los Angeles designated SEAs that occur within the City of Los Angeles and evaluate the appropriateness of the inclusion of other areas that may exhibit equivalent environmental value.
Policy 6.1.4	Conserve and manage the undeveloped portions of the City's watersheds, where feasible, as open spaces which protect, conserve, and enhance natural resources.
Policy 6.1.5	Provide for an on-site evaluation of sites located outside of targeted growth areas, as specified in amendments to the community plans, for the identification of sensitive habitats, sensitive species, and an analysis of wildlife movement, with specific emphasis on the evaluation of areas identified on the Biological Resource Maps contained in the Framework Element's Technical Background Report and Environmental Impact Report.
Policy 6.1.6	Consider preservation of private land open space to the maximum extent feasible. In areas where open space values determine the character of the community, development should occur with special consideration of these characteristics.
Conservation Element – Endangered Species	
Policy 1	Continue to require evaluation, avoidance, and minimization of potential significant impacts, as well as mitigation of unavoidable significant impacts on sensitive animal and plant species and their habitats and habitat corridors relative to land development activities.
Policy 2	Continue to administer City-owned and managed properties so as to protect and/or enhance the survival of sensitive plant and animal species to the greatest practical extent.
Policy 3	Continue to support legislation that encourages and facilitates protection of endangered, threatened, sensitive and rare species and their habitats and habitat corridors.
Conservation Element – Habitats	
Policy 1	Continue to identify significant habitat areas, corridors and buffers and to take measures to protect, enhance and/or restore them.
Policy 2	Continue to protect, restore, and/or enhance habitat areas, linkages and corridor segments, to the greatest extent practical, within City-owned or managed sites.
Policy 3	Continue to work cooperatively with other agencies and entities in protecting local habitats and endangered, threatened, sensitive, and rare species.
Policy 4	Continue to support legislation that encourages and facilitates protection of local native plant and animal habitats.

Source: City of Los Angeles, 2001.

SEAs are significant habitats identified by Los Angeles County as important for the preservation and maintenance of biodiversity. Los Angeles County defines SEAs as ecologically important land and water systems that support valuable habitat for plants and animals, and are often integral to the preservation of rare, threatened, or endangered species and the conservation of biological diversity in the county. These areas are classified as one or more of the following: (1) habitats for rare and endangered species of plants and animals, (2) restricted natural communities - ecological areas that are scarce on a regional basis, (3) habitats restricted in distribution in the county, (4) breeding or nesting grounds, (5) unusual biotic communities, (6) sites with critical wildlife and fish value, and (7) relatively undisturbed habitats. As shown on **Figure 4.2-1**, there are two SEAs located within the project area boundaries - the Ballona Wetlands and the El Segundo Dunes. The Ballona Wetlands is also part of the California Audubon-designated Ballona Wetlands State Important Bird Area and the El Segundo Dunes has been designated as an ecologically significant habitat area (ESHA) pursuant to Section 30240 of the California Coastal Act.

Given that the project area is within the highly urbanized City of Los Angeles, and that the proposed transportation improvements would primarily occur within existing rights-of-way, habitat suitable to support special-status species in the vicinity of the proposed transportation improvements is limited. Habitat in the immediate vicinity of the proposed transportation improvements includes the Ballona Wetlands SEA (discussed in greater detail below), including a portion of the Ballona Creek flood control channel, and parks and other recreational facilities (such as golf courses). Parks and golf courses, located throughout the project area as shown on Figure 4.2-1, generally have ornamental landscaping, such as introduced or nonnative trees, shrubs, flowers, and turf grass, with little or no biological value. The project area also has street trees that may support migratory birds, and pockets of ornamental landscaping that occur within and adjacent to existing right-of-ways. No proposed transportation improvements would occur within 200 feet of the El Segundo Dunes or the project area's sandy beaches and, therefore, these areas are not discussed further.

4.2.3.1 Ballona Wetlands Ecological Reserve

The Ballona Wetlands Ecological Reserve (BWER) is one of only two remaining coastal wetland areas bordering Santa Monica Bay and includes native and non-native vegetation. Vegetation communities include salt and freshwater marshes and southern willow scrub. A 10-acre freshwater marsh has been restored in the BWER, which supports emergent marsh dominated by cattail and bulrush, and perimeter riparian vegetation dominated by willows and mulefat (*Baccharis salicifolia*). Additional willow woodlands are present along undeveloped areas in lower Ballona Creek, and fragmented and degraded areas of salt and brackish marsh are present in the remaining coastal marsh (City of Los Angeles DPW/ Department of Water and Power [DWP], 2006). Dominant plant species in salt marsh areas include pickleweed (Salicornia spp.) and alkali heath (Frankenia sp.) (City of Los Angeles DPW/DWP, 2006). The BWER provides high-quality habitat for a variety of wildlife species and also have the potential to support sensitive plant species. Endangered and threatened species known to occur at the BWER include the California least tern (*Sterna antillarum browni*) and Belding's savannah sparrow (*Passerculus sandwichensis beldingi*). Further, Least Bell's vireos (*Vireo bellii pusillus*), a state and federally listed endangered species, are using the restored freshwater marsh for breeding (County of Los Angeles, 2014).

The Ballona Creek flood control channel bisects the BWER from the northeast toward the southwest. The channel is trapezoidal, with bottom widths varying from 80 to 200 feet and depths varying from 19 to 23 feet from the top of the levee. The side slopes are lined with concrete, paving stones and riprap; the channel bottom is not armored (USEPA, 2012). The levees along the Ballona Creek flood control channel have disconnected tidal exchange and freshwater input to adjacent wetland habitats. As a result, this historical wetland habitat has been converted to upland habitat in many areas.

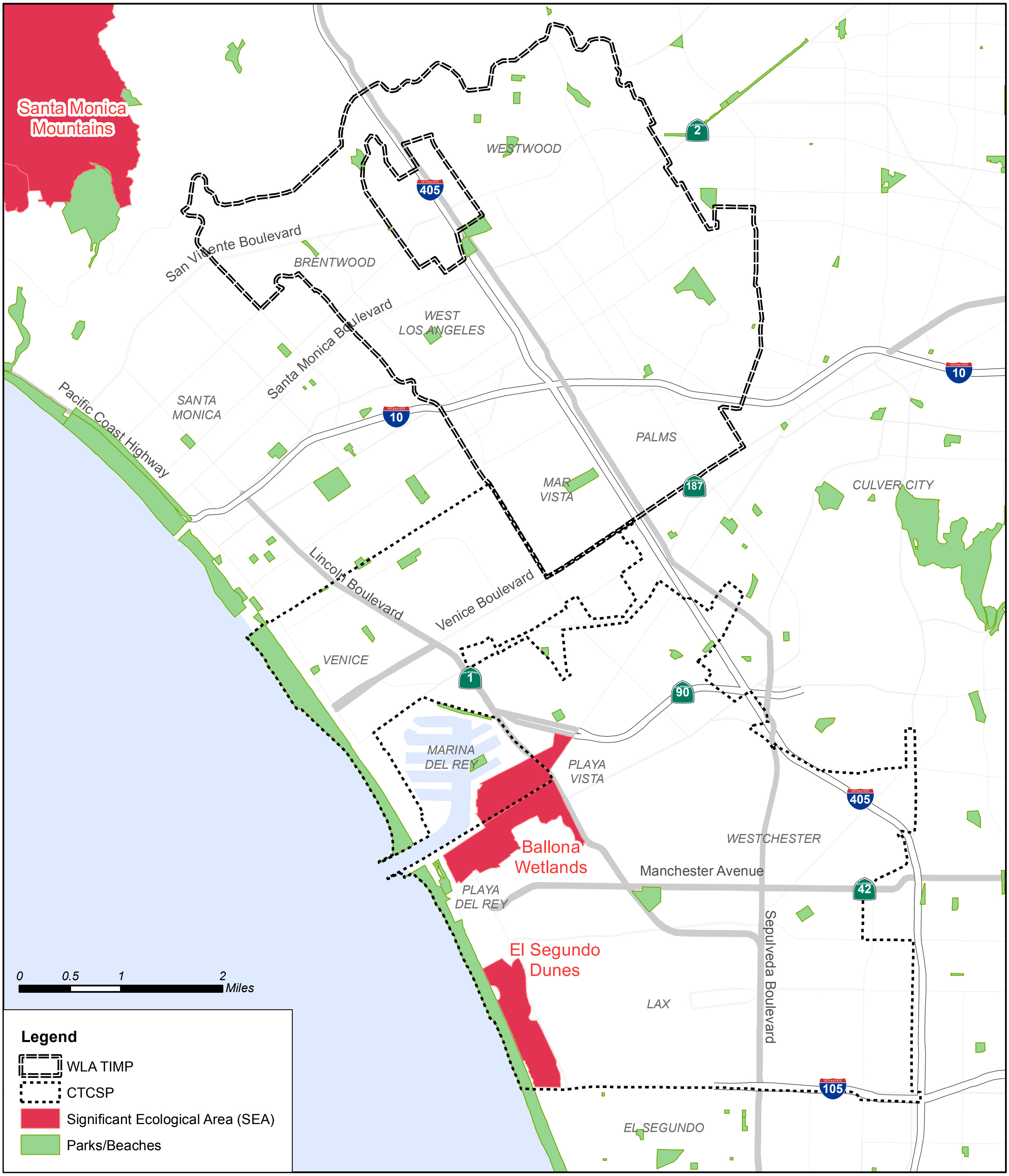
The Ballona Creek flood control channel is a water of the U.S., requiring a Section 404 permit and Section 401 Water Quality Certification under the CWA and Section 10 permit under the Rivers and Harbors Act for any dredge and fill activities within the channel and for structures in or affecting navigable waters. In addition, the Ballona Creek levees were constructed by USACE for flood risk management. As such, a Section 408 permit would be required to alter or modify the levees or other features of the Ballona Creek flood control channel. To comply with Section 1600 of the California Fish and Game Code, a Streambed Alteration Agreement would be required from CDFW. In addition, a Natural Environment Study (NES) may be required by the California Department of Transportation.

4.2.3.2 Sensitive Species

The Venice U.S. Geological Survey [USGS] 7.5 Minute Quadrangle includes most of the CTCSP project area, including the BWER, El Segundo Dunes, and sandy beaches. Based on a search of the California Natural Diversity Database (CNDDB), there are 47 bird species, 20 animals, 24 plants and 2 plant communities that are known or have the potential to occur within the Venice Quadrangle (CDFW, 2015). The two sensitive plant communities, Southern Coastal Salt Marsh and Southern Dune Scrub, are located within the BWER and El Segundo Dunes, respectively. Likewise, the sensitive animal and plant species that may occur within the quadrangle are primarily associated with the two sensitive plant communities. **Table 4.2-2** lists the sensitive plant communities, plants, and animal species that may occur within the Venice Quadrangle.

4.2.3.3 Wildlife Linkages

Due to the urbanized environment, including a heavily traveled roadway network, the project area does not provide viable linkages or migration corridors between habitat areas. The largely small and fragmented patches of habitat provide limited opportunity for wildlife movement (except for bird species) due to the lack of physical linkages and existing barriers (e.g., roads and buildings). Further, the BWER is surrounded by development and Ballona Creek is a concrete-lined channel that does not support wetland flora or fauna (City of Los Angeles Department of City Planning, 2012). Therefore, the project area does not act as a wildlife corridor, movement pathway, or linkage of note between larger habitat areas for terrestrial wildlife. However, as previously described, trees within the project area may be used by migratory birds. Further, the BWER is a stop along the Pacific Flyway, a migratory route that extends from South America to northern Alaska, used by many millions of birds. The BWER may also serve as shelter for young fishes and invertebrates (County of Los Angeles, 2014).



Source: Los Angeles County Department of Regional Planning, 2010
U.S. Census Bureau, Geography Division, 2010

Figure 4.2-1
Biological Resource Areas

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Table 4.2-2 List of CNDDB Species within Venice 7.5' Quadrangle

Type	Scientific Name	Common Name	Federal Status	State Status	CDFW Status	Rare Plant Rank	Habitat
Animal Species							
Bird	*Accipiter cooperii*	Cooper's hawk	None	None	WL	N/A	Nests in open forests, groves, or trees along rivers, or low scrub of treeless areas. The wooded area is often near the edge of a field or water opening.
Bird	*Aquila chrysaetos*	golden eagle	None	None	FP; WL	N/A	Inhabits open terrain in deserts, mountains, slopes, and valleys. Nest mainly on cliffs, also in large trees (such as oaks), and rarely on artificial structures or the ground.
Bird	*Buteo regalis*	ferruginous hawk	None	None	WL	N/A	Forages in agricultural and urban habitats, as well as creosote bush and saltbush scrub. Breeds in isolated trees, small groves of trees, on rocky ledges, or occasionally on the ground. Nests are adjacent to open areas such as grasslands or shrub lands. Prefers open country, where it often hunts from low perches on fence posts, utility poles, or small trees. Occurs in Los Angeles County only as a winter visitant.
Bird	*Circus cyaneus*	northern harrier	None	None	SSC	N/A	Most commonly found in large, undisturbed tracts of wetlands and grasslands with low, thick vegetation. Breeds in freshwater and brackish marshes, lightly grazed meadows, old fields, tundra, dry upland prairies, drained marshlands, high-desert shrubs, teppe, and riverside woodlands.
Bird	*Elanus leucurus*	white-tailed kite	None	None	FP	N/A	Inhabits rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Forages in open grasslands, meadows or marshes close to isolated, dense-topped trees for nesting and perching.
Bird	*Pandion haliaetus*	Osprey	None	None	WL	N/A	Found near bodies of water: saltmarshes, rivers, ponds, reservoirs, and estuaries.
Bird	*Eremophila alpestris actia*	California horned lark	None	None	WL	N/A	Inhabits coastal regions from Sonoma County to San Diego County Inhabits short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, and alkali flats.
Bird	*Aythya americana*	Redhead	None	None	SSC	N/A	Found near lakes/ponds.
Bird	*Branta bernicla*	Brant	None	None	SSC	N/A	Found in marsh habitat; breeds in the high Arctic tundra and winters along both coasts.
Bird	*Chaetura vauxi*	Vaux's swift	None	None	SSC	N/A	Nests in coniferous or mixed forest. Forages in forest openings, especially above streams.

Type	Scientific Name	Common Name	Federal Status	State Status	CDFW Status	Rare Plant Rank	Habitat
Bird	*Ixobrychus exilis*	least bittern	None	None	SSC	N/A	Inhabits freshwater or brackish marshes with tall emergent vegetation.
Bird	*Charadrius alexandrinus nivosus*	western snowy plover	Threatened	None	SSC	N/A	Nests, feeds, and takes cover on sandy or gravelly beaches along the coast, on estuarine salt ponds, alkali lakes, and at the Salton Sea. Requires a sandy, gravelly or friable soil substrate for nesting.
Bird	*Mycteria americana*	wood stork	None	None	SSC	N/A	Inhabits marsh habitat.
Bird	*Ammodramus savannarum*	grasshopper sparrow	None	None	SSC	N/A	Occurs in dry, dense grasslands, especially those with a variety of grasses and tall forbs and scattered shrubs for singing perches.
Bird	*Passerculus sandwichensis beldingi*	Belding's savannah sparrow	None	Endangered	-	N/A	Breeds on the southern coast from Santa Barbara to San Diego County. Nests in Salicornia on and about margins of tidal flats.
Bird	*Passerculus sandwichensis rostratus*	large-billed savannah sparrow	None	None	SSC	N/A	Inhabits grasslands with few trees and tidal saltmarshes and estuaries.
Bird	*Falco columbarius*	Merlin	None	None	WL	N/A	Inhabits seacoast, tidal estuaries, open woodlands, savannas, edges of grasslands and deserts, farms and ranches. Clumps of trees or windbreaks are required for roosting in open country.
Bird	*Falco peregrinus anatum*	American peregrine falcon	Delisted	Delisted	FP	N/A	Inhabits wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape on a depression or ledge in an open site.
Bird	*Grus canadensis tabida*	greater sandhill crane	None	Threatened	FP	N/A	Breeds and forages in open prairies, grasslands, and wetlands. Nests in marshes, bogs, wet meadows, prairies, burned-over aspen stands, and other moist habitats, preferring those with standing water. Outside of the breeding season, they often roost in deeper water of ponds or lakes, where they are safe from predators.
Bird	*Xanthocephalus xanthocephalus*	yellow-headed blackbird	None	None	SSC	N/A	Breeds and roosts in freshwater wetlands with dense, emergent vegetation such as cattails. Forages in fields, typically wintering in large, open agricultural areas.
Bird	*Lanius ludovicianus*	loggerhead shrike	None	None	SSC	N/A	Found in broken woodlands, savanna, pinyon-juniper woodland, Joshua tree woodland, riparian woodland, desert oases, scrub, and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.
Bird	*Chlidonias niger*	black tern	None	None	SSC	N/A	Inhabits marsh habitat.

Type	Scientific Name	Common Name	Federal Status	State Status	CDFW Status	Rare Plant Rank	Habitat
Bird	*Larus californicus*	California gull	None	None	WL	N/A	Breeds on islands in lakes or rivers. Forages along lakes, bogs, farm fields, lawns, pastures, sagebrush, garbage dumps, feedlots, parking lots, ocean beaches, and open ocean.
Bird	*Sternula antillarum browni*	California least tern	Endangered	Endangered	FP	N/A	Nests along the coast from San Francisco Bay south to northern Baja California. Breeds on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, landfills, or paved areas.
Bird	*Thalasseus elegans*	elegant tern	None	None	WL	N/A	Inhabits coastal waters, occasionally ocean far from land. Breeds on low, flat, sandy islands.
Bird	*Icteria virens*	yellow-breasted chat	None	None	SSC	N/A	Summer resident in riparian thickets of willow and other brushy tangles such as blackberry and wild grape near water courses.
Bird	*Setophaga petechia*	yellow warbler	None	None	SSC	N/A	Breeds in shrubby thickets and woods, particularly along watercourses and in wetlands. Common trees include willows, alders, and cottonwoods across North America.
Bird	*Pelecanus occidentalis californicus*	California brown pelican	Delisted	Delisted	FP	N/A	Nests on coastal islands just outside the surf line. Nests on Islands of small to moderate size which afford immunity from attack by ground dwelling predators.
Bird	*Phalacrocorax auritus*	double-crested cormorant	None	None	WL	N/A	Breeds on the coast as well as on large inland lakes. They form colonies of stick nests built high in trees on islands or in patches of flooded timber.
Bird	*Laterallus jamaicensis coturniculus*	California black rail	None	Threatened	FP	N/A	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that does not fluctuate during the year and dense vegetation for nesting habitat.
Bird	*Rallus longirostris levipes*	light-footed clapper rail	Endangered	Endangered	FP	N/A	Inhabits saltmarshes and mangrove swamps.
Bird	*Rallus longirostris obsoletus*	California clapper rail	Endangered	Endangered	FP	N/A	Inhabits saltmarshes and mangrove swamps.
Bird	*Numenius americanus*	long-billed curlew	None	None	WL	N/A	Winter resident along the coasts in wetlands, tidal estuaries, mudflats, flooded fields, and occasionally beaches.
Bird	*Athene cunicularia*	burrowing owl	None	None	SSC	N/A	Inhabits open, dry grassland and desert habitats throughout California, or scrublands characterized by low-growing, widely spaced vegetation.

Type	Scientific Name	Common Name	Federal Status	State Status	CDFW Status	Rare Plant Rank	Habitat
Bird	*Polioptila californica californica*	coastal California gnatcatcher	Threatened	None	SSC	N/A	Obligate permanent resident of coastal sage and alluvial scrub habitats in Southern California.
Bird	*Plegadis chihi*	white-faced ibis	None	None	WL	N/A	Feeds in fresh emergent wetland, shallow lacustrine waters, muddy ground of wet meadows, and irrigated or flooded pastures and croplands. Nests in dense, fresh emergent wetland. Roosts amidst dense, freshwater emergent vegetation such as bulrushes, cattails, reeds or low shrubs over water. Extensive marshes are required for nesting.
Bird	*Cistothorus palustris clarkae*	Clark's marsh wren	None	None	SSC	N/A	Nests in variety of marshes, especially with dense reeds.
Bird	*Empidonax traillii extimus*	southwestern willow flycatcher	Endangered	Endangered	-	N/A	Nests and roosts in dense willow thickets. Nesting site usually near languid stream, standing water, or seep. Most numerous where extensive thickets of low, dense willows edge on wet meadows, ponds, or backwaters.
Bird	*Vireo bellii pusillus*	least Bell's vireo	Endangered	Endangered	-	N/A	Resident in willows and other low, dense valley foothill riparian habitat. Thickets of willow and other low shrubs afford nesting and roosting cover. May inhabit thickets along dry, intermittent streams.
Crustaceans	*Streptocephalus woottoni*	Riverside fairy shrimp	Endangered	None	-	N/A	Found in vernal pools, ponds, and other ephemeral pool-like bodies of water. During dry periods, cysts of the species lay dormant in the soil and hatch when adequate rainfall fills the ponds and pools.
Insects	*Euphilotes battoides allyni*	El Segundo blue butterfly	Endangered	None	-	N/A	Restricted to remnant coastal dune habitat in Southern California. Host plant is Eriogonum parvifolium; larvae feed only on the flowers and seeds; used by adults as major nectar source.
Mammals	*Perognathus longimembris pacificus*	Pacific pocket mouse	Endangered	None	SSC	N/A	Inhabits the narrow coastal plains from the Mexican border north to El Segundo, Los Angeles County. Seems to prefer soils of fine alluvial sands near the ocean, but much remains to be learned.
Mammals	*Lepus californicus bennettii*	San Diego black-tailed jackrabbit	None	None	SSC	N/A	Shrub habitats and intermediate canopy stages of shrub habitats and open shrub/herbaceous and tree/herbaceous edges.
Mammals	*Microtus californicus stephensi*	south coast marsh vole	None	None	SSC	N/A	Tidal marshes in Los Angeles, Orange and southern Ventura Counties.
Mammals	*Sorex ornatus salicornicus*	southern California saltmarsh shrew	None	None	SSC	N/A	Coastal marshes in Los Angeles, Orange and Ventura Counties. Requires dense vegetation and woody debris for cover.

Type	Scientific Name	Common Name	Federal Status	State Status	CDFW Status	Rare Plant Rank	Habitat
Reptiles	*Anniella pulchra pulchra*	silvery legless lizard	None	None	SSC	N/A	Leaf litter associates with sandy or loose loamy soil of high moisture content under sparse vegetation
Reptiles	*Emys marmorata*	western pond turtle	None	None	SSC	N/A	Requires basking sites such as partially submerged logs, vegetation mats or open mud banks and needs suitable nesting sites in permanent or near permanent bodies of water in many habitat types below 2,000 m asl.
Plant Community							
Terrestrial	*Southern Coastal Salt Marsh*	Southern Coastal Salt Marsh	None	None	-	N/A	Develops in low, flat estuaries at the mouths of rivers and streams.
Terrestrial	*Southern Dune Scrub*	Southern Dune Scrub	None	None	-	N/A	El Segundo Dunes complex west of Los Angeles International Airport (LAX).
Plant Species							
Vascular	*Centromadia parryi ssp. Australis*	southern tarplant	None	None	-	1B.1	Vernally mesic, often alkaline, habitats in marshes and swamp margins, valley and foothill grassland, and vernal pool communities between 0 and 427 m asl.
Vascular	*Chaenactis glabriuscula var. orcuttiana*	Orcutt's pincushion	None	None	-	1B.1	Sandy habitats in coastal bluff scrub and coastal dunes communities between 3 and 100 m asl.
Vascular	*Deinandra paniculata*	paniculate tarplant	None	None	-	4.2	Usually vernally mesic, sometimes sandy habitat, such as: coastal scrub; valley and foothill grassland; vernal pools.
Vascular	*Lasthenia glabrata ssp. Coulteri*	Coulter's goldfields	None	None	-	1B.1	Alkaline soils in coastal salt marshes and swamps, playas, and vernal pools between 1 and 1,220 m asl.
Vascular	*Phacelia ramosissima var. austrolitoralis*	south coast branching phacelia	None	None	-	3.2	Sandy, sometimes rocky habitats in chaparral, coastal dune, coastal scrub, and coastal salt marsh and swamp communities between 6 and 300 m asl.
Vascular	*Phacelia stellaris*	Brand's star phacelia	None	None	-	1B.1	Coastal dune and coastal scrub communities between 1 and 400 m asl.
Vascular	*Dithyrea maritima*	beach spectaclepod	None	Threatened	-	1B.1	Sandy soils in coastal dune and scrub communities between 3 and 50 m asl.
Vascular	*Erysimum insulare*	island wallflower	None	None	-	1B.3	Grows in the sand along the coast.
Vascular	*Erysimum suffrutescens*	suffrutescent wallflower	None	None	-	4.2	Coastal bluff scrub, Chaparral (maritime), Coastal dunes, Coastal scrub 0-150 m
Vascular	*Chenopodium littoreum*	coastal goosefoot	None	None	-	1B.2	Coastal dune communities between 10 and 30 m asl.
Vascular	*Suaeda esteroa*	estuary seablite	None	None	-	1B.2	Clay, silt and sand substrates in coastal salt marshes and swamps between 0 and 5 m asl.

Type	Scientific Name	Common Name	Federal Status	State Status	CDFW Status	Rare Plant Rank	Habitat
Vascular	*Suaeda taxifolia*	woolly seablite	None	None	-	4.2	Coastal bluff scrub, Coastal dunes, Marshes and swamps (margins of coastal salt) 0-50 m
Vascular	*Dichondra occidentalis*	western dichondra	None	None	-	4.2	Chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland communities between 50 and 500 m asl.
Vascular	*Astragalus pycnostachyus var. lanosissimus*	Ventura Marsh milk-vetch	Endangered	Endangered	-	1B.1	Coastal dunes, coastal scrub, and edges of coastal salt and brackish marsh and swamp communities between 1 and 35 m asl.
Vascular	*Astragalus tener var. titi*	coastal dunes milk-vetch	Endangered	Endangered	-	1B.1	Sandy, often vernally mesic habitats in coastal bluff scrub, coastal dune, and coastal prairie communities between 1 and 50 m asl.
Vascular	*Juncus acutus ssp. leopoldii*	southwestern spiny rush	None	None	-	4.2	Mesic and alkaline habitats in coastal dune, meadow, seep, marsh and swamp communities between 3 and 900 m asl.
Vascular	*Abronia maritima*	red sand-verbena	None	None	-	4.2	Coastal dunes below 100 m asl.
Vascular	*Camissoniopsis lewisii*	Lewis' evening-primrose	None	None	-	3	Sandy or clay soils in coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, valley and foothill grassland communities between 0 and 300 m asl.
Vascular	*Hordeum intercedens*	vernal barley	None	None	-	3.2	Saline flats and depressions in coastal dune, coastal scrub, valley and foothill grassland and vernal pool communities between 5 and 1,000 m asl.
Vascular	*Navarretia prostrata*	prostrate vernal pool navarretia	None	None	-	1B.1	Alkaline soils, vernal pools and mesic habitats within coastal scrub, meadow, seep and valley and foothill grassland communities between 15 and 700 m asl.
Vascular	*Chorizanthe parryi var. fernandina*	San Fernando Valley spineflower	Candidate	Endangered	-	1B.1	Sandy soils in coastal scrub and valley and foothill grassland communities between 150 and 1220 m asl.
Vascular	*Potentilla multijuga*	Ballona cinquefoil	None	None	-	1A	Presumed extinct. Brackish meadows and seeps between 0 and 2 m asl.

Source: California Department of Fish and Wildlife, 2015.

- Status Codes:
- Watch list (WL); fully protected (FP); species of special concern (SSC)
- 0.1 Seriously threatened in California
- 0.2 Fairly threatened in California
- 0.3 Not very threatened in California
- 1A Plants presumed extinct in California and rare/extinct elsewhere
- 1B Plants rare, threatened, or endangered in California and elsewhere
- 3 Plants about which we need more information
- 4 Plants of limited distribution
- m- meters
- asl – above sea level

4.2.4 Methodology

This section outlines the methodology for evaluating impacts to biological resources, including sensitive natural communities and special status species. In accordance with Appendix G of the State CEQA Guidelines, as described in Section 4.2.5 below, a project would result in significant impacts if it results in a substantial adverse effect to sensitive biological resources including a sensitive natural community or special status species.

For the purpose of this analysis, sensitive natural communities are considered to be habitats or natural communities that are unique, of relatively limited distribution in the region, and/or of particularly high value for wildlife. Sensitive habitats include specific natural communities defined by CDFW as well as wetlands and riparian communities, which are considered special status natural communities due to their limited distribution in California (CDFW, 2009). Sensitive natural communities are usually identified in regional or local plans, policies, or regulations, and may or may not contain special status species. Special status species include those state- and/or federally-listed threatened, endangered, proposed and/or candidate plant or wildlife species, as well as those identified as fully protected and/or species of concern by CDFW (for wildlife), or as rare, threatened, or endangered by the California Native Plant Society (CNPS) (for plants).[19]

The following sources were reviewed to determine the potential for special status species and sensitive habitats to be present within the project area:[20]

- Los Angeles County Department of Regional Planning SEA Program (County Los of Angeles, 2011);
- CDFW CNDDB (CDFW, 2015);
- CNPS Electronic Inventory (CNPS, 2015); and
- USFWS list of federal endangered and threatened species (USFWS, 2015).

Sensitive habitats and special status species that may occur within the project area, but are not near any proposed transportation improvements, would not be physically affected by the Proposed Project; therefore, the impacts evaluation presented herein considers potential effects on species and natural communities within 200 feet of proposed transportation improvements. While there is no established standard buffer distance, a distance of 200 feet is typical for urban environments (California Coastal Commission, 2013). The evaluation considers both direct and indirect impacts. Direct impacts are effects that can occur from direct removal or disturbance of habitats. Examples of direct impacts

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19 Sensitive habitats and sensitive natural communities, collectively, are consistent with the definition of “sensitive biological resource” in the L.A. CEQA Thresholds Guide.

20 The methodology included in the L.A. CEQA Thresholds Guide for evaluating impacts to biological resources includes a field reconnaissance survey, as needed. A field survey was not necessary for determination of special status species and sensitive habitats for this EIR, as sufficient information is available from existing documentation to identify the resources likely to be affected by the Proposed Project. The Proposed Project would not entitle or enable construction of any transportation improvements. Rather, these improvements will be analyzed further at the project level through separate environmental analyses and approval processes. As the individual improvements are not proposed for construction at this time, information obtained from a field survey at this time would not be useful for determining project-level impacts at the time that individual transportation improvements are implemented. A field survey is recommended when project implementation is foreseeable, construction-level information has been determined, and project level analysis is timely. Field surveys will be conducted during project-level environmental analyses of individual transportation improvements, as required.

include effects such as mortality of individuals and permanent loss of habitat. Indirect impacts are effects that have delayed, secondary effects. Examples of indirect impacts include fragmentation, pollination interruption, increased environmental toxins, plant and wildlife dispersal interruption, increase risk of fire, and increased invasion by non-native animals and plants that out-compete natives. Indirect impacts can increase mortality, reduce productivity, and/or reduce the value and functions of natural open space for the native species that inhabit it.

4.2.5 Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, the Proposed Project would have a significant impact related to biological resources if it would:

- Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means; and/or
- Interfere substantially with the movement of any native resident, or migratory fish or wildlife species, or with established native residents or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

The L.A. CEQA Thresholds Guide was initiated as part of the City's Development Reform efforts to streamline the City's permit and development processes, improve the level of consistency, predictability, and objectivity of the City's environmental documents, and reduce costs and time delays (City of Los Angeles, 2006). The significance thresholds from the L.A. CEQA Thresholds Guide, as provided below, offer assistance in the evaluation of environmental impacts and are not more restrictive or permissive than the significance thresholds in Appendix G of the State CEQA Guidelines, provided above.

The L.A. CEQA Thresholds Guide addresses impacts to Biological Resources under Section C. The L.A. CEQA Thresholds Guide reads that a project would normally have a significant impact on biological resources if it would result in:

- The loss of individuals, or the reduction of existing habitat, of a state or federal listed endangered, threatened, rare, protected, or candidate species, or a Species of Special Concern or federally listed critical habitat;
- The loss of individuals or the reduction of existing habitat of a locally designated species or a reduction in a locally designated natural habitat or plant community;
- Interference with wildlife movement/migration corridors that may diminish the chances for long-term survival of a sensitive species;
- The alteration of an existing wetland habitat; or

- Interference with habitat such that normal species behaviors are disturbed (e.g., from the introduction of noise, light) to a degree that may diminish the chances for long-term survival of a sensitive species.

4.2.6 Impacts and Mitigation Measures

The proposed update to the TIA fee program and the administrative and minor revisions to the Specific Plans would not result in any physical impacts that could affect biological resources. Therefore, the following analysis addresses whether implementation of the proposed updates to the lists of transportation improvements in the CTCSP and WLA TIMP would result in significant impacts on biological resources. No specific construction projects would be implemented based on this EIR; rather, the transportation improvements are identified at a conceptual level of detail.

Impact 4.2-1: The Proposed Project would not have a substantial adverse effect, either directly or through habitat modification, on any species identified as candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. This would be a *less than significant impact* for operations and a *less than significant impact with mitigation* for construction.

Construction

Impacts would occur if construction were to directly result in the take of a special status species or if construction activities occurring within 200 feet of native habitats were to result in the modification of habitats capable of supporting special status species.

Generally, project related construction activities would take place within existing roadways, sidewalks, and right-of-ways and would not result in direct removal or modification of native habitat or otherwise directly affect a special status species. Further, most of the improvements would not require federal authorization, permitting, or funding from a federal agency. However, some of the proposed transportation improvements may require removal, trimming, or disturbance of street trees and/or landscaping that support nesting birds, or would be located adjacent to parks, golf courses, or cemeteries having vegetation that could support nesting birds. Therefore, minor construction activities associated with some of the proposed improvements could result in disturbance to nearby nesting birds. In addition, the Lincoln Boulevard Bridge Enhancement project would involve widening of the bridge over the Ballona Channel, widening of the roadway immediately north and south of the bridge, and modifications to Culver Boulevard in the vicinity of the bridge, including widening of the Culver Boulevard bridge over Lincoln Boulevard and modifications to the Culver Boulevard/Lincoln Boulevard interchange. These improvements would occur in an area that contains sensitive habitat, as described further below.

Lincoln Boulevard Bridge Enhancement

The Lincoln Boulevard Bridge Enhancement, would occur along the northern boundary of the Ballona Wetlands SEA. The Lincoln Boulevard Bridge Enhancement would entail replacing the existing Lincoln Boulevard Bridge over Ballona Creek (between Jefferson Boulevard and Fiji Way) with a wider bridge that has three lanes in each direction, center running transit lanes, and an on-street bike lane in each direction. Lincoln Boulevard would also be widened north and south of the bridge and the Culver Boulevard overcrossing of Lincoln Boulevard would be widened to allow for the wider roadway underneath. Although the Lincoln Boulevard Bridge Enhancement has not been designed, it is expected that, south of the bridge, the roadway widening would occur on the east side of

Lincoln Boulevard, away from the BWER. North of the bridge, it is also expected that the majority of the roadway widening would occur on the east side, with some widening on the west near Fiji Way and at the Culver Boulevard Bridge overcrossing. Along the portion of Lincoln Boulevard north of Ballona Channel, the BWER lies on both sides of the roadway.

These improvements have the potential to result in the removal, trimming, or disturbance of street trees and ornamental landscaping which have the potential to support nesting migratory birds that are protected by the MTBA and the California Fish and Game Code and to adversely impact special status species. It is expected that potential impacts to special status species may occur in the vicinity of the existing loop ramp connecting Culver Boulevard and Lincoln Boulevard, and in the areas southeast and southwest of the Lincoln Boulevard and Fiji Way intersection. During design, habitats that support special status species would be avoided to the greatest extent feasible. If, as expected, Lincoln Boulevard were widened toward the east, most impacts to habitat for special status species that occurs west of Lincoln Boulevard within the Ballona Wetlands SEA would be avoided. However, there is potential for destruction or alteration of habitat such that there would be an adverse effect on special status species. In addition, the temporary generation of noise, emissions of air pollutants, and discharges that could affect water quality would adversely affect special status species.

Additional project-specific environmental review of the Lincoln Boulevard Bridge Enhancement will be required following completion of project design, and prior to approval and implementation. Project permitting and approval would require compliance with the Federal ESA and CESA with regards to any listed plant or animal species, or any candidates for federal or state listing as endangered or threatened. Coordination with federal and state resource agencies would be required to minimize adverse effects to these species. Furthermore, the Ballona Creek flood control channel is a water of the U.S., therefore, any dredge and fill activities within the channel or structures in or affecting navigable waters would require a Section 404 permit and a Section 401 Water Quality Certification under the CWA as well as a Section 10 permit under the Rivers and Harbors Act. In addition, to comply with Section 1600 of the California Fish and Game Code, a Streambed Alteration Agreement would be required from CDFW. These permits are addressed in greater detail in the discussion of Impact 4.2-3 below.

As part of these review and permitting processes, potential project-specific impacts would be assessed and project-specific mitigation would applied as appropriate to reduce potential impacts. In the absence of project-specific details, it is assumed that adverse effects to special status species resulting from the Lincoln Boulevard Bridge Enhancement would result in a ***potentially significant impact.***

Other Transportation Improvements

As noted above, some of the proposed transportation improvements would likely result in the removal, trimming, or disturbance of street trees and ornamental landscaping which have the potential to support nesting migratory birds that are protected by the MTBA and the California Fish and Game Code. Moreover, some improvements would be located adjacent to parks, golf courses, or cemeteries, construction of which could result in indirect disturbance to nesting migratory birds through noise, vibration, or lighting. All of the proposed transportation improvement projects would be subject to the requirements of local tree trimming and tree removal ordinances and federal and state regulations related to the protection of migratory birds, including avoiding the direct destruction of active nests and avoiding disturbance of nesting birds due to noise, vibration, lighting, or human activity in proximity to active nests. Regardless, construction activities occurring within the nesting season[21] have the potential to result in the removal or destruction of an active nest or direct mortality or injury of individual birds. This would be a ***potentially significant impact***.

Operation

During operation, the proposed transportation improvements would operate within existing roadways, sidewalks, and right-of-ways and would not result in direct physical effects to candidate, sensitive, or special status species. The proposed transportation improvements, including the Lincoln Bridge Enhancement, would not substantially alter the existing transportation infrastructure from its current condition in such a way that could indirectly affect special status species. Therefore, impacts from operation would be ***less than significant***.

Mitigation Measures

Mitigation Measure (MM)-BR-1: Migratory Birds. To prevent the disturbance of nesting native and/or migratory bird species during construction, the City shall require that clearing of street trees or other vegetation take place between September 1 and January 30. If construction is scheduled or ongoing during bird or raptor nesting season (January 31 to August 31), the City of Los Angeles shall require that a qualified biologist conduct two nest surveys, one 15 days and the second 72 hours prior to the commencement of construction activities. Surveys shall be conducted in accordance with CDFW protocols, as applicable. If no active nests are identified on or within 200 feet of the construction activity, no further mitigation is necessary. A copy of the preconstruction survey shall be submitted to the Department of City Planning. If an active nest is identified, construction shall be suspended within 200 feet of the nest, or an alternative distance determined to be appropriate by a qualified ornithologist of biologist, until the nesting cycle is complete, as determined by a qualified ornithologist or biologist.

MM-BR-2: Special Status Species and Habitat. For CTCSP and WLA TIMP transportation improvement projects that would be constructed within 200 feet of a Significant Ecological Area designated by the County of Los Angeles, a project-specific biological resource survey and assessment shall be conducted by a qualified biologist and prepared prior to project construction that identifies the biological resources within 200 feet and any potential impacts to special status species and habitats. If it is determined during these biological resources surveys that special status species could occur and be impacted by the Proposed Project, focused surveys shall be conducted by a qualified or permitted biologist, as required, in coordination with USFWS and/or CDFW. If potential impacts are identified that cannot be avoided through modification of project design, species- and habitat-specific mitigation measures shall be developed to avoid or reduce project-related impacts. Such measures could include seasonal restrictions on construction, monitoring by a qualified biological monitor during construction, salvage and replacement of native plants, and restoration of sensitive natural communities or habitat following construction. These measures shall be established through the permitting process under ESA and CESA, as appropriate.

Significance of Impacts After Mitigation

Construction

<u>Lincoln Boulevard Bridge Enhancement</u>

[21] The nesting season varies according to species, but is generally February 15 through August 15 for most birds and January 31 through August 31 for raptors.

Implementation of MM-BR-1 would reduce potential impacts on migratory bird species associated with construction of the Lincoln Boulevard Bridge Enhancement to a level that is ***less than significant***.

Implementation of MM-BR-2 would ensure that project-specific impacts to other special status species would be identified following completion of project design and would require compliance with mitigation measures set forth in permits issued under ESA and CESA, as appropriate, to avoid or reduce all significant impacts to special status species. Therefore, impacts associated with construction of the Lincoln Boulevard Bridge Enhancement would be ***less than significant.***

<u>Other Transportation Improvements</u>

Implementation of MM-BR-1 would reduce potential impacts on migratory bird species associated with construction of the proposed transportation improvements to a level that is ***less than significant***.

Construction of the other transportation improvements would not have any significant impacts to special status species. This impact would be ***less than significant.***

Operation

The Proposed Project would not have any significant impacts to special status species. This impact would be ***less than significant.***

Impact 4.2-2: The Proposed Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS. This would be a *less than significant impact* for operations and a *less than significant impact with mitigation* for construction.

Construction

Lincoln Boulevard Bridge Enhancement

Construction associated with the Lincoln Boulevard Bridge Enhancement has the potential to adversely impact riparian areas and sensitive natural communities, including wetlands. It is expected that potential impacts may occur in the vicinity of the existing loop ramp connecting Culver Boulevard and Lincoln Boulevard, and in the areas southeast and southwest of the Lincoln Boulevard and Fiji Way intersection. During design, sensitive natural communities and wetlands would be avoided to the greatest extent feasible. If, as expected, Lincoln Boulevard were widened toward the east, most impacts to riparian areas and sensitive natural communities, including wetlands, located west of Lincoln Boulevard within the Ballona Wetlands SEA would be avoided. Due to the channelized nature of the Ballona Creek channel and its disconnection from the former floodplain, habitats north of the channel at the location of the bridge are primarily upland. However, as design-level details are not available at this time, there is potential for destruction or alteration of native vegetation and habitats such that there would be an adverse effect on sensitive natural communities such as Southern Coastal Salt Marsh, an identified sensitive plant community that may occur nearby. Construction of the Lincoln Boulevard Bridge Enhancement could have an adverse effect on these sensitive natural communities, including direct alteration of habitat or hydrology by construction equipment, and release of soils or hazardous materials that could adversely affect water quality. This would be a ***potentially significant impact***.

As discussed under Impact 4.2-1 above, implementation of the Lincoln Boulevard Bridge Enhancement would require additional project-specific environmental review and coordination and permitting with resource agencies. Compliance with federal, state, and local regulations, and compliance with any terms and conditions required by permits issued by the state or federal resource agencies, would avoid or minimize adverse effects on riparian or other sensitive natural communities. As project-specific details of the Lincoln Boulevard Bridge Enhancement are not known at this time, it is assumed that adverse effects on riparian habitat and other sensitive natural communities associated with the Lincoln Boulevard Bridge Enhancement would result in a ***potentially significant impact***.

Other Transportation Improvements

As described under Impact 4.2-1 above, construction of the other proposed transportation improvements would occur within developed streets, sidewalks, and/or right-of-ways and would not affect any riparian habitats or sensitive natural communities. As a result, impacts relative to riparian habitat or other sensitive natural communities would be ***less than significant***.

Operation

During operation, the proposed transportation improvements, including the Lincoln Boulevard Bridge Enhancement, would operate within existing roadways, sidewalks, and right-of-ways and would not result in direct physical effects to riparian or other sensitive natural communities. Impacts would be ***less than significant.***

Mitigation Measures

See MM-BR-2 under Impact 4.2-1 above.

Significance of Impacts After Mitigation

Construction

<u>Lincoln Boulevard Bridge Enhancement</u>

Implementation of MM-BR-2 would ensure that project-specific impacts would be identified following completion of project design and would require compliance with mitigation measures set forth in permits issued under ESA and CESA, as appropriate, to avoid or reduce all significant impacts to riparian habitat or sensitive natural communities. Therefore, impacts associated with construction of the Lincoln Boulevard Bridge Enhancement would be ***less than significant.***

<u>Other Transportation Improvements</u>

Proposed transportation improvements would not have any significant impacts to riparian habitat or sensitive natural communities. This impact would be ***less than significant*.**

Operation

The Proposed Project would not have any significant impacts to riparian habitat or sensitive natural communities. This impact would be ***less than significant*.**

Impact 4.2-3: The Proposed Project would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means. This would be a *less than significant impact* for operations and a *less than significant impact with mitigation* for construction.

The only project-related improvement that would occur in or near a wetlands would be the Lincoln Boulevard Bridge Enhancement. As discussed above, the Lincoln Boulevard Bridge Enhancement would be constructed within the Ballona Wetlands Ecological Reserve. The Ballona Wetlands contain wetlands protected under Section 404 of the CWA. Potential impacts from construction and operations of the Lincoln Boulevard Bridge Enhancement are discussed below.

Construction

Construction activities associated with the Lincoln Boulevard Bridge Enhancement could result in discharge of dredged or fill material into federal and state jurisdictional waters. Although project-specific details are not known at this time, it is assumed that impacts to jurisdictional waters and wetlands would be minimized to the extent possible. Moreover, it is anticipated that impacts to wetlands would be minimal, as adjacent habitats within the construction area are mostly upland habitats due to the disconnection of Ballona Creek from the former floodplain. However, the placement of bridge support structures in the Ballona Creek channel would be considered discharge of fill. This would be a significant impact. In addition, as described under Impact 4.2-2, construction of the replacement bridge could have an adverse effect on wetlands through direct alteration of habitat or hydrology by construction equipment, and release of soils or hazardous materials could adversely affect water quality. As a result, adverse effects to wetlands associated with the Lincoln Boulevard Bridge Enhancement would be a ***potentially significant impact***.

Operation

During operation, the Lincoln Boulevard Bridge Enhancement would operate within existing roadways, sidewalks, and right-of-ways and would not result in direct physical effects to a federally-protected wetland. Therefore, impacts on wetlands and jurisdictional waters from the Lincoln Boulevard Bridge Enhancement would be ***less than significant***.

Mitigation Measures

MM-BR-3: Wetlands and Jurisdictional Waters. For transportation improvements that may result in temporary or permanent impacts to federal and/or state jurisdictional waters or wetlands, all applicable permits shall be acquired. These permits include, but would not be limited to, Section 404 and Section 408 permits, a Section 401 Water Quality Certification, a Section 10 permit, and a Streambed Alteration Agreement.

During design of the Lincoln Boulevard Bridge Enhancement, encroachment into jurisdictional waters and wetlands shall be minimized to the greatest extent feasible. All conditions of the Section 408 permit shall be met to address the alteration of the Ballona Creek flood control channel to ensure there would be no significant changes to the pre-project hydrology in order to maintain its capacity for flood management.

All conditions of the Section 404 permit from the USACE and Streambed Alteration Agreement from the CDFW shall be met. As part of this compliance, compensatory mitigation may be required to offset the impact related to placement of permanent fill in jurisdictional waters. The exact compensatory mitigation ratio will be determined at the time the permit is issued and would be based on the type and value of the wetlands affected by the project; agency standards typically require a minimum of 1:1 for restoration and 3:1 for construction of new wetlands. In addition, all conditions of the Wetland Mitigation and Monitoring Plan as required by USACE for federal jurisdictional waters and CDFW for state jurisdictional waters shall be met. The Wetland Mitigation and Monitoring Plan shall include the following:

- Descriptions of the wetland types, and their expected functions and values.
- Performance standards and monitoring protocol to ensure the success of the mitigation wetlands over a period of five to ten years following completion of construction of the compensatory mitigation project.
- Engineering plans showing the location, size and configuration of wetlands to be created or restored.
- An implementation schedule showing that construction of mitigation areas shall commence prior to or concurrently with the initiation of construction.
- A description and proof of legal protection measures for the preserved wetlands (i.e., dedication of fee title, conservation easement, and/ or an endowment held by an approved conservation organization, government agency or mitigation bank).

Significance of Impacts After Mitigation

Construction

Implementation of MM-BR-3 would require compliance with provisions set forth in the Section 404 permit and the Streambed Alteration Agreement, which would require the City to avoid or reduce all significant impacts to federal and state jurisdictional wetlands. If required, compensatory mitigation would likely entail restoration or enhancement of wetland habitat, such as Southern Coastal Salt Marsh, nearby within the Ballona Wetlands SEA. Exact compensatory mitigation requirements would be determined during project design and permitting in consultation with USACE for federal jurisdictional waters and CDFW for state jurisdictional waters. Therefore, with implementation of MM-BR-3, the impact on federally protected wetlands associated with the Lincoln Boulevard Bridge Enhancement would be ***less than significant.***

Operation

The Lincoln Boulevard Bridge Enhancement would not have any significant impacts to riparian habitat or sensitive natural communities. This impact would be ***less than significant.***

Impact 4.2-4: The Proposed Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native residents or migratory wildlife corridors, or impede the use of native wildlife nursery sites. This would be a *less than significant impact* for operations and a *less than significant impact with mitigation* for construction.

Construction

Lincoln Boulevard Bridge Enhancement

Given the urbanized surroundings, the BWER does not serve as a linkage to other large habitat areas for terrestrial wildlife. Construction of the Lincoln Boulevard Bridge Enhancement would entail work within the existing concrete-lined Ballona Creek. Adjacent habitats within the construction area are mostly upland habitats due to the disconnection of Ballona Creek from the former floodplain. Tidal marshes that provide nursery habitat for fish are not located in the vicinity of the bridge. However, habitat near the bridge may support migratory birds such as yellow-breasted chat and yellow warbler The Lincoln Boulevard Bridge Enhancement has the potential to result in direct mortality or injury to migratory birds; removal or destruction of nests, nestlings, or breeding habitat; or disturbance of nesting migratory birds from construction activities during the nesting season. This would be a ***potentially significant impact***.

Other Transportation Improvements

Habitat within the project area is generally fragmented and of low value (e.g., ornamental landscaping) and does not provide viable linkages or migration corridors between habitat areas. Roadways, sidewalks, and public right-of-ways do not serve as wildlife corridors, movement pathways, or linkages between larger habitat areas for terrestrial wildlife. While wildlife may find their way onto transportation infrastructure, the proposed transportation improvements would not create a condition that would increase this potential to occur.

Street trees within or immediately adjacent to the proposed transportation improvements could potentially support migratory birds. As discussed under Impact 4.2-1 above, the removal or destruction of an active nest, or direct mortality or injury of individual birds, occurring during construction of any of the proposed transportation improvements would be a ***potentially significant impact***.

Operation

Lincoln Boulevard Bridge Enhancement

Should any permanent structures, such as piles or other support infrastructure, be required for the Lincoln Boulevard Bridge Enhancement, this is expected to occupy only a small portion of the channel and would not impede the movement of wildlife or use of the wetlands as nursery site. Therefore, impacts related to movement of the movement of wildlife species or the use of native wildlife nursery sites associated with operation of the Lincoln Boulevard Bridge Enhancement would be ***less than significant***.

Other Transportation Improvements

During operation, the proposed transportation improvements would operate within existing roadways, sidewalks, and right-of-ways and would not result in adverse effects on the movement of wildlife species or the use of native wildlife nursery sites. Impacts would be ***less than significant.***

Mitigation Measures

See MM-BR-1 under Impact 4.2-1 above.

Significance of Impacts After Mitigation

Construction

<u>Lincoln Boulevard Bridge Enhancement</u>

Implementation of MM-BR-1 would reduce potential impacts on migratory bird species associated with construction of the Lincoln Boulevard Bridge Enhancement to a level that is ***less than significant***.

<u>Other Transportation Improvements</u>

Implementation of MM-BR-1 would reduce potential impacts on migratory bird species associated with construction of the proposed transportation improvements to a level that is ***less than significant***.

Operation

The Proposed Project would not have any significant impacts related to interference with the movement of any native resident or migratory fish or wildlife species, migratory wildlife corridors, or native wildlife nursery sites. This impact would be ***less than significant.***

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Section 4.3

Greenhouse Gas Emissions

4.3.1 Introduction

This section evaluates greenhouse gas (GHG) emissions from construction activities and from operations (project-related mobile sources and off-site regional traffic) that would occur at build out in the horizon year of 2035. Potential greenhouse gas impacts associated directly with the Project and indirect impacts from activities related to or affected by the Proposed Project are analyzed. The analysis of project-related GHG emissions includes a comparison to the emissions associated with baseline (2014) conditions; a comparison to Future without Project (2035) conditions is provided for additional information.

This section provides an overview of applicable regulations, presents existing conditions in the project area, describes the methodology used in the analysis, and evaluates the potential construction and operational impacts associated with the proposed updates to the Coastal Transportation Corridor Specific Plan (CTCSP) and West Los Angeles Transportation Improvement and Mitigation Specific Plan (WLA TIMP) Specific Plans (Proposed Project).

4.3.1.1 Organization of the Section

The section is organized as follows:

- **Regulatory Framework** summarizes the applicable federal, state, and local regulations, policies, and guidelines pertaining to GHG.
- **Existing Setting** describes current GHG issues and quantifies existing GHG emissions in the project area.
- **Methodology** identifies the approach and models used to evaluate project impacts.
- **Thresholds of Significance** lists the thresholds used in identifying significant impacts, as identified in Appendix G of the State CEQA Guidelines.
- **Impacts and Mitigation Measures** presents the analysis of impacts relating to GHG, and provides recommended mitigation measures, where appropriate, to reduce significant impacts. The **Significance of Impacts After Mitigation** is also identified.

4.3.1.2 Definitions of Technical Terminology

This section uses technical terminology to describe GHGs. Definitions of key terms are provided in **Table 4.3-1**.

Table 4.3-1 Key GHG Terminology

Term	Acronym	Definition
Carbon Dioxide	CO_2	A colorless, odorless gas that is the leading cause of climate change, contributing over 80 percent of US GHG emissions[1, 2]
Carbon Dioxide Equivalent	CO_{2e}	The total climate change impact of all greenhouse gases expressed in terms of carbon dioxide
Global Warming Potential	GWP	The potential for each GHG to trap heat in the atmosphere and contribute to climate change[3]
Greenhouse gas	GHG	A gas in the atmosphere that absorbs and emits radiation
Hydrofluorocarbons	HFCs	Gases used for refrigeration and air conditioning, known as a super greenhouse gas due to their high global warming potential and increased use[1]
Intergovernmental Panel on Climate Change	IPCC	The leading international body for the assessment of climate change. It was established by the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) in 1988 to provide the world with a clear scientific view on the current state of knowledge in climate change and its potential environmental and socio-economic impacts.[4]
Methane	CH_4	The main component of natural gas and a biogas associated with the life cycle of livestock products, methane is the most prevalent GHG after CO_2[1, 2]
Nitrous Oxide	N_2O	A GHG emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste[2]
Parts per billion	ppb	The concentration of a chemical in the environment
Parts per million	ppm	The concentration of a chemical in the environment

Notes:
1. Think Global Green. Homepage. Available: http://www.thinkglobalgreen.org/CARBONDIOXIDE.html. Accessed on August 31, 2015.
2. USEPA. 2015a. Overview of Greenhouse Gases. Available: http://www.epa.gov/climatechange/ghgemissions/gases/fgases.html. Accessed on August 31, 2015.
3. Global Greenhouse Warming. Homepage. Available: http://www.global-greenhouse-warming.com/. Accessed on August 31, 2015.
4. Intergovernmental Panel on Climate Change. Homepage. Available: http://ipcc.ch/organization/organization.shtml. Accessed on August 31, 2015.

4.3.2 Regulatory Framework

The following federal, state, and local laws and policies pertain to GHG emissions.

4.3.2.1 Federal

The United States Environmental Protection Agency (USEPA) is responsible for implementing federal policy to address GHGs. On April 2, 2007, the U.S. Supreme Court issued an opinion in response to *Massachusetts et. al. v. Environmental Protection Agency et. al.* (549 U.S. 497 [2007]) that the USEPA has statutory authority to regulate emissions of GHGs from motor vehicles. The USEPA subsequently published its endangerment finding for GHGs (74 FR 66496) in response to this court case. The USEPA Administrator determined that six GHGs, taken in combination, endanger both the public health and welfare of current and future generations. Although the endangerment finding discusses the effects of six GHGs, it acknowledges that transportation sources only emit four of the key GHGs: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and hydrofluorocarbons (HFCs). Further, the USEPA Administrator found that the combined emissions of these GHGs from new motor vehicles contribute to air pollution that endangers the public health and welfare under the Clean Air Act, Section 202(a) (USEPA, 2015b).

On May 7, 2010, the USEPA and National Highway Traffic Safety Administration (NHTSA) finalized GHG standards for model year 2012 through 2016 passenger cars, light-duty trucks, and medium-duty passenger vehicles. Under these standards, CO_2 emission limits would decrease from 295 grams per mile (g/mi) in 2012 to 250 g/mi in 2016 for a combined fleet of cars and light trucks. If all of the necessary emission reductions were made from fuel economy improvements, then the standards would correspond to a combined fuel economy of 30.1 miles per gallon (mpg) in 2012 and 35.5 mpg in 2016 (USEPA, 2010). On October 15, 2012, the agencies finalized GHG standards for model year 2017 through 2025 light-duty vehicles. The average industry CO_2 emissions are projected to be 163 g/mi in 2025 with fuel economy of 54.5 mpg in 2025 (USEPA, 2012).

On September 15, 2011, the USEPA and NHTSA finalized a rule to reduce GHG emissions and to improve fuel efficiency for model years 2014 through 2018 medium- and heavy-duty vehicles (amended June 17, 2013 and August 17, 2013). The two agencies' complementary standards form a new Heavy-Duty National Program that has the potential to reduce GHG emissions by 270 million metric tons (MMT) carbon dioxide equivalent (CO_2e) and to reduce oil consumption by 530 million barrels over the life of model year 2014 through 2018 vehicles (USEPA, 2011). The second phase of this program targets model years beyond 2018 and is anticipated to reduce GHG emissions by approximately 1 billion metric tons CO_2e and oil consumption by 1.8 billion barrels. The proposed rule was signed on June 19, 2015 (USEPA, 2015c).

In 2009, the USEPA issued the Mandatory Reporting of Greenhouse Gas Rule (74 FR 56260), which requires large sources and suppliers of GHG to report annual GHG generation and emission data starting with 2010 reporting year. The rule is intended to collect GHG data for future policy making decisions (USEPA, 2014). In 2013, 3.18 billion metric tons CO_2e were reported by 7,865 direct emitters of GHG. The largest emitting sector was the power plant sector, followed by petroleum and natural gas systems sector and refineries sector (USEPA, 2015d).

On June 3, 2010, the USEPA published the final GHG Tailoring Rule, in which GHG from stationary sources were phased into the air permitting programs (75 FR 31514). However, on June 23, 2014, the U.S. Supreme Court ruling in *Utility Air Regulatory Group v. EPA* (573 U.S. ___ [2014], Docket No. 12-1146) determined that air regulatory agencies cannot require a Prevention of Significant Deterioration (PSD) or Title V air permit solely based on GHG emissions. The air permitting threshold must first be triggered for another pollutant. Then, if the PSD or Title V air permit is required for another pollutant, the regulatory agency may consider whether or not a significant increase has also occurred for GHG emissions, and only then require GHG emissions limits and GHG Best Available Control Technology (BACT). On April 10, 2015, the D.C. Circuit vacated the permitting requirement solely based on GHGs and directed USEPA to revise regulations as necessary to comply with these determinations (USEPA, 2015e).

4.3.2.2 State

The California Air Resources Board (CARB) is responsible for the coordination and administration of federal and state air pollution control programs in California. Various statewide initiatives have been enacted to reduce the state's contribution to GHG emissions and to develop climate change adaptation strategies. Regulations and programs relevant to the Proposed Project are discussed below.

Assembly Bill 1493 - Pavley

California Assembly Bill (AB) 1493, commonly referred to as Pavley, was adopted in 2002 and amended in 2009. The bill required CARB to develop and adopt regulations to reduce GHG emissions from model year 2009 and later passenger vehicles and light-duty trucks. CARB estimates that the regulation will reduce GHG emissions from passenger vehicles by 30 percent in 2016. In 2011, the U.S. Department of Transportation, USEPA, and California announced a single timeframe for proposing fuel and economy standards, thereby aligning the Pavley standards with the federal standards for passenger cars and light-duty trucks that were described above (CARB, 2013a).

California Executive Order S-03-05

On June 1, 2005, then California Governor Arnold Schwarzenegger signed Executive Order (EO) S-03-05. This EO established the following GHG emission reduction targets for California:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The order also requires the Secretary of the California Environmental Protection Agency (CalEPA) to report to the Governor and the State Legislature biannually on progress made toward meeting the GHG emission targets, commencing in January 2006. The Secretary of the CalEPA is also required to report impacts on water supply, public health, agriculture, the coastline, and forestry; mitigation and adaptation plans to combat these impacts must also be developed. According to CARB's latest *California GHG Emissions Inventory* (CARB, 2015a), total GHG emissions in California dropped below 2000 levels in 2009 and per capita emissions peaked in 2001. On April 29, 2015, Governor Jerry Brown added a target to reduce GHG emissions to 40 percent below 1990 levels by 2030 (EO B-30-15).

Assembly Bill 32 – California Global Warming Solutions Act of 2006

California AB 32, the Global Warming Solutions Act of 2006, codifies the state's GHG emissions targets by requiring the state's global warming emissions to be reduced to 1990 levels by 2020 and directs CARB to enforce the statewide cap that began to phase in during 2012 (CARB, 2014a). In 2007, CARB recommended and adopted the 1990 GHG emissions level and 2020 emissions limit of 427 $MMTCO_2e$ (CARB, 2015b). The limit is a statewide limit and does not require individual sectors or facilities to reduce emissions equally.

The Scoping Plan (CARB, 2008) provides a framework for the state's strategy to reduce GHG emissions to 1990 levels by 2020. This reduction goal means reducing GHG emissions by approximately 30 percent from business-as-usual emission levels projected for 2020 or approximately 15 percent from 2005 levels. The Scoping Plan recommends 39 measures that would achieve an emissions reduction of 174 $MMTCO_2e$/year, if fully implemented. The recommended measures cover nine sectors: 1) transportation, 2) electricity and natural gas, 3) green buildings, 4) water, 5) industry, 6) recycling and waste management, 7) forests, 8) high global warming potential gases, and 9) agriculture. Additionally, nine discrete early actions were adopted to reduce GHG emissions. Key features of the state's plan for reducing emissions include six main recommendations:

- Expand and strengthen existing energy efficiency programs as well as building and appliance standards;
- Achieve a statewide renewables energy mix of 33 percent;

- Develop a cap-and-trade program that links other partner programs to create a regional market system;
- Establish targets for transportation-related GHG emissions for regions throughout the state, and pursue policies and incentives to achieve those targets;
- Adopt and implement measures including California's clean car standards, goods movement measures, and the low carbon fuel standard; and
- Create targeted fees to fund the administrative costs of the state's long-term commitment to AB 32 implementation.

A draft update to the Scoping Plan was approved by CARB on May 22, 2014. The draft update presents the progress made so far and defines CARB's climate change priorities for the next five years. As part of the update, CARB revised the 2020 emissions goal to 431 $MMTCO_2e$ based on global warming potentials of GHGs found in IPCC's AR4. Also, the Pavley standards are now incorporated into the business as usual forecast. CARB has been proactive in its implementation of AB 32 and is on track to meet the 2020 goal (EO B-30-15).

California Executive Order S-1-07 – Low Carbon Fuel Standard

California EO S-01-07 established a statewide goal to reduce the carbon intensity of transportation fuels sold in California by at least ten percent from 2005 levels by 2020. The Low Carbon Fuel Standard (LCFS), a discrete early action item in the Scoping Plan, was approved by CARB in 2009, with amendments implemented on January 1, 2013. Each fuel provider may meet the standard by selling fuel with lower carbon content, using previously banked credits from selling fuel that exceeded the LCFS, or purchasing credit from other fuel providers who have earned credits (17 California Code of Regulations [CCR] Section 95480). By the end of February 2014, approximately 270 LCFS credit transactions were recorded, with credits generated primarily from ethanol (62 percent). New amendments to the LCFS have been proposed and are currently open to public comment. Re-adoption of the LCFS is anticipated to occur in 2015 (CARB, 2014b; CARB, 2015c).

Senate Bill 375 – Sustainable Communities and Climate Protection Act of 2008

Senate Bill (SB) 375, adopted on September 30, 2008, required CARB to develop regional GHG reduction targets from passenger vehicles. Targets for 2020 and 2035 were developed by CARB in 2010 for each area covered by a metropolitan planning organization (MPO). SB 375 requires the MPOs to prepare Sustainable Communities Strategies (SCS) as part of their Regional Transportation Plans (RTPs) to meet these GHG emission reduction targets (CARB, 2015d).

California Executive Order S-13-08

California EO S-13-08, signed in November 2008, tasked state agencies to develop California's first climate change adaptation strategy to identify and prepare for expected climate change impacts, including sea level rise, increased temperature, shifting precipitation, and extreme weather events. In response, the *2009 California Climate Adaptation Strategy* (CAS) report (California Natural Resources Agency [CNRA], 2009) was released; the report summarized the best known science on climate change impacts and outlined possible solutions to promote resiliency and reduce California's vulnerability to climate impacts.

The CAS included 12 recommendations that are largely geared towards state agencies, but have implications for project-level analyses. For example, the CAS recommends that the potential impacts of climate change be considered for all significant state projects, to the extent required by State CEQA Guidelines Section 15126.2, which relates to the consideration and discussion of significant environmental impacts. This CEQA section requires lead agencies to identify and focus on the significant environmental effects of the proposed project; to describe any significant impacts, including those that can be mitigated but not reduced to a level of insignificance; to evaluate significant irreversible environmental changes that would be caused by the proposed project; and to discuss growth-inducing impacts of the proposed project.

In 2010, the CNRA released the *First Year Progress Report* (CNRA, 2010) that describes California's progress towards completing the tasks outlined in the CAS. *Safeguarding California Plan* was developed in 2014 to update the CAS and to guide policy makers in implementing key actions to address climate risks. Strategies to implement cross-sector actions are presented in the 2014 plan (CNRA, 2014).

Senate Bills 97 & 743 - CEQA Guidelines

On March 18, 2010, the California Natural Resources Agency adopted amendments to the State CEQA Guidelines to include provisions for evaluating the significance of GHG emissions in response to SB 97. The amended guidelines give the lead agency leeway in determining whether GHG emissions should be evaluated quantitatively or qualitatively, but requires that the following factors be considered when assessing the significance of impacts from GHG emissions (Section 15064.4):

- The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting.
- Whether the project emissions exceed a threshold of significance that the lead agency determines apply to the project.
- The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

The 2010 amended State CEQA Guidelines (Section 15126.4[c]) also suggest measures to mitigate GHG emissions, including implementing project features to reduce emissions, obtaining carbon offsets, or sequestering GHG.

SB 743, adopted on September 27, 2013, encourages land use and transportation projects that reduce vehicle miles traveled (VMT) and resulting GHG emissions. SB 743 requires the Governor's Office of Planning and Research (OPR) to establish new criteria in the State CEQA Guidelines for determining the significance of transportation impacts and define alternative metrics for traffic level of service. The new criteria are still under review by OPR and updated State CEQA Guidelines have not been adopted. OPR released a preliminary discussion draft of updates to the State CEQA Guidelines implementing Senate Bill 743 on August 6, 2014 (OPR, 2014a). Based on comments received on the draft updates in 2014, OPR is developing a revised draft for further review and comment (OPR, 2014b; OPR, 2015a). On August 11, 2015, OPR released a preliminary discussion draft of a comprehensive update to the State CEQA Guidelines; this discussion draft does not encompass amendments to transportation impacts analysis pursuant to SB 743, but it does endorse a VMT standard for assessing transportation impacts (OPR, 2015b).

4.3.2.3 Regional and Local

The CARB divided California into regional air basins according to common topographic and meteorological features. The Proposed Project is located in the Los Angeles County subarea of the South Coast Air Basin (SoCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD is the regional agency responsible for air quality regulations and implementing strategies to improve air quality and to mitigate effects from new growth within the SoCAB.

The SCAQMD, Southern California Association of Government (SCAG), and the City of Los Angeles have adopted policies and plans to reduce GHG emissions from the region.

SCAQMD Policies

The SCAQMD adopted a *Policy on Global Warming and Stratospheric Ozone Depletion* on April 6, 1990. The 1990 Policy phased out the use of chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs). Following the 1990 Policy, SCAQMD conducted impact assessments and created regulations related to GHGs (SCAQMD, 2014).

Actions that the SCAQMD will take to help reduce GHG emissions are outlined in the *SCAQMD Climate Change Policy*, which was approved on September 5, 2008. Some of the actions involve supporting development of protocols, rules, and programs related to climate change, updating the SoCAB's GHG inventory, and sharing with other policy makers any knowledge related to, and educating the public about, climate change (SCAQMD, 2008a).

The 2011 *AQMD Air Quality-Related Energy Policy* promotes zero and near-zero emissions technologies to reduce criteria pollutant and GHG emissions from stationary and mobile sources. The Energy Policy summarizes energy use and associated air emissions in the SoCAB in 2008 and presents energy policies and actions to reduce energy consumption and associated air emissions in the SoCAB (SCAQMD, 2011).

SCAQMD CEQA Thresholds

The SCAQMD created a GHG Significance Threshold Working Group to assist in the development of GHG significance thresholds. The SCAQMD released draft guidance on interim CEQA thresholds for GHGs in October 2008, and a quantitative threshold for GHG emissions of 10,000 metric tons CO2e per year (MTCO2e/year) for industrial projects was approved on December 5, 2008 (SCAQMD, 2008b). The draft guidance included a recommended screening threshold for residential and commercial development of 3,000 MTCO2e/year, which was not adopted (SCAQMD, 2008c).

Regional Transportation Plan/Sustainable Communities Strategy

As noted above, SB 375 requires SCAG to develop a Sustainable Communities Strategy to reduce per capita GHG emissions. SCAG adopted the *2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)* on April 4, 2012, and subsequent amendments of project lists were approved on June 6, 2013 and September 11, 2014 (SCAG, 2015). The 2012-2035 RTP/SCS aims to reduce emissions from transportation sources to comply with SB 375 and meet the State's GHG emission reduction targets, improve public health, and reduce air emissions. The following goals are included in the 2012-2035 RTP/SCS:

- Align the plan investments and polices with improving regional economic development and competitiveness;
- Maximize mobility and accessibility for all people and goods in the region;
- Ensure travel safety and reliability for all people and goods in the region;
- Preserve and ensure a sustainable regional transportation system;
- Maximize the productivity of our transportation system;
- Protect the environment and health for our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking);
- Actively encourage and create incentives for energy efficiency, where possible;
- Encourage land use and growth patterns that facilitate transit and non-motorized transportation; and
- Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.

The current SCAG target, as established by CARB, is to reduce per capita emissions by 8 percent below 2005 levels by 2020 and 13 percent below 2005 levels by 2035. The 2012-2035 RTP/SCS achieves per capita GHG emission reductions relative to 2005 of 9 percent in 2020 and 16 percent in 2035 (SCAG, 2012a).

SCAG identified a range of strategies to meet these targets in four key areas:

- A Land Use growth pattern that accommodates the region's future employment and housing needs and protects sensitive habitat and natural resource areas;
- A Transportation Network that consists of public transit, highways, local streets, bikeways, and walkways;
- Transportation Demand Management (TDM) measures that reduce peak-period demand on the transportation network; and
- Transportation System Management (TSM) measures that maximize the efficiency of the transportation network.

SCAG also identified specific implementation strategies that local governments, SCAG, and other stakeholders may consider in order to successfully implement the SCS. The following transportation strategies are relevant to the Proposed Project (land use strategies are not identified below as the Proposed Project would not alter land uses in the project area):

Transportation Network Actions and Strategies

- Perform and support studies with the goal of identifying innovative transportation strategies that enhance mobility and air quality, and determine practical steps to pursue such strategies, while engaging local communities in planning efforts.

- Explore and implement innovative strategies and projects that enhance mobility and air quality, including those that increase the walkability of communities and accessibility to transit via non-auto modes, including walking, bicycling, and neighborhood electric vehicles (NEVs) or other alternative fueled vehicles.
- Collaborate with local jurisdictions to provide a network of local community circulators that serve new transit oriented development (TOD), HQTAs, and neighborhood commercial centers providing an incentive for residents and employees to make trips on transit.
- Develop first-mile/last-mile strategies on a local level to provide an incentive for making trips by transit, bicycling, walking, or NEV or other zero emission vehicle (ZEV) options.
- Work with transit properties and local jurisdictions to identify and remove barriers to maintaining on-time performance.
- Develop policies and prioritize funding for strategies and projects that enhance mobility and air quality.

Transportation Demand Management Actions and Strategies

- Develop a comprehensive regional active transportation network along with supportive tools and resources that can help jurisdictions plan and prioritize new active transportation projects in their cities.
- Encourage the implementation of a Complete Streets policy that meets the needs of all users of the streets, roads and highways – including bicyclists, children, persons with disabilities, motorists, NEV users, movers of commercial goods, pedestrians, users of public transportation and seniors – for safe and convenient travel in a manner that is suitable to the suburban and urban contexts within the region.
- Support work-based programs that encourage emission reduction strategies and incentivize active transportation commuting or ride-share modes.
- Emphasize active transportation and alternative fueled vehicle projects as part of complying with the Complete Streets Act (AB 1358).

Transportation System Management Actions and Strategies

- Collaborate with local jurisdictions and subregional COGs to continually update the intelligent transportation system (ITS) inventory.

Green LA Plan and Climate LA

In May 2007, the City of Los Angeles introduced *Green LA - An Action Plan to Lead the Nation in Fighting Global Warming* (City of Los Angeles, 2007). Green LA proposes to reduce the City's GHG emissions by 35 percent below 1990 levels, or 35.1 $MMTCO_2e$ per year, by 2030. The plan calls for an increase in the City's use of renewable energy to 35 percent by 2020 in combination with promoting water conservation, improving the transportation system, reducing waste generation, greening the ports and airports, creating more parks and open space, and greening the economic sector. Green LA identifies over 50 action items in various focus areas. Actions identified for transportation include:

- Complete the automated traffic signal synchronization and control system;
- Make transit information easily available, understandable, and translated into multiple languages;
- Promote walking and biking to work, within neighborhoods, and to large events and venues; and
- Expand the regional rail network.

In 2008, the City of Los Angeles published the *Climate LA - Municipal Program Implementing the Green LA Climate Action Plan* to provide a GHG inventory for the city and mechanisms to monitor and evaluate progress of the Green LA action items (City of Los Angeles, 2008).

Mobility Plan 2035

The City of Los Angeles updated the Transportation Element of the City's General Plan, now referred to as Mobility Plan 2035 or MP 2035, to reflect policies and programs that will lay the policy foundation for safe, accessible, and enjoyable streets for pedestrians, bicyclists, transit users, and vehicles throughout the City of Los Angeles, including the Westside (City of Los Angeles, 2015a). The MP 2035 and Final EIR were in November, 2015. MP 2035 is compliant with the 2008 Complete Streets Act (Assembly Bill 1358), which mandates that the circulation element of a city's General Plan be modified to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan.

One of the key policy initiatives of MP 2035 is to target greenhouse gas reductions through a more sustainable transportation system. The following goals, objectives, and policy topics from the MP2035 relate to this initiative and are applicable to the Proposed Project.

- Goal: **Clean Environments and Healthy Communities** focuses on topics related to environment, health, clean air, clean fuels and fleets, and open street events.
  - Objective: Decrease VMT per capita by 5% every five years, to 20% by 2035.
  - Objective: Meet a 9% per capita GHG reduction for 2020 and a 16% per capita reduction for 2035 (SCAG RTP).
  - Policy Topic 5.1: *Sustainable Transportation.* Encourage the development of a sustainable transportation system that promotes environmental and public health.
  - Policy Topic 5.2: *Vehicle Miles Traveled (VMT).* Support ways to reduce VMT per capita.

Plan for A Healthy Los Angeles (General Plan Health and Wellness Element)

The City of Los Angeles adopted the Plan for A Healthy Los Angeles, a Health and Wellness Element of the General Plan, in 2015 (City of Los Angeles, 2015b). The following goals, objectives, and policy topics from the Plan for a Healthy Los Angeles are applicable to the Proposed Project.

- Goal 5: **An Environment Where Life Thrives**
  - Objective: Decrease the respiratory disease mortality rate citywide by 20% and reduce the disparity between the City Council Districts with the highest and lowest respiratory disease mortality rates by at least 50%.
  - Objective: Decrease the rate of asthma-related emergency department (ED) visits among children citywide by 20% and reduce the disparity between the Community Plan Areas with the highest and lowest rates of ED by at least 50%.
  - Objective: Reduce the disparity in communities that are impacted by a high Pollution Exposure Score (exposure to six exposures indicators, including ozone concentrations, fine particulate matter (PM2.5) concentrations, diesel particulate matter (DPM) concentrations, pesticide use, toxic releases from facilities, and traffic density) so that every zip code has a score less than 1.7 (current citywide average).
  - Policy Topic 5.1: *Air pollution and respiratory health.* Reduce air pollution from stationary and mobile sources; protect human health and welfare and promote improved respiratory health.

4.3.3 Existing Setting

4.3.3.1 Global

GHGs – CO_2, CH_4, N_2O, sulfur hexafluoride, HFCs, and perfluorocarbons (PFCs) – are emitted from human activities and natural systems into the atmosphere and trap heat that would otherwise be released into space. Thermal radiation absorbed by the GHGs is re-radiated in all directions, including back toward the surface of the earth. This results in an increase of Earth's surface temperatures above what they would be without the presence of the GHGs, which are persistent and remain in the atmosphere for long periods of time. The long term and irrevocable shifts in weather, including temperature, precipitation and seasonal patterns are referred to as climate change.

Each GHG contributes to climate change differently, as expressed by its global warming potential (GWP). Combined GHG emissions are discussed in terms of CO_2e emissions, which is the amount of CO_2 that would have the same GWP over a specific timescale as the GHG mixture. CO_2e is determined by multiplying the mass of each GHG by its GWP. Currently, GWPs from the Intergovernmental Panel on Climate Change's (IPCC's) *Fourth Assessment Report* (AR4) (IPCC, 2007) are commonly used in inventories; CO_2e that are presented in this report are based on GWPs of 25 and 298 for CH_4 and N_2O, respectively.

Although many organizations have been studying global climate change and its impacts for decades, it was not until 2007 that a landmark report was published by the IPCC that moved global climate change into the mainstream. The IPCC finalized an updated report, *Fifth Assessment Report* (AR5), in 2014 with additional data and results of improved climate models since AR4 (IPCC, 2014). The AR5 concluded that global atmospheric concentrations of CO_2, N_2O, and CH_4 have reached an unprecedented level in the last 800,000 years. Atmospheric concentrations of CO_2, CH_4, and N_2O were 391 parts per million (ppm), 1,803 parts per billion (ppb), and 324 ppb, respectively, in 2011, substantially exceeding the natural ranges over the last 800,000 years that have been measured in ice core samples. This substantial increase is attributed to anthropogenic sources of GHGs, such as burning of fossil fuels and land use changes (e.g., deforestation) (IPCC, 2013; IPCC, 2014).

AR5 also stated that the observed increase in anthropogenic GHG emissions is extremely likely the source of observed increase in global average temperatures since the mid-20th century. In addition to rising temperatures, human activities very likely contributed to Arctic sea-ice loss, increase in upper ocean temperature, and global sea level rise during the latter half of the 20th century. It is virtually certain that there will be warmer and more frequent hot days and nights and very likely that heat waves will occur more frequently and last longer. Heavy precipitation events will very likely increase in frequency and intensity in many regions. The ocean is expected to warm and acidify, and an increase in global mean sea level will very likely occur at a faster pace in the 21st century (IPCC, 2013; IPCC, 2014).

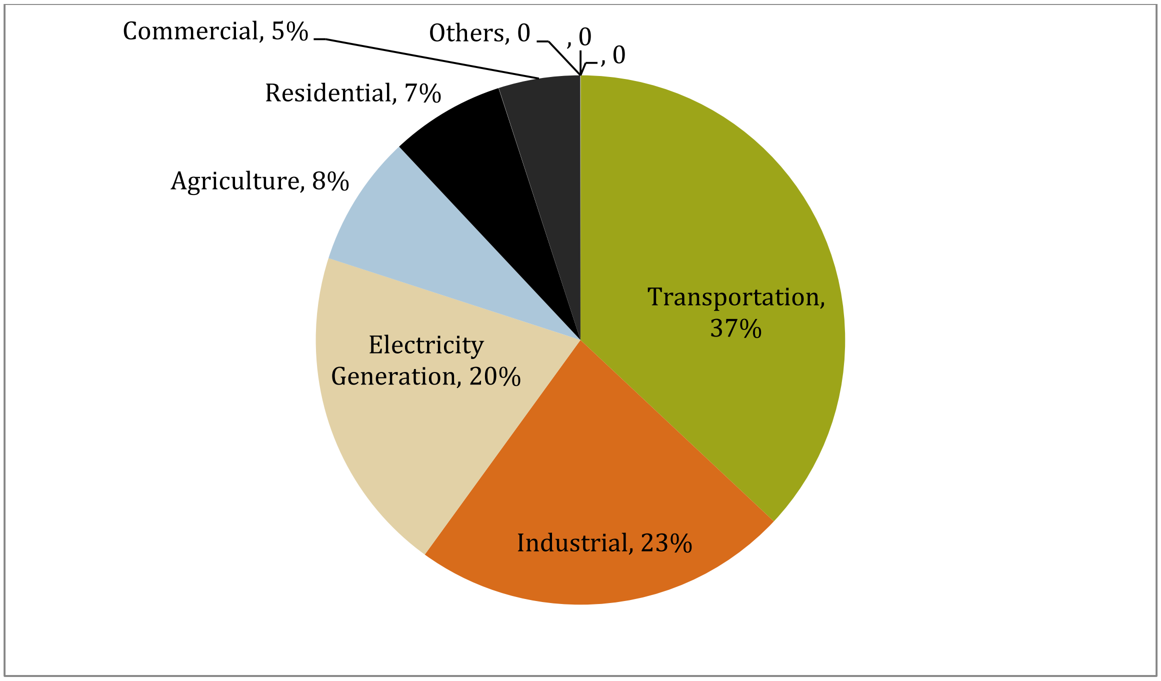
Climate change is anticipated to result in climate-related hazards, extinction of species, reduced food production, exacerbated health problems, slower economic growth, and displacement of people. Additional mitigation efforts to reduce GHG emissions, along with adaptation planning and implementation by all levels of government and individuals, are required to reduce the risk of climate change (IPCC, 2014).

4.3.3.2 National

In 2013, GHG emissions from the United States were approximately 6,673 $MMTCO_2e$. Increases in electricity generation, vehicles miles traveled, heating due to a cooler winter, and industrial production resulted in an increase of 2 percent from 2012 to 2013. Between 1990 and 2013, U.S. GHG emissions increased 5.9 percent, however, U.S. GHG emissions peaked in 2007. By GHG type, 2013 emissions in CO_2e were 82.5 percent CO_2, 9.5 percent CH_4, 5.3 percent N_2O, with the balance made up of the fluorinated GHGs. Fossil fuel combustion accounted for 93.7 percent of CO_2 emitted in 2013, of which electricity generation and transportation were the largest sources. Enteric fermentation, natural gas systems, and landfills were the three largest sources of CH_4. Approximately 74.2 percent of N_2O emissions were from agricultural soils (USEPA, 2015f).

4.3.3.3 State

Worldwide, California would be the 20th largest emitter of CO_2 if it were a country and 38th on a per capita basis, based on 2010 data (CARB, 2014c). California GHG emissions in 2013 (the last year inventoried) totaled approximately 459.3 $MMTCO_2$ (CARB, 2015e). As shown in **Figure 4.3-1,** transportation is responsible for 37 percent of the state's GHG emissions, followed by the industrial sector (23 percent), electricity generation (20 percent), agriculture (8 percent), residential (7 percent), commercial (5 percent), and other sources (less than 1 percent). Emissions of CO_2 (84 percent) are largely byproducts of fossil fuel combustion. Methane (9 percent) and N_2O (3 percent) results largely from off-gassing associated with agricultural practices. Fluorinated gases with high global warming potentials are approximately 4 percent of the total emitted GHGs.



Source: CARB, 2015e.

Figure 4.3-1 California 2013 GHG Emissions Inventory

4.3.3.4 Local

The current average daily VMT in the study area is 5,637,534 miles. The resulting annual emission of CO_2 from vehicles in the study area is estimated to be 1,034,529 metric tons.

4.3.4 Methodology

CARB's EMFAC2014 Mobile Source Emission Inventory Model was used to calculate regional emissions from motor vehicles in the study area. EMFAC2014 provides emission rates for various on-road vehicle types at different speeds within different counties in California. The default EMFAC2014 fleet mix for Los Angeles County was used to determine the county-wide emission factor for CO_2 (CARB, 2015f).

To calculate the daily per capita emissions, VMT in the study area by passenger vehicles and light trucks were assumed to be approximately 79 percent of the total study area VMT based on the default EMFAC fleet mix. The per capita emission rate for the 2012-2035 RTP/SCS was calculated assuming no implementation of the Pavley standards, therefore, EMFAC2011, a version of EMFAC prior to EMFAC2014 that outputs emission rates without Pavley standard implementation, was used (CARB, 2013b). Appendix D, *Air Quality/Greenhouse Gas Emissions*, includes detailed GHG emission calculations.

4.3.5 Thresholds of Significance

The significance criteria described below were developed consistent with the State CEQA Guidelines to determine the significance of potential impacts related to GHG that could result from implementation of the Proposed Project. Appendix G of the State CEQA Guidelines identifies the following two criteria when considering GHG impacts:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; and/or
- Conflict with an applicable plan, policy or regulation adopted for reducing the emissions of GHGs.

There are no widely-established or readily accepted thresholds of significance to determine whether a project would generate GHG emissions that may have a significant impact on the environment. The amendments to the State CEQA Guidelines that became effective in March 2010 do not identify a threshold of significance for GHG emissions but, instead, allow lead agencies to exercise discretion and make their own determinations of significance. The SCAQMD's approved quantitative threshold for GHG emissions (10,000 $MTCO_2e$/year) is applicable only for industrial facilities (2015). The City's L.A. CEQA Thresholds Guide (City of Los Angeles, 2006) was published prior to the amendments to the State CEQA Guidelines; there are no GHG significance thresholds in the City's Guide.

The City finds there is no applicable numeric threshold of significance for the Proposed Project and the City declines to adopt one based on the nature of the impact area. As the California Supreme Court recognized with approval in *Center for Biological Diversity v. California Department of Fish and Wildlife (DFW)* (2015):

> "[F]or a global environmental issue (such as climate change), utilizing an absolute number as a significance criterion equates to attempting to use CEQA to discourage population growth. Of note, the future residents and occupants of development [from project approval] would exist and live somewhere else if [a project] is not approved. Whether here or there," GHG emissions associated with population growth will occur.

Instead, of a numeric threshold, the Court reasoned that a lead agency relying on consistency with state and regional plans for reducing GHG's may serve as a better measure of significance:

> "…given that multiple agencies' efforts at framing greenhouse gas significance issues have not yet coalesced into any widely accepted set of numerical significance thresholds, but have produced "a certain level of consensus" on the value of A.B. 32 consistency as a criterion, [ ] we cannot conclude [a lead agency's] discretionary choice of A.B. 32 consistency as a significance criterion for this project violated Guidelines section 15064.4, subdivisions (b)(1) or (b)2).
>
> As noted by the Natural Resources Agency in its amicus curiae brief, "a discussion of a project's consistency with the State's long-term climate stabilization objectives . . . will often be appropriate . . . under CEQA," *provided the analysis is "tailored . . . specifically to a particular project"* (emphasis added). Indeed, to proceed in this manner is consistent with CEQA's "inherent recognition . . . that if a plan is in place to address a cumulative problem, a new project's incremental addition to the problem will not be 'cumulatively considerable' if it is consistent with the plan and is doing its fair share to achieve the plan's goals. (*Addressing the Significance of Greenhouse Gas Emissions, supra,* 4 Golden Gate U. Envtl. L.J. at pp. 210–211.)"

In outlining potential options that could be used to determine if GHG emissions from a given project are significant, the Court provided the following:

> "Second, a lead agency might assess consistency with A.B. 32's goal in whole or part by *looking to compliance with regulatory programs designed to reduce greenhouse gas emissions from particular activities* (emphasis added). (See Final Statement of Reasons, *supra*, at p. 64 [greenhouse gas emissions "may be best analyzed and mitigated at a programmatic level."].) To the extent a project's design features comply with or exceed the regulations outlined in the Scoping Plan and adopted by the Air Board or other state agencies, a lead agency could appropriately rely on their use as showing compliance with "performance based standards" adopted to fulfill "a statewide . . . plan for the reduction or mitigation of greenhouse gas emissions." (Guidelines, § 15064.4, subds. (a)(2), (b)(3); see also *id*., § 15064, subd. (h)(3) [determination that impact is not cumulatively considerable may rest on compliance with previously adopted plans or regulations, including "plans or regulations for the reduction of greenhouse gas emissions"].)
>
> In addition, CEQA expressly allows streamlining of transportation impacts analysis for certain land use projects based on metropolitan regional "sustainable communities strategies." Under follow-up legislation to A.B. 32 (Stats. 2008, ch. 728, p. 5065, commonly known as S.B. 375) each metropolitan planning organization in the state is to prepare a "sustainable communities strategy" or alternative plan to meet regional targets set by the Air Board for greenhouse gas emissions from cars and light trucks. (Gov. Code, § 65080, subd. (b)(2).) CEQA documents for certain residential, mixed use and transit priority projects that are consistent with the limits and policies specified in an applicable sustainable communities strategy need not additionally analyze greenhouse gas emissions from cars and light trucks. (§§ 21155.2, 21159.28; Guidelines, § 15183.5, subd. (c).)"

The Proposed Project is unlike traditional development projects that would represent a change in existing or future land uses or land use patterns, contribute to population and/or employment growth, or generate new vehicle trips. Instead, the Proposed Project is a transportation plan that would provide improved mobility and access to transportation options. The Proposed Project would not result in increased growth or land use activity and, therefore, would not directly result in GHG emissions. The Proposed Project is a plan that supports the land use plans in the project area and is intended to support mobility options and transportation facilities. Therefore, for the purpose of this analysis, GHG impacts would be considered significant if the project would:

- Exceed existing or Future without Project GHG emission levels;
- Impede attainment of SCAG's per capita GHG emission reduction targets as established in the 2012-2035 RTP/SCS; and/or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

These thresholds reflect the fact that the 2012-2035 RTP/SCS is the regional plan that was adopted for the purpose of reducing GHG emissions in the region consistent with AB 32 and subsequent legislation and state agency action to address climate change. Moreover, these thresholds are consistent with the State CEQA Guidelines relative to determining the significance of impacts from GHG.

4.3.6 Impacts and Mitigation Measures

The proposed update to the Transportation Impact Assessment (TIA) fee program and the administrative and minor revisions of the specific plans would not result in any physical impacts that could affect greenhouse gas emissions. Therefore, the following analysis addresses whether implementation of the proposed updates to the lists of transportation improvements in the CTCSP and WLA TIMP would result in significant impacts related to GHG. No specific construction projects would be implemented based on this EIR; rather, the transportation improvements are evaluated at a conceptual level of detail.

SCAQMD recommends that amortized GHG construction emissions (i.e., total construction emissions divided by the lifetime of the project, assumed to be 30 years) be added to operational emissions to evaluate significance. As a result, construction-related significance is not determined on an individual basis for GHG emissions; rather, the discussion below quantitatively evaluates the significance of the combined construction-related and operations-related GHG emissions associated with the Proposed Project.

Impact 4.3-1: Implementation of the Proposed Project would not exceed existing or Future without Project emission levels. This impact would be *less than significant*.

Construction

Construction of the proposed transportation improvements would result in temporary increases in GHG emissions. Implementation of these transportation improvement projects would be subject to available funding collected through the proposed TIA fee program, which would be dependent on the rate of development within the project area, as well as funding obtained from other sources; therefore, implementation schedules and specific design of these transportation improvement projects are not yet available.

The 2012-2035 RTP/SCS estimated that construction emissions in Los Angeles County would be approximately 0.2 percent of countywide GHG emissions in 2035 (SCAG, 2012a). These emissions include construction emissions from all development activity, not just transportation improvements. Project-related construction emissions would be associated with construction equipment, construction-related truck trips, and worker commute trips. Most of the proposed transportation improvements would not involve substantial construction activity (see Table 4.1-11 in Section 4.1, *Air Quality*) and would not require construction equipment with heavy duty engines. The higher intensity construction improvements, including the Lincoln Boulevard Bridge Enhancement, the Lincoln Boulevard and Sepulveda Boulevard Bus Rapid Transit (BRTs), and the I-10 Ramp Reconfiguration at Bundy Drive, would use heavy equipment on a temporary basis, which would generate GHG emissions for relatively short durations. However, these transportation improvements would not require substantial grading or excavation, which are activities that require heavy equipment and often use such equipment for extended periods. Moreover, the ongoing implementation of motor vehicle emission control and fuel mileage standards in new vehicles, along with the gradual transition to newer, cleaner, and more fuel efficient engines over time, would result in reduced GHG emissions per engine or vehicle by 2035. Construction-related emissions associated with the Proposed Project would be a small portion of total construction emissions estimated in the 2012-2035 RTP/SCS, which themselves are expected to represent only 0.2 percent of countywide GHG emissions in 2035.

As noted above, the amortized GHG construction emissions associated with the Proposed Project are combined with operational emissions to evaluate significance. The combined emissions analysis is provided below.

Operations

A change in vehicle operations in the study area as a result of project implementation may result in GHG emissions in the study area. The existing (2014) daily VMT in the study area, as described previously, is approximately 5.6 million. In 2035, without implementation of the Proposed Project (i.e., Future without Project), the daily VMT in the study area is anticipated to increase to 6.2 million, an increase of 9.6 percent over existing conditions. With implementation of the Proposed Project (i.e., Future with Project), daily VMT would increase to approximately 6 million, an increase of 5.9 percent over existing conditions, but a reduction of 3.4 percent compared to conditions in the future without the project. The emphasis of the proposed transportation improvements on alternative modes of transportation would result in a reduction in VMT per capita (which includes both project area residents and employees) of 4.4 percent compared to existing conditions and a reduction of 3.4 percent compared to future conditions without the project. Although the daily VMT in the study area would be higher in the future with or without the project, technological advances in vehicle emissions systems, projected turnover in the vehicle fleet, and future emission standards are expected to reduce the vehicle emission rates of CO_2. GHG emissions from operations, as combined with emissions from construction, are evaluated below.

Combined Construction and Operations GHG Emissions

Annual GHG emissions from operations in the project area are based on projected daily VMT. These emissions were combined with construction-related emissions to determine total project-related GHG emissions. Normally, amortized construction-related emissions would be added to operational emissions to calculate total project-related emissions. However, the Proposed Project includes a large number of transportation improvements, and the details of many of these improvements have not yet been determined. As a result, there is no methodology for calculating amortized construction-related emissions for all of the proposed improvements at this time. Assumptions have been made regarding the four most significant construction projects—the Lincoln Boulevard Bridge Enhancement, the Lincoln Boulevard and Sepulveda Boulevard BRTs, and the I-10 Ramp Reconfiguration at Bundy Drive—to allow construction-related emissions to be estimated. In order to account for GHG emissions from the other transportation improvements, the unamortized emissions from these four projects have been used in the combined emissions summary, instead of amortized emissions. This provides a conservatively high value for construction-related GHG emissions, which accounts for the emissions associated with the other transportation improvements. These total combined GHG emissions are presented in **Table 4.3-2**.

Table 4.3-2 GHG Emissions Summary

Activity	Existing Conditions (2014)	Future without Project	Compared to Existing	Significant?	Future with Project	Compared to Existing	Significant?	Compared to Future without Project
Operational GHG Emissions, MT/yr	1,463,748	974,627			958,914			
Construction GHG Emissions, MT/yr [1]	0	0			6,392			
Total GHG Emissions, MT/yr (as CO_2e) [2]	**1,463,748**	**974,627**	**-489,121**	**No**	**965,306**	**-498,442**	**No**	**-9,321**

Source: CDM Smith, 2015.

Notes:

1. Construction emissions shown represent total estimated GHG emissions from the Lincoln Boulevard Bridge Enhancement, the Lincoln Boulevard and Sepulveda Boulevard BRTs, and the I-10 Ramp Reconfiguration at Bundy Drive elements **before** amortization. Since these elements represent the Westside elements with the highest GHG emissions, using this total for project-related construction emissions (instead of using the much lower amortized emissions) accounts for the other transportation improvement projects. Even using the unamortized emissions, combined construction and operational emissions associated with the Future with Project would be lower than existing conditions and would be less than significant.
2. CO_2e emissions were estimated by multiplying CO_2 emissions by 1.009, based on CO_2, CH_4, and N_2O factors from The Climate Registry for gasoline and diesel fuels (The Climate Registry, 2015).

As noted above, although the daily VMT in the study area would be higher in the future with or without the project, technological advances in vehicle emissions systems, projected turnover in the vehicle fleet, and future emission standards are expected to reduce the vehicle emission rates of CO_2. As a result, regional GHG emissions with implementation of the Proposed Project would be almost 500,000 metric tons (MT) lower than existing conditions, a reduction of 34 percent, and almost 10,000 MT lower than Future without Project conditions, a reduction of approximately 1 percent. Therefore, impacts related to GHG emissions associated with Proposed Project construction and operations would be ***less than significant***.

Mitigation Measures

No mitigation measures are required.

Significance of Impacts After Mitigation

Impacts from the Proposed Project related to GHG emissions would be ***less than significant.***

Impact 4.3-2: Implementation of the Proposed Project would not impede attainment of SCAG's per capita GHG emission reduction targets as established in the 2012-2035 RTP/SCS. This impact would be *less than significant*.

In accordance with the 2008 Scoping Plan and SB 375, the 2012-2035 RTP/SCS aims to meet the GHG per capita emission reduction targets for the region established by CARB. As identified in Section 4.3.2.3, SCAG identified a range of implementation strategies to meet these targets, including strategies pertaining to transportation. With implementation of the strategies in the 2012-2035 RTP/SCS, the region will exceed the 2020 and 2035 targets established by CARB. Implementation strategies that apply to the Proposed Project are identified in Section 4.3.2.3 and consist of three transportation-related components. The Transportation Network Actions and Strategies identify steps to enhance mobility and improve air quality by increasing non-automobile modes of travel and improving the efficiency of these alternative travel modes. The applicable Transportation Demand Management Actions and Strategies focus on developing programs and physical infrastructure to support the use of alternative travel modes, and the relevant component of the Transportation System Management Actions and Strategies would increase the efficiency of the vehicular circulation network through upgrades to the ITS inventory. The Proposed Project would enable the implementation of these strategies throughout the Westside. The proposed updates to the lists of transportation improvements in the CTCSP and WLA TIMP incorporate a wide range of transportation improvements, including enhanced transit service, bicycle facilities, and pedestrian accommodations to promote multi-modal transportation in the project area; roadway projects to improve intersections, safety, and traffic flow; installation of automated traffic surveillance and control systems and cameras; and trip reduction programs. These transportation improvements reflect the SCAG strategies that are identified for implementation by local jurisdictions and would result in the intended outcome of encouraging the use of alternative modes of transportation, thereby minimizing the increase in vehicle travel in the region and reducing per capita GHG emissions. Although the total VMT in the study area would increase due to regional growth, the Proposed Project is anticipated to reduce the study area VMT as compared to the Future without Project conditions. The proposed transportation improvements would increase mobility options, increase access to alternative modes of transportation, and reduce future transportation emissions; therefore, these improvements would advance the goals of the 2012-2035 RTP/SCS.

The regional CO_2 emission reduction targets in the 2012-2035 RTP/SCS equate to per capita emissions of approximately 20.5 pounds per day in 2035 (SCAG, 2012a). In order to determine the Project's consistency with the 2012-2035 RTP/SCS targets and with SB 375, daily per capita emissions associated with the Proposed Project were estimated (see **Table 4.3-3**). As shown in the table, the per capita CO_2 emissions with and without the Proposed Project were estimated to be 8.6 and 8.7 pounds per day, respectively, both of which are less than the SCAG projection of 20.5 pounds per day. Therefore, the Proposed Project would meet the goals of the 2012-2035 RTP/SCS and SB 375.

Table 4.3-3 SB 375 Consistency Analysis

	RTP/SCS (2035)[1]	Future without Project (2035)[2,3]	Future with Project (2035)[2,3]
Geographic Boundary	Region	Study Area	Study Area
Population	21,773,000	737,700	737,700
CO_2 Emissions (1,000 pounds per day)	445,800	6,404	6,276
Per Capita Emissions (pounds per day)	20.5	8.7	8.6
Significant Impact?	-	No	No

Source: SCAG, 2012b; CDM Smith, 2015.

Notes:
1. RTP/SCS values are for the entire SCAG region.
2. Because the RTP/SCS calculations did not include implementation of the Pavley standards, future emissions with and without the Proposed Project were calculated using EMFAC2011's CO2 emission rates without Pavley reductions. Emissions include engine running exhaust, startup, and idling.
3. Cars/light truck percentage in the study area was assumed to be approximately 79% based on the default fleet mix in EMFAC2014.

As discussed above, implementation of the Proposed Project would advance the goals of the RTP/SCS throughout the Westside and would contribute to the region's attainment of CARB's per capita GHG emission reduction targets. Therefore, the Proposed Project would not impede attainment of SCAG's per capita GHG emission reduction targets as established in the 2012-2035 RTP/SCS and, thus, the impact would be ***less than significant.***

Mitigation Measures

No mitigation measures are required.

Significance of Impacts After Mitigation

Impacts from the Proposed Project related to attainment of SCAG's per capita GHG emission reduction targets would be ***less than significant***.

Impact 4.3-3: Implementation of the Proposed Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs. This impact would be *less than significant*.

The 2012-2035 RTP/SCS, Mobility Plan 2035, and Green LA Plan are regional and local plans adopted for the purpose of reducing emissions of GHGs. These plans aim to minimize impacts, including to GHG emissions, as a result of growth in the region while supporting regional mobility. Potential transportation improvements related to the Proposed Project include enhancing transit service, bicycle facilities, and pedestrian accommodations to promote multi-modal transportation in the project area; roadway projects to improve intersections, safety, and traffic flow; installation of automated traffic surveillance and control systems and cameras; and trip reduction programs. The improvement projects are intended to encourage the use of alternative modes of transportation and to minimize the increase in vehicle travel in the region.

As noted in Impact 4.3-2 above, the Proposed Project would advance the goals of the 2012-2035 RTP/SCS with respect to achieving GHG emission reduction targets by implementing transportation-related strategies incorporated into the plan. Similarly, the Proposed Project would implement components of MP 2035 in the Westside, and would be consistent with MP 2035's sustainable transportation policy, which would result in a decrease in VMT and related GHG emissions. In addition, the Proposed Project would achieve actions identified in the Green LA Plan, such as improving the ITS system, promoting pedestrian and bicycle modes, and expanding transit.

Although the total VMT in the study area would increase due to regional growth, the Proposed Project is anticipated to reduce the study area VMT as compared to the Future without Project conditions. The proposed transportation improvements would increase mobility options, increase access to alternative modes of transportation, and reduce future transportation emissions; therefore, these improvements would be aligned with the 2012-2035 RTP/SCS, Mobility Plan 2035, Green LA Plan, and the Plan for a Healthy Los Angeles. Finally, a comparison of these plans to the Proposed Project demonstrates no conflict between the goals and anticipated improvements associated with the Proposed Project and the goals, policies, targets, regulations, and requirements of the 2012-2035 RTP/SCS, Mobility Plan 2035, Green LA Plan, and the Plan for a Healthy Los Angeles.

As discussed above, implementation of the Proposed Project would not conflict with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions and, thus, the impact would be ***less than significant.***

Mitigation Measures

No mitigation measures are required.

Significance of Impacts After Mitigation

Impacts from the Proposed Project related to conflicts with applicable plans to reduce GHG emissions would be ***less than significant***.

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Section 4.4
Land Use and Planning

This section describes current land use and planning in the project area and analyzes potential land use and planning impacts stemming from the Proposed Project. A discussion is included based on an analysis of the potential economic impacts of an update to the Transportation Impact Assessment (TIA) fee programs in the Coastal Transportation Corridor Specific Plan (CTCSP) and West Los Angeles Transportation Improvement and Mitigation Specific Plan (WLA TIMP) areas conducted by Economic & Planning Systems as part of the TIA Fee Program Study for the CTCSP and WLA TIMP Specific Plans Amendment Project (hereafter referred to as the TIA Fee Program Study), which was prepared by Fehr and Peers in October 2015 and is included as Appendix B of this EIR.

4.4.1 Introduction

This section provides an overview of existing land uses in the CTCSP and WLA TIMP project area as well as the policies and plans that govern land use and planning in the project area, specifically those policies and plans adopted for the purpose of avoiding or mitigating an environmental effect. The compatibility of the Proposed Project with surrounding land uses, and the Proposed Project's concurrence with land use plans and policies is analyzed, potential impacts are described, and, where necessary, mitigation measures are recommended.

The section is organized as follows:

- **Regulatory Framework** provides an overview of state, regional, and local laws and guidelines relative to land use and planning, including the land use and planning goals, objectives, and policies applicable to the project area.
- **Existing Setting** provides a summary and overview of land use conditions in the project area.
- **Methodology** describes the approach used for analyzing the significance of potential impacts to land use and planning from implementation of the Proposed Project.
- **Thresholds of Significance** lists the thresholds used in identifying significant impacts as defined in Appendix G of the State CEQA Guidelines and the L.A. CEQA Thresholds Guide.
- **Impacts and Mitigation Measures** discusses the effects of implementation of the Proposed Project on existing land uses and the Proposed Project's consistency with relevant and applicable plan goals and policies adopted for the purpose of avoiding or mitigating an environmental effect. Mitigation measures are identified as necessary and feasible to reduce significant impacts. The **Significance of Impacts After Mitigation** discussion identifies residual impacts after application of mitigation measures.

4.4.2 Regulatory Framework

4.4.2.1 Federal

There are no federal plans, policies, or regulations related to land use and planning that apply to the Proposed Project for the purpose of determining land use and planning impacts.

4.4.2.2 State

State California Complete Streets Act

In 2008, the California Department of Transportation (Caltrans) enacted the California Complete Streets Act (Assembly Bill [AB] 1358). The legislation requires cities to identify how they will provide for the routine accommodation of all users of the roadway, including motorists, pedestrians, bicyclists, individuals with disabilities, seniors, and users of public transportation. This legislation requires that the legislative body of a city or county, upon any substantive revision of the circulation element of the general plan, modify the circulation element to the plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways for safe and convenient travel in a manner that is suitable to the rural, suburban, or urban context of the general plan and, in doing so, to consider how appropriate accommodation varies depending on its transportation and land use context. Users of streets, roads, and highways have been defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation.

California Coastal Act

In 1972 in California, the Coastal Zone Conservation Act (Proposition 20) was approved, which prohibited development 1,000 yards inland from California's mean high tide line (MHTL) without a permit from a regional or state coastal commission. By 1976, a statewide plan for coastal protection was developed, leading to the passage of the California Coastal Act (Coastal Act) (Public Resource Code [PRC] Section 30000 et seq.).

The Coastal Act was enacted to establish policies and guidelines that provide direction for the conservation and development of the California coastline. With the creation of the California Coastal Commission, the Coastal Act created a state and local government partnership to ensure that public concerns regarding coastal development are addressed. The California Coastal Commission is charged with protecting regional, state, and national interests in assuring the maintenance of the long-term productivity and economic vitality of coastal resources necessary for the well-being of the people of the state; avoiding long-term costs to the public and a diminished quality of life resulting from the misuse of coastal resources; and providing continued state coastal planning and management through the state coastal commission (PRC Section 30004).

The Coastal Act requires all cities and counties along the California coast to prepare a local coastal program (LCP) for the portion of their jurisdiction that falls within the coastal zone. The LCP must reflect the coastal issues and concerns of its specific area, and be consistent with the overall statewide goals, objectives, and policies of the Coastal Act. An LCP typically consists of a land use plan and an implementation plan (coastal zoning ordinance). The land use plan provides the general kinds, locations, and intensity of land uses; the applicable resource protection and development policies; and, where necessary, a listing of implementing actions. The implementation plan consists of the zoning ordinances and zoning district maps to implement the land use plan.

Following the certification of an LCP, regulatory responsibility is delegated to the local jurisdiction, although the California Coastal Commission (CCC) retains jurisdiction (i.e., permit authority) over the immediate shoreline (e.g., submerged lands, tidelands, and public trust lands) (Section 30519(b) of the Coastal Act). The CCC has appellate authority over development approved by local governments in specified geographic areas and for major public works projects and major energy facilities. In authorizing Coastal Development Permits (CDPs), the local government must make the finding that the development conforms to the certified LCP.

Local actions on applications for Coastal Act authority to conduct certain types of development and development within certain geographic areas may be appealed to the CCC. Appeal jurisdiction is retained, for example, on lands within 100 feet of streams or wetlands; lands subject to the public trust that are no longer within the Commission's retained jurisdiction; lands within 300 feet of coastal bluffs, beaches, or estuaries; and lands between the sea and the first public road paralleling the sea.

In the City of Los Angeles, there are currently no fully certified LCPs. The majority of the Venice Community Plan area is in the Venice Coastal Zone. The Venice LCP is described in more detail in Section 4.4.2.4 below. **Figure 4.4-1** shows the coastal zone boundaries in the project area, the location of the Venice LCP area, and the key components of the CTCSP and WLA TIMP proposed lists of transportation improvements that would extend into the coastal zone.

Senate Bill 743

Two other laws, the Sustainable Communities and Climate Protection Act of 2008 (Senate Bill [SB] 375) and the Global Warming Solutions Act of 2006 (AB 32), form the backdrop to SB 743. Through the enactment of the Sustainable Communities and Climate Protection Act of 2008, California signaled its commitment to encourage land use and transportation planning decisions and investments that reduce vehicle miles traveled and contribute to the reduction of GHG emissions. As described above, the California Complete Streets Act also prioritizes integrated transportation decision making with its focus on planning for balanced, multimodal transportation networks that meet the needs of all users.

A key provision of SB 743 is the elimination of the measurement of auto delay, including Level of Service, as a metric used for measuring traffic impacts in transit priority areas.[22] The statute provides that, upon certification and adoption of the revised CEQA Guidelines by the Secretary of the Natural Resources Agency, "automobile delay, as described solely by level of service (LOS) or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment" pursuant to CEQA. In other words, LOS generally shall not be used as a significance threshold under CEQA. The purpose of this is to establish criteria for determining the significance of transportation impacts of projects within transit priority areas that promote the "…reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." It also allows the Office of Planning and Research (OPR) to develop alternative metrics outside of transit priority areas. Potential metrics could include, but are not limited to, vehicle miles traveled, vehicle miles traveled per capita, or automobile trip generation rates. The alternative criteria and metrics have not yet been adopted by OPR. For additional discussion of SB 743, see Section 4.6, *Transportation.*

4.4.2.3 Regional

South California Association of Governments

Regional Transportation Plan/Sustainable Communities Strategy

The Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) presents the transportation and overall land use vision for Los Angeles, Orange, San Bernardino, Imperial, Riverside, and Ventura Counties

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22 A "transit priority area" is defined in as an area within one-half mile of an existing or planned major transit stop. A "major transit stop" is defined in Section 21064.3 of the California Public Resources Code as a rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

(SCAG, 2012). The RTP portion of the 2012-2035 RTP/SCS identifies priorities for transportation planning within the Southern California region, sets goals and policies, and identifies performance measures for transportation improvements to ensure that future projects are consistent with other planning goals for the area. The SCS portion of the 2012-2035 RTP/SCS presents an overall land use concept for the region with increasing focus on densification of urban areas and development around transit stations, as well as increased focus on use of transit and active transportation. The goals of the 2012-2035 RTP/SCS are identified in **Table 4.4-1** below.

Table 4.4-1 SCAG 2012-2035 RTP/SCS Regional Goals

RTC/SCS Goals
Align the plan investments and policies with improving regional economic development and competitiveness
Maximize mobility and accessibility for all people and goods in the region
Ensure travel safety and reliability for all people and goods in the region
Preserve and ensure a sustainable regional transportation system
Maximize the productivity of our transportation system
Protect the environment and health of our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking)
Actively encourage and create incentives for energy efficiency, where possible
Encourage land use and growth patterns that facilitate transit and non-motorized transportation
Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies

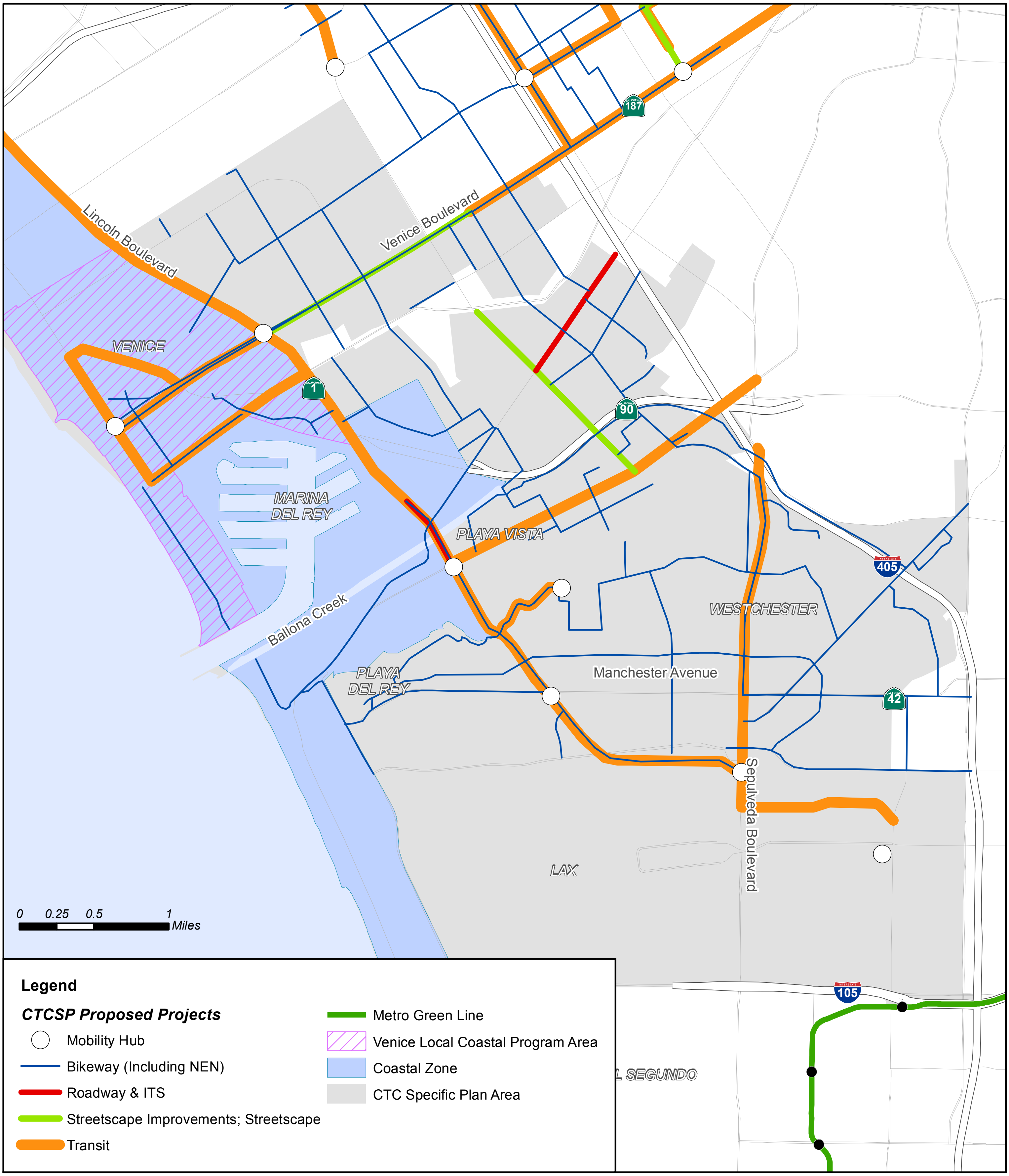
Source: SCAG, 2012.

4.4.2.4 Local

City of Los Angeles General Plan Framework Element

The General Plan Framework Element, one of the ten elements of the General Plan for the City of Los Angeles, was adopted in 1996 (and readopted in 2001; City of Los Angeles, 2001a). It is a discretionary element of the General Plan which looks to the future. The Framework Element establishes the broad overall policy and direction for the entire General Plan and provides the long-range strategy to guide the comprehensive update of the General Plan's other elements -- including the Community Plans which collectively comprise the Land Use Element. The Framework Element also provides guidance for the preparation of related General Plan implementation measures including Specific Plans, ordinances, or programs, including the Capital Improvements Program.

While all adopted General Plan elements have equal status and no element may be made subordinate to another, the Framework Element is a special purpose element which serves as the General Plan's "umbrella document." The Framework Element sets forth a conceptual relationship between land use and transportation on a citywide basis whereby lower density neighborhoods are preserved and new density, if it occurs, is directed to areas served by adequate transportation infrastructure. This element provides the vision necessary to bring cohesion to the City's overall General Plan and the direction by which the citywide elements and the community plans shall be comprehensively updated in harmony with that vision. It establishes the standards, goals, policies, objectives, programs, terms, definitions, and direction to guide these updates.



Source: California Coastal Commission, 2003

Figure 4.4-1
Coastal Zone in the CTCSP Area

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The Framework Element describes a vision for transportation in the City that is fully integrated, multimodal, provides multiple travel choices, and increases accessibility. As described in the Framework Element, this transportation vision can only be achieved through a comprehensive strategy of physical and operational improvements and behavioral changes that reduce the number and length of trips generated. The Framework Element points to rail and bus improvement, transportation system management, trip reduction, and mode shift strategies to fulfill its transportation vision. It envisions that greater choice and accessibility, made possible by new, multi-modal facilities and services as well as improved access to key transportation facilities, will enhance the many economic resources of the City, improve the environments where people live and work, and support greater equity.

City of Los Angeles Mobility Plan

In August 2015, the City adopted a revised Transportation Element of the City's General Plan, referred to as Mobility Plan 2035 or MP 2035 (City of Los Angeles, 2015a). The revised element reflects updated policies and programs that renew the policy foundation for safe, accessible, and enjoyable streets for pedestrians, bicyclists, transit users, and vehicles throughout the City, including the Westside. MP 2035 is in compliance with the 2008 Complete Streets Act (AB 1358), which mandates that the circulation element of a city's general plan must plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan. MP 2035 is also consistent with SB 743.

MP 2035 includes the following overall five goals that define the City's mobility priorities:

- **Safety First:** focuses on topics related to crashes, speed, protection, security, safety, education, and enforcement.
- **World Class Infrastructure:** focuses on topics related to the Complete Streets Network (walking, bicycling, transit, vehicles, green streets, goods movement), Great Streets, Bridges, Street Design Manual, and demand management.
- **Access for all Angelenos:** focuses on topics related to affordability, least cost transportation, land use, operations, reliability, demand management, and community connections.
- **Collaboration, Communication & Informed Choices:** focuses on topics related to real-time information, open source data, transparency, monitoring, reporting, emergency response, departmental and agency cooperation and data base management.
- **Clean Environment and Healthy Communities:** focuses on topics related to environment, health, clean air, clean fuels and fleets, and open street events

To address these multimodal priorities, MP 2035 includes pedestrian, neighborhood, bicycle, transit, and vehicle enhancements to improve mobility and create a more pedestrian friendly atmosphere throughout the City. These improvements include enhanced connections throughout the City through the establishment of networks and districts where specific multi-modal transportation enhancement projects are planned to take place:

- **Pedestrian Enhanced Districts:** Areas where pedestrian improvements will be made. Pedestrian enhancements include way-finding, street trees, pedestrian-scaled street lighting, and enhanced crosswalks at all legs of the intersection, automatic pedestrian signals, reduced crossing lengths, wider sidewalks, and specialty paving and seating areas where special maintenance funding exists.

- **Neighborhood Enhanced Network:** Areas that provide a network of slow, locally serving streets that connect communities to schools, retail, parks and open space, health care and employment opportunities. Streets on the Neighborhood Enhanced Network are typically local and/or collector streets with one lane in each direction that are enhanced with street calming techniques that can include, but are not limited to: bump outs, round-a-bouts, ample sidewalks, and street trees. Neighborhood Enhanced Network streets are intended to provide a safe and convenient place to walk, roll, skate, scooter, bike, and stroll. Some streets (or street segments) on the Neighborhood Enhanced Network may already provide a quality pedestrian and bicycle experience and will require little, if any, improvements. Others may require the addition of a signalized crosswalk to assist non-motorized users to cross a fast moving arterial street.

- **Transit Enhanced Network:** The purpose of the Transit Enhanced Network is to improve existing and future bus service on a select group of arterial streets by prioritizing improvements for transit riders relative to improvements for other roadway users. The aim of transit-enhanced streets is to provide reliable and frequent transit service that is convenient and safe, increase transit mode share, reduce single-occupancy vehicle trips, and integrate transit infrastructure investments with the identity of the surrounding street. The transit technology will primarily be high-capacity buses. Bus service will be improved with infrastructure improvements in the right-of-way, signal timing and technology improvements, and stop enhancements.

- **Bicycle Enhanced Network:** The intent of the Bicycle Enhanced Network is to provide safe, convenient, and comfortable local and regional bicycle facilities for people of all types and abilities. The Bicycle Enhanced Network is comprised of a low-stress network of bikeways, including protected bicycle lanes and bicycle paths that will provide additional separation or protection from mixed traffic. The key linkages of streets will receive treatments beyond a striped bicycle lane or shared lane marking, including buffered lanes, cycle tracks, and intersection enhancements. Planned improvements will support a greater mode shift from vehicles to bicycles throughout the City and will complement all uses, allowing short (and longer) trips to be made via bicycle on a safe and fully connected network throughout the City and to adjacent jurisdictions with their own bicycle paths.

- **Vehicle Enhanced Network:** The Vehicle Enhanced Network recognizes the need to accommodate regional traffic to and from freeways on City streets. The Vehicle Enhanced Network identifies corridors that will remain critical to vehicular circulation and to balance regional and local circulation needs. The overall intent of the Vehicle Enhanced Network is to provide streets that prioritize vehicular movement and offer safe, consistent travel speeds and reliable travel times. Enhancements include investments in intelligent transportation systems, access management and consolidation, parking restrictions and removal, improved signal timing, and turning restrictions.

City of Los Angeles Community Plans

The City of Los Angeles General Plan includes 35 community plans that collectively comprise the Land Use Element of the General Plan. The project area is made of the Los Angeles International Airport (LAX) Plan and all or a portion of the following community plans: Westchester-Playa Del Rey, Palms-

Mar Vista-Del Rey, Venice, West Los Angeles, Westwood, and Brentwood-Pacific Palisades. The community plan areas are shown in **Figure 4.4-2** and **Figure 4.4-3**. The Community Plans depict a range of allowable land uses, which are unique to the City's many communities. The Community Plans are intended to promote an arrangement of land uses, streets, and services which encourage and contribute to the economic, social, and physical health, and enhance the safety, welfare, and convenience, of the people who live and work in the City of Los Angeles.

Each of the plans includes aspirational goals, objectives, and policies related to improving the character and quality of life within the community. Among these are goals, objectives, and policies that specifically address transportation. Within the context of the Los Angeles City General Plan, a goal is a direction setter; it is an ideal future condition related to public health, safety or general welfare toward which planning implementation is measured. An objective is a specific end that is an achievable intermediate step toward achieving a goal. A policy is a statement that guides decision making, based on the plan's goals and objectives (City of Los Angeles, 2001a). The specific objectives and policies within each of the Community Plans in the CTCSP and WLA TIMP planning area may vary to some extent as they may be tailored to address the unique needs of each community. However, aside from the LAX Plan which has aviation specific goals, the Community Plans in the study area share common transportation goals. These common Community Plan transportation goals include increasing multimodal transportation opportunities; reducing vehicle trips and traffic congestion; creating safe, efficient and attractive bicycle, pedestrian, and roadway networks; and providing a circulation system that supports existing and planned land uses. As described in further detail above, the City recently adopted an updated Transportation Element to the General Plan (MP 2035). MP 2035 reflects the City's updated transportation goals, objectives, and policies. Individual Community Plan transportation objectives and policies will be updated to reflect the City's latest strategies for achieving mobility goals (see Appendix H, *Updated Community Plan Text*).

City of Los Angeles Specific Plans

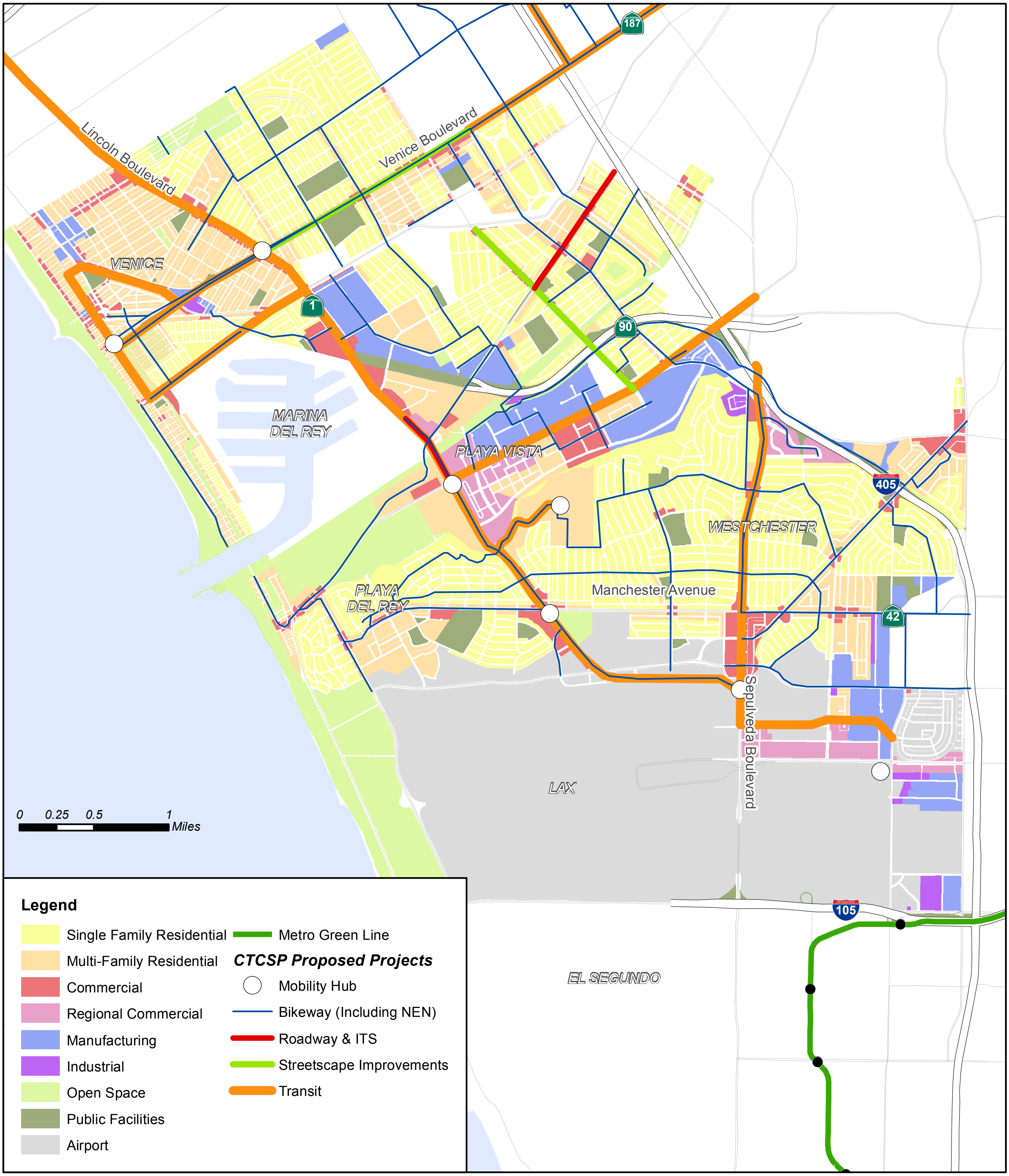
The project area encompasses numerous Specific Plan boundaries. Specific Plans are established to provide additional regulatory controls and general procedures and policies for development in specific geographical areas. Some of the Specific Plans listed below are focused on land use and zoning issues, such as density and land use restrictions, and others establish guidelines and policies related development and land planning, which may include policies related to street design and engineering, transportation demand management, and parking.

Following a brief description of the Specific Plans within the project area:

- **LAX Plan Area**
  - ***Los Angeles Airport/El Segundo Dunes Specific Plan:*** This plan relates to the protection of the Dunes Habitat Preserve (City of Los Angeles, 1992a).
  - ***LAX Specific Plan:*** This plan provides regulatory controls and procedures for the development of infrastructure at LAX consistent with the LAX Plan, including airside and landside land uses, transportation, and parking within the airport boundaries (City of Los Angeles, 2005).
  - ***LAX Northside Plan Update:*** This plan area covers approximately 340 acres just north of LAX. The plan consists of the LAX Northside Design Guidelines and Standards as well as a Tract Map and is intended to create a vibrant, sustainable center of employment, retail,

restaurant, office, hotel, research and development, higher education, civic, airport support, recreation, and buffer uses that support the needs of surrounding communities and Los Angeles World Airports, the City of Los Angeles department that manages LAX. The plan enables the development of up to 2,320,000 square feet of new development and would permit areas for recreation, open space, and buffer space. Although it is not a Specific Plan, the Design Guidelines and Standards establish regulations governing future development occurring within the LAX Northside sub-area of the LAX Specific Plan area (City of Los Angeles, 2015b).

- **Westchester-Playa Del Rey Community Plan Area**
  - ***Playa Vista Area B Specific Plan:*** This plan identifies land use regulations for the Playa Vista Area B area (City of Los Angeles, 1985a). The purpose of plan includes establishing a Local Coastal Program for the area within the coastal zone, protecting and enhancing the coastal zone environment, and assuring that maximum public access to the coast and public recreation area is provided. The plan includes standards aimed at facilitating the safe, efficient flow of traffic. Development within this area is required to comply with the provisions of the CTCSP.
  - ***Playa Vista Area D Specific Plan:*** This plan identifies land use regulations for the Playa Vista Area D area (City of Los Angeles, 1985b). The purpose of the plan is to designate standards to regulate land uses, density, building heights, architectural and landscape treatment, signs, and vehicular and pedestrian circulation. Development within this area is required to comply with the provisions of the CTCSP.
  - ***Coastal Bluffs Specific Plan:*** This plan is aimed at protecting, maintaining, enhancing and, where feasible, restoring the quality of the coastal environment, and assuring that maximum public access to the coast and public recreation area is provided (City of Los Angeles, 1994).
  - ***Los Angeles Airport/El Segundo Dunes Specific Plan:*** This plan is described above under the LAX Plan Area.
- **Palms-Mar Vista-Del Rey Community Plan Area**
  - ***Glencoe/Maxella Specific Plan:*** This Specific Plan was adopted to guide future development, protect industrial land uses, and protect adjacent residential neighborhoods from development within the area (City of Los Angeles, 1993). The plan specifies transportation improvements if a development threshold is met at a property fronting Glencoe Avenue, Maxella Avenue between Glencoe and Redwood Avenues, Redwood Avenue, Beach Avenue or Del Rey Avenue. Development within this Specific Plan area is required to comply with the provisions of the CTCSP.
  - ***Playa Vista Area C Specific Plan:*** This plan identifies land use regulations for the Playa Vista Area C area (City of Los Angeles, 1985c). The purpose of the plan includes establishing a Local Coastal Program for the area within the coastal zone, protecting and enhancing the coastal zone environment, and assuring that maximum public access to the coast and public recreation area is provided. The plan also includes standards aimed at facilitating the safe and efficient flow of traffic. Development within this area is required to comply with the provisions of the CTCSP.



Source: City of Los Angeles Department of City Planning, 2015

Figure 4.4-2
Existing Land Use in the CTCSP Area

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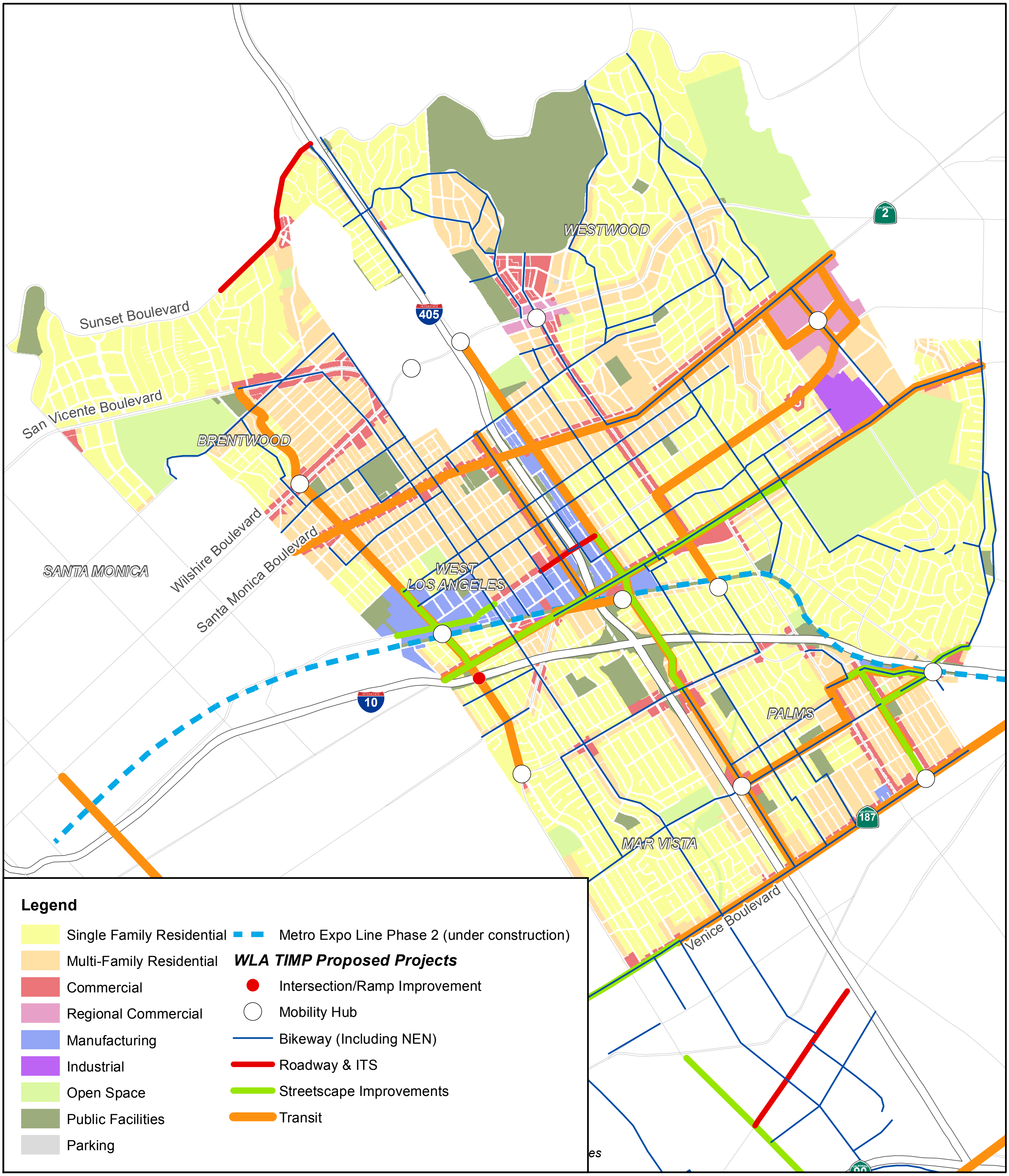

Source: City of Los Angeles Department of City Planning, 2015

Figure 4.4-3
Existing Land Use in the WLA TIMP Area

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- **Venice Community Plan Area**
  - ***Oxford Triangle Specific Plan:*** This plan was established and adopted to guide development within the Oxford Triangle area and encourage mixed-use development that creates a lively urban environment (City of Los Angeles, 1987). The plan includes transportation and traffic standards, including limits on vehicular access from buildings or structures on Lincoln Boulevard. Development within this Specific Plan area is required to comply with the provisions of the CTCSP.
  - ***Glencoe/Maxella Specific Plan:*** This plan is described above under the Palms-Mar Vista-Del Rey Community Plan area.
- **West Los Angeles Community Plan Area**
  - ***Century City South Specific Plan:*** This plan establishes regulations for the development of land within the Specific Plan area, including providing street capacity adequate for the intensity and design of development by establishing general procedures for the phasing of development within the Specific Plan area (City of Los Angeles, 1981a). There are requirements for trip cap monitoring and travel demand management (TDM) when a specified development threshold is met for certain developments within the Specific Plan area.
  - ***Century City North Specific Plan:*** This plan establishes standards and regulations for the development of the Specific Plan area, including providing street capacity adequate for the intensity and design of development by establishing phases for construction within the Specific Plan Area and providing for installation of a continuous Pedestrian Corridor, consisting of pedestrian walkways and crossings (City of Los Angeles, 1981b).
  - ***Sepulveda Corridor Specific Plan:*** This plan establishes regulations for the development of land within the Specific Plan area, including redevelopment that supports street improvements, and the provision of adequate off-street parking and freight loading facilities (City of Los Angeles, 1992b).
- **Westwood Community Plan Area**
  - ***Westwood Village Specific Plan:*** This plan establishes standards and regulations for the mixed use development of the Westwood Village (City of Los Angeles, 1989). Provisions include encouraging streetscape improvements and additional public parking, encouraging non-automobile access by facilitating pedestrian and shuttle access, providing sufficient parking, developing programs to encourage carpooling, and providing off-street parking spaces for bicycles.
  - ***Westwood Community Design Review Board:*** This specific plan establishes the Westwood Community Design Review Board (City of Los Angeles, 1988a).
  - ***Westwood Community Multi-Family Specific Plan:*** This specific plan establishes development and design standards for multiple-family residential development in specified portions of the Westwood Community Plan Area (City of Los Angeles, 1988b).

- ***North Westwood Village Specific Plan:*** This plan guides development within the North Westwood Village Specific Plan Area to ensure development takes place in accordance with the Westwood Community Plan (City of Los Angeles, 1999a). Regulations in the Specific Plan pertain to building massing and design as well as architectural character and environmental setting (City of Los Angeles, 1988c). The plan also provides the guidelines and processes for the review and approval of the design of buildings proposed for construction within the area.

- ***Wilshire-Westwood Scenic Corridor Specific Plan:*** This plan establishes development standards aimed at minimizing traffic and parking problems along Wilshire Boulevard, enhancing the aesthetic qualities of the Specific Plan area, encouraging more open space, reducing the impact of high-density residential development, and reducing the impact of shadows caused by high-rise buildings (City of Los Angeles, 1981c).

- **Brentwood-Pacific Palisades Community Plan Area**

  - ***San Vicente Scenic Corridor Specific Plan:*** This plan establishes design and development standards to maintain the existing character of San Vicente Boulevard, including preserving and enhancing the landscaped median strip, and assuring that commercial signage along the boulevard appropriately scaled and placed so as not to dominate the existing streetscape (City of Los Angeles, 1980).

Venice Local Coastal Program

The California Coastal Act of 1976 directs local governments within the coastal zone to prepare LCPs for those areas located in the State's designated Coastal Zone. A majority of the Venice Community Plan is in the State's Coastal Zone. However, a Local Coastal Program has not yet been certified for the Venice Coastal Zone. Figure 4.4-1 shows the location and extent of the Venice Coastal Zone. The area is generally bounded by Marine Street on the north; the City-County boundary, Washington Boulevard and Via Marina on the south; Lincoln Boulevard and Via Dolce on the east; and the Pacific Ocean on the west. A certified LCP consists of the City's land use plans, zoning ordinances and maps, and the other implementing actions which implement the provisions and policies the California Coastal Act. An LCP contains the Land Use Plan (LUP) and a Local Implementation Plan (LIP). The LUP includes the kinds, locations, and intensity of land uses; the applicable resources protection and development policies; and a listing of implementing actions. The LIP is comprised of a Specific Plan, related implementing ordinances, and a zoning map. The LIP implements the LUP with specific zoning designations and development standards for all uses within the Venice Coastal Zone (City of Los Angeles, 2001b).

Westwood/Pico Neighborhood Overlay District

The Westwood/Pico Neighborhood Overlay District was established by Ordinance No. 171,859. The District was established to regulate portions of Westwood Boulevard, Pico Boulevard, and Overland Avenue, which have a variety of commercial uses and activities. Portions of these streets are occupied with structures of a similar size and with architectural details such as the location of windows, building walls, and pedestrian entrances which, if preserved and enhanced, would encourage people in the surrounding neighborhoods to walk and shop along these streets.

The following pedestrian-oriented streets have been identified as part of the Westwood/Pico Neighborhood Oriented District: Westwood Boulevard (both sides of Westwood Boulevard between Missouri Avenue and the alley northerly of Pico Boulevard); Pico Boulevard (the north side of Pico Boulevard between Bentley Avenue and Patricia Avenue; and the south side of Pico Boulevard between Military Avenue and Patricia Avenue); and Overland Avenue (the east side of Overland Avenue between Blythe Avenue and the alley south of Pico Boulevard).

City of Los Angeles Great Streets Initiative

Mayor Eric Garcetti enacted the Great Streets Initiative in October 2013 to activate public spaces, provide economic revitalization, increase public safety, enhance local culture, and support neighborhoods (City of Los Angeles, 2015c). The Great Street projects will add bike racks, medians, plazas, sidewalk repairs, bus stops, pocket parks, crosswalks, and other improvements aimed at attracting pedestrians and new businesses.

Two segments of the Great Streets Initiative are located in the project area: Venice Boulevard between Beethoven Street and Inglewood Boulevard, and Westwood Boulevard between Le Conte Avenue and Wilshire Boulevard (City of Los Angeles, 2015c).

- **Venice Boulevard between Beethoven Street and Inglewood Boulevard:** Great Streets will enhance the community's infrastructure and help create an even more accessible pedestrian and bicycle environment.
- **Westwood Boulevard between Le Conte Avenue and Wilshire Boulevard:** Great Streets will partner with the Westwood Village Improvement Association and other community partners to support efforts to maximize community access, reduce commercial vacancies, and improve parking management in Westwood Village.

4.4.3 Existing Setting

The project area is in the western portion of the City of Los Angeles (the "Westside") and encompasses the CTCSP area and the WLA TIMP area. The CTCSP area includes all or parts of the Westchester-Playa Del Rey, Palms-Mar Vista-Del Rey, and Venice community plan areas and the LAX) Plan area. The CTCSP area is generally bounded by the City of Santa Monica on the north, Imperial Highway on the south, the San Diego Freeway (I-405) on the east, and the Pacific Ocean on the west. The WLA TIMP area includes all or parts of the Westwood, West Los Angeles, Brentwood-Pacific Palisades, and the Palms-Mar Vista-Del Rey community plan areas, and is generally bounded by the City of Beverly Hills/Beverwil Drive/Castle Heights Avenue/National Boulevard/Hughes Avenue on the east; Sunset Boulevard on the north; the City of Santa Monica and Centinela Avenue on the west; and Venice Boulevard on the south.

Figure 4.4-2 and Figure 4.4-3 show the general types of land uses in the CTCSP and WLA TIMP project areas, the location of Community Plan areas, and the location of key components of the proposed transportation improvements for each of the Specific Plan areas.

As shown in the figures, the project area is an urban area that is built out with a variety of land uses, including residential, commercial, and industrial uses, with some areas of open space/public parks. The most prevalent land use within the project area (as measured by percent of land area consumed) is low-density residential (single-family development), representing approximately 35 percent of total land area, concentrated primarily in the Brentwood-Pacific Palisades, Palms-Mar Vista, and Westchester-Playa del Rey areas.

The project area has a larger percentage of high-density (multi-family development) residential than urban Los Angeles County (14 percent versus approximately 10 percent), with high-density housing clusters in Playa Vista, Venice, Palms, West Los Angeles, and Westwood areas.

Commercial uses are also prevalent (14 percent compared to 7 percent for Urban Los Angeles County), with areas of concentration within the project area in Westchester, Playa Vista, and Westwood.

Below is a description of the types of land uses by Community Plan area. The locations of the Community Plan areas are shown in Figure 3-1 in Chapter 3, *Project Description*.

4.4.3.1 Los Angeles International Airport

The LAX Plan area is located in the southwest portion of the CTCSP area (City of Los Angeles, 2004a). It is generally bounded by Imperial Highway/ Interstate 105 (I-105) on the south; Vista Del Mar on the west; Westchester Parkway on the north; and La Cienega Boulevard on the east. Pershing Drive runs in a north-south direction along the western part of the plan area. The land east of Pershing Drive is identified in the LAX Plan as Airport use, with the exception of a small portion of land designed as the Belford Special Study Area (City of Los Angeles, 2013a).[23] A generalized land use map for the LAX area identifies the airport as Industrial; the area that is a Special Study Area on the LAX Plan map (i.e., east of Airport Boulevard between Westchester Parkway and 96th Street) has a designation of Residential Multi Family and Commercial (City of Los Angeles, 2013a). A small area along I-105 from Sepulveda Boulevard to Aviation Boulevard is designated as Public Facilities.

4.4.3.2 Westchester-Playa Del Rey

Westchester-Playa Del Rey comprises a majority of the CTCSP area, stretching west to east from the coast to I-405 (City of Los Angeles, 2004b). The majority of the Community Plan lies to the north of LAX; however, the Community Plan Area also includes the non-airport land to the west, east, and south of LAX. This area is bounded Jefferson Boulevard/Centinela Avenue on the north, LAX and Imperial Highway on the south, the Pacific Ocean on the west, and La Cienega Boulevard, LAX, and the City of Inglewood on the east. The westernmost portion of the plan area is comprised of Open Space (i.e., LAX/El Segundo Dunes). From Culver Boulevard inland to near Osage Avenue, the land use is a mixture of single family residential, multi-family residential, commercial, and open space. The majority of land from Lincoln Boulevard east to La Tijera Boulevard is single family residential. In the north along Jefferson Boulevard, and in the east along Century Boulevard, there is a majority of commercial and industrial land uses (City of Los Angeles, 2013b).

4.4.3.3 Palms-Mar Vista-Del Rey

The Palms-Mar Vista-Del Rey plan area makes up part of both the CTCSP area and the WLA TIMP area. The southern part of the Palms-Mar Vista-Del Rey plan area makes up part of the central portion of the CTCSP area (north of Marina Del Rey) and the northern part of the Palms-Mar Vista-Del Rey plan area comprises the southern part of the WLA TIMP area (stretching south to north from approximately Venice Boulevard to Pico Boulevard and west to east from Walgrove Avenue to Clarington Avenue). The majority of land use throughout this plan area is single family residential. Areas of multi-family residential and commercial are located in the northeast, west, and southwest. Open space and public facilities uses are located throughout the plan area. Industrial uses are fairly centralized in the south/southwest (City of Los Angeles, 2007).

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23 The LAX Plan Special Study Area is an airport acquisition area; most of the former land uses have been demolished.

4.4.3.4 Venice

The entire Venice Community Plan Area is within the CTCSP area. Venice spans west to east from the coast to approximately Walgrove Avenue and north to south from just north of Rose Avenue to Via Marina and the entrance to Marina Del Rey. The majority of land use in Venice from north of Rose Avenue to Via Marina is multi-family residential. Areas of open space are located along the coast, near Main Street and Abbot Kinney Boulevard, south of Venice Boulevard near Walgrove Avenue, and along Rose Avenue to the north and south of Penmar Avenue. Commercial uses are clustered around Lincoln Boulevard, Abbot Kinney Boulevard, Washington Boulevard, Pacific Avenue, Main Street, and Rose Avenue between 4th Avenue and Lincoln Boulevard (City of Los Angeles, 2001b).

4.4.3.5 West Los Angeles

Similar to Venice, almost the entire West Los Angeles Community Plan Area is encompassed within the WLA TIMP area (City of Los Angeles, 1999b). Land uses in the north and northeast are largely multi-family residential, commercial, public facilities, and industrial. The western side of the area is largely single family residential with some areas of commercial and multi-family residential along Pico Boulevard and National Boulevard. Additionally, Hillcrest Country Club and Cheviot Hills Park are located south of Pico Boulevard between Patricia Avenue on the west and Roxbury Drive on the north (City of Los Angeles, 2013c).

4.4.3.6 Westwood

The Westwood Community Plan Area comprises the northeastern section of the WLA TIMP area. The main land uses in the north, central, and eastern parts of the Community Plan Area are single family residential, public facilities, and open space. Areas of multi-family residential are located along the western and southern boundaries of the plan area along Sepulveda and Santa Monica Boulevards, respectively. The main commercial areas are located along Westwood Boulevard, along Wilshire Boulevard between Sepulveda Boulevard and Glendon Avenue, and in Westwood Village (City of Los Angeles, 2010).

4.4.3.7 Brentwood-Pacific Palisades

The southeastern part of the Brentwood-Pacific Palisades Community Plan Area comprises the northwestern corner of the WLA TIMP area (City of Los Angeles, 1998). Land use in this area is a mixture of single family residential throughout the northern and central portions, and open space, commercial, and multi-family residential in the western and southern portions (City of Los Angeles, 2006a).

4.4.4 Methodology

The land use and planning analysis identifies existing land uses generally in the vicinity of the proposed transportation improvements, and describes applicable land use plans and policies. This analysis fulfills the requirements of State CEQA Guidelines Section 15125(d) that an EIR discuss any inconsistencies between a proposed project and applicable general plans and regional plans, specifically plans and policies adopted for the purpose of avoiding or mitigating an environmental effect. The analysis also describes the potential for changes in land use to occur as a result of the Proposed Project.

4.4.4.1 Methodology for Determining Consistency with Applicable Plans, Policies and Regulations

The Proposed Project is considered consistent with the provisions of the identified regional and local plans if it meets the general intent of the applicable land use plans. The focus of this analysis is on plans, and policies within those plans, adopted for the purpose of avoiding or mitigating an environmental effect. A given project need not be in perfect conformity with each and every policy, nor does state law require precise conformity of a proposed project with every policy or land use designation for a site.[24] A project's inconsistency with a policy is only considered significant if such inconsistency would cause significant physical environmental impacts (as defined by State CEQA Guidelines Section 15382). Under this approach, a policy conflict is not, in and of itself, considered to be a significant environmental impact. An inconsistency between a proposed project and an applicable plan is a policy determination that may or may not indicate the likelihood of environmental impact.

Land use goals, policies, and development standards that apply to the CTCSP area and WLA TIMP area were analyzed with respect to the proposed amendments to the lists of transportation improvements to determine consistency. As stated above, the emphasis of this analysis is on plan consistency and potential conflicts between the Proposed Project and existing land use plans, policies, and regulations adopted to avoid or mitigate environmental effects. The consistency analysis was prepared in compliance with State CEQA Guidelines Section 15125(d). Neither CEQA nor the State CEQA Guidelines set forth standards for determining when a project is inconsistent with an applicable plan; rather, the final determination that a project is consistent or inconsistent with an applicable plan is made by the Lead Agency when it acts on a project.

Courts have recognized that general and specific plans attempt to balance a range of competing interests. It follows that it is nearly, if not absolutely, impossible for a project to be in perfect conformity with each and every policy set forth in the applicable plan. If the Proposed Project is determined to be inconsistent with specific individual objectives or policies of an applicable plan, but is largely consistent with the land use or the other goals and policies of that plan and would not preclude the attainment of the primary intent of the land use plan, the project is not considered to be inconsistent with the plan. Furthermore, any such inconsistency would also have to result in a physical change in the environment, not analyzed in the other resource chapters of this EIR, to result in a significant environmental impact. The analyses below provide an overview of the relevant policies and development standards from various federal, state, regional, and local policy and planning documents applicable to the project area.

4.4.4.2 Indirect Effects

The Proposed Project itself would not involve any construction or changes in land use and would not result in direct impacts to land use and planning. However, the analysis addresses whether the Proposed Project's TIA fees updates or list of transportation improvements could result in indirect changes in land use by altering the types of land uses that are developed within the project area. An example of such an indirect change in land use could be the encouragement of more affordable housing than would occur without the project.

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24 San Francisco Tomorrow et al. v. City and County of San Francisco (2015) 229 Cal.App.4th 498; Sierra Club v. County of Napa (2004) 121 Cal.App.4th 1490; San Franciscans Upholding the Downtown Specific Plan v. City & County of San Francisco (2002) 102 Cal.App.4th 656; Sequoyah Hills Homeowners Assn. V. City of Oakland (1993) 23 Cal.App.4th 704, 719.

Indirect Effects on Land Use and Development Associated with Updated TIA Fees

To determine the appropriate updates to the TIA fees, a TIA Fee Program Study was conducted. The purpose of the study was to establish the relationship, referred to as the "nexus," between new development expected to occur and the need for new and expanded major public transportation facilities. In support of the TIA Fee Program Study, an analysis of the potential economic impacts of the proposed updates to the TIA fee programs in the CTCSP and WLA TIMP areas was conducted by Economic & Planning Systems. (The complete analysis is appended to Appendix B of this EIR, as Appendix E.) The purpose of the economic impact analysis was to evaluate the feasibility of the proposed TIA fee updates in the context of new residential and mixed-use development (mixed residential, retail, and office uses) and to ascertain whether the proposed fee updates would alter land use patterns in the Specific Plan areas. The analysis was based on models that simulated the financial performance of a variety of real estate development prototypes under a range of TIA fee levels and credit structures.[25] The analysis provided the City with a logical approach to understanding the potential impacts to development and land use as a result of the proposed TIA fees.

Indirect Effects Associated with Modifications to the Lists of Transportation Improvements

As stated in the introduction to Chapter 4, *Environmental Impacts,* the Proposed Project would not provide entitlements for any of the proposed transportation improvements. However, implementation of the Proposed Project would result in the collection of TIA fees that would be used to fund these proposed improvements. The Proposed Project's list of transportation improvements does not itself have a direct effect on land use. However, the indirect effects of the Proposed Project on land use and planning that may be realized when the proposed transportation improvements are implemented are evaluated in Section 4.4.6, *Impacts and Mitigation Measures*. An example of an indirect effect from the Proposed Project's list of transportation improvements could be induced growth.

4.4.5 Thresholds of Significance

State CEQA Thresholds

In accordance with Appendix G of the State CEQA Guidelines, the Proposed Project would have a significant impact related to land use and planning if it would:

- Physically divide an established community; and/or
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

In addition to the above two thresholds, the State includes a third threshold related to land use planning. This third threshold states that the Proposed Project would have a significant impact related to land use and planning if it would "conflict with any applicable habitat conservation plan or natural community conservation plan." As discussed in the Notice of Preparation, provided in Appendix C, *Notice of Preparation/Scoping*, any potential tree removal/replacement would occur in accordance

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25 The existing TIA program includes fees on commercial and industrial uses but does not currently include fees on residential uses. Generally, the strong real-estate market on the Westside has supported continued development over time under the current fee program. Therefore, evaluation of the feasibility of TIA fees in the context of stand-alone land uses that are currently (and would continue to be) subject to fees was not conducted; the economic impact analysis focuses on residential and residential mixed-use development prototypes.

with the Los Angeles Municipal Code, including the tree ordinance, and the recommendations of the Department of Public Works' Urban Forestry Division of the Bureau of Street Services, and thus no conflict with local policies or ordinances protecting biological resources would occur. Further, there are no County Habitat Conservation Plans (HCP) or Natural Community Conservation Plans (NCCP) within the project area. Therefore, impacts related to conflicts with a habitat conservation plan or natural community conservation plan do not require any further analysis are not addressed herein.

City of Los Angeles CEQA Thresholds

The City of Los Angeles CEQA Thresholds Guide describes that determinations of significance for the above mentioned state thresholds should be considered in relation to land use compatibility and consistency impacts. Section H of the Thresholds Guide states that these determinations are made on a case-by-case basis (City of Los Angeles, 2006b). This is done due to the fact that the significance of land use impacts is often specific to site conditions and project operations. The following factors are to be used in the evaluation of land use and planning impacts related to the Proposed Project.

The determination of significance related to proposed land use changes and their compatibility with existing land uses is based on the following criteria:

- The extent of the area that would be impacted, the nature and degree of impacts, and the type of land uses within that area;
- The extent to which existing neighborhoods, communities, or land uses would be disrupted, divided or isolated, and the duration of the disruptions; and,
- The number, degree, and type of secondary impacts to surrounding land uses that could result from implementation of the proposed project.

The determination of significance related to land use consistency is based on the following criteria:

- Whether the proposal is inconsistent with the adopted land use/density designation in the Community Plan, redevelopment plan or specific plan for the site; and,
- Whether the proposal is inconsistent with the General Plan or adopted environmental goals or policies contained in other applicable plans.

4.4.6 Impacts and Mitigation Measures

The following analysis focuses on whether implementation of the proposed updates to the TIA fees or the proposed updates to the lists of transportation improvements in the CTCSP and WLA TIMP would result in significant impacts to land use and planning. No specific construction projects would be implemented based on this EIR; rather, impacts associated with the transportation improvements are addressed at a program level of detail.

Impact 4.4-1: Implementation of the Proposed Project would not physically divide an established community. This would be a *less than significant* impact.

According to the State and City CEQA Guidelines, the Proposed Project may be considered incompatible with surrounding land uses if it has the potential to disrupt the physical layout of an established community. One way that this disruption could occur is through the construction and/or development of:

- A land use type that is incompatible with existing or proposed adjacent land uses (due to size, intensity, density, or type of use); or,
- Features such as a highway, aboveground infrastructure, or an easement through an established neighborhood community that could cause a permanent disruption in the physical arrangement of that established community or otherwise isolate an existing land use.

Construction

The Proposed Project does not involve any specifically planned construction. Therefore, there would be no direct impacts to land use related to construction from the Proposed Project.

The Proposed Project would indirectly lead to construction of projects on the proposed lists of transportation improvements. The majority of the construction activities would take place within existing roadways, sidewalks, and right-of-ways and would not result in removal or alteration of the uses on adjacent property. The exception is the Lincoln Boulevard Bridge Enhancement, which would include widening of Lincoln Boulevard north and south of the bridge and the reconfiguration of the Lincoln Boulevard/Culver Boulevard interchange, and the I-10 off-ramps at Bundy Drive. The improvements associated with these two projects would occur directly adjacent to, but technically outside of, existing right-of-ways. Construction-related land use impacts, such as construction staging and temporary right-of-way encroachments, generally would not be considered significant due to their temporary nature and limited duration. Short-term indirect impacts of the Proposed Project related to construction of the proposed transportation improvements would include temporary access disruptions to adjacent land uses. This could include disruption to residences, businesses, and other retail uses that are located within the Proposed Project area. Impacts and disruptions to access during construction would be temporary and would cease once construction is completed. Construction resulting from the proposed transportation improvements would occur within or adjacent to existing transportation right-of-ways and would not isolate communities, or alter the existing land use conditions in the community. Thus, construction impacts from the Proposed Project would not divide a community or affect land use compatibility and impacts would be ***less than significant***.

Operation

Indirect Effects Associated with Updated TIA Fees

The Proposed Project would not result in any changes in General Plan land designations or zoning classifications. Future development that occurs within the project area would be required to comply with applicable land use planning policies and regulations, including allowable land uses and development standards. Proposed amendments to the TIA fee assessment and methodology include changes to the Affordable Housing Credit. Currently, only the CTCSP provides in-lieu credit for the provision of affordable housing units. The proposed amendments offer opportunities for affordable housing in-lieu credit in the CTCSP *and* WLA TIMP areas. Affordable housing is currently exempt from TIA fees in the existing CTCSP and WLA TIMP. The proposed amendments maintain this exemption.

As noted in Section 4.4.4, *Methodology*, an economic analysis was conducted to evaluate the feasibility of the proposed TIA fee updates and to ascertain whether the proposed fee updates would alter land use patterns in the Specific Plan areas. The analysis focused on residential and residential mixed-use development prototypes, as these are the land use types that would be newly subjected to fees under the Proposed Project.[26] The economic impact analysis found that, given the overall magnitude of development costs, the proposed TIA fees would be unlikely to materially affect market dynamics or deter feasible development from taking place in the CTCSP and WLA TIMP. The analysis concluded that the feasibility of development in the project area is principally affected by factors other than TIA fees, such as tenure, location, affordable housing component, or density bonus incentives. These factors, which would not be affected by the Proposed Project, have a larger impact on the feasibility of new developments and the amount of investor return, and are critical in determining what development will occur. Moreover, the analysis found that the proposed Specific Plan amendments relating to affordable housing credits would be supported by the market. The economic analysis concluded that, in general, the TIA fees represent such a small portion of overall development cost that TIA fees on new development along with TIA fee credits are not expected to change the broader fundamental economics of new development. Therefore, the Proposed Project would not foreseeably affect the type of land uses within the study area.

In summary, implementation of the proposed updates to the TIA fees would not alter future land use patterns. The proposed TIA fee updates would not materially affect the feasibility of development in the CTCSP and WLA TIMP areas, nor would it adversely affect development of affordable housing. Therefore, the proposed updates to the TIA fee program would not result in any direct or indirect physical impacts associated with the alteration of land use development patterns that could result in significant impacts associated with land use and planning, including changes that would physically divide an established community. As such, impacts associated with the proposed updates to the TIA fees would be **less than significant**.

Indirect Effects Associated with Modifications to the Lists of Transportation Improvements

Implementation of the Proposed Project would result in revisions to the lists of transportation improvements that would be funded, in part, by the TIA fees collected in each Specific Plan area. The majority of the proposed transportation improvements are associated with existing roadways and transportation corridors and would operate within existing roadways, sidewalks, and right-of-ways. The exception is the Lincoln Boulevard Bridge Enhancement, which would include widening of Lincoln Boulevard north and south of the bridge and the reconfiguration of the Lincoln Boulevard/Culver Boulevard interchange, and the I-10 off-ramps at Bundy Drive. The improvements associated with these two projects would occur directly adjacent to, but technically outside of, existing right-of-ways. No new roadways or transportation corridors are proposed that would divide or isolate existing neighborhoods or communities. The proposed transportation improvements would not establish new land uses. Operation of the proposed transportation improvements would be compatible with surrounding commercial, office, residential, and institutional uses and would improve safety, access, and alternative modes of transportation in the surrounding area. Specifically, the new transportation improvements would improve mobility and implement bicycle and pedestrian enhancements that would be compatible with existing land uses.

Implementation of some of the transportation improvement projects, such as center running BRT, could decrease the width or number of driving lanes and/or result in the removal of some on-street

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26 As noted in Section 4.4.4, *Methodology,* the existing TIA program includes fees on commercial and industrial uses but does not currently include fees on residential uses. Generally, the strong real-estate market on the Westside has supported continued development over time under the current fee program. Therefore, evaluation of the feasibility of TIA fees in the context of stand-alone land uses that are currently (and would continue to be) subject to fees was not conducted; the economic impact analysis focuses on residential and residential mixed-use development prototypes.

parking. Off-street parking and street parking on adjacent streets would not be affected, and the proposed loss of on-street parking is not anticipated to permanently prevent or disrupt access to surrounding land uses. Further, existing and proposed transit improvements would provide alternative methods of accessing businesses. While access to parking could be more challenging for patrons of some individual businesses, the change in parking availability would not cause a disruption of land uses that would constitute a significant land use impact.

The Proposed Project would improve transportation infrastructure only. Growth is expected in the project area with or without the amendments to the Specific Plans and the Proposed Project would not change the amount or type of growth anticipated to occur. Implementation of the Proposed Project would facilitate movement within the CTCSP and WLA TIMP areas as growth continues. It would accommodate anticipated infill or density-related growth as envisioned in the Framework and Community Plans. Implementation of the Proposed Project's transportation improvements list would not directly or indirectly induce growth and therefore would not result in development of incompatible land uses near each other.

For the reasons outlined above, operation of the Proposed Project would not result in land use incompatibilities, or physically disrupt, divide, or isolate an existing neighborhood or community. Therefore, physical impacts to land use would be ***less than significant***.

Mitigation Measures

No mitigation measures are required.

Significance of Impacts After Mitigation

For land use impacts related to dividing a community, the Proposed Project would have a ***less than significant impact.***

Impact 4.4-2: Implementation of the Proposed Project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, community plans, specific plans, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect. This would be a *less than significant* impact.

Construction

No construction would occur as a direct result of the Proposed Project. However, the Proposed Project would indirectly result in construction associated with implementation of the proposed transportation improvements. Many of the proposed transportation improvements would require limited construction activity, such as restriping, minor alterations to sidewalk and curbs, and changes to signage related to parking and use of lanes. Some of the proposed transportation improvements would require substantial construction, including the Lincoln Boulevard and Sepulveda Boulevard BRTs, reconfiguration of the I-10 westbound ramps at Bundy Drive, and widening of the Lincoln Boulevard Bridge. Construction activities would be temporary and of limited duration. All construction activities would comply with existing city regulations governing construction, including prohibitions on roadway construction during peak hours. There are no policies in applicable land use plans that are directed at construction activities. Therefore, construction impacts would not conflict with any applicable land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect and impacts would be ***less than significant***.

Operation

State Plans and Policies

As described in Section 4.4.2, *Regulatory Framework*, applicable state plans and policies include the California Complete Streets Act, California Coastal Act, and SB 743.

California Complete Streets Act

The California Complete Streets Act requires cities that are updating their circulation elements to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways for safe and convenient travel in a manner that is suitable to the context of the general plan. The City of Los Angeles fulfilled this requirement in its recent adoption of MP 2035. The proposed transportation improvements associated with the Proposed Project are consistent with the multi-modal transportation networks identified in MP 2035. Moreover, the proposed amendments to the CTCSP and WLA TIMP would serve to implement MP 2035 by collecting fees to fund construction of these transportation improvements. As a result, the Proposed Project would be consistent with the goals of the California Complete Streets Act because the proposed traffic improvement projects would support the newly adopted Mobility Element of the General Plan and would improve transit, bicycling, and walking within the project area.

California Coastal Act

Several of the proposed transportation improvements would be located within the coastal zone, as illustrated on Figure 4.4-1. All of these improvements are located within existing roadway right-of-ways and would not constitute new development within the coastal zone. Private development within the City's coastal zones would require the standard city review processes as well as a potential review by the California Coastal Commission. Projects would require coastal development permits prior to implementation, which would ensure their consistency with the Coastal Act. Moreover, the proposed transportation improvements would improve multi-modal mobility within the project area, and would enhance public access to the coast and coastal resources. For these reasons, the Proposed Project would not conflict with the California Coastal Act.

Senate Bill 743

The Proposed Project would be consistent with SB 743 as the implementation of the proposed transportation improvements would provide the infrastructure and facilities needed to reduce vehicle trip generation. Construction of transit-oriented development (TOD), transit, and non-motorized transportation improvements, and the corresponding decrease in vehicle miles traveled (VMT) per Capita that would be realized with implementation of the Proposed Project, would align with the climate action and greenhouse gas (GHG) emissions reduction goals of SB 743.

Regional Plans and Policies

Regional Transportation Plan/Sustainable Communities Strategy

The Proposed Project would be consistent with applicable goals of the RTP/SCS as shown in **Table 4.4-2**. In particular, operation of the Proposed Project would facilitate implementation of proposed transportation improvements that would encourage non-motorized transportation, which would result in a more sustainable transportation network and would benefit the health of residents by providing increased opportunities for bicycling and walking as well as improving air quality. The

RTP/SCS's goal is to "encourage land use and growth patterns that facilitate transit and non-motorized transportation." While the Proposed Project would not encourage any land use changes or growth, it would support existing land uses and anticipated growth by providing transit and non-motorized transportation facilities.

Table 4.4-2 Consistency with SCAG 2012-2035 RTP/SCS Goals

Goal	Goal Description	Analysis
1	Align the plan investments and policies with improving regional economic development and competitiveness	**Consistent.** The proposed transportation improvements include projects that would improve the overall multi-modal transportation system within the CTCSP and WLA TIMP planning areas. This would improve the movement of goods and people, thereby contributing to economic development and competitiveness within the project area, as well as the region as a whole.
2	Maximize mobility and accessibility for all people and goods in the region	**Consistent.** As stated above, the proposed lists of transportation improvements include projects that would improve all modes of transportation, thereby improving the movement of both people and goods within the project area.
3	Ensure travel safety and reliability for all people and goods in the region	**Consistent.** Proposed transportation improvements, such as the implementation of bike lanes, cycle tracks, bicycle and pedestrian friendly street design, mobility hubs, BRT, and bus enhancements, would result in safer and more reliable travel for people and goods in the region.
4	Preserve and ensure a sustainable regional transportation system	**Consistent.** The proposed transportation improvements would provide multi-modal transportation options throughout the Westside. The new and improved transportation facilities would provide or enhance alternatives to motor vehicle travel and would reduce VMT per Capita within the CTCSP and WLA TIMP areas, thus providing a sustainable regional transportation system.
5	Maximize the productivity of our transportation system	**Consistent.** By providing new and improved multi-modal facilities, the productivity of the transportation system would be enhanced and VMT per Capita would be reduced in the CTCSP and WLA TIMP areas.
6	Protect the environment and health of our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking)	**Consistent.** The proposed transportation improvements include multi-modal transportation options and trip reduction programs, which, together, would improve air quality by reducing VMT per Capita. Additionally, the proposed transportation improvements include projects that would encourage walking and bicycling, such as bike lanes, cycle tracks, streetscape plans, and bicycle and pedestrian friendly street design.
7	Actively encourage and create incentives for energy efficiency, where possible	**Consistent.** The proposed transportation improvements would actively encourage and create multimodal facilities that would result in a reduction of VMT per Capita, which would reduce the use of fossil fuels. This would be accomplished through new and enhanced transit and bicycle facilities, and pedestrian-oriented improvements.
8	Encourage land use and growth patterns that facilitate transit and non-motorized transportation	**Consistent.** Proposed transit projects would provide more reliable, frequent, and efficient transit service in areas where existing land use and growth patterns are supportive of increased transit. The transit, bicycle, and pedestrian improvements, coupled with trip reduction programs, would reduce single-occupancy vehicle trips, improve bus technology and capacity, and encourage non-motorized transportation.
9	Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies	**Consistent.** Implementation of proposed roadway and intelligent transportation system (ITS) projects would enhance circulation and safety through ITS signal upgrades and intersection improvements. The proposed Neighborhood Protection Program would discourage through-traffic from using local streets and establish measures to make arterial routes more attractive than local routes for through traffic. This would enhance the safety of pedestrian and vehicular traffic in these areas.

Source: CDM Smith, 2015.

City of Los Angeles Plans and Policies

City of Los Angeles General Plan Framework

As described in Section 4.4.2, *Regulatory Framework*, the City of Los Angeles General Plan Framework Element establishes the overall policy and direction for the General Plan. The Framework provides a comprehensive citywide strategy for long-term growth and sets forth a conceptual relationship between land use and transportation. The Framework Element develops a vision for transportation in the City that is fully integrated, multimodal, provides multiple travel choices, and increases accessibility. As described in the Framework Element, this transportation vision can only be achieved through physical and operational improvements and behavioral changes that reduce the number and length of trips generated. The Proposed Project would increase mobility to support existing and future land uses within the CTCSP and WLA TIMP areas. Moreover, the proposed transportation improvements, which would reduce vehicle miles traveled by providing safe, convenient, and reliable multimodal travel options on the Westside, would be consistent with the Framework's vision of a multimodal transportation system in Los Angeles. Therefore, the Proposed Project would be consistent with the General Plan Framework Element.

Mobility Plan 2035

As discussed in greater detail in Section 4.6, *Transportation,* the proposed amendments to the CTCSP and WLA TIMP, including the amended lists of transportation improvement, were developed as part of an overall implementation strategy to realize MP 2035. The types of projects on the updated lists of transportation improvements—which include pedestrian, neighborhood, bicycle, transit, and vehicle enhancements—mirror the framework established in MP 2035, and are consistent with the City's multimodal approach to transportation planning outlined in MP 2035 that will improve mobility and create a more pedestrian friendly atmosphere throughout the City. Moreover, the proposed transportation improvements would be consistent with the five goals that define the City's mobility priorities. Improvements such as bicycle lanes, cycle tracks, and pedestrian enhancements would increase safety. The multimodal improvements would contribute to a world class infrastructure that would provide access for all Angelenos. Implementation of the Proposed Project would reduce VMT per Capita, which would result in improvements to air quality with related benefits to health. Therefore, the Proposed Project would be consistent with MP 2035.

City of Los Angeles Community Plans

The Community Plans in the CTCSP and WLA TIMP areas provide guidance with respect to land uses and also include complementary transportation goals to support the desired arrangement of land uses. These aspirational transportation goals and policies broadly aim to increase multimodal transportation opportunities; reduce vehicle trips; create safe, efficient and attractive bicycle, pedestrian, and roadway networks; and provide a circulation system that supports existing and planned land uses while reducing traffic congestion. The Proposed Project is consistent with these Community Plan transportation related goals. The Proposed Project would be consistent with Community Plan policies aimed at improving mobility, increasing the availability of multimodal transportation infrastructure, and reducing vehicle trips in the Community Plan Areas. Specifically, the proposed mobility projects would reduce VMT per Capita and would provide better access and transportation options to residents, workers, and visitors on the Westside. The proposed transportation improvements are aligned with the MP 2035 goals of enhancing pedestrian, neighborhood, bicycle, transit, and vehicle infrastructure to improve mobility and create a more pedestrian friendly atmosphere throughout the City. The Proposed Project would also be consistent with the goal of each Community Plan to achieve a circulation system that supports existing and planned land uses and provides a transportation system that meets the needs of all types of users, including transit users, bicyclists, and pedestrians. As noted above, the Proposed Project would not alter land use patterns or change growth that is anticipated to occur in the project area with or without the proposed amendments to the Specific Plans.

As discussed in Section 4.4.2, *Regulatory Framework,* City of Los Angeles planning documents are being updated. The MP 2035 was recently approved and reiterated a renewed vision for multi-modal transportation in the City. In accordance with new State regulations, the City is adjusting how it achieves mobility goals. The State as a whole, and the City of Los Angeles included, is adjusting how it addresses transportation planning and traffic impact analysis. In the past the focus has been on traffic delay-based analysis with the objective of minimizing vehicle delay wherever possible. In the future, as directed by SB 743, the State, including the City of Los Angeles, will move to a VMT focus, with the objective being to reduce VMT (and therefore GHG) as appropriate. When the implementing regulations are adopted as required, SB 743 will change the way cities measure project impacts; through measuring vehicle miles traveled (VMT) versus the current priority of reducing queuing at intersections (LOS) with roadway widening as a mitigation, projects will be encouraged to reduce their GHG emissions. While existing Community Plans currently include select policies related to decreasing delay and improving Level of Service (LOS), they also include numerous goals, objectives and policies that are already aligned with SB 743's VMT focus. The Community Plan polices will be updated to reflect the new state regulations and the City's latest strategies for achieving mobility goals consistent with MP 2035 and the CTCSP and WLA TIMP (see Appendix H, *Updated Community Plan Text*).

As the proposed transportation improvements would enhance multimodal transportation options, decrease VMT per Capita in the Westside, and support existing and planned land uses in the Community Plan Areas, overall, the Proposed Project would be consistent with, and supportive of, the intent of the Community Plan goals, as well as policies that will be updated to reflect consistency with the MP 2035 goals and policies.

City of Los Angeles Specific Plans

As described in the Section 4.4.2, *Regulatory Framework*, there are numerous Specific Plans within the project area, which address a variety of land use and planning issues. Several of the specific plans include policies related to improving mobility, enhancing transportation safety, and providing enhanced bicycle and pedestrian features as well as the application of TDM measures where applicable. Specific policies of individual Specific Plans address access to coastal and recreation areas, providing street improvements and adequate parking along identified transportation corridors, and meeting other geographically-specific needs. The proposed transportation improvements include a wide variety of projects designed to enhance multimodal transportation, including enhanced transit, bicycle, and pedestrian facilities. The proposed transportation improvements would support Specific Plan policies, such as transit service and bicycle connection enhancements in the coastal zone, development of transit and bicycle facilities, and provision of mobility hubs that would enhance transit commuting by bridging the first/last mile of a transit user's commute. The proposed transportation improvements would also improve mobility throughout the project area, including within the Specific Plan areas. Operation of the Proposed Project would not conflict with the intent of the individual Specific Plans.

Venice Local Coastal Program

As mentioned above, a complete LCP has not been certified for the Venice Coastal Zone. The consistency of the Proposed Project with the Venice LCP is addressed under the discussion of State plans and policies above. As indicated in that discussion, the Proposed Project would be consistent with the Coastal Act.

City of Los Angeles Great Streets Initiative

The Proposed Project includes a number of improvements to Venice Boulevard, including Venice Metro Rapid Bus enhancements, streetscape improvements, and a cycle track and bike lane. Improvements are also proposed along Westwood Boulevard, which could include transit, bicycle, and pedestrian enhancements. These improvements would be consistent with the Great Streets Initiative.

Summary

As described above, the Proposed Project would not conflict with applicable state, regional, and local plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. The proposed list of transportation improvements and fees would support implementation of the City's adopted goals. Therefore, impacts of the Proposed Project on land use plan consistency would be ***less than significant***.

Mitigation Measures

No mitigation measures are required.

Significance of Impacts After Mitigation

The Proposed Project, related to consistency with land use impacts, would be ***less than significant***.

Section 4.5

Noise and Vibration

4.5.1 Introduction

This section presents an overview of noise and vibration and evaluates the construction and operational noise and vibration impacts associated with the Coastal Transportation Corridor Specific Plan (CTCSP) and West Los Angeles Transportation Improvement and Mitigation Specific Plan (WLA TIMP) Specific Plans Amendment Project (Proposed Project).

The section is organized as follows:

- **Regulatory Framework** summarizes the applicable federal, state, and local regulations, policies, and guidelines pertaining to noise and vibration.
- **Existing Setting** describes the existing noise sources and noise levels in the project area.
- **Methodology** identifies the approach and models used to determine project impacts.
- **Thresholds of Significance** lists the thresholds used in identifying significant impacts, as identified in Appendix G of the State CEQA Guidelines and the City of Los Angeles' L.A. CEQA Thresholds Guide.
- The **Impacts and Mitigation Measures** section presents the analysis of noise and vibration impacts, and provides mitigation measures, where appropriate, to reduce significant impacts. The **Significance of Impacts After Mitigation** is also identified.

4.5.2 Regulatory Framework

This section describes applicable noise and vibration laws, rules, regulations, and policies at the federal, state, and local level. Noise standards are typically established at the local level, while the U.S. Environmental Protection Agency (USEPA) and the State of California provide general guidelines.

4.5.2.1 Federal

The Noise Control Act of 1972 and the Quiet Communities Act of 1978 promote protection of human health and welfare from excessive noise. Title IV – Noise Pollution, of the Clean Air Act established the Office of Noise Abatement and Control (ONAC) to coordinate all federal noise control activities and investigations. However, in 1981, Congress concluded that noise issues were best handled at the state or local government level. As a result, the USEPA phased out the office's funding in 1982 as part of a shift in federal noise control policy to transfer the primary responsibility of regulating noise to state and local governments. The Noise Control Act of 1972 and the Quiet Communities Act of 1978 were not rescinded by Congress and remain in effect today, but they are not funded. Title IV of the Clean Air Act provides guidance to state and local entities in establishing appropriate noise control standards.

The U.S. Department of Transportation Federal Transit Administration (FTA) and Federal Highway Administration (FHWA) have published guidance documents for assessing noise and vibration impacts associated with transit and roadway projects. Methodology and significance thresholds from these documents are used, as appropriate, for this analysis, and are described in Section 4.5.4.

4.5.2.2 State

Governor's Office of Planning and Research

While the State of California does not directly regulate noise, it provides guidance for the preparation of general plans and noise ordinances. In 1976, the State Department of Health Services (now the Department of Public Health [CDPH]) issued Noise Element Guidelines (Health and Safety Code Section 46050.1). In 1977, the CDPH State Office of Noise Control (ONC) published a model noise ordinance and mandated that each county develop a noise element as part of its general plan (Section 65302(f) of the California Government Code). The purpose of a jurisdiction's noise element is to identify and appraise noise problems in the community. The ONC's model ordinance recommends limits on temporary construction noise levels and operational noise levels in residential, commercial, and industrial areas.

The state's General Plan Guidelines state that local governments must "'analyze and quantify noise levels and the extent of noise exposure through actual measurement or the use of noise modeling." In addition to other requirements, the guidelines state that "technical data relating to mobile and point sources must be collected and synthesized into a set of noise control policies and programs that 'minimizes the exposure of community residents to excessive noise'" (California Governor's Office of Planning and Research [OPR], 2003).

As part of the county-level planning process, analysis of existing conditions and community tolerance for noise are used to dictate the normally acceptable community noise exposure. Terms used by the state to analyze community noise exposure are:

- Normally Acceptable – Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
- Conditionally Acceptable – New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.
- Normally Unacceptable – New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
- Clearly Unacceptable – New construction or development should generally not be undertaken.

The City of Los Angeles has adopted these community noise exposure levels with some adjustments, as discussed below.

4.5.2.3 Local

Local plans, policies, and ordinances pertaining to noise are discussed below.

General Plan Noise Element

The Noise Element of the City of Los Angeles General Plan (1999) contains goals, objectives, and policies to reduce or eliminate conflicts between land uses relative to noise levels and to minimize noise impacts from transportation sources, such as rail, aircraft, and freeways. Programs intended to implement policies presented in the Noise Element that are relevant to the Proposed Project include:

- **P5** Continue to enforce, as applicable, federal, State, and City regulations intended to abate or eliminate disturbances of the peace and other intrusive noise.
- **P10** Continue to encourage public transit and rail systems operating within the city's borders, but which are not within the jurisdiction of the city, to be constructed and operated in a manner that will assure compliance with the city's noise ordinance standards.
- **P13** Continue to plan, design, and construct or oversee construction of public projects, and projects on city owned properties, so as to minimize potential noise impacts on noise sensitive uses and to maintain or reduce existing ambient noise levels.
- **P17** Continue to encourage the California Department of Transportation (Caltrans), the Los Angeles County Metropolitan Transportation Authority (Metro), or their successors, and other responsible agencies, to plan and construct transportation systems so as to reduce potential noise impacts on adjacent land uses, consistent with the standards and guidelines contained in the noise element.

Los Angeles Municipal Code

The City of Los Angeles has established regulations concerning noise levels that could adversely affect its citizens and noise sensitive land uses. Section 41.40 of the Los Angeles Municipal Code (LAMC) prohibits construction or repair work to be performed between the hours of 9:00 p.m. and 7:00 a.m., since such activities would generate loud noises and could disturb sleep. No person, other than an individual homeowner engaged in the repair or construction of his/her single family dwelling, shall perform any construction or repair work of any kind, or perform such work within 500 feet of land so occupied, before 8:00 a.m. or after 6:00 p.m. on any Saturday or on a federal holiday, or at any time on Sunday. For limited construction activities during these prohibited times, the City may grant a variance permit.

Presumed ambient noise levels from LAMC Section 111.03 for various land uses are presented in **Table 4.5-1**. The City of Los Angeles uses these noise levels when measured noise levels are lower than the presumed ambient noise level or where noise measurements are not available to determine minimum existing ambient noise levels for impact analysis. The minimum ambient noise levels allow for a conservative estimate of noise increases above existing levels.

Section 112.05 of the LAMC prohibits the use of powered equipment or hand tools that produce a maximum noise level exceeding 75 A-weighted decibel scale (dBA) at 50 feet. This noise limitation does not apply where compliance is technically infeasible, or the noise limitation cannot be met despite the use of abatement measures, such as mufflers, shields, or sound barriers, during the operation of equipment.

Table 4.5-1 Presumed Ambient Noise Levels at Various Land Uses

Land Use	Presumed Ambient Noise Level (dBA)	
	Day (7:00 a.m.-10:00 p.m.)	Night (10:00 p.m.-7:00 a.m.)
Residential (A1, A2, RA, RE, RS, RD, RW1, RW2, R1, R2, R3, R4, R5)	50	40
Commercial (P, PB, CR, C1, C1.5, C2, C4, C5, CM)	60	55
Manufacturing (M1, MR1, MR2)	60	55
Heavy Manufacturing (M2, M3)	65	65

Source: LAMC, Section 111.03.

Key:
dBA = A-weighted decibel scale

City of Los Angeles L.A. CEQA Thresholds Guide

The L.A. CEQA Thresholds Guide (City of Los Angeles, 2006) describes significance thresholds to be used in noise analyses and outlines methodologies for determining significance. Significance thresholds are described further in Section 4.5.5. **Table 4.5-2** shows the ranges of acceptable and unacceptable community noise exposure levels presented in the L.A. CEQA Thresholds Guide.

Table 4.5-2 Noise Compatible Land Use Planning

Land Use	Community Noise Exposure CNEL (dBA)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential – Low Density Single Family, Duplex, Mobile Homes	50-60	55-70	70-75	70+
Residential – Multi Family	50-65	60-70	70-75	70+
Transient Lodging – Motels, Hotels	50-65	60-70	70-80	80+
Schools, Libraries, Churches, Hospitals, Nursing Homes	50-70	60-70	70-80	80+
Auditoriums, Concert Halls, Amphitheaters	N/A	50-70	N/A	65+
Sports Arena, Outdoor Spectator Sports	N/A	50-75	N/A	70+
Playgrounds, Neighborhood Parks	50-70	N/A	65-75	72+
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50-75	N/A	70-80	80+
Office Buildings, Business Commercial and Professional	50-70	67-77	75+	N/A
Industrial, Manufacturing, Utilities, Agriculture	50-75	70-80	75+	N/A

Source: City of Los Angeles, 2006.

Key:
CNEL = community noise equivalent level
dBA = A-weighted decibel scale
N/A = not applicable

Mayoral Executive Directive No. 2

Mayor Antonio Villaraigosa's Executive Directive No. 2, issued on August 12, 2005 and reissued on October 20, 2005, prohibits construction in the public right-of-way between 6:00 a.m. and 9:00 a.m. and between 3:30 p.m. and 7:00 p.m., including actual construction as well as staging of equipment and materials (City of Los Angeles, 2005). The purpose of the directive is to improve traffic in the City and reduce delays. The directive instructed the Board of Public Worlds to develop appropriate administrative penalties and procedures aimed at enforcing the ban. Exemptions from the prohibition include construction activities related to emergency maintenance and repair, and construction associated with major public works projects with mitigation plans. "Major public works projects" were to be defined by criteria to be developed by the Board of Public Works, which later delegated policy development to the City Engineer. The City Engineer published guidelines to be used to evaluate requests for an exemption from the rush hour prohibitions on April 14, 2006 (Bureau of Engineering, 2006). The Directive and related guidelines are still in effect.

4.5.3 Existing Setting

The existing noise and vibration environment near the study area is influenced by various transportation and non-transportation sources. Vehicular traffic is the predominant source of transportation-related noise, along with aircraft noise in the areas near LAX and Santa Monica Airport.

4.5.3.1 Characteristics of Noise and Vibration

Noise Characteristics

Noise is defined as any unwanted or objectionable sound. When noise levels increase, there may be adverse impacts to humans and the natural environment. Noise impacts can be short-term, such as temporary noise generated from construction activities, or long-term, such as the permanent operation of new facilities.

The human ear perceives sound, which is mechanical energy, as pressure on the ear. Sound level meters measure the air pressure fluctuations caused by sound waves. The decibel (dB) scale for describing sound uses a logarithmic scale to account for the large range of audible sound intensities, with zero dB corresponding roughly to the threshold of human hearing and 120 to 140 dB corresponding to the threshold of pain. Most sounds consist of a broad range of sound frequencies, and several frequency-weighting schemes have been used to develop composite dB scales that approximate the way the human ear responds to noise levels. The most widely used measure for environmental noise assessments is the A-weighted dB scale (designated as dBA). The scale relates sound amplitude to human sensitivity by deemphasizing the low and high-end frequencies that humans cannot hear well. **Table 4.5-3** illustrates the range of typical A-weighted sound levels associated with common indoor and outdoor activities in dBA.

Table 4.5-3 Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	Rock band
Jet flyover at 1,000 feet		
	100	
Gas lawnmower at 3 feet		
	90	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	80	Garbage disposal at 3 feet
Noise urban area, daytime		
Gas lawnmower, 100 feet	70	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60	
		Large business office
Quiet urban daytime	50	Dishwasher in next room
Quiet urban nighttime	40	Theater, large conference room (background)
Quite suburban nighttime		
	30	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	20	
		Broadcast/recording studio
	10	
	0	

Source: Caltrans, 2013a.

Key:
dBA = A-weighted decibel scale
mph = miles per hour

Because sounds in the environment usually vary with time, they cannot simply be described with a single number. The time-varying characteristic of environmental noise is described using statistical noise descriptors.

- Leq (Equivalent Energy Level) – L_{eq} provides a methodology for combining noise from individual events and steady state sources into a measure of cumulative noise exposure. L_{eq} is the A-weighted sound level corresponding to a steady-state sound level that contains the same total energy as a varying signal over a given monitoring period. This is typically computed over 1-, 8-, and 24-hour monitoring periods.

- Ldn (Day-Night Average Level) – (L_{dn}) was developed to account for human sensitivity to nighttime noise. (L_{dn}) represents the 24-hour average sound level with a 10 dBA penalty applied to all noise events occurring at night between 10:00 p.m. and 7:00 a.m. This is a useful measure for community noise impact because people in their homes are much more sensitive to noise at night when they are relaxing or sleeping than they are in the daytime.

- CNEL (Community Noise Equivalent Level) – The CNEL is also a 24-hour cumulative noise descriptor that considers the sensitivity of humans to noise at night. However, in addition to the 10-dBA penalty between 10:00 p.m. and 7:00 a.m., the CNEL adds a 5-dBA penalty for nighttime hours between 7:00 p.m. and 10:00 p.m. The CNEL is commonly used in California instead of the L_{dn}.

Effects of Noise on People

Human response to noise is subjective, and noise effects on humans can range from annoyance to physical discomfort and harm. Sleeping patterns, speech communication, mental acuity, and heart and breathing rates can all be disturbed by noise. Perception of the noise is affected by its pitch, loudness, duration, and time of the day.

Noise-sensitive locations include areas where an excessive amount of noise would interfere with normal operations or activities and where a high degree of noise control may be necessary. Examples include schools, hospitals, and residential areas. Recreational areas may be considered noise-sensitive where quiet and solitude may be an important aspect of the specific recreational experience.

Noise Attenuation and Audible Noise Changes

Noise, often described as unwanted sound, is known to have several adverse effects on humans. These noise effects may include hearing loss (not a factor with typical community noise), communication interference, and annoyance. Hearing loss is generally not a concern in community noise problems, even very near a major freeway. Environmental noise does not have an effect on hearing threshold levels particularly due to the fact that environmental noise does not approximate occupational noise exposures in heavy industry, very noisy work environments with long-term exposure, or certain very loud recreational activities such as target shooting, motorcycle or automobile racing, etc. Noise levels in neighborhoods, even in very noisy neighborhoods, are not sufficiently loud to cause hearing loss.

From the source to the receiver, noise changes both in level and frequency spectrum. The most obvious is the decrease in noise level as the distance from the source increases. Sound levels from isolated point sources of noise typically decrease by about 6 to 7.5 dBA for every doubling of distance from the noise source (i.e., if the noise level is 70 dBA at 25 feet, it is 64 dBA at 50 feet and 58 dBA at 100 feet). Sound from a line source, such as vehicle traffic on a highway, decreases by about 3 to 4.8 dBA for every doubling of distance. Noise levels can also be affected by several factors other than the distance from the noise source. Topographic features, surface types (e.g. absorptive like dirt or grass or reflective like asphalt), and structural barriers that absorb, reflect, or scatter sound waves can affect the reduction of noise levels. A barrier that breaks the line of sight between a noise source and a receiver will typically provide at least a 5 dB noise reduction. Atmospheric conditions (wind speed and direction, humidity levels, and temperatures) and the presence of dense vegetation can also affect the degree to which sound is attenuated over distance.

A key concept in evaluating potential noise impacts is the perceived effect of incremental increase in existing noise levels. Human perception of noise has no simple correlation with acoustical energy. Due to subjective thresholds of tolerance, the annoyance of a given noise source is perceived very differently from person to person. Two noise sources do not “sound twice as loud” as one source. A doubling of noise sources results in a noise level increase of 3 dBA. For example, 60 dB plus 60 dB equals 63 dB, and 80 dB plus 80 dB equals 83 dB. However, where ambient noise levels are high in comparison to a new noise source, there will only be a small change in noise levels. For example, when

70 dB ambient noise levels are combined with a 60 dB noise source, the resulting noise level equals 70.4 dB.

Table 4.5-4 presents the effect of increasing noise levels. As shown in the table, an increase of 3 dBA is barely perceptible, an increase of 5 dBA is noticeable, and an increase of 10 dBA would be perceived by someone to be a doubling of noise.

Table 4.5-4 Decibel Changes, Loudness, and Energy Loss

Sound Level Change (dBA)	Relative Loudness/ Impact	Acoustical Energy Gain (%)
0	Reference	0
+3	Barely Perceptible Change	50
+5	Readily Perceptible Change	67
+10	Twice as Loud	90
+20	Four Times as Loud	99
+30	Eight times as Loud	99.9

Source: FHWA, 2011.

Key:
dBA = A-weighted decibel scale

Vibration Characteristics

Vibration is the periodic movement of mass over time. As with noise levels, groundborne vibration can have a significant effect on persons and buildings. Groundborne vibration from construction activities is caused by operation of equipment such as large bulldozers, vibratory rollers, pile drivers, and loaded trucks. Vibration generated by construction activity has the potential to damage structures. This damage could be structural damage (e.g., cracking of floor slabs, foundations, columns, beams, or wells) or cosmetic architectural damage (e.g., cracked plaster, stucco, or tile).

Ground vibration can also be a source of annoyance to people. The primary effect of perceptible vibration is often a concern. However, secondary effects, such as the rattling of a china cabinet, can also occur, even when vibration levels are well below perception. Any effect (primary perceptible vibration, secondary effects, or a combination of the two) can lead to annoyance. The degree to which a person is annoyed depends on the activity in which they are participating at the time of the disturbance. For example, someone sleeping or reading will be more sensitive than someone who is running on a treadmill. Reoccurring primary and secondary vibration effects often lead people to believe that the vibration is damaging their home, even when vibration levels may be well below minimum thresholds for damage potential.

In order to assess the potential for structural damage associated with vibration, the vibratory ground motion in the vicinity of the affected structure is measured in terms of peak particle velocity (PPV) in the vertical and horizontal directions, typically in units of inches per second (in/sec). The PPV is defined as the maximum instantaneous peak of the vibration signal. Since it is related to the stresses that are experienced by buildings, PPV is often used in monitoring blasting vibration and the vibration of heavy construction equipment.

The root mean square (rms) amplitude is most frequently used to describe the effect of vibration on the human body. The rms amplitude is defined as the average of the squared amplitude of the signal and is approximately 70 percent of the PPV for a single frequency vibration. Vibration velocity level in dB notation (VdB) is commonly used to measure rms. The dB notation acts to compress the range of numbers required to describe vibration and are referenced to 1 x 10^{-6} in/sec in the U.S. Typical rms vibration velocity levels (Lv) and their human or structural responses are summarized in **Table 4.5-5**.

Table 4.5-5 Typical Root Mean Square Vibration Levels

Human/Structural Response	Lv (VdB)	Typical Sources (50 ft from source)
Minor cosmetic damage to fragile buildings	100	Blasting from construction projects
		Bulldozers and other heavy tracked construction equipment
Difficulty with tasks such as reading a video display screen	90	
		Commuter rail (upper range)
Residential annoyance for infrequent events (e.g. commuter rail)	80	Rapid transit (upper range)
		Commuter rail (typical)
Residential annoyance for frequent events (e.g. rapid transit)		Bus/truck over bumpy street
	70	Rapid transit (typical)
Limit for vibration sensitive equipment		
Threshold for human perception		Bus/truck (typical)
	60	
		Typical background vibration
	50	

Source: FTA, 2006.

Key:
ft = feet
Lv = root mean square vibration velocity level
VdB = decibel vibration velocity level

Construction activities can either result in continuous or single-impact vibration impacts. Typical sources of continuous vibration impacts include excavation equipment, traffic, vibratory pile drivers, and vibratory compaction equipment; examples of single-impact vibration sources include blasting and drop balls. Damage thresholds for continuous sources are approximately half of the thresholds for single-impact sources. Typical road traffic induced vibration levels on smooth roads are near the threshold for human perception (FTA, 2006).

Effects of Vibration

Construction activities have the potential to produce vibration levels that may be annoying or disturbing to humans and may cause damage to structures.

While "safe" levels (i.e., levels at which damage to buildings would not occur) of continuous vibration are not well understood, research has been conducted to evaluate the effects of different vibration levels on buildings. The way in which a building is constructed and its condition influence the degree to which it can handle vibration effects. According to FTA guidelines, the construction vibration damage criterion for non-engineered timber and masonry buildings is 0.2 in/sec and that of engineered concrete and masonry is 0.3 in/sec (FTA, 2006).

The human threshold of perception is typically around 64 VdB, and the threshold of human annoyance to ground-borne vibration at residences and buildings where people normally sleep is 72 to 80 VdB. The threshold for institutional land use with primarily daytime use is 75 to 83 VdB. Furthermore, vibration is seldom annoying to people who are outdoors because without the effects of the shaking of a building, the motion does not provoke the same human reaction (FTA, 2006).

4.5.3.2 Existing Noise in the Project Area

The L.A. CEQA Thresholds Guide refers to the LAMC Section 111.03 as a method for determining existing ambient noise levels. The daytime and nighttime ambient noise levels for residential areas are presumed to be 50 and 40 dBA, respectively, as presented in Table 4.5-1. Many neighborhoods in the study area may experience higher noise levels, particularly near major roadways and airports.

Various average daily roadway volumes were modeled using the FHWA Highway Traffic Noise Model (TNM2.5) to give perspective to roadway noise levels. Noise levels for average daily volumes ranging from 10,000 to 60,000 are presented in **Table 4.5-6**, and example roadways in the study area with the same approximate average daily volumes are listed for reference. A receptor was modeled at 50 feet from the centerline of a simple four lane road (i.e., two lanes in each direction) with vehicles traveling at 35 miles per hour, the average speed in the County of Los Angeles based on the EMFAC2014 database. The default fleet mix for the County of Los Angeles from the California Air Resources Board's (CARB) EMFAC2014 Mobile Source Emission Inventory Model was used for all hours of the day.

Table 4.5-6 CNEL Associated with Various Average Daily Volumes

Approximate Average Daily Roadway Volume	Example Roads	CNEL (dBA) at 50 ft from Roadway Centerline
10,000	Overland Ave (low range = 8,100) Jefferson Blvd (low range = 9,900)	70
20,000	Sepulveda Blvd (low range = 25,000) Culver Blvd (low range = 18,300)	73
30,000	Sawtelle Blvd (high range = 33,300) Santa Monica Blvd (low range = 30,900)	75
40,000	Lincoln Blvd (low range = 34,800) Wilshire Blvd (low range = 45,000)	76
50,000	Bundy Dr/Centinela Ave (high range = 48,300) Venice Blvd (high range = 50,400)	77
60,000	Lincoln Blvd (high range = 61,200) Olympic Blvd (high range = 61,500)	78

Source: CDM Smith, 2015; Fehr & Peers, 2015.

Key:
CNEL = community noise equivalent level
dBA = A-weighted decibel scale
ft = feet

4.5.3.3 Existing Vibration in the Project Area

Based on field observations, the only source of groundborne vibration in the project vicinity is vehicular travel (including delivery trucks and transit buses) on local roadways. Typical road traffic induced vibration levels are unlikely to be perceptible by people. Typical background velocity level in residential areas is usually 50 VdB or lower, or below the threshold of perception for humans (FTA, 2006).

4.5.3.4 Sensitive Receptors

The study area is in the western portion of the City of Los Angeles, including all or parts of Westchester, Playa Del Ray, LAX, Playa Vista, Venice, Mar Vista, Palms, Westwood, West Los Angeles, and Brentwood. Various land uses exist within these urbanized areas including residential developments of various densities, commercial, industrial, institutional, and public facilities, and open space. Some land uses, such as residences, schools, hospitals, hotels, and libraries, are typically more sensitive to changes in noise and vibration levels.

4.5.4 Methodology

The focus of this analysis is on potential temporary construction and long-term impacts to local sensitive receptor sites located near the proposed alternatives.

4.5.4.1 Noise

Construction

Typical noise levels of construction equipment are presented in the L.A. CEQA Thresholds Guide and summarized in **Table 4.5-7**. These are noise levels of construction equipment without noise control devices. The noise level at nearby sensitive receptors during construction was estimated by attenuating the construction sound level for distance to the receptor and logarithmically adding the attenuated construction noise source level to the ambient noise level. Construction noise was predicted using the equations and guiding principles from the FHWA Roadway Construction Noise Model (RCNM).

Table 4.5-7 Construction Equipment Noise Level

Equipment Types	Noise Level at 50 feet (dBA)
Concrete Mixers	75-88
Crane	75-88
Front End Loaders	73-86
Jackhammers	81-98
Pavers	85-88
Pile Driver (peaks)	95-107
Saws	72-82
Trucks	82-95

Source: City of Los Angeles, 2006.

Key*:*
dBA = A-weighted decibel scale

For the purpose of this analysis, potential noise levels were estimated at a program level of detail, because detailed plans have not been developed for implementation of any of the projects on the proposed CTCSP or WLA TIMP project lists. Based on the general project features and descriptions, types of improvements were rated as requiring a high, medium, or low level of construction intensity, which reflected the anticipated noise level associated with the improvement type. In general, low construction intensity improvements would require no construction or would require minor construction, including minimal construction equipment, ground disturbance, and removal or replacement of asphalt. Moreover, construction of these improvements would occur over short periods of time. Medium construction intensity improvements would involve minor to moderate construction, such as more removal and replacement of asphalt and concrete. High construction intensity improvements would involve substantial construction activity using heavy construction equipment over a larger area and a longer period of time.

The projects most likely to involve high construction intensity include: (1) the Lincoln Boulevard Bridge Enhancement, (2) the center-running bus rapid transit (BRTs) on Lincoln and Sepulveda boulevards, particularly the construction of BRT platforms, and (3) the I-10 Ramp Reconfiguration at Bundy Drive. For purposes of the noise analysis, it was assumed that the Lincoln Boulevard and Sepulveda Boulevard BRTs would require excavation down to the subsurface to install appropriate foundations for the BRT platforms. Similar to the Lincoln Boulevard and Sepulveda Boulevard BRT improvements, it was assumed that the I-10 Ramp Reconfiguration at Bundy Drive would require excavation down to the subsurface to remove and replace off-ramps.

This analysis assumes that any improvement that involves low or medium intensity construction would generally require a front end loader, a truck, a jackhammer, a concrete mixer, and a paver. This equipment is typically used for construction activities that would be required by these improvements, such as removal and replacement of asphalt and concrete that may be associated with the construction of cycle tracks, sidewalk improvements, traffic calming features, and bicycle transit centers, or the installation of minor new facilities, such as bus shelters, signage, streetscape improvements, and ITS equipment.

The higher intensity construction projects were assumed to require additional construction equipment. A list of construction equipment assumed for these projects is provided in Table 4.1-8 in Section 4.1, *Air Quality*. In addition to the equipment listed in this table, for purposes of the noise analysis, it was assumed that construction of the Lincoln Bridge Enhancement Project could involve a drill or hammer type of pile driving. As conceptual project designs have not been completed for any of the projects on the lists of transportation improvements, there is a level of uncertainty regarding the actual location of construction activity and equipment. For each individual improvement project, a project-level analysis of noise impacts would be required prior to project approval to provide a more detailed analysis.

Operation

Because details regarding the individual transportation improvements have not been developed, operational noise associated with the Proposed Project was not modeled. Instead, impacts were evaluated based on general project characteristics and information generated by the transportation analysis conducted for this EIR (see Section 4.6, *Transportation*).

4.5.4.2 Vibration

Construction

In addition to noise, construction activities have the potential to produce vibration that may be annoying or disturbing to humans and may cause damage to structures. The highest levels of vibration from construction projects are caused by soil compacting, jackhammering, and demolition. **Table 4.5-8** presents the PPV in in/sec and Lv in VdB for typical construction equipment as published by the FTA (2006). The equivalent PPV and Lv at the receptor were calculated based on the distance between the source of vibration and the receptors. The impact of all construction equipment was calculated for Lv, like noise, but a separate PPV was evaluated for each equipment, as PPVs are generally not additive.

Table 4.5-8 Vibration Levels for Construction Equipment

Equipment Types	PPV at 25 feet (in/sec)	L_v at 25 feet (VdB)
Pile Driver (impact)	0.644	104
Vibratory Roller	0.210	94
Large Bulldozer / Hoe Ram	0.089	87
Loaded Trucks	0.076	86
Jackhammer	0.035	79
Small Bulldozer	0.003	58

Source: FTA 2006.

Key:
PPV = peak particle velocity
in/sec = inches per second
L_v = velocity level
VdB = decibel vibration velocity level

Operation

As noted in Section 4.5.3.3, typical road traffic-induced vibration levels are unlikely to be perceptible by people. Therefore, operational vibration impacts were not modeled but, rather, are evaluated qualitatively.

4.5.5 Thresholds of Significance

The significance criteria described below were developed consistent with the State CEQA Guidelines (applicable to this project) to determine the significance of potential impacts on noise that could result from implementation of the project. Impacts on noise would be considered potentially significant if the project would result in:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels;
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, exposure of people residing or working in the study area to excessive noise levels; and/or
- For a project within the vicinity of a private airstrip, exposure of people residing or working in the study area to excessive noise levels.

The L.A. CEQA Thresholds Guide has significance thresholds to be used in noise analyses. These thresholds are identified below.

Construction Noise

Based on the L.A. CEQA Thresholds Guide, the Proposed Project would have significant impact relative to construction noise if:

- Construction activities lasting more than one day would exceed existing ambient noise levels by 10 dBA or more at a noise sensitive use;
- Construction activities lasting more than ten days in a three-month period would exceed existing ambient noise levels by 5 dBA or more at a noise sensitive use; and/or
- Construction activities would exceed the ambient noise level by 5 dBA at a noise sensitive use between the hours of 9:00 p.m. and 7:00 a.m. Monday through Friday, before 8:00 a.m. or after 6:00 p.m. on Saturday, or anytime on Sunday.

Operational Noise

Based on the L.A. CEQA Thresholds Guide, the Proposed Project would have significant operational noise impacts if:

- Ambient noise level measured at the property line of affected uses increases by 3 dBA CNEL to or within the "normally unacceptable" or "clearly unacceptable" categories, as shown in Table 4.5-2, or any 5 dBA or more increase in noise level.

The significance criteria described above apply to the noise receptors that could be affected by the project and are used to determine substantial temporary or permanent increase in ambient noise levels.

Vibration

There are no adopted City standards or significance threshold for vibration. Based on FTA guidelines (2006) and the Caltrans Transportation and Construction Vibration Manual (2013), the Proposed Project would have a significant impact related to vibration if:

- Vibration levels would exceed the building damage criteria listed in **Table 4.5-9**.

Table 4.5-9 Vibration-Related Structural Damage Criteria

Building Category	PPV (in/sec)
I. Reinforced-concrete, steel, or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Non-engineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

Source: FTA, 2006.

Key:
PPV = peak particle velocity
in/sec = inches per second

- Vibration levels would exceed the human annoyance criteria listed in **Table 4.5-10**.

Table 4.5-10 Groundborne Vibration Impact Criteria for Human Annoyance

Land Use Category	Vibration Impact Level for Frequent Events[1] (VdB)	Vibration Impact Level for Occasional Events[2] (VdB)	Vibration Impact Level for Infrequent Events[3] (VdB)
Category 1: Building where low ambient vibration is essential for interior operations[4]	65	65	65
Category 2: Residences and buildings where people normally sleep	72	75	80
Category 3: Institutional land uses with primarily daytime use	75	78	83

Source: FTA, 2006.

Notes:

1. Frequent event is defined as more than 70 vibration events of the same source per day (e.g. rapid transit)
2. Occasional events is defined as between 30 and 70 vibration events of the same source per day (e.g. commuter trunk lines)
3. Infrequent events is defined as fewer than 30 vibration events of the same source per day (e.g. commuter rail)
4. Category 1 is for manufacturing or research building with equipment that are moderately sensitive to vibration, such as optical microscopes.

4.5.6 Impacts and Mitigation Measures

The proposed update to the Transportation Impact Fee program and the administrative and minor revisions of the specific plans would not result in any physical impacts that could affect noise or vibration. Therefore, the following analysis addresses whether implementation of the proposed updates to the lists of transportation improvements in the CTCSP and WLA TIMP would result in significant impacts on noise or vibration. No specific construction projects would be implemented based on this EIR; rather, the transportation improvements are evaluated at a conceptual level of detail.

Impact 4.5-1: Implementation of the Proposed Project would expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. This would be a *significant and unavoidable impact* for construction and operations.

Construction

Construction of the proposed transportation improvements could result in temporary increases in noise levels generated by construction equipment, construction-related truck trips, and worker commute trips. Noise levels would fluctuate depending on the construction activities, equipment type, duration of activity, distance between the noise source and receptor, and presence of barriers that attenuate noise.

Table 4.5-11 identifies the types of transportation improvements associated with the Proposed Project and the level of construction noise intensity associated with each type. As shown in the table, for most of the proposed transportation improvements, the noise levels associated with the construction of proposed transportation improvements would be at the low to medium end of the intensity range of construction activities that occur in the region. Some of the project types identified as low or medium may result in a brief period where noise levels would be high; however, the short duration was taken into account when determining the overall level of noise intensity associated with the different project types. Projects with the greatest level of construction activity and associated noise would include the addition of center-running BRT on Sepulveda and Lincoln boulevards, and roadway projects, such as the Lincoln Boulevard Bridge Enhancement and the I-10 Ramp Reconfiguration at Bundy Drive.

Table 4.5-11 Construction Noise Intensity

Project Type	Project Description	Construction Noise Intensity/Duration
Transit Improvements	New center-running bus rapid transit on Sepulveda Boulevard and Lincoln Boulevard	High
	Curb-running bus rapid transit on other corridors, including enhanced stop amenities	Low/Medium
	Enhance bus service through expanded service routes and frequency as well as bus stop improvements	Low
	Establish circulator/shuttles to connect activity centers to major transit centers	None
Bicycle and Pedestrian Improvements	Improve connectivity at major Metro stations (shading, lighting, directional signage, shelters, crosswalks)	Low
	Implement bicycle friendly street design as an alternate route to major corridors	Low/Medium
	Install mobility hubs near Metro stations and satellite hubs (bike parking, car/bicycle sharing)	Low/Medium
	Implement streetscape plans	Low/Medium
	Implement bicycle lanes, cycle tracks, multi-use tracks	Low/Medium
	Complete gaps in sidewalk network and provide pedestrian enhancements	Medium
	Establish bikesharing and bicycle transit centers that offer bicycle parking, rentals, repairs, lockers, showers, and transit information	Low/Medium
Roadway Projects	Turn-lane or safety improvements at major intersections	Medium
	Improve traffic flow along major arterials, including changes to lane configurations	Medium
	Widen Lincoln Boulevard Bridge	High
	Establish measures to encourage use of arterials and discourage through-traffic from using local streets	Low
	Reconfigure I-10 ramps at Bundy Drive	High
Intelligent Transportation Systems	Implement traffic signal updates as part of the automated traffic surveillance and control system that provides real-time monitoring and adjustment of signal timing	Low
	Install CCTV cameras & associated infrastructure	Low
Trip Reduction Programs	Update parking requirements, establish systems for real-time parking information	Low
	Provide guidance and implementation of travel demand management programs	None
	Develop online TDM Toolkit with information for transit users, cyclists, and pedestrians	None

Source: CDM Smith, 2015.

Key:
Low = Involves a small area (less than one acre), short duration, and minimal disturbance of the ground/existing pavement, including installation of minor new facilities.
Medium = Involves an area generally ranging from one acre to approximately three acres in size and requires removal and replacement of some asphalt and concrete.
High = Involves an area generally greater than three acres in size, occurs over a longer duration, and requires construction of substantial new facilities/infrastructure.

Generally, project-related construction would take place within existing roadways, sidewalks, and right-of-ways and, with the exception of the projects identified above, would not involve construction of major new facilities or infrastructure. Rather, the majority of the projects would involve only minor construction activities, such as removal and replacement of asphalt and concrete, which would be associated with the construction of cycle tracks, sidewalk improvements, traffic calming features, and bicycle transit centers for example; restriping, which would be associated with implementation of curb-running BRT, enhanced pedestrian cross-walks, and turn-lane designations, for example; or the installation of minor new facilities, such as bus shelters, signage, streetscape improvements, and ITS equipment. Nevertheless, as described below, even these activities can result in high levels of noise for short periods of time in specific locations.

Typical noise levels associated with equipment that could be used during the construction of the Lincoln Boulevard and Sepulveda Boulevard BRT platforms and the I-10/Bundy Drive ramp reconfiguration are presented by construction phase in **Table 4.5-12**. In addition to using construction equipment associated with these improvements, the Lincoln Boulevard Bridge Enhancement project may also involve pile driving activities. Estimated noise levels associated with equipment that would be used for the Lincoln Boulevard Bridge Enhancement are shown by construction phase in **Table 4.5-13**. Other transportation improvements would require a lower intensity of construction than the Lincoln Boulevard Bridge Enhancement, the Lincoln Boulevard and Sepulveda Boulevard BRTs, or the I-10 Ramp Reconfiguration at Bundy Drive. Typical noise levels associated with equipment that could be used during the construction of these improvements are shown in **Table 4.5-14**. In order to determine maximum noise levels associated with these lower intensity construction projects, combined equipment noise was evaluated. Of the construction equipment listed in Table 4.5-14, the most conservative combination of construction equipment likely to operate simultaneously includes truck operations and jackhammering; therefore, combined noise levels from a truck and a jackhammer are presented. Detailed modeling results of noise from construction equipment associated with each project type are provided in Appendix E, *Noise and Vibration*.

Table 4.5-12 Construction Noise Levels for Lincoln/Sepulveda BRT and I-10/Bundy Drive Ramp Reconfiguration

	Typical Noise Levels (dBA)		
Phase	50 feet	100 feet	500 feet
Grubbing/Land Clearing	92	86	74
Grading/Excavation	97	91	79
Drainage/Utilities/Subgrade	95	89	76
Paving	94	88	76

Source: CDM Smith, 2015.

Key:
dBA = A-weighted decibel scale

Table 4.5-13 Construction Noise Levels for Lincoln Boulevard Bridge Enhancement

	Typical Noise Levels (dBA)		
Phase	60 feet[1]	100 feet	400 feet
Grubbing/Land Clearing	91	86	74
Grading/Excavation	95	92[2]	80[2]
Drainage/Utilities/Subgrade	94	89	77
Paving	92	88	76

Source: CDM Smith, 2015.

Notes:
1. Noise levels at 60 feet would be associated with widening of Lincoln Boulevard south of the bridge, which would not involve pile driving. The closest receptor during pile driving activities would be 100 feet or more from the construction site.
2. Includes pile driving.

Key:
dBA = A-weighted decibel scale

Table 4.5-14 Typical Construction Equipment Noise Levels for Other Transportation Improvements

	Typical Noise Levels (dBA)		
Equipment Type	50 feet	100 feet	500 feet
Front End Loaders	80	74	60
Trucks	89	83	69
Jackhammers	90	84	70
Concrete Mixers	82	76	62
Pavers	87	81	67
Trucks and Jackhammers Operating Simultaneously[1]	92	86	72

Source: CDM Smith, 2015.

Note:
1. Trucks and jackhammers are likely to operate simultaneously and would result in a higher noise level than combinations of other equipment, such as a concrete mixer and a paver. Combined noise levels from a truck and a jackhammer are used to represent the highest noise level associated with other transportation improvement projects.

Key:
dBA = A-weighted decibel scale

To meet the goals and policies of the City of Los Angeles Noise Element, noise from construction of the proposed transportation improvements would be minimized, as feasible. Construction would be conducted in accordance with regulations found in the LAMC and in mayoral directives. Specifically, Mayor Antonio Villaraigosa's Executive Directive No. 2, still in effect, prohibits construction in the public right-of-way between 6:00 a.m. and 9:00 a.m. and between 3:30 p.m. and 7:00 p.m., with some exceptions. This prohibition would apply to construction of any of the proposed transportation improvements that would occur within public roads, such as BRT and other transit projects, cycle tracks, and intersection improvements, but would not apply to non-road projects, such as sidewalk improvements, streetscape improvements, and bicycle facilities. All construction activities would be subject to the general noise provisions of the LAMC found in Section 41.40, which limits construction within 500 feet of residential uses to the hours of 7:00 a.m. to 9:00 p.m. on weekdays and 8:00 a.m. to 6:00 p.m. on Saturdays and national holidays, and prohibits construction activity on Sundays. In addition, Section 112.05 of the LAMC prohibits the use of powered equipment within 500 feet of a residential zone that produces a maximum noise level exceeding 75 dBA at 50 feet without the use of noise abatement technologies, such as mufflers and sound barriers, to meet this level, unless technically infeasible.

Even with adherence to the LAMC, construction activities associated with the Proposed Project could exceed ambient noise levels by 10 dBA or more for more than one day at a noise sensitive use or exceed ambient noise levels by 5 dBA or more for more than ten days over a three month period at a noise sensitive use. Many of the medium construction intensity projects, such as streetscape improvements, cycle tracks, bike transit centers, and traffic calming features, would occur curb side, which could be close to noise sensitive receptors, depending on the location. As shown in Table 4.5-14, these transportation improvements may at times generate noise levels exceeding 90 dBA at 50 feet. In many cases, construction of these improvements may occur over a period of just a few days in any one location; nevertheless, if located within a right-of-way that is right in front of a sensitive use, such as an apartment building, the activity could exceed ambient noise levels by 10 dBA or more for more than one day, without mitigation. This would be a potentially ***significant impact.***

Construction of the center-running BRT platforms along Lincoln and Sepulveda boulevards, and the I-10 Ramp Reconfiguration at Bundy Drive would involve a high level of construction activity over a lengthy construction period (assumed to be 24 months for purposes of this analysis). As stated previously, the specific design features associated with these projects, such as the BRT platform locations or the exact ramp configuration, have not yet been determined. Depending on the platform locations, construction could occur within 50 feet of a residential use. At this distance, as shown in Table 4.5-12, construction equipment could result in noise levels over 97 dBA. Construction of the I-10/Bundy Drive ramp reconfiguration could have greater construction impacts; if the eastern leg of the off ramp were reconfigured, construction could occur within 40 feet of residences on W. Ayres Way. Construction of the Lincoln Boulevard and Sepulveda Boulevard BRTs and the I-10/Bundy Drive Ramp Reconfiguration could exceed ambient noise levels by 10 dBA or more for more than one day at a noise sensitive use. Because of the duration and construction intensity of the project, construction could also exceed ambient noise levels by 5 dBA or more at a noise sensitive use for more than ten days over a three month period. Construction-related noise levels associated with the Lincoln Boulevard and Sepulveda Boulevard BRTs and the I-10 Ramp Reconfiguration at Bundy Drive would be a potentially ***significant impact.***

The Lincoln Boulevard Bridge Enhancement project would likely take over 18 months and would also involve a high level of construction activity. In addition to widening the Lincoln Bridge over Ballona Channel, the project would require widening Lincoln Boulevard south of the bridge. Construction activities related to the bridge widening would occur approximately 100 to 400 feet from the nearest residence. Widening of Lincoln Boulevard south of the bridge would involve construction within approximately 60 feet of multi-family residences. In addition, the bridge widening may involve intermittent use of a pile driver, which could generate high noise levels for a short duration (likely less than six weeks). Overall, as shown in Table 4.5-13, the Lincoln Boulevard Bridge Enhancement would require operation of construction equipment at times that could result in noise levels exceeding 90 dBA at 60 feet without mitigation. This improvement would exceed ambient noise levels by 10 dBA or more for more than one day at a noise sensitive use. Moreover, because of the duration and construction intensity of the project, construction would also exceed ambient noise levels by 5 dBA or more at a noise sensitive use for more than ten days over a three month period. This would be a potentially ***significant impact***.

Operation

Existing operational noise levels could be affected by a change in vehicle operations in the project area as a result of implementing the proposed transportation improvement projects. Although the Proposed Project would not introduce any new roadways in the project area, and all improvements would occur within existing right-of-ways, enhancing mobility may change vehicle speeds on some roadways, which could result in changes in noise levels. For example, implementation of bus-only lanes would result in increased average bus speeds. In addition, intersection and ITS improvements would increase vehicle speeds on some roadways during some time periods. Conversely, other improvements may involve reducing the number of travel lanes on a roadway to provide bus rapid transit lanes and bicycle lanes. This may shift vehicles onto the remaining travel lane(s) and may result in lower traveling speeds during certain time periods. While decreased vehicle speeds could result in lower vehicle noise levels compared to existing conditions, increases in bus and private vehicle speeds could result in higher vehicle noise levels compared to existing conditions. **Table 4.5-15** shows the change in noise level as a result of changing vehicle speeds.

Table 4.5-15 Vehicle Noise Level as a Function of Speed (50 feet from centerline)

Speed (mph)	Auto (dBA)	Medium Truck (dBA)	Heavy Truck (dBA)
40	67	75	81
44	69	77	82

Source: Caltrans, 2013a.

Key:
dBA = A-weighted decibel scale
mph = miles per hour

Vehicle Traffic

The overall study area speed is not anticipated to change substantially. Overall, study area vehicle trips are anticipated to increase between 2014 and 2035 by approximately 11 percent without the Proposed Project (i.e., Future without Project) and 8 percent with the Proposed Project. A hypothetical doubling of traffic would increase the noise level by 3 dBA. As the projected increase in private vehicle trips is substantially less than double, impacts to overall ambient noise levels from increases in private vehicles would be ***less than significant.***

Buses

The Proposed Project includes a number of improvements to bus service, including center-running BRT on Lincoln Boulevard and Sepulveda Boulevard, curb-running BRT on other corridors, expanded service routes and frequency, and other improvements. The frequency of activity on new and improved bus routes has not been determined. For purposes of this EIR, it is assuming that the frequency of bus service would double in the project area. A doubling of bus service could result in higher noise levels than levels associated with vehicular traffic. The overall effect of the bus improvements would likely not result in significant impacts at sensitive receptors. However, it is possible that curb-running BRT could increase noise levels at some sensitive land uses by more than 3 dBA.

The level of noise that would be generated by buses would vary depending upon the fuel source, which could include conventional diesel, diesel-electric hybrid, compressed natural gas (CNG), electric trolleybus with overhead catenary, and battery-electric. Some of these, in particular battery-electric buses, are not currently in widespread use. Noise generated by buses varies depending upon the phase of operations (e.g., idle, acceleration, wide-open-throttle, etc.) and the speed at which the bus is traveling. When idling, the differences in noise emissions from conventional diesel, diesel-electric hybrid, and CNG buses are small (0 to 2 dBA). Under wide-open-throttle, the differences between hybrid buses and conventional buses are greater (7 dBA). Some studies have shown CNG buses to be louder than conventional and hybrid buses. Noise level differences are greatest under low speed (below 40 mph); at speeds of 40 mph and above, noise from the interaction between tires and pavement dominate bus noise, and the maximum levels of noise between the various technologies show less variation. Electric trolleybuses have notably lower noise levels than other technologies; battery-electric buses would be expected to be similar, or even less noisy, than electric trolleybuses (Ross and Staiano, 2007).

For purposes of this EIR, it is conservatively estimated that the buses that would be in operation would be conventional diesel or CNG buses. As noted above, curb-running BRT could increase noise levels at some sensitive land uses by more than 3 dBA. Therefore, noise levels from improvements to bus service, particularly curb-running BRT, would be a potentially ***significant impact.***

Pedestrian and Bicyclists

The Proposed Project includes enhanced pedestrian and bicycle facilities. Implementation of these projects would expose increased numbers of pedestrians and cyclists to vehicle noise. This noise exposure would be similar to existing roadway noise levels experienced by cyclists and pedestrians in the project area. The fact that increased numbers of pedestrians and cyclists would be exposed to vehicle noise would not, by itself, constitute a significant impact because (1) it would be an impact from the environment on the project and (2) because it does not exceed the adopted threshold. This is a ***less than significant impact.***

Mitigation Measures

Construction

Mitigation Measure (MM)-N-1: Construction Noise. Prior to construction, a noise control plan (NCP) shall be developed by a qualified noise specialist, as approved by the City of Los Angeles Department of Building and Safety. The NCP shall identify the procedures for predicting construction noise levels at sensitive receptors and shall describe the reduction measures required to minimize construction noise. Construction activity lasting more than one day and increasing ambient noise by more than 10 dBA or more at a noise sensitive use, or resulting in increases in ambient noise of 5 dBA or more at a noise sensitive use more than ten days in a three-month period, shall incorporate noise-reducing measures. These measures may include, but are not limited to:

- Install temporary sound barriers (e.g., soundwall) between the construction site and sensitive receptors and/or place portable sound blankets around sandblasting and jackhammering operations, as well as around construction activities that involve vibratory rollers.
- Equip construction equipment with the most effective locally available commercial mufflers, along with any other suitable noise attenuation devices (e.g., acoustically attenuating shields, shrouds, or enclosures). Contractor shall be responsible for maintaining equipment consistent with the manufacturers' standards to assure that no additional noise would be generated due to improperly maintained and worn parts.

- Scheduling operations of high impact equipment (e.g., pile driver, vibratory roller, tractor/loader/backhoe, haul trucks) during the middle of the day so as to reduce early morning and late evening impacts when residents are likely to be home;
- Placing stationary construction equipment (e.g., compressors, generators) as far away from sensitive land uses, as feasible;
- Unnecessary idling of equipment and vehicles shall be prohibited. Idling of haul trucks shall be limited to five minutes or less, as required by the South Coast Air Quality Management District rules;
- The public shall be kept informed of the construction hours and days, especially those of pile driving. The public information shall provide contact information for complaints. Noise complaints shall be logged and construction activities shall be evaluated to determine if additional noise mitigation is necessary and feasible;
- A pre-construction meeting with contractors and project managers shall be conducted to confirm that noise mitigation procedures are in place.

Operation

There are no feasible mitigation measures to reduce the potential noise impact associated with increased bus service. Reducing bus frequency is not considered to be feasible because reduced frequency would not meet the primary project objectives, which include providing transportation options and accommodations for multiple modes of travel, including transit (i.e., buses), and producing fewer auto trips per capita. Replacing all buses with quieter vehicles such as electric trolleybuses or battery-electric buses is also not considered to be a feasible mitigation measure. Electric trolleybuses would require a substantial amount of new infrastructure, including exclusive right-of-way. Implementing electric trolleybus service would result in new environmental impacts not associated with the Proposed Project. Battery-electric buses are not yet widely in use. It is not technologically feasible at this time to consider an all-battery-electric bus fleet as mitigation for potential noise impacts.

Significance of Impacts After Mitigation

Construction

Implementation of mitigation measure MM-N-1 would reduce construction noise to the extent feasible. Sound barriers are effective in reducing sound levels by 3 dBA up to 15 dBA. However, if a barrier is not able to break the line-of-sight from the source to the receiver, its effectiveness is greatly reduced. Due to the proximity of some of the improvements to nearby sensitive receptors, it is expected that sound walls would only be effective in reducing construction noise impacts at the ground level of nearby buildings. It would not be technically feasible to construct a noise barrier that would effectively reduce the construction-related noise at the upper floors of nearby apartment buildings or multi-story homes. Noise level reductions attributable to noise shielding, muffling device, and limited idling, although not easily quantifiable, would also reduce noise impacts associated with construction activities to the extent practicable. Noise impacts associated with the majority of the construction activities would be infrequent and of short duration and would only affect a small number of sensitive receptors. As noted above, implementation of MM-N-1 would reduce noise impacts associated with project construction activities to the extent feasible; however, even with mitigation, impacts at some locations would remain ***significant and unavoidable****.*

Operation

Impacts from private vehicular use would be ***less than significant***.

As there are no feasible mitigation measures to reduce bus frequency or to replace the bus fleet, noise impacts from buses associated with the Proposed Project are considered to be ***significant and unavoidable.***

Impact 4.5-2: Implementation of the Proposed Project would expose persons to or generate excessive groundborne vibration or groundborne noise levels. This would be a *less than significant* impact for operations and *a significant and unavoidable impact* for construction.

Construction

Construction of the proposed transportation improvements may result in temporary increases in vibration. Implementation of these transportation improvement projects would be subject to available funding collected through the proposed Transportation Impact Assessment (TIA) fees, which would be dependent on the rate of development within the project area, as well as funding obtained from other sources; therefore, the implementation schedules and specific designs of these transportation improvement projects are not yet available. Instead, potential vibration impacts were estimated based on anticipated construction activity.

Construction equipment, such as dozers and hammers, could generate vibrations that may affect nearby structures and sensitive receptors. As described above, it was assumed that construction of a typical improvement project would involve a front end loader, a truck, a jackhammer, a concrete mixer, and a paver. The higher intensity construction projects were assumed to require additional construction equipment. A list of construction equipment assumed for these projects is provided in Table 4.1-8 in Section 4.1, *Air Quality*. In addition to the equipment listed in this table, for purposes of the noise analysis, it was assumed that construction of the Lincoln Bridge Enhancement Project could involve a drill or hammer type of pile driving.

Vibration Resulting in Human Annoyance

Table 4.5-16 summarizes the total rms vibration levels produced by the equipment associated with construction of the Lincoln Boulevard and Sepulveda Boulevard BRT platforms and the I-10 Ramp Reconfiguration at Bundy Drive. As shown in the table, typical maximum vibration at 175 feet associated with these projects would be 72 VdB, which is equivalent to the significance threshold associated with frequent events. If the heavy construction activities, such as construction of BRT platforms or demolition of the existing I-10 off-ramps at Bundy Drive, were to occur less than 175 feet from a residence, the human annoyance vibration threshold for frequent events would be exceeded. This would be a potentially ***significant impact.***

Table 4.5-16 Center-Running BRT Station and Bundy Drive/I-10 Ramp Construction Vibration Levels

	Typical Vibration Levels (VdB)		
Phases	**50 feet**	**100 feet**	**175 feet**
Grubbing/Land Clearing	77	68	61
Grading/Excavation	88	79	72
Drainage/Utilities/Subgrade	77	68	61
Paving	88	79	72

Source: CDM Smith, 2015.

Key:
VdB = decibel vibration velocity level

In addition to the construction equipment associated with the Lincoln Boulevard and Sepulveda Boulevard BRT platforms and the I-10 Ramp Reconfiguration at Bundy Drive, construction of the Lincoln Boulevard Bridge Enhancement may also require pile driving. As noted previously, the closest receptor during pile driving activities would be 100 feet or more from the construction site. **Table 4.5-17** summarizes the total rms vibration level produced by the equipment associated with the Lincoln Boulevard Bridge Enhancement. As shown in the table, if pile driving were used for the Lincoln Boulevard Bridge Enhancement, vibration levels could result in an Lv of approximately 87 VdB at the nearest residential receptor. Sensitive receptors that are located less than 315 feet from the pile driving activity would experience vibration levels exceeding the human annoyance threshold. Although pile driving, if used at all, would be infrequent, vibration levels associated with human annoyance could result in significant impacts to the closest residences. Where Lincoln Blvd south of the bridge would require widening, then other equipment that may be used for construction would result in vibration levels of 75 to 86 VdB at the closest receptor distance of 60 feet. Because the project has the potential to result in vibration levels that would exceed thresholds for human annoyance, vibration associated with construction of the Lincoln Boulevard Bridge Enhancement would be a potentially ***significant impact.***

Table 4.5-17 Lincoln Boulevard Bridge Enhancement Construction Vibration Levels

	Typical Vibration Levels (VdB)		
Phases	**60 feet[1]**	**100 feet**	**315 feet**
Grubbing/Land Clearing	75	68	53
Grading/Excavation	86	87[2]	72[2]
Drainage/Utilities/Subgrade	75	68	53
Paving	86	79	64

Source: CDM Smith, 2015.

Notes:
1. Vibration levels at 60 feet would be associated with widening of Lincoln Boulevard south of the bridge, which would not involve pile driving. The closest receptor during pile driving activities would be 100 feet or more from the construction site.
2. Includes pile driving.

Key:
VdB = decibel vibration velocity level

Table 4.5-18 summarizes the vibration levels produced by trucks and jackhammers that may be used to construct other transportation improvements. When combined, a truck and a jackhammer would result in a vibration level of 78 VdB at 50 feet. As shown in the table, construction activities associated with these transportation improvements that are located 81 feet or less from a sensitive land use would exceed the human annoyance vibration threshold for frequent events. This would be a potentially ***significant impact.***

Table 4.5-18 Other Transportation Improvements Construction Vibration Levels

	Typical Vibration Levels (VdB)		
Equipment Type	**50 feet**	**75 feet**	**81 feet**
Truck	77	72	71
Jackhammer	70	65	64
Combined Truck & Jackhammer[1]	78	72	71

Source: CDM Smith, 2015.

Note:

1. Trucks and jackhammers are likely to operate simultaneously and would result in higher vibration levels than combinations of other equipment, such as a concrete mixer and a paver. Combined vibration levels from a truck and a jackhammer are used to represent the highest noise level associated with other transportation improvement projects.

Key:
VdB = decibel vibration velocity level

Vibration Impacts to Structures

Table 4.5-19 summarizes the peak vibration level produced by each equipment type. For purposes of this EIR, a threshold of 0.3 ppv is used to determine the significance of vibration impacts to structures. The table identifies the distances beyond which structural vibration damage criteria of 0.3 in/sec would not be exceeded. Typical improvement projects that utilize typical construction equipment would likely not result in significant vibration at nearby structures. As indicated in Table 4.5-19, structures would need to be located less than 6 feet from a jackhammer, less than 10 feet from a truck, and less than 20 feet from a vibratory roller for the threshold to be exceeded. It is not anticipated that construction activities would occur within these distances from buildings. Vibration associated with pile driving would be greater than that associated with typical construction equipment. However, if it were used, pile driving associated with the Lincoln Boulevard Bridge Enhancement would occur more than 100 feet from the nearest residence. At this distance, vibration impacts to the nearest structures would not exceed the significance thresholds for structural vibration damage. Therefore, structural vibration impacts would be ***less than significant.***

Table 4.5-19 Typical Construction Equipment Peak Vibration Levels

	Typical Peak Vibration Levels (in/sec)			Distance (feet) beyond which structural vibration damage criteria of 0.3 in/sec would not be exceeded
Equipment Type	**25 feet**	**50 feet**	**75 feet**	
Trucks	0.076	0.027	0.015	10
Jackhammers	0.035	0.012	0.007	6
Vibratory Roller	0.210	0.074	0.040	20
Pile Driving	0.644	0.228	0.124	42

Source: City of Los Angeles, 2006; CDM Smith, 2015.

Key:
in/sec = inches per second

Operation

Operation of the Proposed Project would not involve any stationary sources of vibration. Vehicular traffic could generate vibration during operation. As described in Section 4.5.3.1, typical vibration from road traffic is near the threshold of perception for humans. Therefore, vibration impacts associated with project operation would be ***less than significant***.

Mitigation Measures

Construction

MM-N-2: **Construction Vibration.** An evaluation of project-specific vibration levels shall be completed by a qualified vibration specialist, as determined by the City of Los Angeles Department of Building and Safety for any project that is less than 81 feet from a residence. Vibration reducing measures, such as use of lighter weight equipment or use of equipment that produces less vibration, shall be implemented for potentially significant vibration impacts, if technically feasible. In addition, operation of high vibration impact equipment in proximity to sensitive receptors shall be scheduled during the middle of the day so as to reduce human annoyance in the early morning and late evening when residents are likely to be home.

Operation

No mitigation measures are required.

Significance of Impacts After Mitigation

Construction

The Proposed Project would not result in significant vibration impacts to structures.

Human annoyance impacts from vibration associated with the majority of construction activities would be infrequent and of short duration and would only affect a small number of sensitive receptors. Implementation of mitigation measure MM-N-2 is anticipated to reduce human annoyance impacts associated with vibration to the extent feasible; however, even with mitigation, vibration impacts at some locations would remain ***significant and unavoidable.***

Operation

Impacts from vibration associated with operations would be ***less than significant***.

Impact 4.5-3: Implementation of the Proposed Project would result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. This would be a *significant and unavoidable impact*.

Permanent increases in ambient noise levels associated with project operations are addressed in Impact 4.5-1. As identified in that analysis, impacts associated increases in ambient noise levels associated with proposed roadway, bicycle, and pedestrian improvements would be less than significant. However, the increased frequency of bus service associated with the Proposed Project could result in a permanent increase in ambient noise levels that would exceed 3 dBA. This would be a ***significant impact***.

Mitigation Measures

There are no feasible mitigation measures to reduce the potential noise impact associated with increased bus service. Reducing bus frequency is not considered to be feasible because reduced frequency would not meet the primary project objectives, which include providing transportation options and accommodations for multiple modes of travel, including transit (i.e., buses), and producing fewer auto trips per capita.

Significance of Impacts After Mitigation

As there are no feasible mitigation measures to reduce bus frequency, noise impacts from buses associated with the Proposed Project are considered to be ***significant and unavoidable***.

Impact 4.5-4: Implementation of the Proposed Project would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. This impact would be *significant and unavoidable*.

Temporary or periodic increases in ambient noise levels associated with project construction are addressed in Impact 4.5-1. As identified in that analysis, construction of the proposed transportation improvements could exceed ambient noise levels by 10 dBA or more for more than one day at a noise sensitive use. In addition, construction activities associated with some of the proposed improvements, including the Lincoln Boulevard Bridge Enhancement, the Lincoln Boulevard and Sepulveda Boulevard BRTs, and the I-10 Ramp Reconfiguration at Bundy Drive, could exceed existing ambient noise levels by 5 dBA or more at a noise sensitive use for more than ten days over a three month period. These temporary and periodic increases in ambient noise levels would be a potentially ***significant impact***.

Mitigation Measures

Mitigation measure MM-N-1 is recommended to reduce construction-related noise.

Significance of Impacts After Mitigation

As discussed in Impact 4.5-1, implementation of mitigation measure MM-N-1 would reduce construction noise to the extent feasible. Moreover, noise impacts associated with the majority of the construction activities would be infrequent and of short duration and would only affect a small number of sensitive receptors. However, even with mitigation, impacts at some locations would remain ***significant and unavoidable***.

Impact 4.5-5: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, implementation of the Proposed Project would not expose people residing or working in the study area to excessive noise levels. This would be a *less than significant impact* for construction and operations.

Construction

Construction workers associated with the Proposed Project would be located within two miles of LAX, Hawthorne Airport, and Santa Monica Airport. Construction activity would not occur on airport property, and airport-related noise levels would be less than construction noise levels. Construction workers would not be exposed to excessive airport noise and, therefore, impacts would be ***less than significant***.

Operation

The Proposed Project would not change land uses in the project area. Therefore, the project would not expose residents to excessive airport-related noise. This impact is ***less than significant.***

Mitigation Measures

No mitigation measures are required.

Significance of Impacts After Mitigation

The Proposed Project would not have any significant impacts relative to excessive noise levels from a public airport. This impact is ***less than significant.***

Impact 4.5-6: For a project within the vicinity of a private airstrip, implementation of the Proposed Project would not expose people residing or working in the study area to excessive noise levels. There would be *no impact*.

There are no private airstrips located in the vicinity of the study area. Therefore, there would be ***no impact*** associated with excessive noise levels from a private airstrip.

Mitigation Measures

No mitigation measures are required.

Significance of Impacts After Mitigation

The Proposed Project would not have any significant impacts relative to excessive noise levels from a private airstrip. There are no private airstrips located in the vicinity of the study area. Therefore, there would be ***no impact*** associated with excessive noise levels from a private airstrip.

Section 4.6
Transportation

4.6.1 Introduction

This section provides an overview of transportation and mobility in the study area and analyzes the operational impacts associated with the proposed amendments to the Coastal Transportation Corridor Specific Plan (CTCSP) and West Los Angeles Transportation Improvement and Mitigation Specific Plan (WLA TIMP), collectively referred to as the Proposed Project. The Proposed Project would not, itself, entitle or otherwise approve any transportation projects or create any operational changes to transportation and mobility. Individual transportation improvements would be studied in further detail prior to implementation. Nevertheless, the Proposed Project would result in a new list of potential transportation improvements for both the CTCSP and WLA TIMP areas. Topics addressed in this section include the circulation system; congestion management plan; emergency access; public transit; bicycle and pedestrian facilities; parking and safety.

The section is organized as follows:

- **Regulatory Framework** describes the pertinent federal, state, and local laws and guidelines.
- **Existing Setting** provides a general summary and overview of transportation systems as well as measures of travel patterns and operating conditions.
- **Methodology** describes the methodology used to assess impacts, including an overall discussion of assumptions and approach used to evaluate project impacts.
- **Thresholds of Significance** lists the thresholds used in identifying significant impacts as identified in Appendix G of the State CEQA Guidelines and the L.A. CEQA Thresholds Guide (City of Los Angeles, 2006), as well as draft metrics under consideration by the Governor's Office of Planning and Research (OPR).
- **Impacts and Mitigation Measures** discusses the effects of project implementation on transportation in the project area. Where appropriate, recommended mitigation measures are identified to reduce significant impacts. The **Significance of Impacts After Mitigation** is also identified.

4.6.2 Regulatory Framework

Federal

Americans with Disabilities (ADA) Act of 1990. Titles I, II, III, and V of the ADA have been codified in Title 42 of the United States Code, beginning at section 12101. Title III prohibits discrimination on the basis of disability in "places of public accommodation" (businesses and non-profit agencies that serve the public) and "commercial facilities" (other businesses). The regulation includes Appendix A to Part 36 (Standards for Accessible Design), establishing minimum standards for ensuring accessibility when designing and constructing a new facility or altering an existing facility. Examples of key guidelines include detectable warnings for pedestrians entering traffic where there is no curb, a clear zone of 48 inches for the pedestrian travelway and a vibration-free zone for pedestrians.

State

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

Complete Streets Directive. California Department of Transportation (Caltrans) enacted Complete Streets: Integrating the Transportation System (Complete Streets Directive) in October 2008, which required cities to plan for a "balanced, multimodal transportation network that meets the needs of all users of streets (Caltrans, 2014). A complete street is a transportation facility that is planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians, transit vehicles, truckers, and motorists, appropriate to the function and context of the facility. Every complete street looks different, according to its context, community preferences, the types of road users, and their needs.

Statewide Transportation Improvement Program (STIP). Caltrans administers transportation programming for the State. Transportation programming is the public decision-making process that sets priorities and funds projects envisioned in long-range transportation plans. It commits expected revenues over a multi-year period to transportation projects. The STIP is a multi-year capital improvement program of transportation projects on and off the State Highway System, funded with revenues from the State Highway Account and other funding sources.

Congestion Management Program (CMP). CMPs became required with the passage of Proposition 111 in 1990 (also known as Senate Constitutional Amendment 1) and forged new ground in linking transportation, land use, and air quality decisions. The CMP addresses the impact of local growth on the regional transportation system. Statutory elements of the CMP include Highway and Roadway System monitoring, multi-modal system performance analysis, the Transportation Demand Management program, the Land Use Analysis program, and local conformance for all the county's jurisdictions. State statute (Section 65088) requires that a congestion management program be developed, adopted, and updated biennially for every county that includes an urbanized area, and shall include every city and the county government within that county.

Senate Bill 743 (SB 743). SB 743 directs the OPR to develop revisions to the CEQA Guidelines by July 1, 2014 to establish new criteria for determining the significance of transportation impacts and define alternative metrics for traffic level of service. Since the new criteria are still under review by OPR and the updated CEQA Guidelines are still not yet defined, the transportation analysis in this document relies on the legal context and policy framework in place at the time of project initiation. It is possible that some or all of the impacts related to vehicular level of service (LOS) that are considered significant under the current legal and policy framework would no longer be considered significant if analyzed using the new criteria.

Office of Planning and Research Guidance. On September 27, 2013, Governor Jerry Brown signed SB 743 into law and started a process that could fundamentally change transportation impact analysis as part of CEQA compliance. These changes will include elimination of auto delay, LOS, and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts in many parts of California (if not statewide).Further, parking impacts will not be considered significant impacts on the environment for select development projects within infill areas with nearby frequent transit service. According to the legislative intent contained in SB 743, these changes to current practice were necessary to "…more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions."

On August 6, 2014, the Governor's OPR released the *Updating Transportation Impacts Analysis in the CEQA Guidelines, Preliminary Discussion Draft of Updates to the CEQA Guidelines Implementing Senate Bill 743*. Of particular relevance to this project is the text of the proposed new Section 15064.3 that relates to the determination of the significance of transportations impacts, alternatives and mitigation measures. The following key text concerning the analysis of transportation impacts is taken directly from the document:

> *(b) Criteria for Analyzing Transportation Impacts.*
>
> *Section 15064 contains general rules governing the analysis, and the determination of significance, of environmental effects. Specific considerations involving transportation impacts are described in this section. For the purposes of this section, "vehicle miles traveled" refers to distance of automobile travel associated with a project.*
>
> *(1) Vehicle Miles Traveled and Land Use Projects. Generally, transportation impacts of a project can be best measured using vehicle miles traveled. A development project that is not exempt and that results in vehicle miles traveled greater than regional average for the land use type (e.g. residential, employment, commercial) may indicate a significant impact. For the purposes of this subdivision, regional average should be measured per capita, per employee, per trip, per person-trip or other appropriate measure. Also for the purposes of this subdivision, region refers to the metropolitan planning organization or regional transportation planning agency within which the project is located. Development projects that locate within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor generally may be considered to have a less than significant transportation impact. Similarly, development projects, that result in net decreases in vehicle miles traveled, compared to existing conditions, may be considered to have a less than significant transportation impact. Land use plans that are either consistent with a sustainable communities strategy, or that achieve at least an equivalent reduction in vehicle miles traveled as projected to result from implementation of a sustainable communities strategy, generally may be considered to have a less than significant impact.*
>
> *(2) Induced Vehicle Travel and Transportation Projects. To the extent that a transportation project increases physical roadway capacity for automobiles in a congested area, or adds a new roadway to the network, the transportation analysis should analyze whether the project will induce additional automobile travel compared to existing conditions. The addition of general purpose highway or arterial lanes may indicate a significant impact except on rural roadways where the primary purpose is to improve safety and where speeds are not significantly altered. Transportation projects that do not add physical roadway capacity for automobiles, but instead are for the primary purpose of improving safety or operations, undertaking maintenance or rehabilitation, providing rail grade separations, or improving transit operations, generally would not result in a significant transportation impact. Also, new managed lanes (i.e. tolling, high-occupancy lanes, lanes for transit or freight vehicles only,*

etc.), or short auxiliary lanes, that are consistent with the transportation projects in a Regional Transportation Plan and Sustainable Communities Strategy, and for which induced travel was already adequately analyzed, generally would not result in a significant transportation impact. Transportation projects (including lane priority for transit, bicycle and pedestrian projects) that lead to net decreases in vehicle miles traveled, compared to existing conditions, may also be considered to have a less than significant transportation impact.

Regional

A number of regional improvement plans affect transportation in the City of Los Angeles. They include the Los Angeles County CMP and the Long Range Transportation Plan (LRTP) prepared by Los Angeles County Metropolitan Transportation Authority (Metro), the Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS), the Regional Transportation Improvement Program (RTIP), the Regional Comprehensive Plan (RCP), the Compass Growth Vision prepared by the Southern California Association of Governments (SCAG), and the City of Los Angeles General Plan, which includes the 2010 Bicycle Plan.

Southern California Association of Governments 2012-2035 Regional Transportation Plan and Sustainable Communities Strategy and Regional Transportation Improvement Program. SCAG adopted the 2012-2035 RTP/SCS in April 2012. The RTP/SCS is a planning document required under state and federal statute that encompasses the SCAG region, including six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The RTP/SCS forecasts long-term transportation demands and identifies policies, actions, and funding sources to accommodate these demands. The RTP/SCS consists of the construction of new transportation facilities, transportation systems management strategies, transportation demand management and land use strategies. The RTIP, also prepared by SCAG based on the RTP/SCS, lists all of the regional funded/programmed improvements over a six year period.

Southern California Association of Governments Regional Comprehensive Plan. SCAG has prepared the RCP in collaboration with its constituent members and other regional planning agencies. The SCAG Regional Council adopted the RCP in October 2008 as an advisory informational document only. The 2008 RCP is intended to serve as a framework to guide decision-making with respect to the growth and changes that can be anticipated in the region through the year 2035. The RCP features nine chapters that focus on specific areas of planning or resource management that includes: Land Use and Housing; Open Space and Habitat; Water; Energy; Air Quality; Solid Waste; Transportation; Security and Emergency Preparedness and Economy. Local governments are required to use the RCP as the basis for their own plans and are required to discuss the consistency of projects of regional significance with the RCP. The Transportation chapter of the RCP focuses on addressing demand on the transportation system from growth in population, employment and households; preserving, wisely utilizing, and, when necessary, expanding our infrastructure, and funding.

Metro Congestion Management Program. Metro, the local CMP agency, has established an approach to implement the statutory requirements of the CMP. The Metro Board adopted the 2010 CMP in October 2010. The approach includes designating a highway network that includes all State highways and principal arterials within the County and monitoring the network's congestion. The CMP identifies a system of highways and roadways, with minimum levels of service performance measurements designated at Level of Service E (unless exceeded in base year conditions) for highway segments and key roadway intersections on this system. For all CMP facilities within the study area a traffic impact analysis is required. The analysis must: investigate measures which will mitigate the significant CMP system impacts; develop cost estimates, including the fair share costs to mitigate impacts of a proposed project; and, indicate the responsible agency. Selection of final mitigation measures is left at the discretion of the local jurisdiction. Once a mitigation program is selected, the jurisdiction self-monitors implementation through the existing mitigation monitoring requirements of CEQA.

Metro 2009 Long Range Transportation Plan. The 2009 LRTP includes funding for general categories of improvements, such as Arterial Improvements, Nonmotorized Transportation, Rideshare and Other Incentive Programs, Park-and-Ride Lot Expansion, and Intelligent Transportation System (ITS) improvements for which Call for Project Applications can be submitted for projects in Los Angeles County. Metro also has a Short Range Transportation Plan to define the near-term (through year 2024) transportation priorities in Los Angeles County. In addition to the regional transportation plans, Metro has recently adopted a Complete Streets Policy and a First Last Mile Strategic Plan.

Metro Complete Streets Policy. Metro's recently adopted Complete Streets Policy is reinforcing the California Complete Streets Act (Assembly Bill [AB] 1358). Effective January 1, 2017, Metro is requiring that all local jurisdictions within LA County must adopt a Complete Streets Policy, an adopted city council resolution supporting Complete Streets, or an adopted general plan consistent with the California Complete Streets Act of 2008 in order to be eligible for Metro capital grant funding programs, starting with the 2017 grant cycles.

Local

City of Los Angeles General Plan – General Plan Framework Element. The General Plan's guiding document is the Framework Element, which provides a strategy for long-range growth and development focused around the following guiding principles: economic opportunity, equity, environmental quality, strategic investment, clear and consistent rules, and effective implementation. These principles provide direction around topics such as Land Use, Housing, Economic Development and Transportation, among others, that are further developed in related Elements in the General Plan. The Framework Element establishes the big-picture goals that are then further refined in other planning documents, such as community plans, specific plans, and zoning code.

City of Los Angeles Mobility Plan 2035. The City updated the Transportation Element of the City's General Plan, now referred to as Mobility Plan 2035 or MP 2035, to reflect policies and programs that will lay the policy foundation for safe, accessible, and enjoyable streets for pedestrians, bicyclists, transit users, and vehicles throughout the City of Los Angeles, including the Westside. The MP 2035 and Final EIR were adopted on August 11, 2015. MP 2035 is compliant with the 2008 Complete Streets Act (Assembly Bill 1358), which mandates that the circulation element of a city's General Plan be modified to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan.

The goals and objectives of MP 2035 that are relevant to the Proposed Project are as follows:

- **Safety First:** focuses on topics related to crashes, speed, protection, security, safety, education, and enforcement.
  - Objective: Vision Zero: Decrease transportation related fatality rate to zero by 2035.

- **World Class Infrastructure:** focuses on topics related to the Complete Streets Network (walking, bicycling, transit, vehicles, green streets, goods movement), Great Streets, Bridges, Street Design Manual, and demand management.
  - Objective: Provide 95% on-time arrival reliability of buses traveling on the Transit Enhanced Network by 2035. Establish an off-peak 5 minute bus frequency on 25% of the Transit Enhanced Network by 2035.
  - Objective: Increase vehicular travel time reliability on all segments of the Vehicle Enhanced Network by 2035.
  - Objective: Maintain the Automated Traffic Surveillance and Control System (ATSAC) Communications Network.
- **Access for all Angelenos:** focuses on topics related to affordability, least cost transportation, land use, operations, reliability, demand management, and community connections.
  - Objective: Ensure that 90% of households have access within one mile to the Transit Enhanced Network by 2035.
  - Objective: Ensure that 90% of all households have access within one-half mile to high quality bicycling* facilities by 2035. (*protected bicycle lanes, paths, and neighborhood enhanced streets).
  - Objective: Increase the combined mode split of persons who travel by walking, bicycling or transit to 50% by 2035.
- **Collaboration, Communication & Informed Choices:** focuses on topics related to real-time information, open source data, transparency, monitoring, reporting, emergency response, departmental and agency cooperation and data base management.
  - Objective: Install street parking occupancy-detection capability at 50% of on-street parking locations by 2035.
  - Objective: Implement coordinated wayfinding at all major transit stations by 2035.
- **Clean Environment and Healthy Communities:** focuses on topics related to environment, health, clean air, clean fuels and fleets, and open street events.
  - Objective: Decrease vehicle miles traveled (VMT) per capita by 5% every five years, to 20% by 2035.
  - Objective: Meet a 9% per capita greenhouse gas (GHG) reduction for 2020 and a 16% per capita reduction for 2035 (SCAG RTP).
  - Objective: Reduce the number of unhealthy air quality days to zero by 2025.

City of Los Angeles General Plan – General Plan Transportation Element. Prior to the adoption of the Mobility Plan 2035, the applicable circulation element (transportation policies) were contained in the City of Los Angeles Transportation Element, adopted in 1999. At the publication of this Draft EIR, the Mobility Plan 2035 is subject to legal challenge. In the event the litigation results in the Mobility

Plan 2035 being stayed or overturned, the 1999 Transportation Element will be the effective circulation element for the City's General Plan. Therefore, in an excess of caution, the City has included a discussion of the Transportation Element.

The Transportation Element includes a discussion of the existing roadway infrastructure in the City of Los Angeles. Goals, objectives, and policies are included in the Transportation Element to ensure the efficient circulation within the City and region. **Table 4.6-1** summarizes the goals and objectives relevant to the Proposed Project.

Table 4.6-1 Transportation Element Relevant Goals and Objectives

Goal/Objective	Description
Goal A	Adequate accessibility to work opportunities and essential services, and acceptable levels of mobility for all those who live, work, travel, or move goods in Los Angeles.
Objective 1	Expand neighborhood transportation services and programs to enhance neighborhood accessibility.
Objective 2	Mitigate the impacts of traffic growth, reduce congestion, and improve air quality by implementing a comprehensive program of multimodal strategies that encompass physical and operational improvements as well as demand management.
Objective 3	Support development in regional centers, community centers, major economic activity areas and along mixed-use boulevards as designated in the Community Plans.
Objective 4	Preserve the existing character of lower density residential areas and maintain pedestrian-oriented environments where appropriate.
Objective 5	Provide for the efficient movement of goods and for adequate access to intermodal facilities.
Objective 6	Incorporate available local, state, and federal funding opportunities to provide sufficient financing for transportation improvements and programs.
Objective 7	Provide an ongoing evaluation of transportation programs to determine whether the goals and objectives of the Citywide General Plan Framework and this element are being met, or if these goals and objectives should be modified to reflect changing circumstances.
Goal B	A street system maintained in a good to excellent condition adequate to facilitate the movement of those reliant on the system.
Objective 8	Operate a pavement management system designed to provide, on a continuing basis, the status of the maintenance needs of the City's street and bikeway systems.
Objective 9	Ensure that adequate maintenance of the street system is provided to facilitate the movement of current and future traffic volumes, as well as emergency services.
Goal C	An integrated system of pedestrian priority street segments, bikeways, and scenic highways which strengthens the City's image while also providing access to employment opportunities, essential services, and open space.
Objective 10	Make the street system accessible, safe, and convenient for bicycle, pedestrian, and school child travel.

Source: City of Los Angeles General Plan, *Transportation Element*, adopted 1999.

Great Streets for Los Angeles/Los Angeles Department of Transportation Strategic Plan. In September 2014, the Mayor's Office and Los Angeles Department of Transportation (LADOT) released the Great Streets for Los Angeles, LADOT's first strategic plan to turn the city's essential infrastructure -- its streets and sidewalks -- into safer, more livable 21st century public spaces that accommodate everyone who uses them. The plan builds upon Mayor Garcetti's Great Streets Initiative, which looks at Los Angeles' streets as valuable assets that can help revitalize neighborhoods across the city and make it easier for Angelenos to get around whether they walk, bike, drive, or take transit. The plan also stresses the importance of working closely with other city and regional agencies, such as the Bureau of Street Services and Metro, to improve safe, accessible transportation services and infrastructure.

The plan focuses on Mayor Garcetti's priorities of making the city safe, prosperous, and livable with a well-run government and includes the following key goals:

- **Vision Zero:** Eliminate traffic deaths by 2025 and design streets to increase the safety of pedestrians--including adding 100 new high-visibility continental crosswalks.
- **Great Streets:** Implement changes to the 15 Great Street corridors and launch programs to reduce dangerous speeding in residential neighborhoods. Increase bike infrastructure and launch a regional bikeshare program. Expand bus service and improve its quality and connectivity with surrounding neighborhoods.
- **A 21st Century DOT:** Streamline LADOT's operations to implement needed safety and mobility projects quickly and efficiently. Enhance technologies to manage traffic, meters, and parking operations.
- **World-Class Streets for a World-Class Economy:** Real-time traffic information and more efficient allocation of the street to support local foot traffic and better manage freight traffic. Build Great Streets for vibrant and prosperous neighborhood business districts.

Complete Streets Design Guide: Great Streets for Los Angeles. As part of MP 2035, the City has developed a Complete Streets Design Guide. The Complete Streets Design Guide lays out a vision for designing safe, accessible and vibrant streets in Los Angeles. As outlined in California’s Complete Streets Act of 2008 (AB 1358), the goal of Complete Streets is to ensure that the safety and convenience of all transportation users – pedestrians, bicyclists, transit riders, and private motorists – is accommodated. The Complete Streets Design Guide provides a compilation of design concepts and best practices that promote the major tenets of Complete Streets—safety and accessibility. The Guide is not meant to supersede existing technical standards provided for in other City or national manuals. Rather, it is meant to supplement existing engineering practices and requirements in order to meet the goals of Complete Streets. Due to specific site and operational characteristics associated with any given street, any proposed street improvement project must still undergo a detailed technical analysis by the appropriate city departments. Overall, this Guide will indoctrinate the concept of Complete Streets into Los Angeles’ present and future street design so that all stakeholders are able to plan for, implement, and maintain safe and accessible streets for everyone.

City of Los Angeles Community Plans. Community Plans guide the physical development of neighborhoods by establishing the goals and policies for land use. The land use element is one of the state-required elements of a City's General Plan and is required to be updated periodically. While the General Plan sets out a long-range vision and guide to future development, the 35 Community Plans in the City provide the specific, neighborhood-level detail, transportation network, relevant policies, and implementation strategies necessary to achieve the General Plan objectives.

City of Los Angeles 2010 Bicycle Plan (Bicycle Plan). The Bicycle Plan was adopted on March 1, 2011. The Bicycle Plan is a component of the Transportation Element of the City’s General Plan. The purpose of the Bicycle Plan is to increase, improve, and enhance bicycling in the City as a safe, healthy, and enjoyable means of transportation and recreation. The Bicycle Plan establishes policies and programs to increase the number and type of bicyclists in the City and to make every street in the City a safe place to ride a bicycle.

The City is implementing the Bicycle Plan in a series of Five-Year Implementation Strategies, monitored, advised, and assisted by the Bicycle Advisory Council and the Bicycle Plan Implementation Team. The First Five-Year Implementation Strategy, started in 2011, prioritizes the first 253 miles of new bikeways for implementation. As the City updates each of its 35 Community Plans, it can include localized recommendations that address community-specific conditions and are consistent with and complementary to the 2010 Bicycle Plan. As each Community Plan is updated, future bicycle lanes in that planning area will be analyzed for potential environmental impacts.

The 2010 Bicycle Plan, in its entirety, has been incorporated into the MP 2035 and is no longer a standalone chapter devoted to a single mode but instead reflects the City's commitment to a holistic and balanced complete street approach that acknowledges the role of multiple modes (pedestrians, bicycles, transit, and vehicles). The planned bicycle facilities have been incorporated into the MP 2035 Bicycle Lane Network, Bicycle Enhanced Network, and Neighborhood Enhanced Network. The Technical Design Handbook has been incorporated into the new Complete Streets Design Guide: Great Streets for Los Angeles and includes sections on design needs, bicycle paths, bicycle lanes, bicycle routes and neighborhood friendly streets, network gaps, signalized intersections, bicycle parking, bikeway signage, non-standard treatments, and street sections.

4.6.3 Existing Setting

Overview

The project area (see Figure 3-1) is in the western portion of the City of Los Angeles (the "Westside") and encompasses the CTCSP area and the WLA TIMP area. The study area is defined by the potential impacts of the Proposed Project to transportation, parking, and safety. The EIR transportation impact analysis studies impacts to areas within the project boundaries, adjacent areas in the City of Los Angeles, neighboring jurisdictions and freeways that serve the region. For the purposes of the EIR transportation impact analysis, Existing conditions is defined as Year 2014, which corresponds to the date of the release of the Proposed Project Notice of Preparation (NOP).

The Westside, like many other urban areas throughout the country, experiences significant traffic congestion. Despite an extensive street network, vehicular circulation continues to deteriorate due to historical over reliance on the car as the primary mode of transportation. The combination of many regional destinations, oversaturated roadways, unreliable travel times for autos and transit, and limited transit options underlie the need for creating a transportation plan for the CTCSP and WLA TIMP that will better serve all modes of transportation, improve the efficiency of the overall system, and enhance the livability along major boulevards.

The study area is served by a network of east-west arterials, and to a lesser extent, north-south arterials. Rapid and local bus transit lines operate on most major and minor arterials. Pedestrian facilities primarily consist of sidewalks adjacent to roadways, and a limited bicycle network is provided. The transportation network in the study area is primarily auto- and bus transit-oriented.

Highway and Street System

The roadway network in the study area ranges from major freeway facilities, such as I-405, to neighborhood-serving local roadways. Within the project area, approximately 650 miles of arterial, collector and local roadways are provided, of which approximately 15 percent are classified as

Boulevards or Avenues, 20 percent as Collectors, and 65 percent as Local roadways. Below is a brief description of the types of facilities in the study area based on the recently adopted Complete Street Design Guide Manual. **Figure 4.6-1** displays the roadway network within the project area and illustrates the classification of roadway facilities.

- Boulevard I (Major Highway Class I) – Class I Boulevards are generally defined as having three to four lanes in each direction along with a median turn lane. The width of a Class I Boulevard is usually 100 feet, with a typical sidewalk width of 18 feet and a target operating speed of 35 miles per hour (mph).

- Boulevard II (Major Highway Class II) – Class II Boulevards are generally defined as having two to three lanes in each direction along with a median turn lane. The width of a Class II Boulevard is usually 80 feet, with a typical sidewalk width of 15 feet and a target operating speed of 35 mph.

- Avenue I (Secondary Highway) – Class I Avenues typically have one to two lanes in each direction, a roadway width of 70 feet, and a normal sidewalk width of 15 feet and a target operating speed of 35 mph. An Avenue I typically includes streets with a high amount of retail uses and local destinations.

- Avenue II (Secondary Highway) – Avenue II streets usually have one to two lanes in each direction, with a typical roadway width of 56 feet, a typical sidewalk width of 15 feet and a target operating speed of 30 mph. Such streets are typically located in parts of the City with dense active uses, and a busy pedestrian environment.

- Avenue III (Secondary Highway) – Avenue III streets are defined to have one to two lanes in each direction, with a roadway width of 46 feet, a normal sidewalk width of 15 feet, and a target operating speed of 25 mph.

- Collector Street – Collector Streets generally have one travel lane in each direction, with a roadway width of 40 feet and a sidewalk width of 13 feet. The target operating speed for Collector Streets is 25 mph. Such streets are typically intended for vehicle trips that start or end in the immediate vicinity of the street.

- Industrial Collector Street – Industrial collector streets vary from normal collector streets in that larger curb returns are incorporated to allow for the wider turning radii of trucks.

- Local Street Standard – Local Street Standard roadways typically have one lane in each direction, and are designed to have a 36-foot width, 12-foot sidewalks, and a target operating speed of 20 mph. Such streets are not designed for through traffic; rather, their focus is to allow access to and from destination points. Unrestricted parking is typically available on both sides of the street.

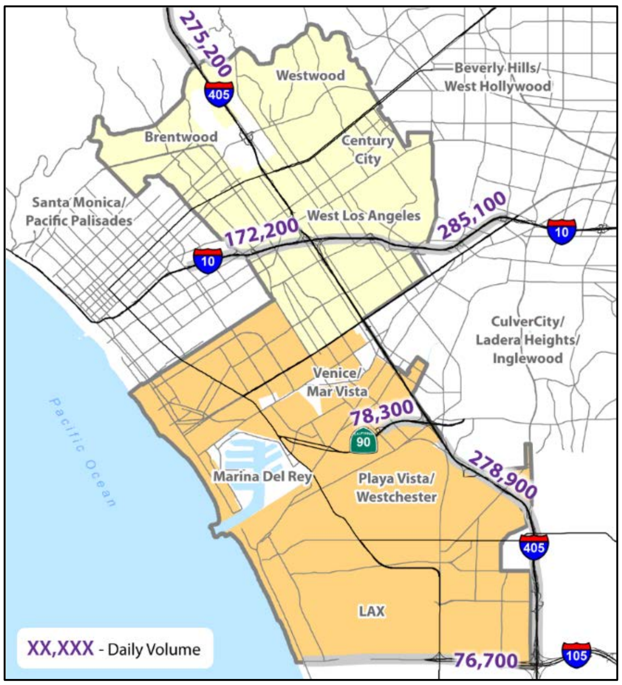
- Local Street Limited – Local Street Limited roadways typically have one lane in each direction, and are designed to have a 30-foot width, 10-foot sidewalks, and a target operating speed of 15 mph.

Figure 4.6-1 Roadway Network

- Industrial Local Street – Although similar to normal local streets, Industrial Local Streets differ primarily in width for the purpose of providing adequate space for trucks to maneuver. The typical roadway width for an Industrial Local Street is 44 feet, with 10-foot sidewalks and a target operating speed of 20 mph.

Regional Access

Regional access in the study area is provided by the north-south I-405 freeway and the east-west I-10, SR-90 and I-105 freeways. The freeways within the study area primarily operate at oversaturated conditions during the morning and evening commute periods. The two primary freeway corridors in the study area, the I-10 and I-405 corridors, are the second and the third most congested corridors in the nation, respectively, according to the 2013 INRIX National Traffic Scorecard.



Source: Caltrans PEMS data.

Figure 4.6-2 Daily Traffic Volumes on Regional Freeway Facilities

As shown in **Figure 4.6-2**, the highest traffic volumes occur on I-405 with daily volumes ranging from 275,200 to 278,900 vehicles. The I-10/I-405 interchange is a major bottleneck within the study area, and the freeway-to-freeway connector ramps typically have vehicles queues extending onto the freeway mainline, affecting traffic flows in the adjacent lanes.

Local Roadway Network

Due to congestion on the freeway network, vehicles use adjacent arterial roadways to travel within and commute to and from the study area. For example, drivers may use Lincoln Boulevard to travel from the City of Santa Monica to Los Angeles International Airport (LAX) to avoid congestion on the I-10 and I-405 freeways during peak periods. East-west arterials, such as Olympic and Pico Boulevards, are utilized by vehicles commuting to and from the Westside to avoid congestion on I-10.

Figure 4.6-3 displays the number of travel lanes on roadways within the study area. Most arterial and collector roads have four lane cross-sections, with two travel lanes in each direction. However, several primary east-west corridors, including Wilshire, Santa Monica, Olympic, Pico and Venice Boulevards have more capacity, with six or more lanes east of Bundy Drive, which corresponds with the locations of the highest demand for travel. Lincoln Boulevard south of Washington Boulevard has five or more lanes.

To maximize vehicular roadway capacity during peak travel hours, the City of Los Angeles has implemented peak period on-street parking restrictions. As illustrated in **Figure 4.6-4**, parking restrictions along a roadway can occur during the AM and/or PM peak periods and may be implemented in one direction or along both sides of the roadway.

AM and/or PM peak period parking restrictions that result in an additional travel lane during peak periods are signed on stretches of a number of east-west arterials within the study area, including portions of San Vicente, Wilshire, Santa Monica, Olympic, and Pico Boulevards, maximizing the capacity of these arterials in stretches where parking is prohibited during peak periods.

On north-south arterials, AM peak period parking restrictions within the study area are signed on portions of Centinela Avenue, and Lincoln, Sepulveda and La Tijera Boulevards. PM peak period parking restrictions are also signed on portions of Lincoln and La Tijera Boulevards.

Emergency Access

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

The Los Angeles Fire Department in collaboration with LADOT has developed a Fire Preemption System (FPS), a system that automatically turns traffic lights to green for emergency vehicles traveling on designated streets in the City. The City of Los Angeles has over 205 miles of routes equipped with FPS (Los Angeles Fire Department [LAFD], 2008).

The City requires that development plans be submitted to the City for review and approval to ensure that new development has adequate emergency access, including driveway access and turning radius in compliance with existing City regulations. The adequacy of service may be influenced by factors such as staffing levels, emergency response times, technology improvements, management strategies, and mutual aid agreements. On a yearly basis, LAFD assesses its resources and reallocates them based on demand and need citywide. The provision of new fire stations varies as a function of not only the geographic distribution of physical structures but access to trucks, ambulances, and other equipment as well as the location of the plan area and access to reciprocal agreements with neighboring jurisdictions.

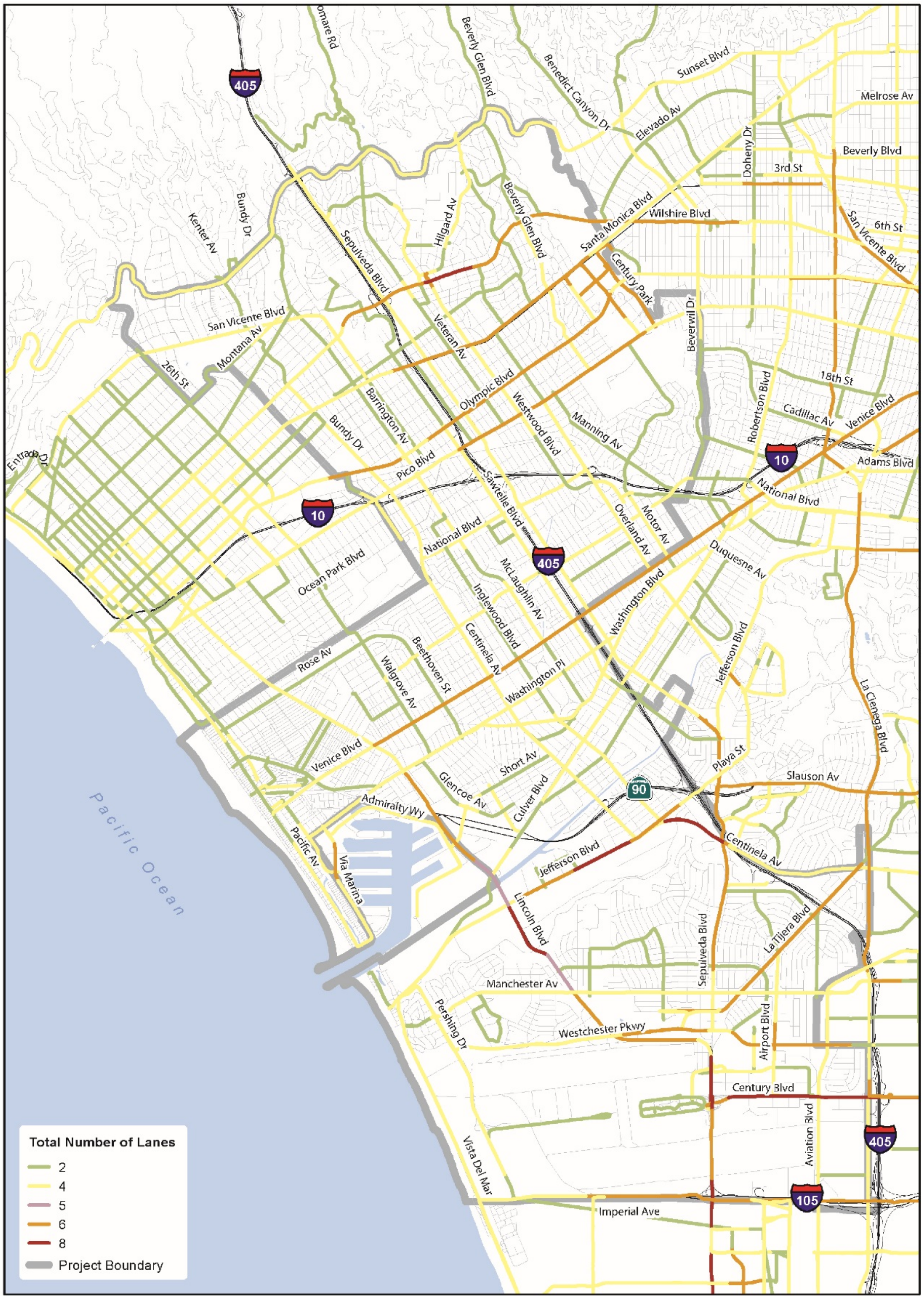


Figure 4.6-3 Number of Travel Lanes

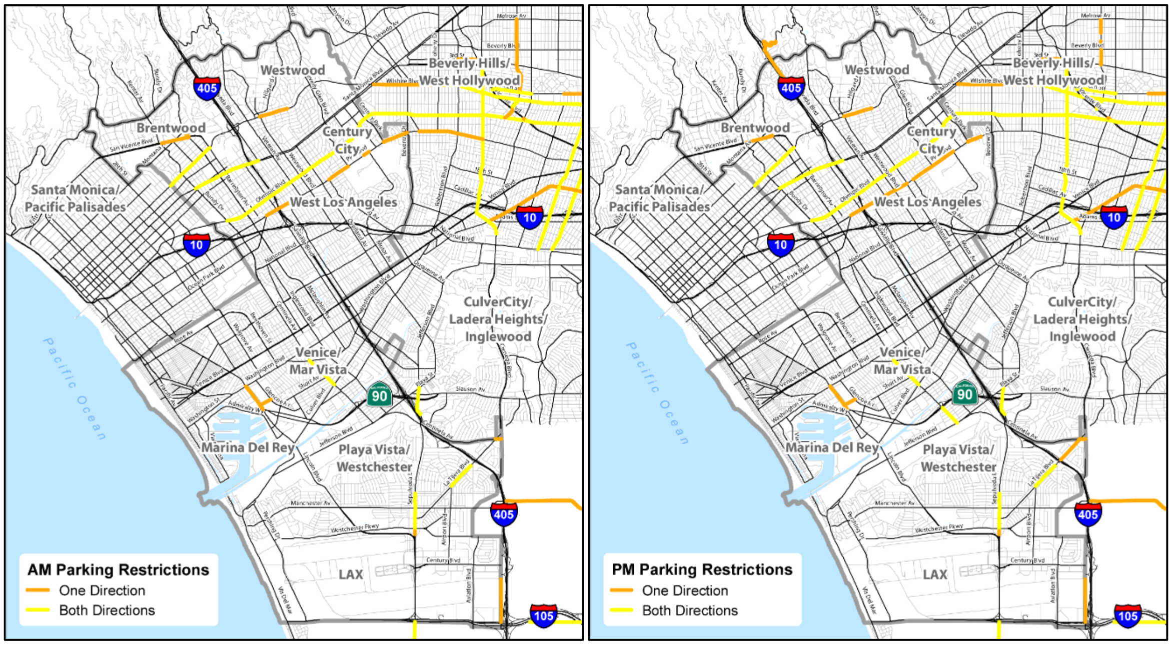


Figure 4.6-4 AM and PM Peak Period Parking Restrictions

Public Transit Service

Transit service in the study area is provided by several transit operators, including Metro, Culver City Bus, Santa Monica Big Blue Bus and LADOT Commuter Express. These operators provide a variety of bus transit services including local, limited stop rapid and commuter express service. The southern area of the CTCSP is served by Metro's Green Line light rail transit route, which is the only fixed-guideway transit service within the specific plan boundaries. Expo Light Rail Transit Phase 1 provides fixed-guideway service on the eastern edge of the study area, with the nearest stop to the WLA TIMP in Culver City. **Figure 4.6-5** illustrates the existing transit lines within the study area.

Similar to the capacity of the roadway system, bus service (number of routes and frequency) is higher along east-west corridors than on north-south corridors. As illustrated in **Figure 4.6-6**, Wilshire and Santa Monica Boulevards, followed by Pico and Venice Boulevards, are served by the most buses per day. These corridors experience more frequent and higher quality transit service than the other east-west corridors, and all of the north-south corridors.

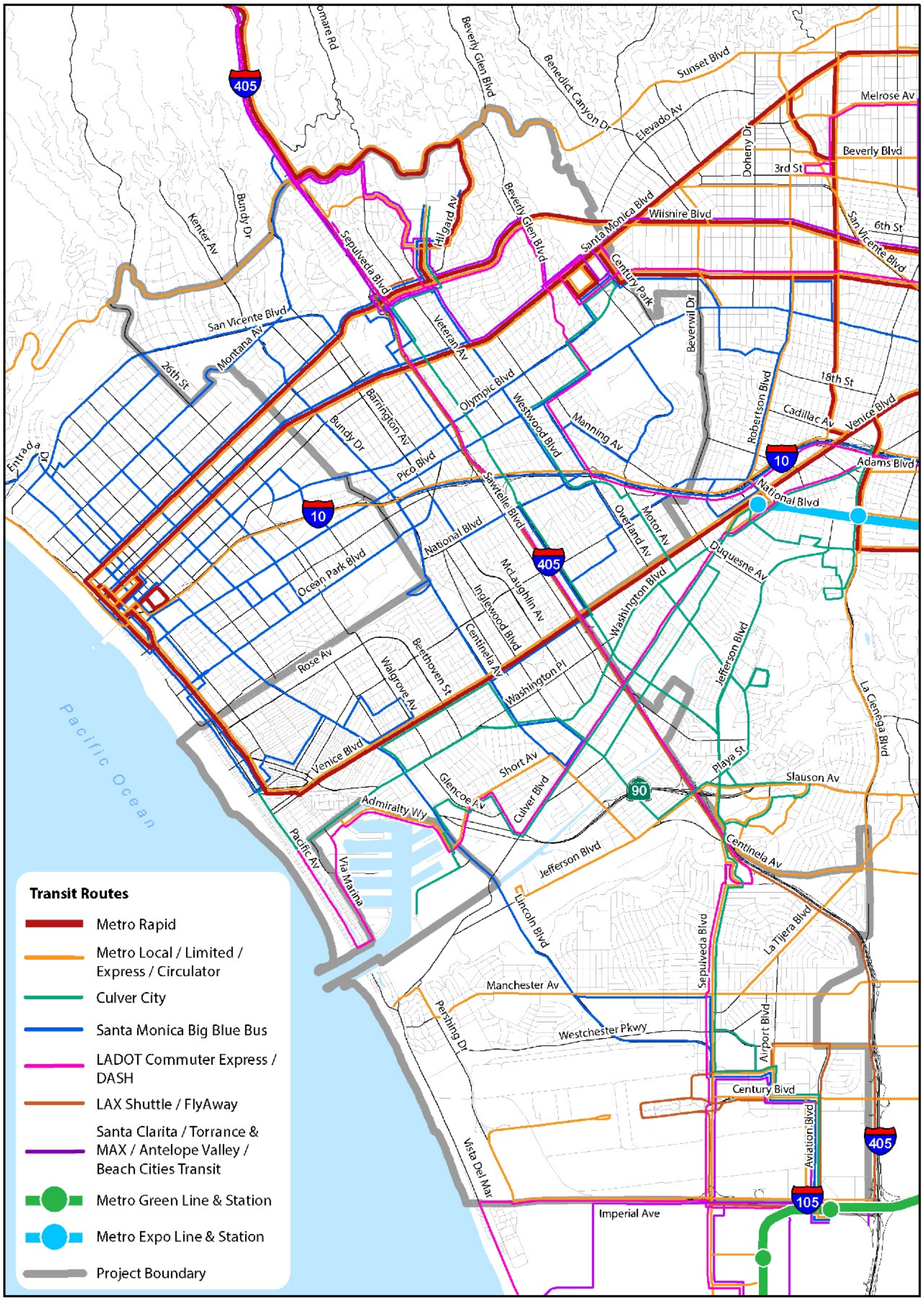
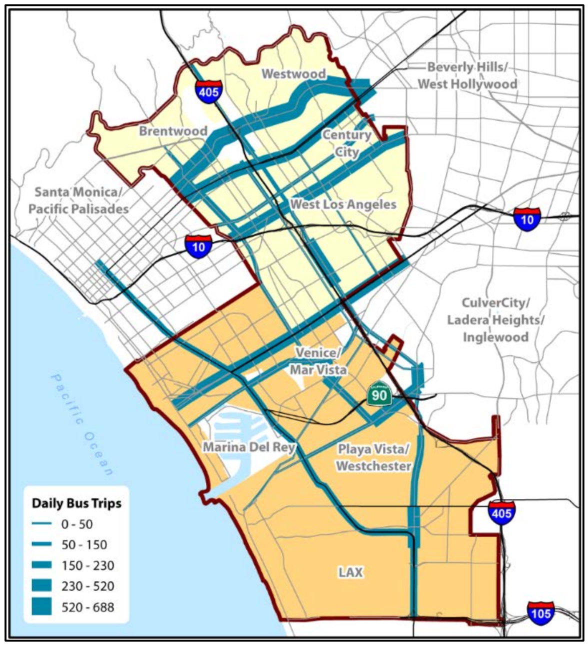


Figure 4.6-5 Transit Service



Source: STV, Study Area Transit Operators.

Figure 4.6-6 Daily Bus Trips

Intersections between major east-west and north-south study corridors are locations where several existing bus lines intersect and riders can transfer from one route to another. These bus-to-bus transfers typically require a short walk around the corner or across one or two legs of the intersection to access the connecting bus stop. For example, at the intersection of Santa Monica and Sepulveda Boulevards, bus passengers traveling east-west along Santa Monica Boulevard on Metro Local Route #4, Metro Rapid Route #704, or Santa Monica Big Blue Bus Routes #1 or #11 can transfer to Culver City Bus Routes #6 or #6 Rapid to travel north or south along Sepulveda Boulevard to Westwood or LAX. This intersection, and most other major bus-to-bus transfer points in the study area, has basic pedestrian amenities, such as signalized crosswalks and bus route signs at stops. However, most transfer points lack additional amenities, such as signage directing riders to the other bus stops in the vicinity.

Study corridors that offer little transit service, such as Overland Avenue and Sawtelle Boulevard, do not offer easy bus-to-bus transfers. Passengers traveling along these corridors and needing to transfer to other bus routes typically need to walk several blocks to reach the transfer route.

While the study area currently has limited fixed-guideway transit service, several rail projects are in the final planning and design phases and/or under construction by Metro, including Expo Light Rail Phase II, Crenshaw Light Rail, and the Purple Line Subway Extension. In addition, the curbside bus lanes being implemented as part of the Wilshire Bus Rapid Transit Project were under construction at the time the NOP was released. The fixed-guideway transit services and the Wilshire bus lanes are reflected in Future without Project conditions.

Bicycle and Pedestrian Facilities

The study area consists of a modest network of bicycle facilities, and pedestrian facilities primarily consist of sidewalks adjacent to roadways. Pursuant to the California Vehicle Code, bicycles are allowed on any street within the local street system. Most roadways are aligned on a grid system providing multiple route options for traveling throughout the study area.

Venice Beach Bicycle Path

Bicycle facilities are defined as off-street bicycle paths (Class I), on-street signed and striped bicycle lanes (Class II), and on-street signed bicycle routes (Class III). The design features of the three types of bicycle facilities are displayed in **Figure 4.6-7**.

The most protected and inviting facilities for bicyclists are those designated as Class I and Class II facilities. As such, bicycle travel is most attractive in the beach areas, on Venice Boulevard, and along portions of Culver and Santa Monica Boulevards due to the presence of bicycle paths and on-street bicycle lanes. Bicycle facilities in the study area are illustrated in **Figure 4.6-8**. As shown in the figure, several roadways have sharrow markings, which is a treatment option common for roadways designated as Class III Bike Routes.

Due to peak period congestion along most major corridors, traveling by bicycle for shorter trips can produce competitive travel times compared to automobile or bus travel. **Figure 4.6-9** illustrates the travel times for a commuter traveling between University of California, Los Angeles (UCLA) and Santa Monica using three modes of travel: car, bus and bicycle. The travel times were collected through a Global Positioning System (GPS) device during the weekday PM peak hour. Due to low vehicular travel speeds along Wilshire Boulevard, the trip made by bicycle had the highest average speed of 14 mph compared to 10 mph for the vehicle trip and 7 mph for the bus trip. Although the bicycle travel time reflects the characteristics of a regular commuter bicyclist with higher travel speeds than someone out for a leisurely ride or a family bicycling together, the comparison of biking to other modes of travel is still a notable comparison in the Westside area. As shown in the figure, bicyclists can also choose to ride on parallel routes adjacent to major roadways that are more conducive to bicycle travel and have a more bicycle friendly environment.

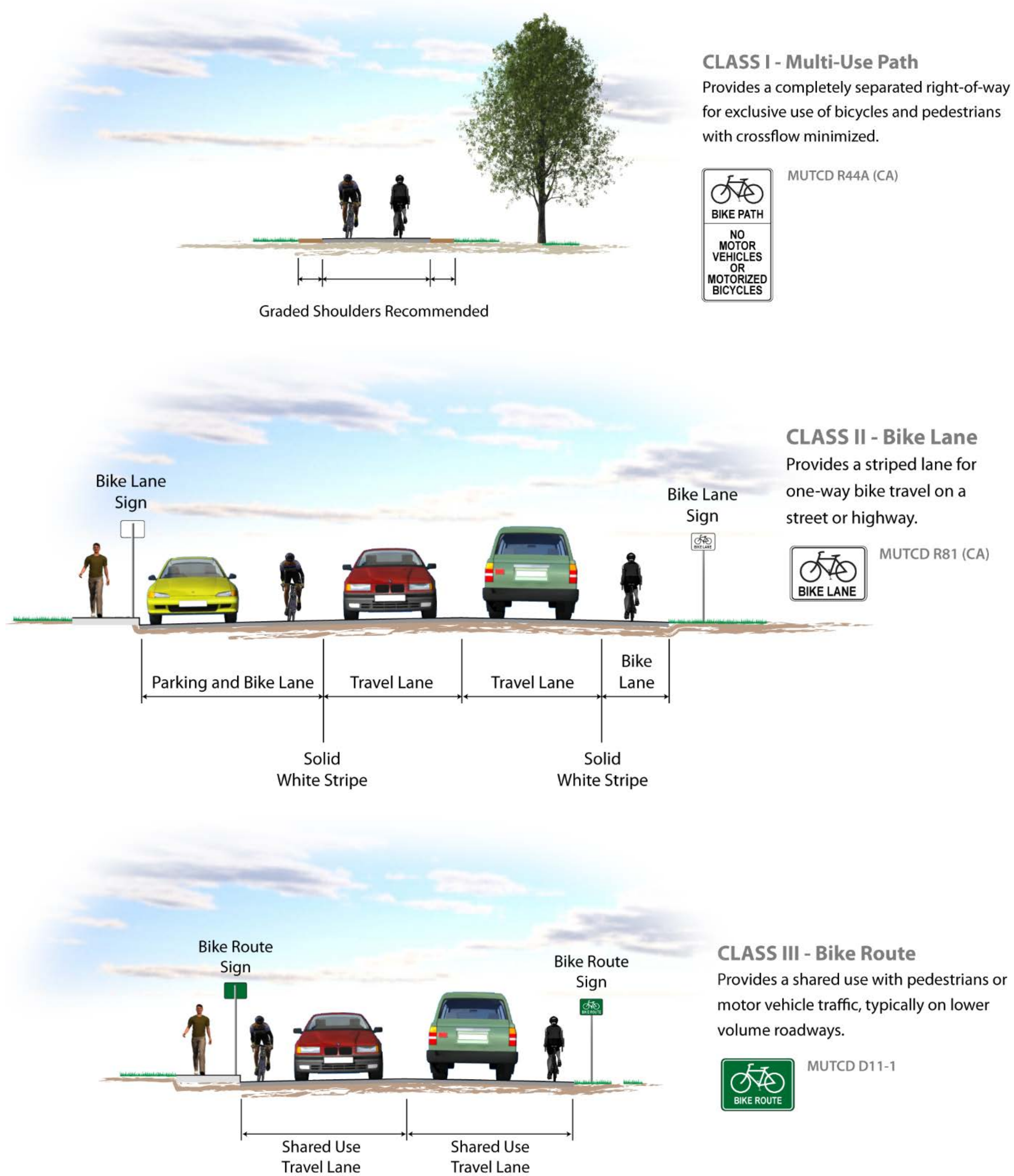


Figure 4.6-7 Bicycle Facility Design Features

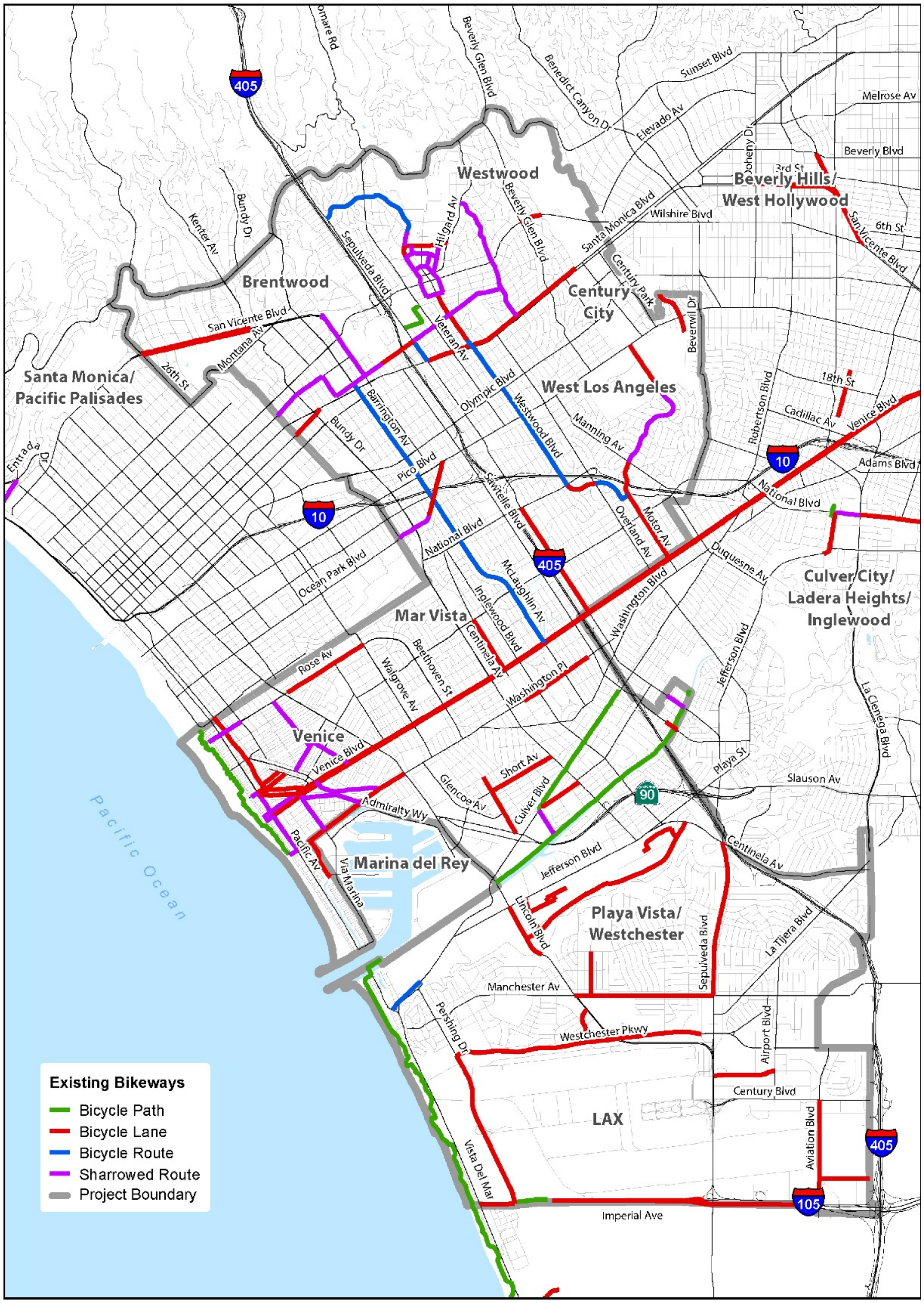


Figure 4.6-8 Bicycle Facilities

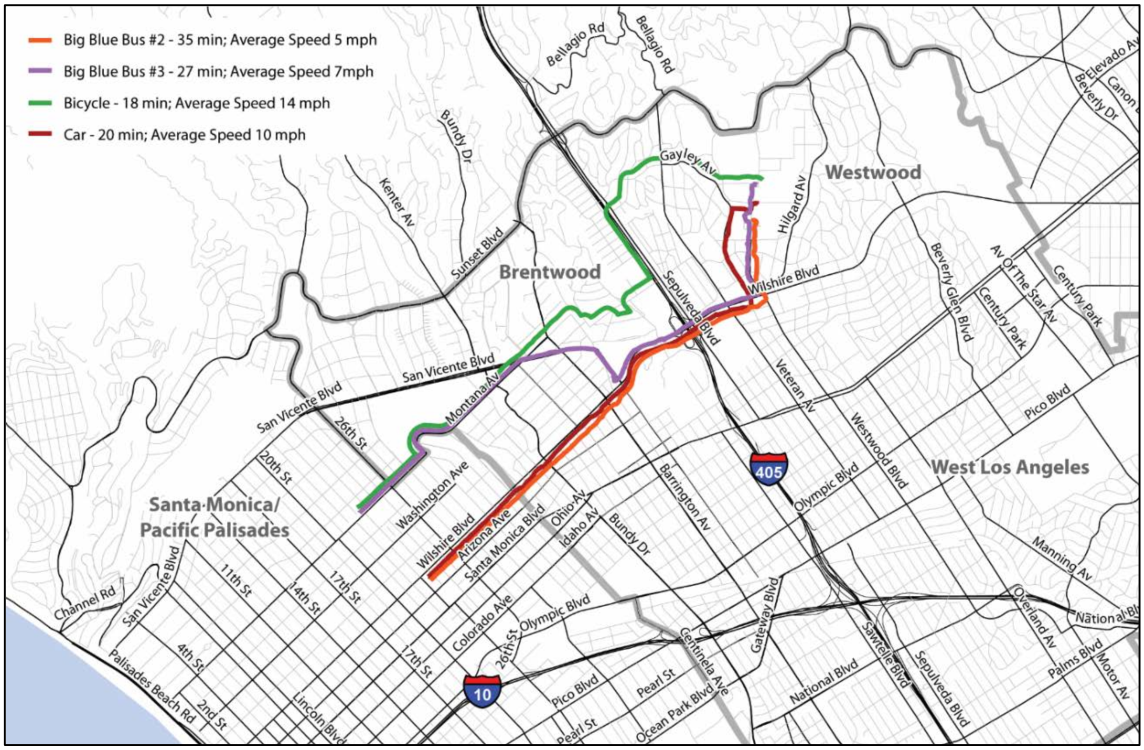


Figure 4.6-9 Travel Time Comparison

Bicycle integration with transit allows cyclists to bring their bikes on board transit for a portion of their trips. Bicycles are allowed in designated areas on Metro trains at no extra charge at all times. Most buses are equipped with two bicycle racks at the front of the bus, and bicyclists are allowed to load their bicycles on the rack when there is space available at no extra charge. If the rack is full, bicyclists are asked to wait for the next bus.

Existing pedestrian-oriented infrastructure provides general accessibility within the study area. Sidewalk widths, landscaping and amenities vary by location, but are generally sufficient to provide pedestrian access to bus stops, and other nearby destinations. In locations where the environment is more amenable to pedestrian activity, potential transit riders are more likely to use the facilities to interface between their bus stop and ultimate destination. In contrast, the perception of an unsafe or otherwise undesirable pedestrian environment may serve as a barrier to transit ridership.

The pedestrian network includes sidewalks, crosswalks, and curb ramps, as well as pedestrian amenities such as street trees, benches, and buffer zones separating sidewalks from traffic and buildings. The study area has an aging network of pedestrian facilities including sidewalks of varying widths and wide crosswalks at most major intersections. Many areas have pedestrian-friendly features such as curb-side parking, and traffic signal modifications to ensure longer pedestrian crossing times, where warranted. Conditions vary widely in terms of sidewalk condition, pavement marking visibility, and obstructions in the sidewalk realm. In April 2015, the City of Los Angeles agreed to spend $1.3 billion over the next thirty years to fix sidewalks throughout the City, and produce two reports per year to document its progress in repairing substandard sidewalks.

The user experience for pedestrians traveling in the study area can vary widely depending on the location. Venice Boulevard is an example of a corridor that has a pedestrian-friendly design. It has wide landscaped strips with large shade trees that separate the pedestrian walkway from the street, street furniture, bus shelters at most stops, and pedestrian call buttons at signalized intersections. In contrast, the Lincoln Boulevard study corridor has few pedestrian amenities with the sidewalk immediately adjacent to travel lanes, limited landscaping and shade trees, and most bus stops lacking shelters or benches.

Travel Patterns and Operating Conditions

Travel Patterns

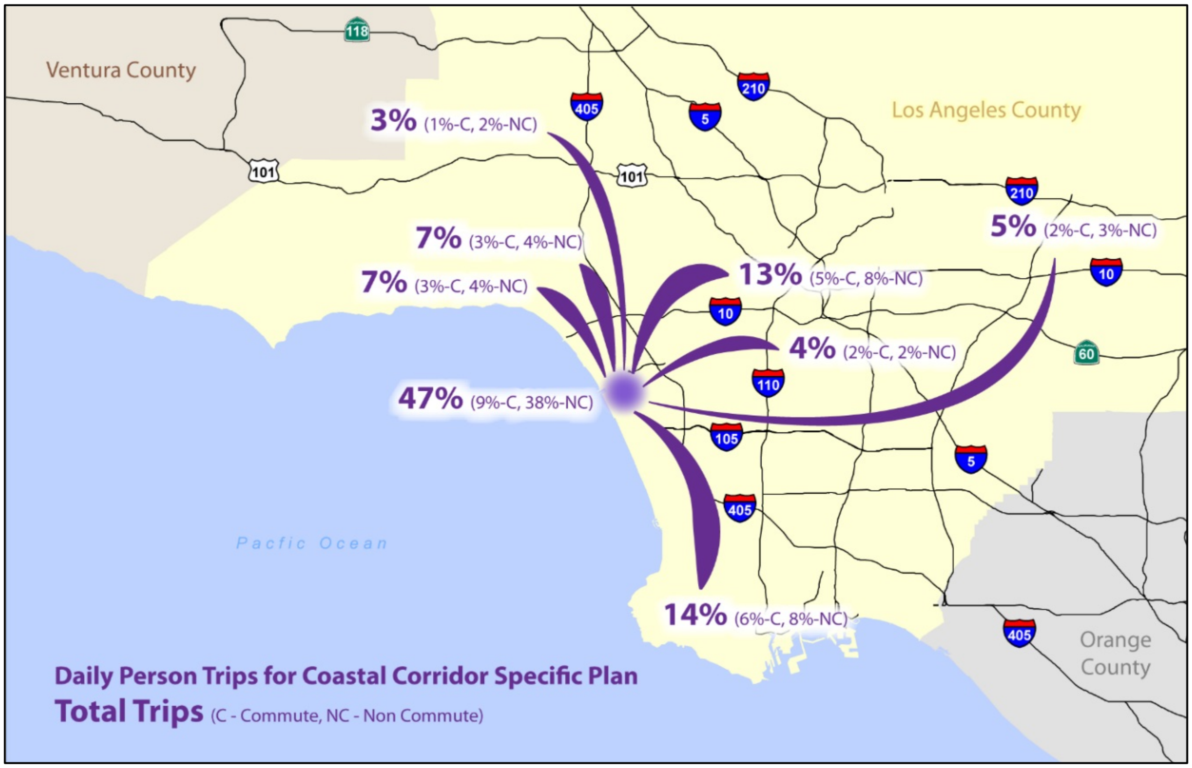
To better describe the travel patterns to, from, and within the study area, the travel characteristics of person trips were explored in further detail. The land use patterns within the study area and concentrations of employment centers result in an influx of weekday commute trips. Based on estimates derived from the Westside Travel Demand Forecasting (TDF) model, 214,000 workers commute to the Westside each day resulting in nearly 430,000 round-trips to and from the Westside. For those residing on the Westside, approximately 145,000 residents also work in the area while 82,000 residents commute elsewhere.

To determine trip patterns within the project area, the Westside TDF model was used to track daily person trips as follows:

- **Origin-Destination (O-D)**: start- and end-point of trip
- **Trip Type**: commute and non-commute
- **Mode of Travel**: drive alone, carpool, transit, walking and biking

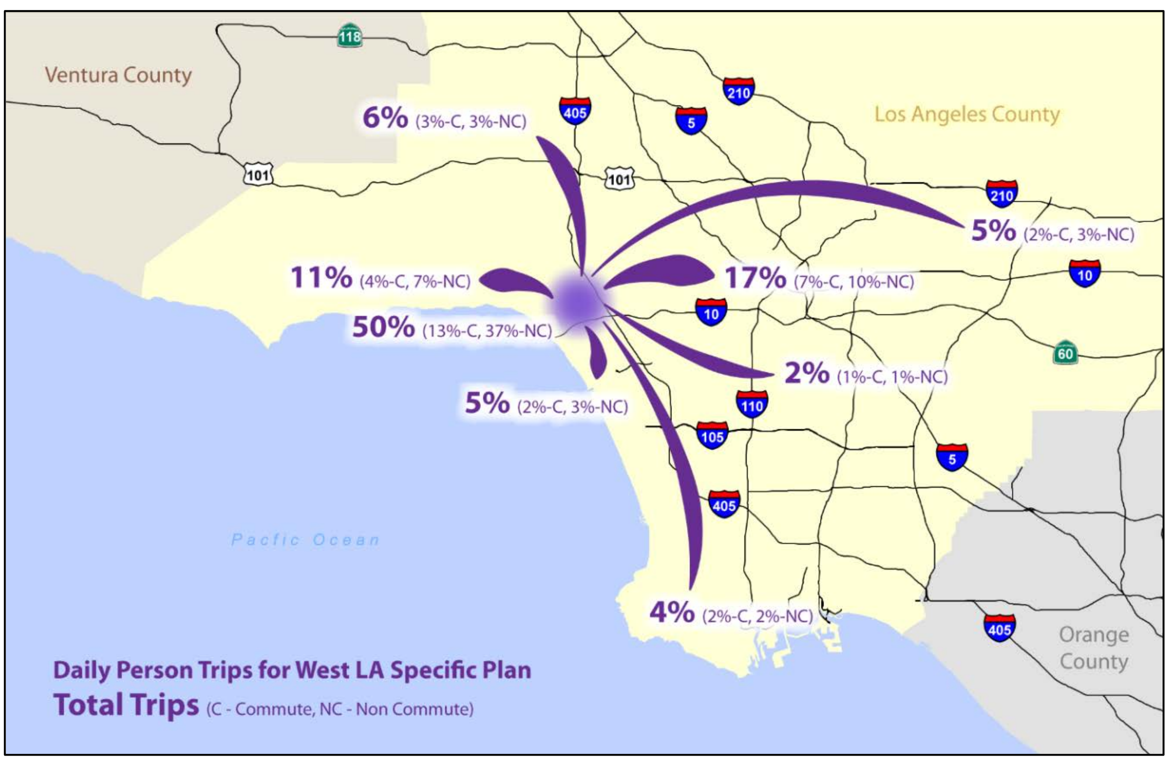
The daily person trip characteristics for the CTCSP and WLA TIMP are displayed in **Figure 4.6-10** and **Figure 4.6-11**, respectively. These figures reflect person trips with either an origin or destination in the specific plan areas. The figures display the general directionality of the travel patterns to/from the CTCSP and WLA TIMP specific plan areas. The percentage of trips to the farthest extents shown include trips that extend beyond the County border; for example, the 3 percent trip distribution for CTCSP at the farthest extent north includes trips with an origin/destination in Ventura and/or Kern Counties.

In addition to daily person trips, person miles of travel for both specific plan areas were also determined. Person miles of travel illustrates the cumulative effect of short local trips compared to longer regional trips on the transportation system. Within the CTCSP area, 47 percent of person trips are internal to the CTCSP boundaries; however, these internal trips comprise 10 percent of the person miles of travel generated by CTCSP land uses. Similarly, within the WLA TIMP area, 50 percent of the person trips are internal trips but only comprise 11 percent of the person miles of travel generated by uses within the WLA TIMP area.



Source: Westside Travel Demand Forecasting Model, 2015.

Figure 4.6-10 CTCSP Travel Patterns



Source: Westside Travel Demand Forecasting Model, 2015.

Figure 4.6-11 WLA TIMP Travel Patterns

Table 4.6-2 summarizes the percentage of internal and external vehicle trips within both specific plan areas and in the overall project area. Vehicle-trips internal to the project area (I-I) both begin and end within the project area, though they might cross into other jurisdictions during some portion of the trip. Internal-to-External (I-X) vehicle trips begin in the project area and end outside the project area in another jurisdiction or other portions of the City of Los Angeles, while External-to-Internal (X-I) vehicle trips begin outside the project area and end within the CTC or WLA TIMP specific plan areas.

Table 4.6-2 Internal and External Distribution of Vehicle Trips with Origins and/or Destinations in the Project Area

Locations	Internal (I-I)	Internal-to-External (I-X)	External-to-Internal (X-I)
CTCSP Area	22.8%	38.4%	38.9%
WLA TIMP Area	32.4%	33.9%	33.7%
Project Area	**28.0%**	**35.9%**	**36.1%**

Source: Westside Travel Demand Forecasting Model, 2015.

Vehicle trips that begin and end in the project area make up nearly one-third of all trips. The remaining two thirds of vehicle trips start or end outside of the project area. The WLA TIMP area has more vehicle trips that stay within the project area compared to the CTCSP area. The CTCSP has more trips that travel outside the project area which is largely due to trips associated with LAX in the southern portion of the specific plan area.

Mode Split

The Westside TDF model estimates the mode split of existing peak period person trips within the project area. Overall, approximately 81 percent of peak period person trips are made by automobile, 15 percent are made by walking, 3 percent by transit, and 1 percent by bicycle**. Table 4.6-3** provides additional existing mode split detail by specific plan area.

Table 4.6-3 Existing Peak Period Mode Split

Locations	Auto	Transit	Bike	Walk
CTCSP Area	82.2%	2.7%	1.1%	14.0%
WLA TIMP Area	79.9%	3.6%	1.4%	15.1%
Project Area	**80.8%**	**3.3%**	**1.3%**	**14.6%**

Source: Westside Travel Demand Forecasting Model, 2015.

By comparison, the survey-based SCAG Profile of the City of Los Angeles reports that 82 percent of year 2012 journey-to-work trips were made by auto, 12 percent by public transit, and 6 percent by other modes (SCAG, 2013). Since the purpose of most transit trips nationwide is work (59.2 percent) (American Public Transportation Association, 2011), it is reasonable to expect a higher transit mode share for journey-to-work trips than for peak period trips of all purposes.

SCAG is currently updating the regional travel demand forecasting model for use in the 2016 Regional Transportation Plan and is in the process of updating the mode split data within the region. Given the investments in additional transit and bicycling facilities over the last several years, the mode split data is expected to show a decrease in the number of auto trips with a corresponding increase to other modes.

Vehicle Trips

On a typical weekday, travelers take over 1 million trips by automobile that either start from a point within the project area, end at a point within the project area, or both. Roughly one-third of these trips are taken during the four-hour PM peak period between 3:00 and 7:00 p.m. **Table 4.6-4** summarizes the number of vehicle trips for each specific plan area and the overall project area.

Table 4.6-4 Existing Vehicle Trips with Origins and/or Destinations in the Project Area

Locations	AM Peak Period (3-Hour)	PM Peak Period (4-Hour)	Off-Peak Period (17-Hour)	Daily
CTCSP Area	116,347	176,424	269,578	562,349
WLA TIMP Area	158,739	245,013	315,361	719,112
Project Area	**275,086**	**421,437**	**584,939**	**1,281,461**

Source: Westside Travel Demand Forecasting Model, 2015.

Vehicle Miles Traveled

Motorists travel nearly four million vehicle miles on City roadways within the project area on an average weekday, and an additional 1.7 million miles on freeways within the project area. Nearly one-third of these vehicle miles are traveled during the four-hour PM peak period between 3:00 and 7:00 PM. Of the total VMT in the project area, freeway travel accounts for nearly one-third of all daily VMT and the remaining 70 percent of vehicle traffic is split nearly evenly between CTCSP and WLA roadways. **Table 4.6-5** presents VMT by specific plan area and for the overall study area.

Table 4.6-5 Existing Vehicle Miles Traveled

Locations	AM Peak Period (3-Hour)	PM Peak Period (4-Hour)	Off-Peak Period (17-Hour)	Daily
CTCSP Roadways	426,923	648,413	883,200	1,958,536
WLA TIMP Roadways	472,451	707,098	839,570	2,019,119
Project Area Surface Streets	***899,374***	***1,355,511***	***1,722,770***	***3,977,655***
Freeways (Mainline)	*330,057*	*462,379*	*879,696*	*1,672,132*
Study Area	**1,229,431**	**1,817,890**	**2,602,466**	**5,649,787**

Source: Westside Travel Demand Forecasting Model, 2015.

Existing Traffic Operations

To determine the operations of the roadway network during peak commute hours, a LOS analysis was conducted for the roadways in the project area. LOS is a qualitative measure used to describe the condition of traffic flows, ranging from excellent conditions at LOS A (free-flow traffic conditions with little or no delay) to LOS F (oversaturated conditions in which traffic flows exceed design capacity) resulting in extensive vehicle queues and delays.

The LOS of the study corridors was determined based on the ratio of volume-to-capacity (V/C) using the Westside TDF model. This ratio was calculated by comparing peak hour traffic volumes to the estimated roadway capacity for each facility. The roadway capacities reflect the operating characteristics of the study corridors, such as directional volume splits, functional classifications, number of lanes, and travel speeds.

The AM and PM peak period weighted average V/C and corresponding LOS for the roadways in the project area are summarized in **Table 4.6-6** and **Table 4.6-7**, respectively. The results reported in these tables reflect the operating conditions of all roadway segments classified as freeways, high-occupancy vehicle (HOV) lanes, expressways, arterials, and collector streets within the project area. In both the AM and PM peak periods, the WLA TIMP area has the highest share of segments operating at LOS E or F. In the AM peak period, over 25 percent of the WLA TIMP segments operate at LOS E or F, increasing to over 35 percent in the PM peak period. Within the CTCSP area, nearly 15 percent of street segments operate at LOS E or F in the AM peak period, rising to over 21 percent in the PM peak period. Within the overall project area, approximately 21 percent of street segments operate at LOS E or F in the AM peak period and approximately 29 percent operate at LOS E or F in the PM peak period.

Table 4.6-6 Summary of AM Peak Period Roadway Operating Conditions

Locations	Percent of Segments Operating at:				Weighted Average V/C Ratio (all segments)
	LOS D or Better	LOS E	LOS F	Unsatisfactory LOS (E or F)	
CTCSP Area	85.44%	4.88%	9.68%	14.56%	0.76 (LOS C)
WLA TIMP Area	72.88%	8.09%	19.03%	27.12%	0.85 (LOS D)
Project Area	**79.44%**	**6.41%**	**14.15%**	**20.56%**	**0.80 (LOS C)**

Source: Westside Travel Demand Forecasting Model, 2015.

Table 4.6-7 Summary of PM Peak Period Roadway Operating Conditions

Locations	Percent of Segments Operating at:				Weighted Average V/C Ratio (all segments)
	LOS D or Better	LOS E	LOS F	Unsatisfactory LOS (E or F)	
CTCSP Area	78.24%	7.23%	14.53%	21.76%	0.78 (LOS C)
WLA TIMP Area	63.82%	11.75%	24.43%	36.18%	0.90 (LOS D)
Project Area	**71.36%**	**9.39%**	**19.26%**	**28.64%**	**0.86 (LOS D)**

Source: Westside Travel Demand Forecasting Model, 2015.

The AM and PM peak period V/C and corresponding LOS for the roadways in the project area are subdivided by functional classification in **Table 4.6-8.** The table shows that Freeways experience the heaviest congestion followed by Expressways and Arterials.

Table 4.6-8 Peak Period Volume to Capacity Comparison by Facility Type

CTCSP	AM Peak Hour		PM Peak Hour	
	V/C	LOS	V/C	LOS
Freeways	0.88	D	0.93	E
Expressways + Principal Arterials	0.73	C	0.82	D
Minor Arterials	0.69	B	0.76	C
Collectors	0.61	B	0.68	B
CTCSP Study Area Roadways	***0.76***	***C***	***0.78***	***C***
WLA TIMP	**V/C**	**LOS**	**V/C**	**LOS**
Freeways	0.91	E	0.93	E
Expressways + Principal Arterials	0.82	D	0.88	D
Minor Arterials	0.86	D	0.93	E
Collectors	0.73	C	0.78	C
WLA TIMP Study Area Roadways	***0.85***	***D***	***0.9***	***D***
Study Area	**0.80**	**C**	**0.86**	**D**

Source: Westside Travel Demand Forecasting Model, 2015.

The Westside TDF model was also used to report operating conditions on the major corridors in the study area. For the purpose of this analysis, the LOS ratings were grouped into the following three categories: 1) Available Capacity: A facility operating at LOS A through LOS D able to accommodate additional vehicle demand; 2) At Capacity: A facility operating at LOS E approaching saturated conditions, and 3) Over Capacity: A facility operating at LOS F under oversaturated conditions. **Figure 4.6-12A** and **Figure 4.6-12B** illustrate the AM and PM peak hour capacity ratings for the major arterial corridors in the study area.

Areas of congestion occur on the majority of east-west arterials adjacent to the I-405 freeway during both peak hours. Congestion also occurs on north-south arterials near the I-10 freeway and at major intersections with east-west arterials. Overall, congestion is most severe in the WLA TIMP area, where most major east-west arterials experience significant congestion during both peak hours. However, several north-south arterials, such as Lincoln and Sepulveda Boulevards, also experience significant congestion within the CTCSP area.

Although reserve capacity is available along various segments of the study corridors, key bottlenecks in the system, such as I-405, prevent additional vehicles from effectively entering/exiting the study area during peak travel periods. Consequently, many portions of the study area are operating over capacity during peak hours. To illustrate the bottlenecks within the roadway network, the Westside TDF model was used to report the operating conditions and resulting bottlenecks in the roadway network. **Figure 4.6-13A and Figure 4.6-13B** highlight the areas in which the roadway network is operating at or over capacity, resulting in bottlenecks within the study area.

Reliability

The traffic volume, travel time, and LOS results presented in this section reflect typical weekday (Tuesday through Thursday) conditions within the study area without major incidents and under mild weather conditions. Atypical traffic conditions, such as an accident on the I-405 freeway, rainy weather or a special event, can impact travelers in the study area. The reliability of the roadway network can be impacted by these occurrences and is a common frustration for Westside drivers. The transit system is also affected by these events.

Figure 4.6-12A Corridor Operations during AM Peak Hour

Figure 4.6-12B Corridor Operations during PM Peak Hour

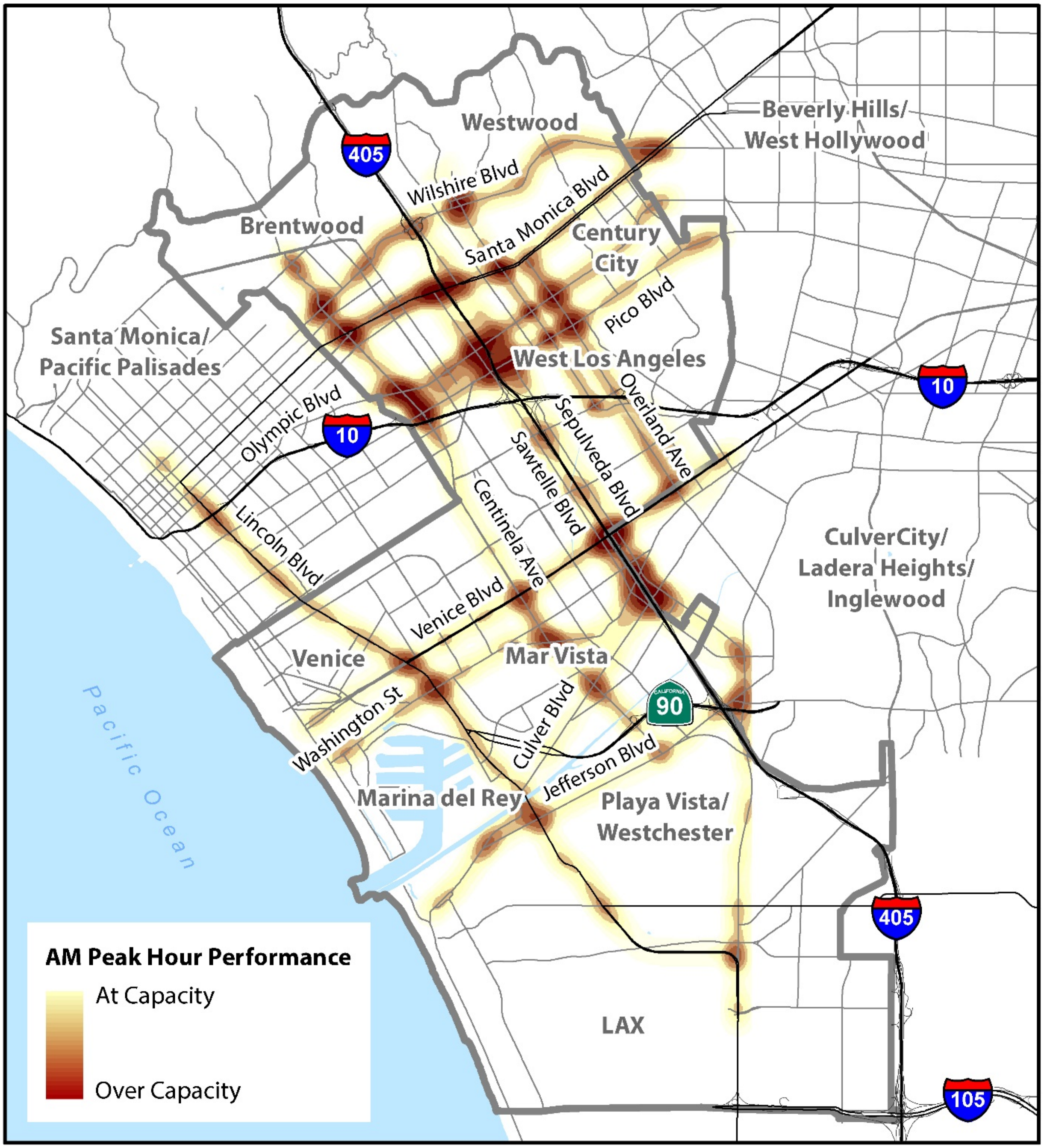


Figure 4.6-13A System Bottlenecks during AM Peak Hour

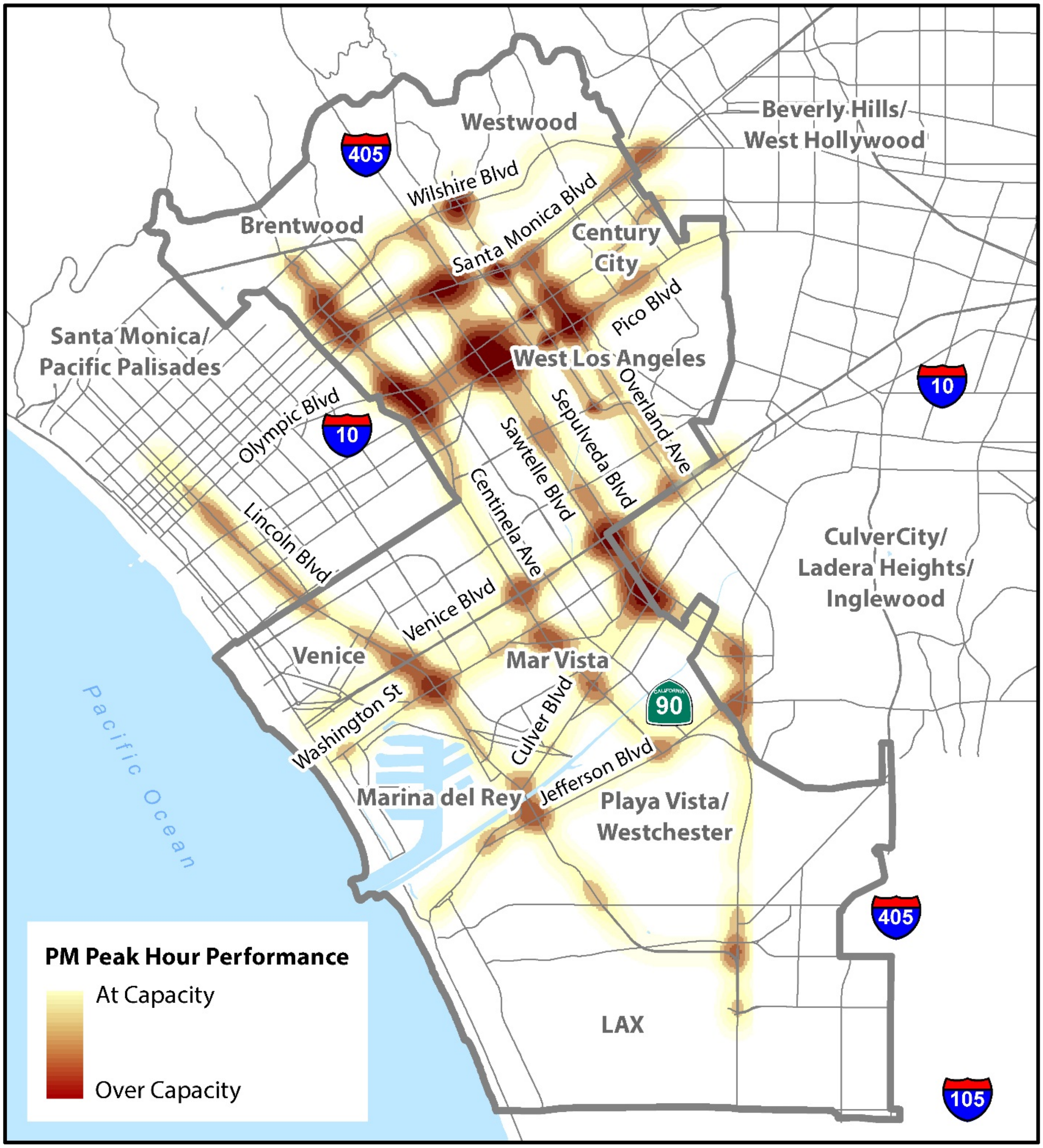


Figure 4.6-13B System Bottlenecks during PM Peak Hour

Existing Transit Ridership

Transit ridership data indicate a total of 33 thousand daily boardings at transit stops within the project area under Existing conditions. The WLA TIMP accounts for 55 percent of bus and rail ridership within the project area. The 7 hour peak period accounts for over 50 percent of all transit boardings within the day. **Table 4.6-9** presents details by specific plan area and time of day.

Table 4.6-9 Transit Boardings

Locations	Transit Boardings		
	Peak Period (7-Hour)	Off Peak Period (17-Hour)	Daily
CTCSP Area	8,000	7,000	15,000
WLA TIMP Area	9,900	8,500	18,400
Project Area Total	**17,900**	**15,500**	**33,400**

Source: Metro Ridership Data, 2013.

4.6.4 Methodology

Overview

This section describes the procedures used to assess impacts on the transportation system. It includes an overall discussion of methodology and assumptions, followed by a discussion of how the Proposed Project is expected to perform for each of the thresholds described in Section 4.6.5 below.

Planning in response to Climate Change has been underway for some time. In 2005 Executive Order (E.O.) S-3-05 set the following GHG emission reduction targets: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; and by 2050, reduce GHG emissions to 80 percent below 1990 levels. In September 2006, the State passed the California Global Warming Solutions Act of 2006, also known as AB 32, into law. AB 32 focuses on reducing GHG emissions in California, and requires the California Air Resources Board (CARB) to adopt rules and regulations to achieve GHG emissions equivalent to statewide levels in 1990 by 2020. California SB 375 was passed by the State Assembly on August 25, 2008 and signed by the Governor on September 30, 2008. SB 375 links regional planning for housing and transportation with the GHG reduction goals outlined in AB 32. For example, reductions in GHG emissions could be achieved by locating housing closer to jobs, retail, and transit. GHG reduction targets have resulted in regional and local agencies reprioritizing their transportation investments to ensure that people have access to transit and active modes of transportation in an effort to reduce dependence on vehicular travel and reduce vehicle miles traveled and associated GHG emissions.

On April 4, 2012, the Regional Council of the SCAG adopted the 2012-2035 RTP/SCS. The 2012-2035 RTP/SCS provides a regional plan to meet region-specific GHG reduction targets. The 2012-2035 RTP/SCS identifies transportation corridors and transit routes, High Quality Transit Areas (HQTAs), and a variety of strategies to be employed across the region to link transportation and land use planning in order to reduce GHG emissions.

As part of its response to the 2012-2035 RTP/SCS, the City of Los Angeles initiated an update to the Transportation Element of the General Plan known as Mobility Plan 2035 or MP 2035. MP 2035 provides a City-wide transportation framework on which to build balanced land use plans. It is anticipated that both transportation infrastructure planning (as presented in MP 2035) as well as future land use planning efforts (community plans, specific plans and occasionally individual projects) will be undertaken in an iterative manner. MP 2035 provides the framework for future community plans and specific plans, such as the proposed amendments to the CTCSP and WLA TIMP, which will take a closer look at the transportation networks in specific areas of the City and will recommend more-detailed implementation strategies to realize MP 2035.

The transportation analysis methods used in this document reflect the policy and legal context in place at the time of project initiation and input from the lead agency on methods. During the course of the project, SB 743 was considered and ultimately enacted into state law. SB 743 makes several changes to CEQA related to both the location and analysis of transportation impacts. Most relevant to this document are changes to the criteria for determining the significance of transportation impacts by projects in transit priority areas and changes to congestion management law. The legislation directs the Governor's Office of Planning and Research to develop revisions to the CEQA Guidelines that establish new criteria for determining the significance of transportation impacts and define alternative metrics for traffic level of service. The legislation does not preclude the application of local general plan policies, zoning codes, conditions of approval, thresholds, or any other planning requirements. Since this guidance is not yet defined, the transportation analysis in this document relies on the legal context and policy framework in place at the time of project initiation. It is possible that some or all of the impacts related to vehicular congestion and LOS that are considered significant under the current legal and policy framework would no longer be considered significant if analyzed using the new criteria.

Study Area and Reporting Framework

The project area is defined by the boundaries of the CTC and WLA TIMP Specific Plan areas in the City of Los Angeles. Analysis results are summarized for both specific plan areas as well as the overall project area. The study area is defined by the potential impacts of the Proposed Project to transportation and safety. The EIR transportation impacts analysis studies impacts to areas within the project boundaries, adjacent areas in the City of Los Angeles, neighboring jurisdictions and freeways that serve the region. Although the proposed amendments to the CTCSP and WLA TIMP do not directly apply to freeways, the Proposed Project could influence motorists' decisions to use the freeway network, and therefore, potential impacts at CMP freeway monitoring stations within the study area are reported. Finally, because the study area is an important part of the greater Westside region and many trips that use facilities within the study area originate or are destined for locations beyond the project boundaries, changes in VMT to traffic on roadways in neighboring areas, including the City of Los Angeles and other adjacent jurisdictions, are also reported in the analysis (see Table 4.6-26).

The Westside TDF model specifies the number of vehicle travel lanes defined on a roadway segment basis throughout the study area. At the aggregate specific plan scale, the analysis results reflect the impacts related to the locations and the number of travel lanes identified as part of the updated lists of transportation projects (i.e., project lists) that could potentially be funded through traffic impact assessment fees and other sources. However, since the potential projects that could be built with the amendments to the Specific Plans have been explored at a conceptual level of design, the detailed designs of turn lanes, signal timings, and driveways are not accounted for in the analysis. Each of these features has the potential to affect operations, delay, VMT, and rerouting of traffic at the neighborhood level. At the programmatic level of analysis, it is not feasible or practical to develop a detailed design and impact analysis for every segment and every intersection within the specific plan boundaries. As individual projects move forward they will be evaluated at a project level as appropriate.

Given the programmatic level of analysis completed for the EIR, a conservative approach was taken to identify potential impacts. While certain transportation projects could be implemented without triggering environmental impacts, the EIR identifies that impacts may occur and impact findings would need to be further analyzed and defined as individual projects are studied for implementation. The specific reporting framework for each analyzed threshold is described in more detail below.

Level of Service Methodology

LOS is a qualitative measure used to describe the condition of traffic flow, ranging from excellent conditions at LOS A to overloaded conditions at LOS F. LOS definitions for street segments are summarized in **Table 4.6-10**. LOS can be determined by dividing demand volume by capacity, and the resulting V/C ratio is then used to obtain the corresponding LOS. The capacity values for analyzed roadway segments were obtained from the Westside TDF model.

Table 4.6-10 Roadway Segment LOS Definitions

LOS	Volume/ Capacity Ratio	Definition
A	0.00 - 0.60	Describes primarily free flow-operations at average travel speeds usually about 90 percent of the free flow speed for the arterial class. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Stopped delay at signalized intersections is minimal.
B	0.61 - 0.70	Represents reasonably unimpeded operations at average travel speeds usually about 70 percent of the free flow speed for the arterial class. The ability to maneuver within the traffic stream is only slightly restricted and stopped delays are not bothersome.
C	0.71 - 0.80	Represents stable operations. Ability to maneuver and change lanes in midblock locations may be more restricted than LOS B, and longer queues and/or adverse signal coordination may contribute to lower average travel speeds of about 50 percent of average free flow speed for the arterial class.
D	0.81 - 0.90	Borders on a range on which small increases in flow may cause substantial increases in approach delay and, hence, decreases in arterial speed. This may be due to adverse signal progression, inappropriate signal timing, high volumes, or some combination of these. Average travel speeds are about 40 percent of free flow speed.
E	0.91 - 1.00	Is characterized by significant approach delays and average travel speeds of one-third the free flow speed or lower. Such operations are caused by some combination of adverse progression, high signal density, extensive queuing at critical intersections, and inappropriate signal timing.
F	> 1.00	Characterizes arterial flow at extremely low speeds below one-third to one-quarter of the free flow speed. Intersection congestion is likely at critical signalized locations, with high approach delays resulting. Adverse progression is frequently a contributor to this condition.

Source: Transportation Research Board, Highway Capacity Manual, 2010.

Plans that involve large areas and are not expected to be fully implemented until Year 2035 or beyond are not analyzed effectively by detailed intersection V/C analyses. Detailed roadway designs for improvements to individual intersections are not yet available. For projects being evaluated at the programmatic level, roadway segment analysis is commonly used to determine the average service capacity of the roadway network within the study area. In addition, the L.A. CEQA Thresholds Guide states that “street segment capacity impacts are generally evaluated in program-level analyses (such as specific plans or long-range development projects) for which details regarding specific land use types, sizes, project access points, etc., are not known.”

SB 743 directs OPR to develop revisions to the CEQA Guidelines to establish new criteria for determining the significance of transportation impacts and define alternative metrics for traffic level of service. Since this guidance is not yet available in final form, the transportation analysis in this document relies on the legal context and policy framework in place at the time of project initiation. It is possible that some or all of the impacts related to vehicular LOS that are considered significant under current legal and policy framework would no longer be considered significant if analyzed using the new criteria.

Travel Demand Model Development

The City of Los Angeles Travel Demand Forecasting Model provides the ability to evaluate the transportation system, use performance indicators for land use and transportation alternatives, provide information on regional pass-through traffic versus locally generated trips, and graphically display these results. The model captures planned growth within the project area, including special generators, such as LAX and universities, and is sensitive to emerging land use trends through improved sensitivity to built environment variables. The model forecasts AM and PM peak period and daily vehicle and transit flows on the transportation network within the City. In essence, the travel demand model serves as a tool to implement, manage and monitor the City of Los Angeles' transportation plans, projects, and programs, providing a suitable starting point for additional refinement as part of a more local application, such as the CTCSP and WLA TIMP project.

The City of Los Angeles TDF Model provided the starting point for creating a more detailed, locally valid model for the project study area as part of the Westside Mobility Plan, known as the Westside TDF model, to which future roadway improvements and land use assumptions could be added. Starting with both a regionally and City-validated model ensured the model captured regional traffic flow patterns and transit ridership while the additional detail and model refinements within the study area allowed the model to more accurately capture local travel patterns. To develop a model for the Proposed Project, land use and roadway network detail were added within and around the study area. Additional modifications were also made to key model components based on data provided by the City of Los Angeles to allow the model to more accurately capture traffic patterns within and around the Westside.

The Westside Travel Demand Forecasting Model Development Report is contained in Appendix F, *Model Development Report.* This report documents the model structure and methodology applied to the development of the Westside TDF model, including the assumptions and sources of data used to develop key model inputs and refine model components. A summary of how well the model performed against validation thresholds established by the California Transportation Commission is also provided. Compliance with these guidelines indicates that the model is suitable for developing traffic volume forecasts to evaluate anticipated growth and transportation system improvements within the study area. Having a locally valid model is a critical step in ensuring a high level of confidence for traffic volume forecasts.

Since the development of the Westside TDF model, SCAG adopted the 2012-2035 RTP/SCS. The 2012-2035 RTP/SCS forecasts long-term transportation demands and identifies policies, actions, and funding sources to accommodate these demands. The 2012-2035 RTP/SCS Model provides a regionally consistent model of traffic conditions in the six-county SCAG region and serves as the platform for many sub-area models. As part of the Proposed Project, the socioeconomic data (SED) for the Westside TDF model was updated to reflect the most recent growth forecasts in 2012-2035 RTP/SCS within the SCAG region. Within the project area, the latest growth forecasts were verified from the Los Angeles Department of City Planning. In addition, the roadway and transit networks have been updated to reflect the assumptions contained in the 2012-2035 SCAG RTP. Appendix F, *Model Development Report,* summarizes the updates made to the travel demand model used for the Proposed Project. **Table 4.6-11** summarizes the existing and future model SED in the project area. Based on this, the City finds that it has provided the most up to date data using the best available methodology to study the project and cumulative impacts.

Table 4.6-11 Summary of Westside TDF Model Socioeconomic Data

SED Data	Location	Model Calibration Year[1]	Future (2035)	Growth	% Growth
Households	CTCSP Area	68,383	84,552	16,169	24%
	WLA TIMP Area	88,903	107,467	18,564	21%
	Project Area	**157,286**	**192,019**	**34,733**	**22%**
Employment	CTCSP Area	87,679	111,904	24,225	28%
	WLA TIMP Area	197,840	217,980	20,140	10%
	Project Area	**285,519**	**329,884**	**44,365**	**16%**
Population	CTCSP Area	157,466	182,305	24,839	16%
	WLA TIMP Area	197,190	219,330	22,140	11%
	Project Area	**354,656**	**401,635**	**46,979**	**13%**

Source: Westside Travel Demand Forecasting Model, 2015.

Note:

1. The Westside Travel Demand Forecasting Model was originally developed, calibrated and validated to 2008 conditions. 2008 is the most recent year in which a consistent data set of population, employment and households is available for the SCAG region (reported at the traffic analysis zone (TAZ) level of detail) for use in the model calibration process. A new TAZ data set will be available when SCAG produces its 2016 RTP update, which will reflect year 2012 conditions as a baseline. While the model calibration year reflects 2008, Year 2014 is used for the reporting of Existing Conditions.

Since the proposed amendments to the specific plans do not include any land use changes, the transportation impact analysis reflects the same land use and growth assumptions for both Future without Project and Future with Project conditions. Growth will occur with or without implementation of the Proposed Project. Additionally, as discussed in Chapter 5, *Other CEQA Considerations*, the project is not expected to be growth-inducing. The background growth reflected in the Westside TDF model accounts for the expected increased activity levels in the region and study area. If the transportation analysis were to strictly evaluate project-related environmental conditions in the future without including future background growth, and then were to compare that project-related future condition to the existing conditions in 2014, the analysis would not account for the overall cumulative nature of the potential impacts and could understate the expected future conditions.

The updated Westside TDF model was used to generate the baseline (Existing Year 2014) and future (Year 2035) conditions data for the Proposed Project. Given the programmatic nature of the impact analysis and large study area, the Westside TDF model reflects the most recent and applicable data at a specific plan level to report baseline and future transportation characteristics. Through the model updates described above and outlined in Appendix F, *Model Development Report,* the Westside TDF model is consistent with the growth and transportation improvements in the adopted SCAG 2012-2035 RTP/SCS, which reflects both the City of LA and SCAG region.

The model simulates base year conditions and can forecast future year conditions for the network, with and without the effects of the Proposed Project, allowing for evaluation of a range of performance measures. Because the travel demand model itself is not sensitive to certain effects of travel demand management (TDM) policies or of changes in bicycle and pedestrian infrastructure defined in the proposed updates to the CTCSP and WLA TIMP project lists, a mode split adjustment tool (MSAT) is applied to the model results to quantify the effect of these programs and projects on automobile travel. The MSAT applies mode share elasticities and vehicle trip reduction factors gathered from relevant academic and practitioner literature at the traffic analysis zone (TAZ) level to calculate the effects of TDM and active transportation network improvements on mode share and the level of vehicle trip-making.

Used together, the travel demand model and mode split adjustment tool outputs provide information on the performance of the transportation system for the overall study area, including:

- Travel mode shares (mode split)
- Vehicle miles traveled
- Vehicle trips

Even with the best available forecasting and analytical methods, there are multiple possible outcomes. This analysis takes a conservative approach toward vehicle-related congestion impacts. Additional changes in demographics, vehicle ownership patterns, energy prices, and migration to walkable and transit-served locations will likely lead to increasing mode shift to lower-energy and lower-cost transportation options consistent with the regional SCS.

The analysis tools used to forecast future travel patterns are long range models of travel demand. Their primary focus is on forecasting driving with some additional sensitivity to other ways of traveling. This is consistent with how most cities forecast traffic and how transportation professionals have operated for decades. However, new trends in how we travel have emerged in recent years. Experts are debating what may be driving these trends and how durable they may or may not be. Many forces are pulling in various directions, including recessionary effects on employment, changes in millennial interest in driving and vehicle ownership, baby boomer retirement choices and their continued participation in the workforce and preferences for urban living, fuel prices, new delivery of goods and services through providers like Amazon, and greater travel options through autonomous vehicles and shared use mobility (e.g. Lyft, Uber, bikeshare programs).

The transportation analysis approach used in this EIR included using the established traffic forecasting tools and increasing their sensitivity to the trends that have been empirically proven and previously accepted under CEQA. However, these may prove to be conservative if some of the recent trends in travel persist. It is not clear what direction the trends will take at this point. VMT per capita has been generally dropping since around 2004, increased for many decades prior, and has now begun to climb again since January 2014. Trends in LA are also pulling in multiple directions. If the trends toward higher levels of walking, bicycling, and transit use exceed what is forecast in the EIR, this could result in fewer driving related impacts than the plan conservatively accounts for in the EIR.

Proposed Project List Updates and Relationship to MP 2035

MP 2035 provides the framework for future community plans and specific plans, such as the proposed amendments to the CTCSP and WLA TIMP, which take a closer look at the transportation system in specific areas of the City and recommend more detailed implementation strategies to realize MP 2035. MP 2035 was prepared in compliance with the 2008 Complete Streets Act, which mandates that the circulation element of a city's General Plan be modified to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan.

The proposed amendments to the CTCSP and WLA TIMP are updating the Traffic Impact Assessment (TIA) fees along with the types of transportation improvements (identified in the project lists) within each of the specific plan areas. The types of projects envisioned as part of the updates to the project lists are within the framework established in MP 2035. The proposed updates of the CTCSP and WLA TIMP are consistent with the City's multimodal approach to transportation planning and apply such principles to the Westside in a more targeted manner. The improvements proposed on the updated project lists would provide transportation options and accommodations for multiple modes of travel (i.e., transit, bicycle, pedestrian, and vehicle) as part of the transportation system.

The proposed updates to the project lists are presented below in additional detail (see also Figures 3-4, 3-5, 3-6 and 3-7 in Chapter 3, *Project Description*). These project lists are not exhaustive but are representative of the types of improvements proposed for inclusion in the specific plan amendments. In addition, for the purpose of analyzing potential impacts of the updated project lists at a programmatic level, assumptions were made as to the improvements that could be implemented with the specific plan amendments. The Proposed Project would not, itself, entitle or otherwise approve any transportation projects.

The proposed updates to the project lists reflect the vision of MP 2035; however, they do not reflect full build-out of MP 2035. Many of the projects contained in the updated project lists provide a first-step in implementing MP 2035. For example, Pico Boulevard is designated as part of the Moderate Plus Transit Enhanced Network (TEN) in MP 2035. For the purposes of analyzing the MP 2035 TEN, the Moderate Plus treatments were assumed to result in the conversion of one vehicular travel lane per direction to a bus only lane during peak periods. As part of the WLA TIMP project list, transit is prioritized on Pico Boulevard through the implementation of rapid bus service improvements with increased frequencies, stop improvements, and construction of a new rapid stop in Century City without the removal of vehicular capacity during the peak travel hours. To illustrate a second example, Venice Boulevard is designated as part of both the TEN and Bicycle Enhanced Network (BEN) in MP 2035. While the Proposed Project does not reflect the ultimate improvements that could eventually occur as part of the TEN and BEN designations, such as dedicated transit lanes on Venice Boulevard, the updated project lists reflect the following first-step improvements that are consistent with the vision of providing enhanced transit and bicycle facilities along Venice Boulevard: 1) Cycle track throughout the project area, 2) Rapid bus improvements throughout the project area with increases in service frequency and stop improvements, and 3) Streetscape improvements between Beethoven Street and Inglewood Boulevard.

Proposed CTCSP and WLA TIMP Project Lists

The proposed amendments include updating the list of transportation improvements funded in part by the traffic impact fees in each specific plan area (project lists are in Appendix A of both the CTCSP and WLA TIMP). The updated project lists are aimed at improving the transportation network, enhancing system capacity, reducing vehicle trips and VMT, and improving transit connectivity.

The Proposed Project would not, itself, entitle or otherwise approve any transportation projects. Nevertheless, the Proposed Project would result in a new list of transportation improvements for both the CTCSP and WLA TIMP areas. The types of projects and programs that would be included as transportation improvements for each specific plan are described below in **Table 4.6-12**. The projects and programs in this table are representative of the types of improvements proposed for inclusion in the Specific Plan amendments. The Westside TDF model was updated to reflect the potential transportation improvements (project lists). Projects that could potentially alter the existing roadway network (i.e., change vehicle capacity or eliminate on-street parking) and the modeling assumptions used to quantify potential impacts are noted in the table.

Table 4.6-12 Potential Transportation Improvements (Project List Updates)

Transit

All-Day Center Running Bus Rapid Transit (BRT):

- Lincoln BRT (CTCSP): Center Running BRT on Lincoln Boulevard from the border of the City of Santa Monica to 96th Street Transit Station
- Sepulveda BRT (CTCSP & WLA TIMP): Center Running BRT on Sepulveda Boulevard from Wilshire Boulevard to 96th Street Transit Station

For the purposes of reporting potential traffic impacts, this project type was analyzed as providing all-day center-running bus-only lanes. Parking would be removed from one side of the street along the corridor and from both sides of the street at station locations. In areas where parking is not provided on-street, or prohibited during peak periods, a vehicle lane reduction would be required. Some raised medians along the corridor and left-turn pockets at minor streets would likely need to be removed. The BRT would also include higher frequency peak period service and stop improvements.

Peak Period BRT:

- Santa Monica Boulevard BRT (WLA TIMP): Curb-running peak hour bus-only lanes within the WLA TIMP boundary with enhanced bus stop amenities

For the purposes of reporting potential traffic impacts, this project type was analyzed as the buses utilizing the vehicle travel lane closest to the curb during peak travel hours resulting in reduced vehicle capacity.

Rapid Bus Enhancements:

- Olympic Rapid Bus Enhancements (WLA TIMP): Extend the Rapid bus service along Olympic Boulevard from its current terminus in Century City to the future Metro Exposition Line station at Westwood Boulevard
- Pico Rapid Bus Enhancements (WLA TIMP): Improve existing Rapid bus service on Pico Boulevard through increased frequency, stop improvements, and construction of a new rapid stop in Century City
- Venice Rapid Bus Enhancements (CTCSP & WLA TIMP): Rebrand existing Rapid bus service on Venice Boulevard to serve Venice Beach area, increase service frequency, and implement stop improvements.

For the purposes of reporting potential traffic impacts, the rapid bus improvements included higher frequency peak period service, extension of service hours, and rapid stop improvements. Rapid bus enhancements would not require vehicle capacity reductions, such as travel lane conversions.

Local Bus Enhancements & Circulator Routes:

Circulator bus/shuttle to connect activity centers to major transit stations:

- Sawtelle service between Wilshire Blvd and the Expo Sepulveda Station (WLA TIMP)
- Bundy service between Brentwood, the Expo Bundy Station, and National Blvd (WLA TIMP)
- Palms Circulator to connect to Expo Station (WLA TIMP)
- Century City Circulator to connect to Expo Station (WLA TIMP)
- Loyola Marymount / Westchester Circulator (CTCSP)
- Venice / Playa Vista / Fox Hills Circulator (CTCSP)
- Venice Circulator (CTCSP)

The circulator routes and local bus improvements would travel in mixed-flow lanes with vehicles and would not result in the removal of a vehicle travel lane to the existing roadway network.

Bicycle and Pedestrian

Mobility Hubs

- In both CTCSP and WLA TIMP, install a full-service Mobility Hub at or adjacent to major transit stations and Satellite Hubs surrounding the stations. A hub may include secure bike parking and car/bike sharing to bridge the first/last mile of a transit user's commute.

Streetscape Improvements

- Venice Boulevard (CTCSP) between Lincoln Boulevard and Inglewood Boulevard
- Centinela Avenue (CTCSP) between Washington Boulevard and Jefferson Boulevard
- Olympic Boulevard (WLA TIMP) from Centinela Avenue to Barrington Avenue
- Bundy Drive (WLA TIMP) from Missouri Avenue to Pico Boulevard
- Sepulveda Boulevard (WLA TIMP) from Olympic Boulevard to National Boulevard
- National Boulevard (WLA TIMP) from Castle Heights Avenue to Mentone Avenue
- Palms Boulevard (WLA TIMP) from Motor Avenue to National Boulevard
- Pico Boulevard (WLA TIMP) from I-405 to Patricia Avenue
- Pico Boulevard (WLA TIMP) from Centinela Avenue to I-405
- Motor Avenue (WLA TIMP) from I-10 to Venice Boulevard

Streetscape improvements could include amenities such as landscaping, pedestrian crossing enhancements, median treatments and street lighting. These improvements would occur within the existing right-of-way and are not expected to result in reduced vehicle capacity or material removal of on-street parking.

Multi-Use Paths

- Centinela Creek Multi-Use Path: Centinela Creek path from Ballona Creek to Centinela Avenue east of I-405 (CTCSP)
- Sepulveda Channel Multi-Use Path: Sepulveda Channel path from Ballona Creek to Washington Boulevard (CTCSP)
- Exposition Light Railway Greenway Improvement Project: Transform existing city-owned vacant parcels into a neighborhood greenway that includes construction of a multi-use path with drought tolerant landscaping, simulated stream to treat urban runoff, educational amenities and interpretive signs along Exposition Boulevard between Westwood and Overland along future Expo LRT Westwood Station. (WLA TIMP)

Multi-use paths would be as an off-street network of facilities and are not expected to result in reduced vehicle capacity or removal of on-street parking.

Neighborhood Enhanced Networks (NEN)

- Beethoven Street / McConnell Avenue NEN (CTCSP)
- Prosser/Westholme Avenue NEN (WLA TIMP)
- Veteran Avenue NEN (WLA TIMP)
- Gayley Avenue/Montana Avenue (east of I-405) NEN (WLA TIMP)
- Montana Avenue (west of I-405) NEN (WLA TIMP)
- Barrington Avenue/McLaughlin Avenue NEN (CTCSP)
- Ohio Avenue NEN (WLA TIMP)
- Other corridors identified in City Bicycle Plan/MP 2035 (CTCSP & WLA TIMP)

The streets identified as part of the NEN would receive treatments focused on reducing vehicle speeds and providing a safe and convenient place to walk and bike. These treatments are not expected to require the removal of a travel lane or material removal of on-street parking.

Cycle Tracks

- Venice Boulevard Cycle Track (CTCSP and WLA TIMP): Venice Boulevard throughout the CTCSP area. For the purposes of reporting potential traffic impacts, the Venice Boulevard cycle track is assumed to replace the existing bicycle lane to provide a protected bicycle facility in the project area.
- Santa Monica Boulevard Cycle Track (WLA TIMP): Santa Monica Boulevard in the "parkway" section east of Sepulveda Boulevard. The cycle track would replace the existing bicycle lane.
- Washington Boulevard Cycle Track (CTCSP): Washington Boulevard from Admiralty Way to Pacific Avenue. The cycle track would replace the existing bicycle lane.
- Lincoln Boulevard Cycle Track (CTCSP): Lincoln Boulevard from Jefferson Boulevard to Fiji Way. Additional right-of-way to accommodate cycle track would result from Lincoln Bridge Project.

On-Street Bicycle Lanes

- Culver Boulevard Bike Lane (CTCSP): Culver Boulevard from McConnell Avenue to Playa del Rey
- Gateway Boulevard (CTCSP): Gateway Boulevard to Ocean Park Boulevard gap closure
- Other corridors identified in MP 2035 (CTCSP & WLA TIMP)

Bicycle Transit Centers

- In both CTCSP and WLA TIMP, install bike transit centers that offer bicycle parking, bike rentals, bike repair shops, lockers, showers and transit information and amenities.

Bikesharing

- In both CTCSP and WLA TIMP, provide public bicycle rental in "pods" located throughout the specific plan areas.

Enhance Pedestrian Access to Major Transit Stations

- Implement pedestrian connectivity improvements at major Metro transit stations by providing enhanced sidewalk amenities, such as landscaping, shading, lighting, directional signage, shelters, curb extensions, enhanced crosswalks, as feasible. (CTCSP).

Sidewalk Network & Pedestrian Enhancements

- Sepulveda Boulevard (CTCSP): Implement sidewalk and streetscape improvements, bus stop lighting at transit stops, and enhanced crosswalks on Sepulveda Boulevard between 76th Street and 80th Street.
- In CTCSP and WLA TIMP, complete gaps in the sidewalk network and provide pedestrian enhancements.

Complete Streets

- Westwood Boulevard (WLA TIMP): Improvements along Westwood Boulevard between the future Expo LRT station, Westwood Village, and UCLA could include transit, bicycle and pedestrian enhancements (that do not require removal of vehicular travel lanes or on-street parking) or bicycle enhancements on parallel roadways.

Roadway & ITS

Roadway Capacity Improvements

- Lincoln Boulevard Bridge Enhancement (CTCSP): Partnering with Caltrans and LA County, improve Lincoln Boulevard between Jefferson Boulevard and Fiji Way to remove the existing bottleneck by replacing the existing bridge with a wider bridge with additional southbound lane, transit lanes and on-street bike lanes. Improvements to serve all modes of travel were assumed to be implemented as follows: 1) an additional southbound lane for vehicles would be provided (currently, Lincoln narrows from three to two travel lanes in the southbound direction just south of Fiji Way whereas three travel lanes are provided in the northbound direction), 2) bus-only lanes would be provided in the median, 3) cycle tracks would be provided on both sides of the roadway to connect the existing bicycle lanes to the south with the Ballona Creek bicycle path, and 4) sidewalks would be provided on both sides of the street (the existing bridge does not provide sidewalks).
- Culver Boulevard Corridor (CTCSP): Improve traffic flow along Culver Boulevard between Centinela Avenue and I-405 Freeway including providing left-turn lanes at key signalized intersections (including Inglewood Boulevard).

- Access Improvements to LAX (CTCSP): On-going coordination with LAWA on airport related improvements, which may include a combination of roadway capacity enhancements, streetscape improvements, and multi-modal improvements. For the purposes of modeling potential impacts, improvements already identified in the RTP/SCS in proximity of the airport were included in the Westside TDF model.
- Sunset Boulevard Operations (WLA TIMP): Implement operational improvements along Sunset Boulevard. Improvements could include the following: ITS corridor improvements; signal upgrades as part of the next evolution of ATSAC; intersection improvements, such as turn-lane or safety improvements.
- Olympic Boulevard Operations (WLA TIMP): Implement operational improvements along Olympic Boulevard between I-405 and Purdue Avenue (to the west of I-405). Improvements were assumed to include the following: Convert one westbound travel lane into an eastbound travel lane just west of I-405 by 1) In the westbound direction, provide two travel lanes (three during peak periods with on-street parking restrictions); 2) In the eastbound direction, provide three travel lanes (four during peak periods with on-street parking restrictions); and 3) Remove eastbound and westbound left-turn lanes at Beloit Avenue and eastbound center turn lane at Cotner Avenue to provide additional through lane capacity.
- Bundy Drive/I-10 Ramp (WLA TIMP): Operational improvements at the I-10 ramp connections to Bundy Drive.
- Major Intersection Improvements (CTCSP and WLA TIMP): Spot intersection improvements, such as turn-lane or safety improvements.

Neighborhood Protection Program

- In CTCSP and WLA TIMP, the objective of this Program is to discourage through-traffic from using local streets and to encourage, instead, use of the arterial street system. The Program will establish measures to make the primary arterial routes more attractive and local routes less attractive for through traffic, and establish measures designed to facilitate vehicular and pedestrian egress from local streets in the adjacent neighborhoods onto the primary arterial street and highways system.

Technology Improvements

- ITS Corridor & Signal Upgrades (CTCSP & WLA TIMP): Install ITS improvements along major corridors. Install signal upgrades as part of the next evolution of ATSAC, including detector loops for traffic volume data and monitoring
- Congestion Monitoring (CTCSP & WLA TIMP): Install CCTV cameras and necessary infrastructure to improve DOT's ability to monitor and respond to real-time traffic conditions

Trip Reduction Programs

Parking Management

- ExpressPark (CTCSP & WLA TIMP): Implement an on-street intelligent parking program that includes vehicle sensors, dynamic demand-based pricing and a real-time parking guidance system to reduce VMT and congestion and improve flow for cars/buses.
- Strategic Parking Program (CTCSP & WLA TIMP): Implement a Westside parking program and update parking requirements to reflect mixed-use developments, shared parking opportunities, and parking needs at developments adjacent to major transit stations.
- Parking Utilization Improvements & Reduced Congestion (CTCSP & WLA TIMP): Develop an on-line system for real-time parking information, including GIS database and mapping. Improve parking, wayfinding and guidance throughout commercial areas.

Demand Management

- Rideshare Toolkit (CTCSP & WLA TIMP): Develop an online Transportation Demand Management (TDM) Toolkit with information for transit users, cyclists, and pedestrians as well as ridesharing. Include incentive programs for employers, schools, and residents. Toolkit would be specific to City businesses, employees, and visitors and would integrate traveler information and also include carpooling/vanpooling and alternative work schedules.
- Transportation Demand Management Program (CTCSP & WLA TIMP): The program would provide start-up costs for Transportation Management Organizations/Associations (TMOs/TMAs) as well as provide guidance and implementation of a TDM program.

Changing Travel Patterns and VMT Trends

As discussed throughout this EIR, federal, State, regional and local regulations and policies are increasingly addressing reducing emissions of GHGs. SB 375 requires Metropolitan Planning Organizations (SCAG in the Los Angeles area) to identify land use strategies to achieve specified GHG reductions from automobiles and light trucks. The 2012-2035 RTP/SCS contains the regional-scale Sustainable Communities Strategy to achieve per capita GHG reduction targets specified by CARB. However, the RTP presents only a regional strategy that local jurisdictions are required to interpret at the local level to ensure consistency with the 2012-2035 RTP/SCS and required reductions in VMT and therefore GHGs. The City of Los Angeles has been responding to these changes by incorporating new policies and programs into their recent planning efforts, such as MP 2035 and the proposed CTCSP and WLA TIMP amendments.

Because travel demand forecasting models are substantially based on past precedent, state of the practice traffic modeling tools have not yet fully realized the potential mobility benefits of the planned transit system, expected increases in bicycling and pedestrian activity anticipated to result from State policy (AB 32 and SB 375), regional planning guidance (2012–2035 RTP/SCS) and updated City land use and transportation plans. The CTCSP and WLA TIMP are part of the synergistic matrix of plans, policies, and regulations that are anticipated to foster a community that is less dominated by personal vehicles and more conducive to alternative work practices and alternative modes of transportation. However, this shift in focus, together with anticipated changes in energy pricing, will not occur over night, and it may be several years before the results of these changes are fully reflected in the mobility patterns of those that live and work on the Westside and reflected in the traffic models applied to forecast future travel and potential impacts.

The TDF model-estimated changes in circulation system conditions may overstate traffic congestion. The model forecasts are conservative, vehicle-centric estimates based on historical travel behavior patterns and do not account for additional changes in demographics, vehicle ownership patterns, energy prices, and migration to walkable and transit-served locations that would lead to decreasing vehicular volumes. Transportation demand models are largely dependent on historical travel patterns and mode choices when forecasting future traffic projections. Recent research in this area suggests that factors correlated with annual VMT over the last sixty years include the economy, demographics, technology, and the urban form of the built environment. Specifically, this research shows both cyclical recession effects and a structural leveling of the economy and travel. In addition, research in areas served by high capacity transit shows significantly higher than expected transit ridership and lower than expected trip rates that typical ITE trip generation rates (Boarnet, 2013).

The Westside TDF model used for the Proposed Project is primarily validated and calibrated to forecast vehicular travel. While it also includes forecasts of transit ridership and short trips that are likely to be walking or bicycling trips, the sensitivity of the model to shifts in demographics, vehicle ownership, walkability, and active transportation networks at a city-wide scale is limited. Accordingly, expected increases in bicycling and pedestrian activity anticipated to result from changing land use policies, as well as increasing regulations and fuel pricing, have not been directly quantified and incorporated into the traffic model. It is possible that current traffic studies that rely on the traffic model for vehicle trip generation may overstate future traffic congestion.

In response to increased focus on reducing GHG emissions, the State is shifting the approach to the assessment of traffic impacts – away from the traditional metrics such as LOS that measure levels of traffic congestion and towards metrics that address GHG emissions such as per capita VMT. Also as noted previously, it is anticipated the Governor's OPR will provide additional guidance on CEQA review of transportation impacts.

4.6.5 Thresholds of Significance

State CEQA Guidelines

Appendix G of the State CEQA Guidelines identifies the following considerations relative to determining a project's impacts relating to transportation/traffic:

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

As noted previously, the Governor's OPR has circulated suggested (preliminary discussion draft) changes to the State CEQA Guidelines that would alter the way in which lead agencies have traditionally evaluated traffic impacts to remove automobile delay as a significant impact under CEQA. Mitigations used by lead agencies to address increased delay often involve increasing capacity (i.e., the width of a roadway or intersection), which has the potential to induce more traffic into an area. In addition, most urban areas are built-out and do not have available right-of-way to expand the roadway network by constructing additional vehicle travel lanes. To address this issue, the new draft guidelines focus on VMT as a more appropriate metric for measuring transportation impacts. Several of the potential performance metrics that may be implemented as part of these CEQA changes are also provided in this document for informational purposes. However, the determination of significant Project impacts are still based on current State and City CEQA thresholds and guidelines.

City of Los Angeles CEQA Thresholds

The City of Los Angeles' L.A. CEQA Threshold Guide provides thresholds of significance for intersection capacity, street segment capacity, freeway capacity, neighborhood intrusion, project access, transit system capacity, parking, and in-street construction impacts (City of Los Angeles, 2006). The L.A. CEQA Threshold Guide also includes guidance regarding methodologies to be used in determining significance, as well as criteria to be considered when making a significance determination. The application of the City's thresholds to the Proposed Project is discussed below. As stated below, many of the City's thresholds and criteria have been incorporated into this EIR as thresholds of significance. However, the City's thresholds for intersections are not used in this analysis because the street segment capacity analysis incorporated in the Circulation System threshold below is sufficient and appropriate to characterize the flow of traffic and to analyze potential impacts of the

Proposed Project given the programmatic level of analysis. In addition, the L.A. CEQA Thresholds Guide states that street segment capacity impacts are generally evaluated in program-level analyses (such as specific plans or long-range development projects). In addition, subsequent to publication of the L.A. CEQA Thresholds Guide, parking was removed as a consideration in the State CEQA Guidelines as described below. Therefore, the City's thresholds pertaining to parking are not included. However, thresholds for potential secondary impacts relating to parking are provided in this section.

Thresholds of Significance Applied to the Proposed Project

This section identifies the thresholds of significance used in this EIR. These thresholds were derived from Appendix G of the State CEQA Guidelines and the L.A. CEQA Thresholds Guide.

Consistency with Plans

In accordance with Appendix G of the State CEQA Guidelines, the Proposed Project would have a significant impact related to transportation if it would:

- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Circulation System

The Proposed Project would have a significant impact to the circulation system if one or both of the following criteria are met:

- The "volume-weighted" average of the volume-to-capacity (V/C) ratio under the Year 2035 Project (i.e., Future with Project) conditions for all of the analyzed roadway segments exceeds that of the Existing traffic conditions and/or Future without Project (2035) traffic conditions; and/or

- The number of roadway links projected to operate at unsatisfactory levels of service (LOS E or F) under the Year 2035 Project conditions exceeds the number for Existing traffic conditions and/or Future without Project (2035) traffic conditions.

For the purposes of evaluating the significant impacts based on the above criteria, the analyzed roadway segments include major highways, secondary highways, and collector streets within the project area.

Neighborhood Intrusion

In accordance with the L.A. CEQA Thresholds Guide, the Proposed Project would have a significant impact related to neighborhood intrusion if it would increase the average daily traffic (ADT) volume on a local residential street in an amount equal to or greater than the following:

- ADT increase ≥ 16% if final ADT < 1,000

- ADT increase ≥ 12% if final ADT ≥ 1,000 and < 2,000

- ADT increase ≥ 10% if final ADT ≥ 2,000 and < 3,000

- ADT increase ≥ 8% if final ADT ≥ 3,000

Final ADT is defined as total projected future daily volume including project, ambient, and related project growth.

Because the routing of traffic to local residential streets depends on the roadway network changes that will be determined through further evaluation and selection of the preferred design of specific projects, the Proposed Project is assessed qualitatively against these thresholds for purposes of this EIR.

Congestion Management Program

Metro's CMP was implemented to analyze the impacts of local land use decisions on the regional transportation system. Local jurisdictions are responsible for assessing the impacts of new development on the CMP system as part of the development review and entitlement process. Since the Proposed Project would not result in land use changes within the City of Los Angeles, a CMP analysis is not required. However, for the purposes of showing changes in travel demand on the state highway system within the study area, a CMP analysis was conducted for CMP freeway segments. In accordance with the CMP, the Proposed Project would have a significant impact on a CMP freeway or arterial monitoring location if it would:

- Increase traffic demand on a CMP facility by 2 percent of capacity ($V/C \geq 0.02$), causing LOS F ($V/C > 1.00$).
- If the facility is already at LOS F, it would increase traffic demand on a CMP facility by 2 percent of capacity ($V/C \geq 0.02$).

Since bottlenecks in the freeway network can result in artificially low vehicle counts at CMP monitoring stations and vehicle LOS experienced by drivers may be worse than reported based on the CMP methodology, project increases in $V/C \geq 0.02$ for facilities shown to be operating at LOS E or better are also conservatively identified as a potentially significant impact.

Emergency Access

In accordance with the State CEQA Guidelines, the determination of impacts to transportation/traffic should consider whether a project would result in inadequate emergency access. The L.A. CEQA Thresholds Guide provides screening criteria and thresholds of significance for evaluating emergency access in two discipline areas: impacts to project access as considered in Transportation, and impacts to emergency services as considered in Public Services (Sections L.5, Project Access, and K.2, Fire Protection and Emergency Medical Services, respectively).

The City's guidelines for analyzing a project's access impacts relative to transportation are best suited for evaluating *local* project access in a project-level EIR (such as for a specific development project or a specific transportation improvement project) and are not directly applicable to the analysis of a programmatic plan such as the Proposed Project. The City guidelines provide the following screening criteria for determining whether project access impacts, including emergency access, need to be studied in an EIR:

> *Would the proposed project generate 500 or more daily trips or 43 or more vehicle trips during either the a.m. or p.m. peak hours? If yes, would any of the following occur?*
>
> > *Is a project driveway proposed on a major or secondary highway within 150 feet of an intersection with another major or secondary highway? Would a project driveway intersect an on-street bicycle lane or cross a sidewalk in an area of high pedestrian activity? Can it be readily perceived that there are access risks or deficiencies associated with the adjoining street system due to curves, slopes, walls or other barriers to adequate lines of site?*

A "no" response to the first question and all of the following questions indicates that there would normally be no significant Project Access impacts from the proposed project.

It is not feasible to analyze the Proposed Project using the criteria provided above because the Proposed Project would not generate trips and does not include design-level details (such as driveway design and location). These screening questions are more appropriate for a project-level EIR. A program-level of analysis is more appropriate for the Proposed Project. Therefore, the City threshold established for evaluating project access was not used to evaluate emergency access for the Proposed Project.

The more suitable analysis for determining the emergency access impacts of the Proposed Project is provided in the L.A. CEQA Threshold Guide's discussion of impacts to fire and emergency medical services. The relevant State CEQA Guidelines consideration for public services is as follows:

> *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for…Fire protection?*

The City's screening criteria for whether fire service impacts need to be studied in detail in a CEQA document include whether there would be an increased number of intersections with LOS E or F (among other criteria, such as, project distance to fire station, brush fire hazards, fire hydrant services, storage of combustible materials). It is important to note that this is not a threshold of significance. This criteria simply informs whether further study is required in the CEQA document. In accordance with the threshold of significance provided in the L.A. CEQA Thresholds Guide, the Proposed Project would have a significant impact on fire protection if it would:

- Require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service.

This is the threshold used in this EIR for determining the Proposed Project's fire protection and emergency access impacts.[27]

Public Transit, Bicycle, or Pedestrian Facilities

The Proposed Project would have a significant impact on public transit, bicycle, or pedestrian facilities if it would:

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[27] The City rejects the use of a threshold of significance for fire and emergency response services in this EIR that is directly tied to response times based on LOS as has been advocated by commentators on other City EIRs. The City is rejecting this threshold on the basis that, as discussed further in Impact 4.6-5, it is not supported by substantial evidence. There is no evidence, including substantial evidence, that has been provided to the City, or its traffic and environmental consultants, or that the City, or its traffic and environmental consultants, are aware of, or have found with reasonable diligence and inquiry, including searching the relevant academic and trade literature and other agencies' EIRs prepared across the State, that can demonstrate to the City's satisfaction that there is a correlation between decreased LOS and decreased response times of fire and emergency response services, or that there is any method to connect LOS and response times for purposes of analyzing a plan adoption or update that covers an area the size of the project area.

- Disrupt existing public transit, bicycle, or pedestrian facilities or interfere with planned facilities, or create conflicts or inconsistencies with adopted public transit, bicycle, or pedestrian system plans, guidelines, policies, or standards.

No specific LOS methodologies or quantitative thresholds for performance have been defined by the City to evaluate these impacts.

Safety

In accordance with the State CEQA Guidelines, the determination of impacts to transportation/traffic should consider whether a proposed project would substantially increase hazards due to a design feature or incompatible uses. The L.A. CEQA Thresholds Guide does not identify specific methodologies or quantitative thresholds pertaining to transportation safety. Rather, the methodology to determine significance included in the L.A. CEQA Thresholds Guide relies upon a qualitative analysis of conditions pertaining to bicycle, pedestrian, and vehicular safety. For purposes of this EIR, the Proposed Project would have a significant impact relative to transportation safety if it would:

- Result in a substantial change to physical conditions that would adversely affect transportation safety.

Construction

The State CEQA Guidelines do not include criteria for the consideration of transportation-related construction impacts. Moreover, the L.A. CEQA Thresholds Guide does not include a significance threshold for in-street construction impacts. Rather, the Guide relies upon a qualitative analysis of conditions pertaining to temporary impacts associated with construction, including temporary traffic impacts, loss of access, loss of bus stops or rerouting of bus lines, and loss of on-street parking. For purposes of this EIR, the Proposed Project would have a significant transportation-related impact from construction activities if it would:

- Result in a substantial disruption to traffic during construction, which could include temporary street closures; temporary loss of regular vehicular or pedestrian access to existing land uses; temporary loss of an existing bus stop or rerouting of bus lines; or creation of traffic hazards.

Parking

Parking deficits are considered to be socioeconomic effects, rather than impacts on the physical environment as defined by CEQA. Under CEQA, a project's social impacts need not be treated as significant impacts on the environment. However, environmental documents must address the secondary physical impacts that would be triggered by a social impact (State CEQA Guidelines Section 15131). The secondary physical environmental impacts that may occur include increased traffic congestion at intersections; neighborhood intrusion; air quality, safety, and noise impacts caused by congestion from drivers seeking parking; or land use impacts. According to SB 743, aesthetic and parking impacts of residential, mixed-use residential, or employment center projects on an infill site within a transit priority area are not considered significant impacts. A transit priority area is defined as an area within one-half mile of a major transit stop that is existing or planned. However, the Proposed Project would have a significant impact if it would:

- Result in secondary effects related to parking that would contribute to physical impacts, which could include increased traffic congestion at intersections; neighborhood intrusion; air quality, safety, and noise impacts caused by congestion from drivers seeking parking; or land use impacts.

A discussion of each of these impacts is presented in Section 4.6.6, *Impacts and Mitigation Measures*.

New Transportation Performance Metrics Currently under Consideration

California Senate Bill 743 directs the Office of Planning and Research (OPR) to "prepare, develop, and transmit to the Secretary of the Natural Resources Agency for certification and adoption proposed revisions to the guidelines adopted pursuant to Section 21083 establishing criteria for determining the significance of transportation impacts of projects within transit priority areas … Upon certification of the guidelines by the Secretary of the Natural Resources Agency pursuant to this section, automobile delay, as described solely by LOS or similar measures of vehicular capacity or traffic congestion within a transit priority area, shall not support a finding of significance pursuant to this division…"

In addition to vehicular LOS and the other CEQA significance thresholds described in the aforementioned sections, four additional performance metrics are also evaluated in this EIR for informational purposes. In OPR's August 6th, 2014 preliminary discussion draft of "Updating Transportation Impacts Analysis in the CEQA Guidelines," the evaluation of VMT was recognized as "generally the most appropriate measure of transportation impacts." OPR also states that lead agencies may tailor their analysis to include other measures. In order to provide additional information on the transportation benefits and impacts associated with the Proposed Project, this EIR evaluates VMT and three other metrics that are consistent with the intent of SB 743.

Mode Split

Mode Split is defined as the distribution of travelers across all modes of transportation. A more balanced mode split is indicative of a transportation system that better provides for multiple modes of transportation.

Transit Boardings

Transit Boardings are defined by the number of daily passengers that board a public transit vehicle. Transit Boardings can be used to measure transit usage. An increase in transit boardings indicates an increase in transit usage and a decrease in automobile dependence.

Vehicle Trips

Vehicle Trips are defined as the number of trips undertaken in an automobile, such as in single occupancy vehicles, private automobiles, and vehicles that contain two or more travelers, such as carpools, taxis, or ride-share vehicles. A reduction in the number of Vehicle Trips taken over time can be used as an indicator of reduced reliance on the automobile as well as an indicator of more travel by carpools.

Vehicle Miles Traveled

VMT is a measurement of miles traveled by all vehicles (e.g., private automobiles, trucks and buses) in the study area. A reduction in the number of vehicle miles traveled overall and in the number of vehicle miles traveled per capita can be used as an indicator of reduced reliance on vehicular travel, primarily by private automobiles.

4.6.6 Impacts and Mitigation Measures

The Proposed Project, which includes updates to the TIA Fee program and the list of projects that could be funded by the TIA fees, would not result in any direct physical impacts that could affect transportation. Therefore, the following analysis addresses whether *implementation* of the proposed updates to the lists of transportation improvements in the CTCSP and WLA TIMP would result in significant impacts. The transportation improvements are evaluated at a conceptual level of detail.

The impacts and mitigation discussion presented below reflects current CEQA requirements as well as the potential future CEQA requirements that would remove automobile delay as a significant impact under CEQA. Mitigations for increased delay often involve increasing vehicular capacity, which has the potential to induce more traffic into an area. In addition, most urban areas, such as the Westside, are built-out and do not have available right-of-way to expand the roadway network by constructing additional vehicle travel lanes, as has been historically proposed to mitigate traffic impacts. To provide a more comprehensive analysis of potential project impacts, both current CEQA requirements and those currently under consideration are provided in this section. Determination of project impacts is still based on current CEQA thresholds and guidelines.

Transportation Impacts under CEQA

Impact 4.6-1: Implementation of the Proposed Project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. This would be a *less than significant impact*.

The proposed amendments to the CTCSP and WLA TIMP are updating the TIA fees, the project lists for each of the specific plan areas, and administrative procedures. The types of projects envisioned as part of the updates to the project lists are within the framework established in the City's Transportation Element and Mobility Plan 2035. The proposed updates of the CTCSP and WLA TIMP are consistent with the City's multimodal approach to transportation planning and apply such principles to the Westside in a more targeted manner. The improvements proposed on the updated project lists would provide transportation options and accommodations for multiple modes of travel (i.e., transit, bicycle, pedestrian, and vehicle) as part of the transportation system.

The Proposed Project would not conflict with adopted City and State policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. Therefore, the impact related to consistency with other plans with respect to transit, bicycle or pedestrian policies would be ***less than significant***.

Mitigation Measures

No mitigation measures are required.

Significance of Impacts After Mitigation

Impacts related to consistency with transportation-related plans associated with the Proposed Project would be ***less than significant.***

Impact 4.6-2: Implementation of the Proposed Project would exceed thresholds relating to operation of the vehicular circulation system. This would be a *significant and unavoidable impact.*

Potential impacts to the circulation system were analyzed for projects that could be constructed as part of the updates to the project lists. V/C ratios and LOS calculations were prepared for Existing, Future without Project and Future with Project conditions. The AM and PM peak period weighted average V/C and corresponding LOS for the roadways in the project area are summarized in **Table 4.6-13** and **Table 4.6-14** by Specific Plan area and for the overall project area. Because of the large number of roadway segments in the study area, the LOS calculations are presented on a percent-of-total basis. During the AM peak period, vehicle operations would remain at LOS D under both Future without Project and Future with Project conditions based on the weighted average V/C within the project area, and the V/C would increase from 0.83 to 0.85. During the PM peak period, vehicle operations would remain at LOS E under Future without Project and Future with Project conditions, and the weighted average V/C would increase from 0.90 to 0.93 for the project area.

Under Existing conditions in both the AM and PM peak periods, the WLA TIMP has the highest share of segments operating at LOS E or F. Within the project area, approximately 21 percent of street segments operate at LOS E or F in the AM peak period and 29 percent in the PM peak period.

Under Future without Project conditions, the percent of segments operating at LOS E or F increases in the project area during the AM and PM peak periods. Within the project area, the share of segments operating at LOS E or F increases from approximately 21 percent to 24 percent in the AM peak period and from 29 percent to 34 percent in the PM peak period.

Under Future with Project conditions, the share of roadway links projected to operate at LOS E or F exceeds the share for both Existing traffic conditions and Future without Project conditions in both the AM and PM peak periods. The weighted average of the V/C ratio under Future with Project conditions for all of the analyzed roadway segments also exceeds that of both the Existing and Future without Project conditions in both the AM and PM peak periods.

Table 4.6-13 Summary of AM Peak Period Roadway Operating Conditions

Location	Percent of Segments Operating at:				Weighted Average V/C Ratio (all segments)
	LOS D or Better	LOS E	LOS F	Unsatisfactory LOS (E or F)	
Existing Conditions (2014)					
CTCSP Area	85.44%	4.88%	9.68%	14.56%	0.76 (LOS C)
WLA TIMP Area	72.88%	8.09%	19.03%	27.12%	0.85 (LOS D)
Project Area	**79.44%**	**6.41%**	**14.15%**	**20.56%**	**0.80 (LOS C)**
Future 2035 Without Project					
CTCSP Area	82.77%	5.65%	11.58%	17.23%	0.79 (LOS C)
WLA TIMP Area	68.46%	10.84%	20.70%	31.54%	0.87 (LOS D)
Project Area	**75.86%**	**8.16%**	**15.98%**	**24.14%**	**0.83 (LOS D)**
Future 2035 With Project					
CTCSP Area	78.47%	5.90%	15.62%	21.53%	0.80 (LOS C)
WLA TIMP Area	62.80%	11.00%	26.19%	37.20%	0.90 (LOS E)
Project Area	**70.91%**	**8.36%**	**20.72%**	**29.09%**	**0.85 (LOS D)**

Source: Fehr & Peers, 2015.

Table 4.6-14 Summary of PM Peak Period Roadway Operating Conditions

Location	Percent of Segments Operating at:				Weighted Average V/C Ratio (all segments)
	LOS D or Better	LOS E	LOS F	Unsatisfactory LOS (E or F)	
Existing Conditions (2014)					
CTCSP Area	78.24%	7.23%	14.53%	21.76%	0.78 (LOS C)
WLA TIMP Area	63.82%	11.75%	24.43%	36.18%	0.90 (LOS D)
Project Area	**71.36%**	**9.39%**	**19.26%**	**28.64%**	**0.86 (LOS D)**
Future 2035 Without Project					
CTCSP Area	73.16%	8.10%	18.74%	26.84%	0.82 (LOS D)
WLA TIMP Area	57.97%	13.00%	29.03%	42.03%	0.93 (LOS E)
Project Area	**65.83%**	**10.46%**	**23.70%**	**34.17%**	**0.90 (LOS E)**
Future 2035 With Project					
CTCSP Area	69.66%	7.18%	23.16%	30.34%	0.89 (LOS D)
WLA TIMP Area	49.56%	16.07%	34.37%	50.44%	0.97 (LOS E)
Project Area	**59.96%**	**11.47%**	**28.57%**	**40.04%**	**0.93 (LOS E)**

Source: Fehr & Peers, 2015

The AM and PM peak period weighted average V/C and corresponding LOS by facility type in the project area are summarized in **Table 4.6-15** and **Table 4.6-16** for Existing, Future without Project, and Future with Project conditions. During the AM peak period, the weighted average V/C increases by 3.7 percent under Future without Project and by 8.4 percent under Future with Project compared to Existing conditions within the project area. During the PM peak period, the V/C increases by 5.2 percent under Future without Project and 10.2 percent under Future with Project compared to Existing conditions.

Table 4.6-15 AM Peak Period Volume to Capacity Comparison by Facility Type

Location	Existing		Future without Project		Future with Project		% Change vs. Existing Conditions		% Change Future with Project vs. Future without Project
	V/C	LOS	V/C	LOS	V/C	LOS	Future without Project	Future with Project	
CTCSP Area									
Freeways	0.88	D	0.87	D	0.86	D	-2.1%	-3.3%	-0.7%
Expressways + Principal Arterials	0.73	C	0.78	C	0.81	D	6.4%	12.6%	4.0%
Minor Arterials	0.69	B	0.72	C	0.75	C	4.8%	11.5%	4.9%
Collectors	0.61	B	0.67	B	0.69	B	9.0%	16.2%	3.8%
All Roadways	***0.76***	***C***	***0.79***	***C***	***0.80***	***C***	***3.1%***	***5.3%***	***1.3%***
WLA TIMP Area									
Freeways	0.91	E	0.89	D	0.89	D	-1.7%	-2.5%	-0.3%
Expressways + Principal Arterials	0.82	D	0.86	D	0.90	E	5.3%	12.2%	4.9%
Minor Arterials	0.86	D	0.88	D	0.92	E	2.0%	7.3%	4.6%
Collectors	0.73	C	0.79	C	0.81	D	7.9%	13.3%	2.6%
All Roadways	***0.85***	***D***	***0.87***	***D***	***0.90***	***E***	***3.1%***	***7.4%***	***3.4%***
Project Area	**0.80**	**C**	**0.83**	**D**	**0.85**	**D**	**3.7%**	**8.4%**	**3.4%**

Source: Fehr & Peers, 2015.

Table 4.6-16 PM Peak Period Volume to Capacity Comparison by Facility Type

Location	Existing		Future without Project		Future with Project		% Change vs. Existing Conditions		% Change Future with Project vs. Future without Project
	V/C	LOS	V/C	LOS	V/C	LOS	Future without Project	Future with Project	
CTCSP Area									
Freeways + HOV	0.93	E	0.92	E	0.92	E	-0.2%	-0.7%	-0.6%
Expressways + Principal Arterials	0.82	D	0.89	D	0.91	E	8.9%	15.0%	12.1%
Minor Arterials	0.76	C	0.81	D	0.85	D	6.1%	13.4%	11.4%
Collectors	0.68	B	0.75	C	0.78	C	10.3%	18.5%	15.0%
All Roadways	***0.78***	***C***	***0.82***	***D***	***0.89***	***D***	***5.5%***	***16.5%***	***14.7%***
WLA TIMP Area									
Freeways + HOV	0.93	E	0.95	E	0.95	E	1.4%	1.7%	1.3%
Expressways + Principal Arterials	0.88	D	0.92	E	0.97	E	5.3%	12.6%	10.9%
Minor Arterials	0.93	E	0.95	E	0.99	E	2.0%	6.9%	6.3%
Collectors	0.78	C	0.84	D	0.84	D	6.5%	9.6%	7.6%
All Roadways	***0.90***	***D***	***0.93***	***E***	***0.97***	***E***	***3.8%***	***8.7%***	***7.5%***
Project Area	**0.86**	**D**	**0.90**	**E**	**0.93**	**E**	**5.2%**	**10.2%**	**8.6%**

Source: Fehr & Peers, 2015.

The EIR modeling analysis accounts for potential redistribution of vehicular traffic from highly congested links to links that have more available capacity. Along roadways where the Proposed Project would cause significant traffic congestion, diversion of trips is anticipated to occur onto adjacent parallel routes. It is anticipated that diversion would not occur on streets that operate at LOS D or better during peak periods because the average delay is not substantial. However, for the street segments where the LOS would degrade from D to E or F, some trips would divert to adjacent streets to avoid longer travel times through congested locations. Travel route changes on the City's arterial and collector roadways have been captured through the Westside TDF model's peak hour forecasts and LOS results.

The Westside TDF model reports the roadway segment capacities in the study area. The model is not sensitive to improvements at the intersection level of detail, such as signal timing changes or an additional turn lane, nor is it sensitive to corridor ITS improvements. Consequently, the operational benefits of several of the projects included in the updated project lists are not captured in the Future with Project operational results. These projects include:

- Major Intersection Improvements (CTCSP & WLA TIMP): Spot intersection improvements, such as turn-lane or safety improvements
- ITS Corridor & Signal Upgrades (CTCSP & WLA TIMP): ITS corridor improvements and signal upgrades as part of the next evolution of ATSAC, including right-turn detector loops for traffic volume data and monitoring
- Congestion Monitoring (CTCSP & WLA TIMP): Closed circuit television (CCTV) cameras and necessary infrastructure to improve DOT's ability to monitor and respond to real-time traffic conditions

In addition to the above congestion relief programs, several projects included in the updated project lists would relieve congestion bottlenecks within the vehicular circulation system, and result in LOS and V/C improvements at specific locations. The WLA TIMP potential list of project contains improvements to the I-10 interchange at Bundy Drive, improvements on Olympic Boulevard adjacent to the I-405, and improvements on Sunset Boulevard. The CTCSP potential list of projects includes improvements to the Lincoln Bridge over Ballona Creek and Culver Boulevard corridor improvements.

TDM measures are also included in both updated project lists to reduce the number of vehicle trips in the project area. The TDM measures in the project lists are related to technology enhancements to improve traveler information, such as a Rideshare Toolkit, the development of Transportation Management Organizations/Associations (TMOs/TMAs), and parking management programs.

The proposed WLA TIMP and CTCSP amendments require future developments to complete the required Traffic Study and Traffic Impact procedures as described in the LADOT Traffic Study Policies and Procedures guidelines. Per the guidelines, a TDM program designed to facilitate the use of alternate transportation modes to decrease dependency on single occupancy vehicles may be required. Los Angeles Municipal Code (LAMC) 12.26J (which applies only to construction of new, non-residential development in excess of 25,000 square feet gross floor area) requires, prior to issuance of a building permit, that the owner or applicant agree, by way of a covenant that runs with the land, to provide and maintain minimal TDM measures. LAMC 12.26J notwithstanding, a project may be required to prepare a more comprehensive, integrated program of TDM measures as outlined in the

LADOT Traffic Study Policies and Procedures. LADOT strongly encourages the development of a comprehensive TDM program to eliminate as many new project trips as possible.

The Westside TDF model forecasts AM and PM peak period and daily vehicle and transit flows on the transportation network within the City. The model contains the freeway network, major regional arterials, and both minor arterials and collector roadways in the study area. While the model includes the roadway network in the study area, the level of detail known about the transportation improvements contained in the project lists at this time, as well as the amount of detail contained in the model on a block by-block basis, does not permit the analysis results to be reported for individual roadway segments.

At the aggregate specific plan scale, the traffic operation results reflect the impacts related to the project location and the number of vehicle travel lanes. However, turn lanes, signal timings, and driveways are not accounted for in the analysis at this scale. Each of these features has the potential to affect operations, delay, VMT, and rerouting of traffic at the neighborhood level. At the programmatic level of analysis, it is not feasible or practical to develop a conceptual design and impact analysis for every segment and every intersection for the potential projects contained in the project lists. Additionally, since the design treatments are expected to affect local operating conditions, reporting more detailed results would be misleading and present an incomplete and likely inaccurate picture of potential impacts. Given the programmatic level of analysis completed for the EIR, a conservative approach was taken to the identification of potential impacts.

Moreover, on a regional level, traffic in the study area is anticipated to increase in conjunction with regional population, housing, and employment growth projected to occur in the future by SCAG. This growth will occur with or without implementation of the Proposed Project. The background growth influences the transportation analysis by accounting for the increased activity levels under Future with Project conditions, although those increases would occur with or without the Proposed Project.

The "volume-weighted" average of the V/C ratio under Future with Project conditions for all of the analyzed roadway segments exceeds that of Existing conditions (0.80 to 0.85 during the AM peak period and 0.86 to 0.93 during the PM peak period) and Future without Project conditions (0.83 to0.85 during the AM peak period and 0.90 to 0.93 during the PM peak period). The number of roadway links projected to operate at unsatisfactory levels of service (LOS E or F) under Future with Project conditions exceeds the number for Existing conditions (21 percent to 29 percent during the AM peak period and 29 percent to 40 percent in the PM peak period) and Future without Project conditions (24 percent to 29 percent during the AM peak period and 34 percent to 40 percent in the PM peak period). Therefore, under current CEQA guidelines and City thresholds, this is considered a ***significant impact***.

Mitigation Measures

Mitigation Measure (MM)-T-1: Technology Upgrades and Intersection Improvements. As the City of Los Angeles implements projects in the updated project lists that would impact vehicular operations by resulting in the removal of a vehicular travel lane along a roadway or the removal of a through lane or turn-lane at an intersection, LADOT shall implement ITS signal and corridor upgrades, major intersection improvements such as turn-lane or safety improvements, and/or congestion monitoring technology upgrades both along project routes and parallel roadways if traffic diversions have occurred as a result of the Proposed Project. Improvements to be implemented shall be determined based on an analysis of project-specific impacts conducted according to LADOT Traffic Study Policies and Procedures guidelines.

Significance of Impacts After Mitigation

Mitigation Measure MM-T-1 requires that transportation improvements that would improve vehicle operations and travel flows included as part of the updated project lists be implemented when any loss of vehicular capacity is resulting from other multimodal projects being implemented. Both the CTCSP and WLA TIMP updated project lists include ITS Corridor and Signal Upgrades and CCTV cameras to improve LADOT's ability to monitor and responds to real-time traffic conditions. Spot intersection improvements, such as turn-lanes, signal phasing, or safety improvements are also included in the project lists. These projects are implemented by LADOT to improve traffic flows and safety throughout the project area as determined through further project-specific traffic impact studies based on LADOT Traffic Study Policies and Procedures guidelines.

MM-T-1 is consistent with the Mayor's Office and LADOT's Great Streets for Los Angeles Strategic Plan. Specifically, the Strategic Plan stresses the importance of creating safe, accessible transportation services and infrastructure while protecting neighborhoods from traffic intrusion and vehicle speeding. It also includes the implementation of real-time traffic information and more efficient allocation of the street to support local foot traffic and better manage freight traffic.

Impacts related to the vehicular circulation system were determined to be significant without mitigation. Implementation of MM-T-1 would ensure that mitigation measures would be completed to reduce the level of impacts and that detailed analyses would be completed for individual projects that could result in transportation impacts. In addition, regional growth is expected to increase overall activity levels and travel demands in the study area. Since the implementation of MM-T-1 cannot be certain to reduce the level of impacts to less than significant, the Proposed Project would, based on current thresholds for roadway LOS, result in a ***significant and unavoidable impact***.

As discussed above, it is possible that some or all of the impacts related to vehicular LOS that are considered significant under the current legal and policy framework would no longer be considered significant if analyzed using the new criteria.

Impact 4.6-3: Implementation of the Proposed Project would exceed thresholds related to neighborhood traffic intrusion. This would be a *significant and unavoidable impact.*

Under Future with Project conditions, the share of roadway links projected to operate at LOS E or F exceeds the share for both Existing and Future without Project conditions in both the AM and PM peak periods. Although some of this increase is offset by a reduction in vehicular traffic due to shifts to other modes and routes, congestion could increase on certain roadways in the study area. In addition, some drivers may divert from the major corridors in the study area to parallel routes.

The Proposed Project could increase ADT volume on local residential streets in amounts equal to or greater than the following:

- ADT increase ≥ 16% if final ADT < 1,000
- ADT increase ≥ 12% if final ADT ≥ 1,000 and < 2,000

- ADT increase ≥ 10% if final ADT ≥ 2,000 and < 3,000
- ADT increase ≥ 8% if final ADT ≥ 3,000

The EIR modeling analysis accounts for potential redistribution of vehicular traffic from highly congested links to links that have more available capacity. The cumulative effect of cut-through traffic is accounted for in the model that includes both arterial and non-arterial roadway links. Along roadways where the Proposed Project would cause significant traffic congestion, diversion of trips could occur onto adjacent parallel routes. It is anticipated that diversion would not occur on streets that operate at LOS D or better during peak periods because the average delay is not substantial. However, for the street segments where the LOS would degrade from D to E or F, some trips could divert to adjacent streets to avoid longer travel times through congested locations.

The proposed WLA TIMP and CTCSP amendments require future developments to complete the required Traffic Study and Traffic Impact procedures as described in the LADOT Traffic Study Policies and Procedures guidelines. Per the guidelines, a plan to reduce project traffic from traveling through nearby residential areas, referred to as the Residential Neighborhood Traffic Management (NTM) Program, may be required as part of the mitigation program for future development project prior to approval. If NTM measures are required to off-set potential residential street impacts, then, prior to project occupancy, the applicant shall conduct public outreach and develop a NTM plan, in consultation with LADOT, the affected Council District office and the affected neighborhood. The NTM plan shall be prepared in conformance with the guidelines established by LADOT.

In addition to the Neighborhood Protection Program, the streets identified as part of the Neighborhood Enhanced Network (NEN) in the potential lists of transportation projects and MP 2035 could also receive treatments to calm vehicle travel and reduce travel speeds on neighborhood roadways.

While the NTM plans can alleviate neighborhood traffic intrusion from individual developments within the Specific Plan areas, regional growth and associated increases in activity levels may still result in vehicles diverting to residential roadways. On a regional level, traffic in the study area is anticipated to increase in conjunction with regional population, housing, and employment growth projected to occur in the future by SCAG. This growth will occur with or without implementation of the Proposed Project. The background growth influences the transportation analysis by accounting for the increased activity levels under Future with Project conditions, although those increases would occur with or without the Proposed Project.

Travel route changes on the City's arterial and collector roadways have been captured through the travel model's peak hour forecasts and LOS results. The extent to which trips would divert to adjacent local roadways, and specific roadway segments that may experience an increase in trips due to diversion from parallel routes, cannot be precisely defined at this time given the programmatic nature of the analysis and the uncertainty around the final design options that may be implemented. Therefore, impacts cannot be precisely determined. However, it is anticipated that increased traffic could occur on local roadways. In addition, regional growth is expected to increase overall activity levels and travel demands in the study area.

Since project impacts are based on Future with Project conditions in comparison to Existing conditions, under current CEQA guidelines and City thresholds, this is considered a potentially ***significant impact***.

Mitigation Measures

MM-T-2: Neighborhood Protection Program. As the City of Los Angeles implements projects in the updated project lists that would impact vehicular operations by resulting in the removal of a vehicular travel lane along a roadway that could potentially result in diversion of traffic to adjacent residential streets, LADOT shall implement the Neighborhood Protection Program on the impacted residential streets based on an analysis of project-specific impacts conducted according to LADOT Traffic Study Policies and Procedures guidelines.

Significance of Impacts After Mitigation

MM-T-2 requires that the Neighborhood Protection Program included as part of the updated project lists be implemented when any loss of vehicular capacity results from other multimodal projects being implemented diverts traffic onto adjacent residential streets as determined through further project-specific traffic impact studies based on LADOT Traffic Study Policies and Procedures guidelines. MM-T-2 is also consistent with the Mayor's Office and LADOT's Great Streets for Los Angeles Strategic Plan that identifies the need to protect neighborhoods from traffic intrusion and vehicle speeding.

The implementation of MM-T-2 would reduce the level of impact related to neighborhood traffic intrusion but impacts could remain significant since the mitigation measure cannot be guaranteed to reduce residential traffic volumes below the City's current thresholds. In addition, regional growth is expected to increase overall activity levels and travel demand in the study area. Therefore, the impact of the Proposed Project on neighborhood traffic would be ***significant and unavoidable***.

Impact 4.6-4: Implementation of the Proposed Project would increase the volume to capacity ratio on some CMP and state freeway segments by more than 2%. This would be a *significant and unavoidable impact.*

The CMP is a state-mandated program administered by Metro's 2010 Congestion Management Program for Los Angeles County that provides a mechanism for coordinating land use and development decisions. CMP requires establishment of LOS standards to measure congestion at specific monitoring locations on the freeway and arterial systems. LOS ranges from LOS A to F, with LOS A representing free-flow conditions and LOS F representing a high level of congestion. As previously described, the CMP was implemented by Metro to analyze the impacts of local land use decisions on the regional transportation system. Since the specific plan amendments do not propose any changes to land use, the CMP analysis is not required. However, for the purposes of showing changes in travel demand on the state highway system within the study area, the CMP analysis was conducted for the study area CMP monitoring locations.

In accordance with the CMP guidelines, freeway (mainline) operating conditions during peak periods were evaluated using the general procedures established by the CMP. Freeway mainline LOS is estimated with calculation of the V/C ratio. Calculation of LOS based on V/C ratios is a surrogate for the speed-based LOS used by Caltrans for traffic operational analysis. The LOS criteria for freeway segments using V/C ratios as the performance measure are shown in **Table 4.6-17**. Capacity was determined based on the existing number of lanes and a single-lane capacity of 2,000 vehicles per hour per lane. Highways and roadways designated in the CMP network are required to operate at LOS E, except where Future without Project LOS is worse than LOS E. In such cases, the Future without Project LOS is the standard and any increase in V/C ratio ≥ 0.02 is an impact.

Table 4.6-17 LOS Thresholds for CMP Freeway Mainline Segments

LOS	Volume-to-Capacity Ratio
A	0.00-0.35
B	>0.35-0.54
C	>0.54-0.77
D	>0.77-0.93
E	>0.93-1.00
F(0)	>1.00-1.25
F(1)	>1.25-1.35
F(2)	>1.35-1.45
F(3)	>1.45

Source: Congestion Management Program, Metro, 2010.

There are six CMP freeway monitoring locations within the study area. Freeway segment volumes from the Performance Measurement System (PeMS) and from the most recently reported CMP data were used to establish the CMP LOS conditions during the AM and PM peak hours for 2014 Existing conditions. Due to the data collection technology for PeMS, these volumes were typically found to be lower than the mainline volumes reported in the CMP for the monitoring locations. This is due to the heavily congested conditions on the I-405 and I-10 freeways where the travel demand exceeds the effective vehicle throughput during peak hours. To avoid underestimating current and future vehicle demands for these freeway facilities, the higher volume of the two sources (PeMS or CMP) was applied to the operational analysis.

The operational analysis was then performed to evaluate Future without Project and Future with Project conditions for the CMP freeway monitoring locations within the study area based on traffic forecasts from the Westside TDF model. Future without Project forecasts were calculated as the difference between the model Future without Project volumes and the model base year volumes, which were then added to the existing freeway segment volumes. Similarly, Future with Project forecasts were calculated as the difference between the model Future with Project volumes and the model base year volumes added to the existing data.

Table 4.6-18 presents the freeway segment LOS for each of the CMP freeway monitoring locations within the study area under both Existing and Future with Project conditions. This analysis concludes that most CMP freeway segments in the study area operate at LOS E or F during at least one peak hour (AM and/or PM) peak hour under Existing conditions and at LOS F during at least one peak hour under Future with Project conditions based on the CMP methodology.

The required CMP methodology compares the typical lane capacity for a freeway mainline segment to the number of vehicles traveling on the segment during the peak hour. Due to bottlenecks in the freeway network, vehicle demand can often exceed vehicle throughput resulting in significant reductions in travel speeds and extensive vehicle queuing. When this situation occurs, the number of vehicles passing a CMP monitoring location may be substantially lower than the actual vehicle demand for that location. This can result in an artificially low traffic count at the CMP monitoring station, that when compared to the typical lane capacity, can show better operations (i.e., a lower V/C) than experienced by drivers.

Table 4.6-18 CMP Freeway Analysis – Existing and Future with Project Peak Hour Operations

CMP Freeway Monitoring Location	Peak Hour	Direction	Capacity	Existing Operations			Year 2035 Plus Project Operations			
				Volume	V/C	LOS	Volume	V/C	LOS	Change in V/C
1010 I-10 at Lincoln Blvd	AM	EB	6,000	5,070	0.845	D	5,350	0.892	D	0.047
	AM	WB	6,000	4,664	0.777	D	4,910	0.818	D	0.041
	PM	EB	6,000	5,881	0.980	E	6,110	1.018	F(0)	**0.038**
	PM	WB	6,000	3,955	0.659	C	4,380	0.730	C	0.071
1011 I-10 e/o Overland Ave	AM	EB	10,000	12,084	1.208	F(0)	12,180	1.218	F(0)	0.010
	AM	WB	8,000	10,171	1.271	F(1)	10,400	1.300	F(1)	**0.029**
	PM	EB	10,000	13,695	1.370	F(2)	14,210	1.421	F(2)	**0.051**
	PM	WB	8,000	8,560	1.070	F(0)	8,640	1.080	F(0)	0.010
1041 I-105 e/o Sepulveda Blvd (Jct Rte 1)	AM	EB	6,000	3,647	0.608	C	3,960	0.660	C	0.052
	AM	WB	6,000	5,875	0.979	E	6,370	1.062	F(0)	**0.083**
	PM	EB	6,000	5,977	0.996	E	6,480	1.080	F(0)	**0.084**
	PM	WB	6,000	5,774	0.962	E	6,260	1.043	F(0)	**0.081**
1069 I-405 n/o La Tijera Blvd	AM	NB	10,000	14,299	1.430	F(2)	15,470	1.547	F(3)	**0.117**
	AM	SB	10,000	10,171	1.017	F(0)	10,810	1.081	F(0)	**0.064**
	PM	NB	10,000	14,501	1.450	F(2)	15,160	1.516	F(3)	**0.066**
	PM	SB	10,000	11,581	1.158	F(0)	12,980	1.298	F(1)	**0.140**
1070 I-405 n/o Venice Blvd	AM	NB	10,000	13,790	1.379	F(2)	14,990	1.499	F(3)	**0.120**
	AM	SB	10,000	9,430	0.943	E	10,100	1.010	F(0)	**0.067**
	PM	NB	10,000	15,109	1.511	F(3)	16,840	1.684	F(3)	**0.173**
	PM	SB	10,000	14,804	1.480	F(3)	15,760	1.576	F(3)	**0.096**
1071 I-405 s/o Mulholland Dr	AM	NB	10,000	8,923	0.892	D	9,660	0.966	E	0.074
	AM	SB	10,000	14,804	1.480	F(3)	15,460	1.546	F(3)	**0.066**
	PM	NB	10,000	14,804	1.480	F(3)	16,780	1.678	F(3)	**0.198**
	PM	SB	10,000	10,140	1.014	F(0)	10,720	1.072	F(0)	**0.058**

As defined by the CMP, a significant impact occurs when a project increases traffic demand on a CMP facility by 2 percent of capacity (V/C ≥ 0.02), causing LOS F (V/C > 1.00); if the facility is already at LOS F, a significant impact occurs when a project increases traffic demand on a CMP facility by 2 percent of capacity (V/C ≥ 0.02). Since bottlenecks in the freeway network may result in artificially low vehicle counts at some CMP monitoring stations and vehicle LOS experienced by drivers may be worse than reported based on the CMP methodology, increases in V/C ≥ 0.02 for facilities shown to be operating at LOS E or better may also experience a significant impact resulting from the Proposed Project. Since project impacts are based on Future with Project conditions in comparison to Existing conditions, under current CEQA guidelines and City thresholds, this is considered a ***significant impact***.

On a regional level, traffic in the study area is anticipated to increase in conjunction with regional population, housing, and employment growth projected to occur in the future by SCAG. This growth will occur with or without implementation of the Proposed Project. The background growth influences the transportation analysis by accounting for the increased activity levels under Future with Project conditions, although those increases would occur with or without the Proposed Project. Consequently, when comparing traffic operations on the freeway system under Future with Project conditions to Existing conditions, peak period congestion continues to increase as a result of background growth.

Future with Project conditions for freeway facilities were also compared to Future without Project conditions. **Table 4.6-19** presents the freeway segment LOS for each of the CMP freeway monitoring locations within the study area under both Future without Project and Future with Project conditions. This analysis shows that no CMP freeway monitoring segments experience a change in V/C ≥ 0.02 with the implementation of the potential transportation improvements under Future with Project conditions when compared to Future without Project conditions.

Table 4.6-19 CMP Freeway Analysis – Future without Project and Future with Project Peak Hour Operations

CMP Freeway Monitoring Location	Peak Hour	Direction	Capacity	Year 2035 Without Project Operations			Year 2035 Plus Project Operations			
				Volume	V/C	LOS	Volume	V/C	LOS	Change in V/C
1010 I-10 at Lincoln Blvd	AM	EB	6,000	5,320	0.887	D	5,350	0.892	D	0.005
	AM	WB	6,000	4,890	0.815	D	4,910	0.818	D	0.003
	PM	EB	6,000	6,070	1.012	F(0)	6,110	1.018	F(0)	0.006
	PM	WB	6,000	4,350	0.725	C	4,380	0.730	C	0.005
1011 I-10 e/o Overland Ave	AM	EB	10,000	12,160	1.216	F(0)	12,180	1.218	F(0)	0.002
	AM	WB	8,000	10,300	1.288	F(1)	10,400	1.300	F(1)	0.012
	PM	EB	10,000	14,110	1.411	F(2)	14,210	1.421	F(2)	0.010
	PM	WB	8,000	8,620	1.078	F(0)	8,640	1.080	F(0)	0.002
1041 I-105 e/o Sepulveda Blvd (Jct Rte 1)	AM	EB	6,000	3,940	0.657	C	3,960	0.660	C	0.003
	AM	WB	6,000	6,350	1.058	F(0)	6,370	1.062	F(0)	0.004
	PM	EB	6,000	6,460	1.077	F(0)	6,480	1.080	F(0)	0.003
	PM	WB	6,000	6,240	1.040	F(0)	6,260	1.043	F(0)	0.003
1069 I-405 n/o La Tijera Blvd	AM	NB	10,000	15,360	1.536	F(3)	15,470	1.547	F(3)	0.011
	AM	SB	10,000	10,790	1.079	F(0)	10,810	1.081	F(0)	0.002
	PM	NB	10,000	15,140	1.514	F(3)	15,160	1.516	F(3)	0.002
	PM	SB	10,000	12,890	1.289	F(1)	12,980	1.298	F(1)	0.009
1070 I-405 n/o Venice Blvd	AM	NB	10,000	14,910	1.491	F(3)	14,990	1.499	F(3)	0.008
	AM	SB	10,000	10,080	1.008	F(0)	10,100	1.010	F(0)	0.002
	PM	NB	10,000	16,820	1.682	F(3)	16,840	1.684	F(3)	0.002
	PM	SB	10,000	15,670	1.567	F(3)	15,760	1.576	F(3)	0.009
1071	AM	NB	10,000	9,640	0.964	E	9,660	0.966	E	0.002

CMP Freeway Monitoring Location	Peak Hour	Direction	Capacity	Year 2035 Without Project Operations			Year 2035 Plus Project Operations			
				Volume	V/C	LOS	Volume	V/C	LOS	Change in V/C
I-405 s/o Mulholland Dr	AM	SB	10,000	15,340	1.534	F(3)	15,460	1.546	F(3)	0.012
	PM	NB	10,000	16,660	1.666	F(3)	16,780	1.678	F(3)	0.012
	PM	SB	10,000	10,700	1.070	F(0)	10,720	1.072	F(0)	0.002

The roadway and ITS projects included in the updated CTCSP and WLA TIMP project lists would help to alleviate congestion on state highway facilities. For example, the WLA TIMP project list contains enhancements to the Bundy Drive interchange at I-10, and the CTCSP project list contains improvements to Lincoln Bridge over Ballona Creek. In addition, the ITS signal upgrades and CMP monitoring stations could be implemented along major corridors providing access to the freeway system, including ramp terminal intersections, and improve vehicular flows for those traveling to/from state highway facilities.

Mitigation Measures

MM-T-3: Coordination with Other Agencies on Transportation Improvements and Funding. As the City of Los Angeles implements projects in the updated project lists that could potentially impact vehicular operations as determined by LADOT on transportation systems managed by other agencies, such as Caltrans or Metro, or neighboring jurisdictions, the City of Los Angeles shall coordinate with these entities to identify transportation improvements and seek opportunities to jointly pursue funding. Mobility solutions shall be focused on safety, enhancing mobility options, improving access to active modes, and implementing TDM measures to achieve both local and regional transportation and sustainability goals.

Significance of Impacts After Mitigation

The implementation of MM-T-3 would reduce the level of impact related to freeways and the CMP but impacts could remain significant since the mitigation measure cannot be guaranteed to occur prior to certain freeway or roadway segments experiencing increases in traffic volumes in exceedance of the current CMP thresholds and that feasible improvements, such as widening existing roadways or freeway segments, are available to reduce the impact to a less than significant level. In addition, regional growth is expected to increase overall activity levels and travel demands in the study area. Therefore, the impact of the Proposed Project on CMP and state freeway facilities would be ***significant and unavoidable.***

Impact 4.6-5: Implementation of the Proposed Project would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service. This would be a *less than significant impact.*

The LAFD in collaboration with LADOT has developed a FPS, a system that automatically turns traffic lights to green for emergency vehicles traveling on designated streets in the City (LAFD, 2008). The City of Los Angeles has over 205 miles of routes equipped with FPS.

This EIR provides a programmatic evaluation of impacts to emergency services. While the project would impact segment-level LOS, there is not a direct relationship between predicted travel delay and response times as California state law does require drivers to yield the right-of-way to emergency vehicles and even permits emergency vehicles to use opposing lane of travel, the center turn lanes, or bus-only lanes. In some instances, roadway reconfigurations with the implementation of the transportation improvements on the updated project lists could improve emergency access. For example, a roadway reconfiguration could improve emergency access where a bus-only lane or a contiguous center left turn lane is introduced where it previously did not exist. Emergency vehicles are permitted to use bus only lanes for local access to emergency destinations. People traveling by bicycle are required to pull to the side of the road to yield access to emergency providers regardless if they are traveling in a bus only lane or in a standard travel lane. It is more likely that when in route to an emergency incident, general traffic will be expected to merge into the bus only lane permitting the emergency vehicle to pass in the through lane to the left. Emergency responders also routinely use the center left turn lanes, or even travel in opposing travel lanes if needed. Generally, multi-lane roadways allow the emergency vehicles to travel at higher speeds and permit other traffic to maneuver out of the path of the emergency vehicle.

Knowing exactly how fire and emergency service response times will be affected calls for a great deal of speculation based on the Proposed Project. The proposed update to the TIA Fee program and the administrative and minor revisions of the specific plans would not result in any physical impacts that could affect emergency access. Therefore, the EIR analysis addresses whether implementation to the proposed updates to the lists of transportation improvements in the CTCSP and WLA TIMP would result in significant impacts.

As explained under Impact 4.6-2, it is not possible to exactly predict the project impacts at the street and intersection level. This is one factor as to why it is not possible to forecast response times. The other is that, as explained above, the interrelationship between emergency access and traffic is complex and involves factors such as the following:

- The proximity of LAFD (and other) facilities to those they serve.
- The opportunity for LAFD and emergency responders to use alternative routes in an area.
- LAFD, in cooperation with LADOT and the Los Angeles Department of City Planning (LADCP), actively participates in the design of specific roadway changes in order to ensure adequate fire/emergency access is maintained. LAFD, in reviewing street and right-of-way projects, comments on particular street configuration designs, and will raise concerns if roadways present particular access challenges, and can recommend no changes be done at all or alternative changes be undertaken if fire and emergency access are particularly impacted.
- LAFD is responsible for identifying and implementing capital improvements (such as new Fire Stations) as may be needed to respond to anticipated increased demand. LAFD does not have a capital improvement plan that identifies construction of new fire stations in specific locations and therefore it is not possible to forecast or identify any specific impacts associated with any potential new or expanded fire stations. Any impacts from building or expanding fire stations and facilities would be speculative at this point in time.
- As identified in the L.A. CEQA Threshold Guide, on any given project review, LAFD can implement project specific mitigation requirements, such as requiring fire retardant landscaping, prohibiting construction in fire hazard areas, requiring design features that reduce fire potential and developing emergency response plans.

- The changing demand for service is complex. For example, with increasing populations there may be more density and more construction, though new buildings are constructed in accordance with increasingly stringent building and fire codes making them safer and more resistant to fires, such as requiring fire sprinklers. The population is aging which may increase demand for service. But the population may be becoming healthier with increased and improved healthcare.

- Future factors that could increase efficiencies in response, including improvements in technology and management, such as changes in deployment of equipment and staff and mutual aid agreements.

Based on the City's adopted threshold of significance, the Proposed Project would not require the addition of a new fire station or the expansion, consolidation or relocation of an existing facility to maintain service. LAFD has a mandate to protect public safety and must respond to changing circumstances and therefore would act to maintain response times. Based on information provided in LAFD's Strategic Plan 2015-2017 and from meetings with LAFD staff, the ability to provide adequate fire protection services is dependent on numerous factors including staffing levels, mutual aid agreements, deployment strategies, and technological advances in equipment. Moreover, LAFD's primary determinant for assessing future service needs is based on their cumulative review and analysis of past incidents. Options available to LAFD include expanding the Fire Preemption System, increasing staffing levels and adding new fire stations(s) to underserved areas. The potential for new fire station construction is speculative at the present time and is therefore not analyzed in this document. Depending on the location of new fire protection facilities, operational impacts (primarily noise) could occur; however, such impacts are unforeseeable at this time. Therefore, the impact of the Proposed Project on fire protection and emergency services would be ***less than significant***.

Mitigation Measures

No mitigation measures are required.

Significance of Impacts After Mitigation

The impact of the Proposed Project on fire protection and emergency access would be ***less than significant***.

Impact 4.6-6: Implementation of the Proposed Project would not substantially disrupt existing public transit, bicycle, or pedestrian facilities or interfere with planned facilities, or create conflicts or inconsistencies with adopted public transit, bicycle, or pedestrian system plans, guidelines, policies, or standards. This would be *less than significant impact.*

The proposed amendments to the CTCSP and WLA TIMP are updating the TIA fees and the lists of potential transportation improvements within each of the specific plan areas. The types of projects envisioned as part of the updates to the project lists are within the framework established in the City's Transportation Element and MP 2035. The proposed updates of the CTCSP and WLA TIMP are consistent with the City's multimodal approach to transportation planning and apply such principles to the Westside in a more targeted manner. The improvements proposed on the updated project lists would provide transportation options and accommodations for multiple modes of travel (i.e., transit, bicycle, pedestrian, and vehicle) as part of the transportation system. The project lists are representative of the types of improvements proposed for inclusion in the Specific Plan amendments.

The types of improvements that could be implemented through the specific plan updates are discussed in further detail below.

Public Transit Facilities

The transportation improvements in the updated project lists include a sample of the types of transit projects that could be implemented in the project area. Transit improvements range from new local circulators to serve transit hubs and destinations in the project area while others, such as center-running BRT, provide dedicated transit service that will connect to other planned major transit lines in the region. The transit improvements include signal timing and technology improvements and stop enhancements that would help to reduce delays for transit vehicles; provide reliable and frequent transit service that is convenient and safe; increase transit mode share; and reduce single-occupancy vehicle trips.

The Proposed Project would not disrupt any existing or planned transit facilities or create conflicts or inconsistencies with adopted transit plans, guidelines, policies, or standards. Therefore, impacts related to the transit system would be ***less than significant***.

Bicycle Facilities

The bicycle improvements in the updated project lists include a sample of the types of bicycle facilities that could be implemented in the project area. The City's 2010 Bicycle Plan has been incorporated into MP 2035 as part of the Bicycle Enhanced Network (BEN), Bicycle Lane Network, and NEN. The bicycle facilities included in the project lists are a sample of the improvements that could be implemented, and do not preclude other facilities identified in the City-wide plans from being implemented. The bicycle facilities in the project list are intended to work in conjunction with existing paths and neighborhood facilities to provide a low-stress network of bikeways for all types of riders. A combination of neighborhood treatments and separate facilities, such as cycle tracks, are reflected in the updated project lists. In addition, access to bicycles and maintenance facilities through bikeshare and bicycle transit centers are contained in the updated project lists.

The Proposed Project would not disrupt any existing or planned bicycle facilities, or create conflicts or inconsistencies with adopted bicycle system plans, guidelines, policies, or standards. Therefore, impacts related to the bicycle circulation system would be ***less than significant***.

Pedestrian Facilities

The pedestrian improvements in the updated project lists include a sample of the types of pedestrian facilities and amenities that could be implemented in the project area. Many of the pedestrian improvements are focused on improving access to transit. For example, multiple streetscape improvements are reflected in the project lists to improve the walking environment around the planned major transit stations in the project area as critical first/last-mile connections. The completion of gaps in the sidewalk network needed to serve future development are also included in the updated project lists.

The Proposed Project would not disrupt existing pedestrian facilities or interfere with planned pedestrian facilities, or create conflicts or inconsistencies with adopted pedestrian system plans, guidelines, policies, or standards. Therefore, impacts related to the pedestrian circulation system would be ***less than significant***.

Mitigation Measures

No mitigation measures are required.

Significance of Impacts After Mitigation

Impacts related to public transit, bicycle, and pedestrian facilities would be ***less than significant***.

Impact 4.6-7: Implementation of the Proposed Project would not substantially change physical conditions that would adversely affect transportation safety. This would be a *less than significant impact.*

None of the transportation system improvements proposed in the project would introduce new safety hazards at intersections or along roadway segments, as most would be designed to improve safety for all roadway users. Therefore, from a programmatic perspective, impacts related to safety would be ***less than significant***.

The implementation of bicycle and pedestrian facilities associated with the updated project lists are anticipated to improve safety. Automobile speed is a major factor in the severity of collisions with bicyclists and pedestrians, the most vulnerable roadway users. Collisions with a vehicle traveling at 20 miles per hour results in a 5 percent pedestrian fatality rate, and fatalities increase to 40, 80 and 100 percent when the vehicle speed increases to 30, 40 and 50 miles per hour, respectively (U. S. Department of Transportation National Highway Traffic Safety Administration, 1999). Bicycle lanes, when accompanied by travel lane reductions can help reduce overall vehicle speeds (Federal Highway Administration, 2012). When modified from four travel lanes to two travel lanes with a two-way left-turn lane, research along 45 corridors throughout the country has found a range of 19 percent to 47 percent reduction in all roadway crashes. The upgrade to fully protected bicycle lanes or cycle tracks has been shown to reduce the risk of injury by 90 percent (Teschke et al., 2012).

The bicyclist and pedestrian improvements contained in the updated project lists are also anticipated to increase the number and visibility of bicyclists and pedestrians on the City's transportation network. Of 68 cities across California with highest per capita pedestrian and bicycle collisions, per capita injury rates to pedestrians and bicyclists are shown to fall precipitously as the number of bicyclists increases, revealing a non-linear relationship between bicycle safety and the level of bicycling (Jacobsen, 2003). This study showed as much as an eightfold variation of collisions (expressed as a percentage of those that bike or walk to work) in comparing low and high bicycling cities. The underlying reason for this pattern is that motorists drive slower when bicyclists and pedestrians are visible either in number or frequency, and drive faster when few pedestrians and bicyclists are present, resulting in higher overall travel speeds. This effect of modified driving behavior is consistent with other research focused on 24 California cities that shows that higher bicycling rates among the population generally show a much lower risk of fatal crashes for all road users (Marshall, 2011). Comparing these low versus high bicycling communities, there was a ten-fold reduction in fatality rate for motorists, and eleven-fold reduction in fatality rate for pedestrians, and an almost fifty-fold reduction in fatality rate for bicyclists (Marshall, 2011).

Inclusion of protected bicycle lanes, such as the cycle tracks included in the updated project lists, further increases the level of safety. New York City implemented the first fully protected bike lanes in the country. Protected bike lanes in New York City on 8th Avenue and 9th Avenue resulted in a 35 percent and 58 percent decrease, respectively, in injuries to all road users (New York Department of

Transportation [NY DOT], 2012). In the same study, implementation of bus/bike lanes on First and Second Avenues led to a 37 percent decrease in injury crashes (NY DOT, 2012).

The proposed specific plan updates are responding to changing demographics, a younger population desirous of safe and accessible active transportation options (bike, walk), a growing number of residents and employees seeking alternatives to the car, and an aging population that may need to rely more and more on transportation alternatives to the automobile. In 2030, senior citizens will make up one fifth of Los Angeles County's population. This older population (as well as children and the disabled) will benefit from longer pedestrian crossing times, shorter street crossing distances, wider, shaded sidewalks, street benches, increased transit service and separated bicycle facilities. Ultimately, there is nothing in the project that is expected to significantly reduce or impede pedestrians, including but not limited to the disabled, those with strollers, and bus riders.

Mitigation Measures

No mitigation measures are required.

Significance of Impacts After Mitigation

Impacts related to transportation safety would be ***less than significant***.

Impact 4.6-8: Implementation of the Proposed Project would result in a substantial disruption to traffic during construction, which could include temporary street closures; temporary loss of regular vehicular or pedestrian access to existing land uses; temporary loss of an existing bus stop or rerouting of bus lines; or creation of traffic hazards. This would be a *significant and unavoidable impact.*

The Proposed Project would not, itself, entitle or otherwise approve any transportation projects for construction. Implementation of on-street improvements identified in the updated project lists would mostly consist of roadway restriping and limited changes to the physical configuration of curbs, and thus, would likely be short in duration lasting up to a few weeks while other projects, such as the Lincoln Bridge improvements or center-running BRT corridors would require longer construction duration. Therefore, temporary construction related impacts could occur from the projects with longer construction durations. The City implements standard construction techniques to manage construction related traffic impacts. Examples of these include preparation of traffic control plans, requiring flagmen and preparing detours. If unusual circumstances exist (e.g., multiple construction projects occurring around the same location), there may be ***significant impacts***.

Mitigation Measures

MM-T-4: Traffic Control Plan. Construction activities that may result from the buildout of improvements on the proposed project lists will be evaluated on a project-by-project basis by LADOT for construction-related impacts to traffic. Construction activities will be managed through the implementation of a traffic control plan, approved by LADOT, to mitigate the impact of traffic disruption and to ensure the safety of all users of the affected roadway, including, as appropriate, through the use of temporary traffic signals, detours, or the use of flagmen adjacent to construction activities.

Significance of Impacts After Mitigation

Implementation of MM-T-4 would be expected to reduce impacts to transportation related to construction. However, even with implementation of this measure, significant impacts may result. Therefore, construction-related impacts would remain ***significant and unavoidable***.

Secondary Impacts to Transportation

Parking deficits are considered to be social effects, rather than impacts on the physical environment as defined by CEQA. Under CEQA, a project's social impacts need not be treated as significant impacts on the environment. Environmental documents must address the secondary physical impacts that would be triggered by a social impact (State CEQA Guidelines Section 15131). The social inconvenience of parking deficits, such as having to hunt for scarce parking spaces, is not an environmental impact, but parking deficits may result in secondary physical environmental impacts, such as increased traffic congestion at intersections; air quality, safety, or noise impacts caused by congestion from drivers seeking parking; or land use impacts relating to access (see Section 4.4, *Land Use and Planning*).

Some of the transportation projects contained in the proposed project lists have the potential to remove on-street parking in certain locations while others provide parking solutions. For the purpose of analyzing potential project impacts at a programmatic level, assumptions needed to be made as to how the projects could be implemented based on conceptual designs. For example, it was assumed that the center-running BRT projects on Lincoln and Sepulveda Boulevards would remove parking from one side of the street along the corridor and from both sides of the street at station locations. However, it is not certain that parking will be removed for these projects. Both of these corridors will need to be studied in further detail before any improvements are implemented. Through these additional studies, it may be found that on-street parking should be maintained in exchange for a reduction in vehicle capacity (i.e., vehicle travel lane conversions to bus-only lanes) or other off-street parking solutions required in certain locations along the corridors may be proposed. Individual projects would be studied in further detail as the Proposed Project would not, itself, entitle or otherwise approve any transportation projects. Based on this, it is speculative at this time to conclude that any parking in specific locations will be removed for the Proposed Project.

Additionally, at this time, removal of parking due to the Proposed Project would not be expected to result in impacts to traffic congestion based on the off-setting benefits from other components of the Proposed Project. In addition to the multi-modal improvements contained in the proposed project lists, the following trip reduction programs would help to reduce the need for vehicular travel and better manage the supply of parking in the project area:

- ExpressPark (CTCSP & WLA TIMP): Implement an on-street intelligent parking program that includes vehicle sensors, dynamic demand-based pricing and a real-time parking guidance system to reduce VMT and congestion and improve flow for cars/buses.
- Strategic Parking Program (CTCSP & WLA TIMP): Implement a Westside parking program and update parking requirements to reflect mixed-use developments, shared parking opportunities, and parking needs at developments adjacent to major transit stations.
- Parking Utilization Improvements & Reduced Congestion (CTCSP & WLA TIMP): Develop an on-line system for real-time parking information, including GIS database and mapping. Improve parking, wayfinding and guidance throughout commercial areas.

- Rideshare Toolkit (CTCSP & WLA TIMP): Develop an online TDM Toolkit with information for transit users, cyclists, and pedestrians as well as ridesharing. Include incentive programs for employers, schools, and residents. Toolkit would be specific to City businesses, employees, and visitors and would integrate traveler information and also include carpooling/vanpooling and alternative work schedules.

- Transportation Demand Management Program (CTCSP & WLA TIMP): The program would provide start-up costs for TMOs/TMAs as well as provide guidance and implementation of a TDM program.

The Proposed Project could result in a loss of on-street parking spaces that could increase VMT if people drive farther to find parking or seek an alternate destination with more convenient parking. However, this increased VMT could potentially be off-set by a reduction in vehicle trips resulting from travel options other than driving that would be available as part of the updated project lists, and by implementing the parking projects and programs included in the updated project lists. Hence, any secondary environmental impacts which may result from a shortfall in parking are anticipated to be minor and other transportation analyses reasonably address potential secondary impacts. Therefore, with implementation of the Proposed Project, the traffic impacts related to parking would be ***less than significant***.

In addition, the City's establishment of Modified Parking Requirement (MPR) Districts (Ordinance No. 182242) allows for the modification of parking requirements within the MPR District to maintain the required number of parking spaces for any permitted use in the District, to allow off-site parking within 1,500 feet of the site, to reduce parking requirements for individual projects, to establish less restrictive parking requirements by use within the District, to establish more restrictive parking requirements by use within the District, to create a commercial parking credit program, or to establish maximum parking requirements within the District.

Based on all of the above, secondary impacts of the Proposed Project related to loss of parking would be ***less than significant*** and no mitigation is required.

New Transportation Performance Metrics Currently Under Consideration

The new draft CEQA guidance from OPR focuses on per-capita VMT. Other potential metrics that could be considered include total VMT, vehicle trips, and peak period mode split. The Proposed Project's intended benefits can be quantified using these potential metrics. Included below is an overview of the mobility benefits of the Proposed Project and an analysis using the alternate thresholds identified in Section 4.6.5. This analysis is provided as additional information and does not affect the impact analysis in the EIR.

Overview of Mobility Benefits from Proposed Project

The mobility projects envisioned through the CTCSP and WLA TIMP updates are intended to reduce reliance of vehicular travel, decrease the number of vehicle trips per capita, and reduce VMT per capita in order to provide better access and transportation options to residents, workers and visitors on the Westside. The potential benefits from each category of projects presented below is based on research documented in the California Air Pollution Control Officers Association's Quantifying Greenhouse Gas Mitigation Measures (CAPCOA). This research is provided for informational purposes only, and was not used in the analysis of project impacts. In addition to VMT reductions, many of the potential projects on the updated project lists result in improved accessibility, mode-share, or safety improvements. Where applicable, these benefits are also discussed below.

Potential Transit Improvements

Transit projects proposed in the CTCSP and WLA TIMP updates consist of the creation of high-quality BRT service, improvements to existing local or rapid bus lines, and the creation of new circulator bus routes. In addition, many of projects classified as pedestrian and bicycle improvements on the updated project lists are intended to provide first/last-mile connections to transit service.

According to CAPCOA, BRT systems have been shown to result in a decrease in VMT between 0.02%-3.2%, depending on the characteristics of the system in terms of time savings, efficiency, cost, and way-finding (CAPCOA, 2014). Improvements to local or rapid service have also been attributed to a reduction in VMT, including up to 2.5% reduction as a result of speed and service frequency improvements and up to 8.2% reduction as a result of network expansions (CAPCOA, 2014). A maximum of 10% VMT reduction exists for combined transit system improvements (CAPCOA, 2014). In addition, new service would increase transit ridership and the percent of both population and jobs located in proximity to a transit stop.

Potential Pedestrian Improvements

The potential pedestrian projects included in the CTCSP and WLA TIMP updates are contained within three categories of improvements: the quality of the pedestrian environment, pedestrian safety, and access to transit. Pedestrian environment improvements include landscaping, shade, shelters, and directional signage. Pedestrian safety improvements include curb extensions, enhanced crosswalks, and upgraded lighting. Transit connection and streetscape projects include many of these same improvements, focused around high-volume transit stations.

These projects can help reduce VMT by up to 2% for projects that improve pedestrian networks and 0.25%-1% for projects that improve pedestrian safety through traffic calming measures (CAPCOA, 2014). This estimate is based on a variety of studies which include improvements to the pedestrian network, the design of the pedestrian environment, and the safety of pedestrian facilities. In addition to VMT reduction, these pedestrian projects can improve pedestrian safety by reducing the width of a crossing, improving visibility, and addressing personal security concerns. They can also result in a higher percent of jobs that exist or people who live within a pedestrian-enhanced area, a metric that is used to quantify improved accessibility.

Potential Bicycle Improvements

Bicycle projects primarily fall into three categories of improvement: the presence and quality of bicycle facilities, access to bicycles, and transit connections. Improvements to the presence and quality of bicycle facilities include projects such as bike lanes, which demarcate space for bicyclists, cycle tracks, which provide separated and protected space for bicyclists, and Neighborhood Friendly Streets (identified as the NEN in MP 2035), which include traffic calming measures and route signage for bicyclists. Improvements to bicycle access include the creation or expansion of a bikeshare system, which allows members to use bicycles on demand. Improvements to transit connections include mobility hubs, which provide information and secure bike parking at transit stations, intended to bridge the first and last mile of a rider's commute.

According to CAPCOA, projects located near improved bicycle facilities can help reduce VMT by 0.625% (CAPCOA, 2014). Other sources cited in CAPCOA attribute a larger reduction of 1%-5% in

VMT for projects that include comprehensive bicycle programs (CAPCOA, 2014). Projects that include traffic calming measures reduced VMT between 0.25%-1% (CAPCOA, 2014).

Bicycle programs can also improve accessibility of a neighborhood. For example, while bikeshare systems alone have been shown to have a negligible effect on VMT (0.03% reduction), a 2006 study in London showed that 23% of bikeshare users said they would have not made the trip before bikeshare was an option (CAPCOA, 2014). This demonstrates that bikeshare can allow people to take more trips than they otherwise would have taken, without putting the burden of vehicle trips onto the transportation system. In addition, building bike facilities throughout a neighborhood would increase the percent of the population within proximity of a bicycle-enhanced area and the percent of jobs located within proximity of a bicycle facility.

Potential Roadway & ITS Improvements

Projects related to roadway improvements and ITS focus on maximizing the efficiency of the road for vehicle use. These projects improve traffic flow by providing select intersection improvements, signal timing and coordination upgrades, signal detectors, and monitoring and response technology. While some projects may require roadway widening (e.g., Lincoln Bridge enhancements), the additional capacity is intended to remove an existing bottleneck in the roadway network and would not result in induced vehicle travel.

While there are often emissions reductions associated with these types of projects as travel time per mile decreases, there are no associated VMT reductions. The Neighborhood Protection Program, however, may reallocate VMT away from local streets and onto arterial streets. In addition, these improvements would increase accessibility by increasing the number of jobs reachable by vehicle within a certain amount of time. The improvements may also reduce certain types of collisions by providing dedicated space and signal phasing for protected turning movements and safety improvements at intersections.

Potential Auto-Trip Reduction Improvements

Projects that directly reduce auto trips generally use either a direct financial incentive or disincentive to influence travel behavior. Some projects within this category focus on providing more information about transportation options, and others focus on connecting program participants to the resources they need to change behavior, like linking up with a carpool.

CAPCOA attributes a 1%-6.2% reduction in commute VMT to voluntary Commute Trip Reduction Programs by providing both incentives and financial disincentives to taking trips in single-occupancy vehicles (CAPCOA, 2014). Required Commute Trip Reduction Programs, by contrast, can reduce between 4.2% and 21% of commute VMT, depending on the percent of employers for enrollment into the program (CAPCOA, 2014). Rideshare programs, as a stand-alone Commute Trip Reduction Program, can reduce as much as 8.3% of commute VMT, or 3.6% of total VMT (CAPCOA, 2014). Additionally, a 2.8%-5.5% reduction in VMT can be attributed to parking policies that set market rate prices for on-street parking, such as ExpressPark (CAPCOA, 2014). For projects which address parking standards and develop shared-parking policies, such as the Strategic Parking Program, 5%-12.5% of VMT can be reduced (CAPCOA, 2014).

While these improvements may not directly expand accessibility, the associated programs may incentivize the creation of new modes of travel, such as carpooling, car sharing, vanpooling, or bikesharing, which would, in turn, improve the mode split between single occupancy vehicles and other transportation options.

Impact Analysis using New Potential Metrics

Mode Split

Mode Share is defined as the percentage of travelers using a particular mode of transportation. Mode Split is defined as the distribution of travelers across all modes of transportation. A more balanced mode split is indicative of a transportation system that better provides for multiple modes of transportation. Any increase in the peak-period auto mode share would be an undesirable outcome of the Proposed Project. Under Existing conditions, auto travel is the dominant mode of transportation within the project area.

The mode split with potential projects that could be implemented with the updates to the project lists were forecasted with the Westside TDF model. **Table 4.6-20** summarizes changes in peak period mode split under Existing, Future without Project, and Future with Project conditions by specific plan area, and **Table 4.6-21** summarizes the peak period person trips by mode.

Table 4.6-20 Peak Period Mode Split

Locations	Mode Split				Percent Change			
	Auto	Transit	Bike	Walk	Auto	Transit	Bike	Walk
Existing Conditions								
CTCSP	82.2%	2.7%	1.1%	14.0%	-	-	-	-
WLA TIMP	79.9%	3.6%	1.4%	15.1%	-	-	-	-
Project Area	**80.8%**	**3.3%**	**1.3%**	**14.6%**	**-**	**-**	**-**	**-**
Future Without Project (Comparison To Existing)								
CTCSP	81.8%	2.8%	1.2%	14.3%	-0.5%	3.7%	1.9%	2.1%
WLA TIMP	79.1%	3.9%	1.5%	15.6%	-1.0%	6.5%	5.0%	3.1%
Project Area	**80.2%**	**3.4%**	**1.3%**	**15.0%**	**-0.7%**	**4.9%**	**3.5%**	**2.6%**
Future With Project (Comparison To Existing)								
CTCSP	76.7%	3.7%	2.8%	16.8%	-6.6%	36.1%	142.1%	20.3%
WLA TIMP	73.6%	5.0%	3.1%	18.3%	-7.9%	38.0%	122.6%	21.2%
Project Area	**74.9%**	**4.5%**	**3.0%**	**17.7%**	**-7.3%**	**36.6%**	**128.9%**	**20.7%**
Future With Project (Comparison To Future Without Project)								
CTCSP	76.7%	3.7%	2.8%	16.8%	-6.1%	31.2%	137.4%	17.8%
WLA TIMP	73.6%	5.0%	3.1%	18.3%	-7.0%	29.6%	112.1%	17.5%
Project Area	**74.9%**	**4.5%**	**3.0%**	**17.7%**	**-6.6%**	**30.1%**	**121.2%**	**17.6%**

Source: Westside Travel Demand Forecasting Model, 2015.

Table 4.6-21 Peak Period Person Trips by Mode (in Thousands)

Locations	Mode Split				Percent Change			
	Auto	Transit	Bike	Walk	Auto	Transit	Bike	Walk
Existing Conditions (2014)								
CTCSP	200	7	3	34	-	-	-	-
WLA TIMP	303	14	5	57	-	-	-	-
Project Area	**503**	**20**	**8**	**91**	**-**	**-**	**-**	**-**
Future Without Project (Comparison To Existing)								
CTCSP	230	8	3	40	14.9%	19.8%	17.7%	17.9%
WLA TIMP	319	16	6	63	5.3%	13.3%	11.7%	9.7%
Project Area	**549**	**24**	**9**	**103**	**9.1%**	**15.4%**	**13.8%**	**12.8%**
Future With Project (Comparison To Existing)								
CTCSP	216	10	8	47	7.8%	57.1%	179.3%	38.8%
WLA TIMP	296	20	12	74	-2.2%	46.4%	136.2%	28.6%
Project Area	**512**	**31**	**20**	**121**	**1.7%**	**49.9%**	**151.2%**	**32.4%**
Future With Project (Comparison To Future Without Project)								
CTCSP	216	10	8	47	-6.2%	31.1%	137.3%	17.7%
WLA TIMP	296	20	12	74	-7.2%	29.3%	111.5%	17.3%
Project Area	**512**	**31**	**20**	**121**	**-6.8%**	**29.9%**	**120.8%**	**17.4%**

Source: Westside Travel Demand Forecasting Model, 2015.

With the implementation of the potential list of transportation improvements, the peak period auto mode share would decrease by 7.3 percent compared to Existing conditions and 6.6 percent compared to Future without Project conditions. The decrease in auto mode share results in a corresponding increase in transit, biking and walking in the study area. Transit mode share would increase by approximately 37 percent compared to Existing conditions and 30 percent compared to Future without Project conditions. Bicycle mode share would increase by approximately 129 percent compared to Existing conditions and 121 percent compared to Future without Project conditions. Pedestrian mode share would increase by 21 percent compared to Existing conditions and 18 percent compared to Future without Project conditions.

The peak period person trips by mode shows similar trends to the overall mode split percentages. The number of people traveling in cars would increase by 1.7 percent with the implementation of the Proposed Project when compared to Existing conditions whereas people traveling in cars would increase by 9.1 percent under Future without Project conditions. Approximately 50 percent more people would take transit during the peak hours, 150 percent more would bike, and 32 percent more would walk with the implementation of the potential transportation projects compared to Existing conditions.

These changes in mode split are based on the Westside TDF model. The model-estimated changes in mode-split are conservative vehicle-centric estimates based on historical travel behavior patterns and do not account for additional changes in demographics, vehicle ownership patterns, energy prices, and migration to walkable and transit-served locations that would lead to increasing mode shift to lower-energy and lower-cost transportation modes.

Peak period mode-split is one potential metric for evaluating transportation impacts that may be included in future revisions to the City of Los Angeles' CEQA Thresholds Guide. While the City of Los Angeles has not yet developed a threshold for this metric, the Proposed Project would result in an overall reduction in auto mode share and an overall increase in mode shares for transit, biking and walking. Given this conclusion, the Proposed Project impacts under this potential new CEQA metric would be ***less than significant***.

Transit Boardings

Transit Boardings are defined by the number of daily passengers that board a public transit vehicle. Transit Boardings can be used to measure transit usage. An increase in transit boardings indicates an increase in transit usage and a decrease in automobile dependence. An increase in Transit Boardings would also help meet the State's goals of reducing greenhouse gas emissions, as mandated by AB 32 and SB 375. Any decrease in the number of daily transit boardings would be an undesirable outcome of the Proposed Project.

Table 4.6-22 summarizes changes in transit boardings under Existing conditions, Future without Project, and Future with Project conditions by specific plan area and for the overall project area. The table includes transit boardings at all stop locations in the project area. Existing ridership numbers reflect Metro data from 2013. Future without Project and Future with Project ridership numbers reflect the percent increases in transit ridership estimated by the Westside TDF model.

Table 4.6-22 Transit Boardings

Location	Transit Boardings			Percent Change		
	Peak Period (7-Hour)	Off Peak Period (17-Hour)	Daily	Peak Period (7-Hour)	Off Peak Period (17-Hour)	Daily
Existing Conditions						
CTCSP	8,000	7,000	15,000	–	–	–
WLA TIMP	9,900	8,500	18,400	–	–	–
Project Area	**17,900**	**15,500**	**33,400**	**–**	**–**	**–**
Future Without Project (Comparison to Existing)						
CTCSP	9,800	8,900	18,700	22.6%	27.1%	24.4%
WLA TIMP	14,900	11,000	25,900	50.9%	29.8%	42.2%
Project Area	**24,700**	**19,900**	**44,600**	**39.3%**	**28.8%**	**35.0%**
Future With Project (Comparison to Existing)						
CTCSP	16,000	11,200	27,200	99.6%	59.7%	84.0%
WLA TIMP	22,300	13,900	36,200	124.8%	63.3%	99.4%
Project Area	**38,300**	**25,100**	**63,400**	**114.5%**	**61.9%**	**93.2%**
Future With Project (Comparison to Future Without Project)						
CTCSP	16,000	11,200	27,200	62.8%	25.7%	47.9%
WLA TIMP	22,300	13,900	36,200	49.0%	25.8%	40.3%
Project Area	**38,300**	**25,100**	**63,400**	**54.0%**	**25.7%**	**43.1%**

Source: Metro 2013, Westside Travel Demand Forecasting Model, 2015.

Under Existing conditions, there are approximately 33,000 daily transit boardings in the project area, and over half of these boardings occur in the 7-hour peak period. Under Future without Project conditions, boardings increase by 35 percent overall to 44,600 daily boardings and the peak period continues to contribute the highest number of boardings, with over 55 percent of all daily boardings.

With the implementation of the potential transportation improvements under future conditions, the total number of transit boardings would increase by approximately 93 percent compared to Existing conditions and by 43 percent compared with Future without Project conditions. The WLA TIMP experiences more transit growth than the CTCSP with a 99 percent increase in transit ridership compared to Existing conditions while the CTCSP has an increase of 84 percent compared to Existing conditions.

The model-estimated changes in transit ridership are conservative, vehicle-centric estimates based on historical travel behavior patterns and do not account for additional changes in demographics, vehicle ownership patterns, energy prices, and migration to walkable and transit-served locations that would lead to increasing transit use.

Transit boardings is one potential metric that may be included in revisions to State CEQA Guidelines. While the City of Los Angeles has not yet developed a threshold for this metric, the Proposed Project would result in an overall increase in transit boardings. Given this conclusion, under this potential new CEQA metric, impacts associated with the Proposed Project would be ***less than significant***.

Vehicle Trips

Vehicle Trips are defined as the number of trips undertaken in an automobile, such as in single occupancy private automobiles, and vehicles that contain two or more travelers, such as carpools, taxis, or ride-share vehicles. A reduction in the number of Vehicle Trips taken over time can be used as an indicator of reduced reliance on the automobile as well as an indicator of more travel by carpools. A reduction in the number of Vehicle Trips also helps meet the State's goals of reducing greenhouse gas emissions, as mandated by AB 32 and SB 375. Any increase in the number of daily vehicle trips would be an undesirable outcome of the Proposed Project.

The number of vehicle trips with an origin and/or destination in the project area was forecasted with the Westside TDF model. **Table 4.6-23** summarizes changes in vehicle trips under Existing, Future without Project, and Future with Project conditions for each Specific Plan area and for the overall project area. The table includes all vehicle trips that originate in the project area, are destined for the project area, or both, but excludes trips that both start and end outside the specific plan boundaries.

Table 4.6-23 Vehicle Trips with Origins and/or Destinations in the Project Area

Planning Areas	Vehicle Trips			Percent Change		
	Peak Period (7-Hour)	Off-Peak Period (17-Hour)	Daily Total	Peak Period (7-Hour)	Off-Peak Period (17-Hour)	Daily Total
Existing Conditions (2014)						
CTCSP	292,771	269,578	562,349	-	-	-
WLA TIMP	403,751	315,361	719,112	-	-	-
Project Area	**696,523**	**584,939**	**1,281,461**	**-**	**-**	**-**
Future Without Project (Comparison to Existing)						
CTCSP	341,069	321,162	662,231	15.7%	17.0%	16.5%

Planning Areas	Vehicle Trips			Percent Change		
	Peak Period (7-Hour)	Off-Peak Period (17-Hour)	Daily Total	Peak Period (7-Hour)	Off-Peak Period (17-Hour)	Daily Total
WLA TIMP	429,625	341,002	770,626	6.1%	6.6%	6.4%
Project Area	**770,693**	**662,164**	**1,432,857**	**10.2%**	**10.9%**	**10.6%**
Future With Project (Comparison To Existing)						
CTCSP	332,810	316,332	649,142	12.9%	14.2%	13.7%
WLA TIMP	416,641	335,428	752,069	2.8%	3.4%	3.2%
Project Area	**749,451**	**651,759**	**1,401,211**	**7.1%**	**7.9%**	**7.6%**
Future With Project (Comparison To Future Without Project)						
CTCSP	332,810	316,332	649,142	-2.4%	-2.4%	-2.4%
WLA TIMP	416,641	335,428	752,069	-3.1%	-3.0%	-3.0%
Project Area	**749,451**	**651,759**	**1,401,211**	**-2.8%**	**-2.7%**	**-2.8%**

Source: Westside Travel Demand Forecasting Model, 2015.

Under Existing conditions, there are over 1.2 million daily vehicle trips in the project area, and approximately one-half of these trips occur during the peak periods. Under Future without Project conditions, daily vehicle trips increase by 10.6 percent to over 1.43 million trips, reflecting increases in the number of residents, employees and visitors in the study area.

With the implementation of the potential transportation improvements under Future with Project conditions, the total number of vehicle trips is reduced by 2.8 percent from Future without Project conditions to approximately 1.40 million, which is a reduction of 31,600 trips every day in the project area. The same sociodemographic increases that apply to the Future without Project conditions also apply to the Future with Project conditions, resulting in an increase in the number of vehicle trips over Existing conditions. However, the potential transportation improvements to transit, walking, and biking shifts travelers from vehicles to other modes, reducing the number of vehicle trips under Future with Project conditions relative to Future without Project conditions.

As discussed throughout the EIR, the model-estimated changes in vehicle trips are conservative. Therefore it is possible that the Westside TDF model and this analysis underestimate the magnitude of vehicle trip reduction in the Future with Project condition.

The number of vehicle trips is one potential metric for evaluating transportation impacts that may be included in revisions to the City of Los Angeles' CEQA Thresholds Guide. While the City of Los Angeles has not yet developed a threshold for this metric, the Proposed Project would result in an overall decrease in vehicle trips relative to Future without Project conditions. Given this conclusion, under this potential new CEQA metric, impacts associated with the Proposed Project would be ***less than significant***.

Vehicle Miles Traveled (VMT)

Vehicle Miles Traveled (VMT) is a measurement of miles traveled by all vehicles (e.g., private automobiles, trucks and buses) in the study area. A reduction in the number of vehicle miles traveled can be used as an indicator of reduced reliance on vehicular travel, primarily by private automobiles.

Reducing VMT helps meet the State's goals of reducing greenhouse gas emissions, as mandated by AB 32 and SB 375. Any increase in the total number of vehicle miles traveled would be an undesirable outcome of the Proposed Project.

VMT within each of the Specific Plan areas was forecasted with the Westside TDF model. **Table 4.6-24** summarizes changes in VMT in Existing, Future without Project, and Future with Project conditions on surface streets by specific plan area and for the overall study area, including mainline freeway segments.

Table 4.6-24 Vehicle Miles Traveled in the Project Area

Location	Vehicle Miles Traveled			Percent Change		
	Peak Period (7-Hour)	Off Peak Period (17-Hour)	Daily	Peak Period (7-Hour)	Off Peak Period (17-Hour)	Daily
Existing Conditions (2014)						
CTCSP	1,075,337	883,200	1,958,536	-	-	-
WLA TIMP	1,179,549	839,570	2,019,119	-	-	-
Surface Streets	***2,254,885***	***1,722,770***	***3,977,655***	-	-	-
Freeways (Mainline)	*792,436*	*879,696*	*1,672,132*	-	-	-
Study Area	**3,047,321**	**2,602,466**	**5,649,787**	**-**	**-**	**-**
Future Without Project (Comparison to Existing)						
CTCSP	1,178,199	1,009,164	2,187,362	9.6%	14.3%	11.7%
WLA TIMP	1,241,692	893,368	2,135,059	5.3%	6.4%	5.7%
Surface Streets	***2,419,891***	***1,902,531***	***4,322,422***	***7.3%***	***10.4%***	***8.7%***
Freeways (Mainline)	*876,989*	*991,068*	*1,868,056*	*10.7%*	*12.7%*	*11.7%*
Study Area	**3,296,879**	**2,893,599**	**6,190,478**	**8.2%**	**11.2%**	**9.6%**
Future With Project (Comparison to Existing)						
CTCSP	1,107,419	980,852	2,088,271	3.0%	11.1%	6.6%
WLA TIMP	1,192,318	883,875	2,076,193	1.1%	5.3%	2.8%
Surface Streets	***2,299,737***	***1,864,728***	***4,164,465***	***2.0%***	***8.2%***	***4.7%***
Freeways (Mainline)	*856,730*	*961,080*	*1,817,810*	*8.1%*	*9.3%*	*8.7%*
Study Area	**3,156,467**	**2,825,808**	**5,982,275**	**3.6%**	**8.6%**	**5.9%**
Future With Project (Comparison to Future Without Project)						
CTCSP	1,107,419	980,852	2,088,271	-6.0%	-2.8%	-4.5%
WLA TIMP	1,192,318	883,875	2,076,193	-4.0%	-1.1%	-2.8%
Surface Streets	***2,299,737***	***1,864,728***	***4,164,465***	***-5.0%***	***-2.0%***	***-3.7%***
Freeways (Mainline)	*856,730*	*961,080*	*1,817,810*	*-2.3%*	*-3.0%*	*-2.7%*
Study Area	**3,156,467**	**2,825,808**	**5,982,275**	**-4.3%**	**-2.3%**	**-3.4%**

Source: Westside Travel Demand Forecasting Model, 2015.

Under Existing conditions, motorists travel over 5.6 million vehicle miles on roadways within the study area on an average weekday. Over half of these vehicle miles are traveled during the seven-hour peak period. Freeways account for nearly one-third of all daily vehicle miles traveled within the study area.

Under Future without Project conditions, daily VMT increases to approximately 6.2 million, a 9.6 percent increase from Existing conditions in the project area. The increase occurs disproportionately on freeways, where VMT increases by 11.7 percent, compared with surface streets, where VMT increases by 8.7 percent.

With the implementation of the potential transportation improvements, Future with Project conditions shows a reduction in daily VMT to 5.98 million, which is approximately 200,000 fewer vehicle miles traveled every day compared to Future without Project conditions. Future with Project daily VMT is forecast to be 5.9 percent greater than Existing conditions, and 3.4 percent lower than Future without Project. When comparing the Future with Project to Future without Project conditions, the daily freeway VMT decreases by 2.7 percent, while daily surface street VMT decreases by 3.7 percent. During the peak period, VMT decreases by 5 percent on the City streets in the project area and by 2.3 percent on the freeways.

To isolate the effects of the project from land use changes that could vary between the Future without Project and Future with Project scenarios, the same socioeconomic increases that apply to the Future without Project conditions also apply to the Future with Project conditions. This approach results in an increase in the level of VMT over Existing conditions; however, project improvements to transit, walk, and bicycle modes shift travelers from vehicles, reducing the level of VMT under Future with Project conditions relative to Future without Project conditions. It is possible that additional land use related strategies to reduce VMT may also be in place by 2035 and these changes could further reduce forecast VMT outcomes.

VMT in the project area is one potential metric for evaluating transportation impacts that may be included in revisions to the City of Los Angeles' CEQA Thresholds Guide. While the City of Los Angeles has not yet developed a threshold for this metric, the Proposed Project would result in an overall decrease in VMT relative to Future without Project conditions. Given this conclusion, under this potential new CEQA metric, impacts associated with the Proposed Project would be ***less than significant***.

To account for the background growth in the Westside TDF model, vehicle miles traveled was also calculated on a per-capita basis. **Table 4.6-25** summarizes changes in vehicle miles traveled on a per-capita basis by dividing total VMT on roadways in the study area by the total number of people, including both residents and workers.

Table 4.6-25 Vehicle Miles Traveled Per Capita (Employment Plus Population)

Locations	Vehicle Miles Traveled			Percent Change		
	Peak Period (7-Hour)	Off Peak Period (17-Hour)	Daily	Peak Period (7-Hour)	Off Peak Period (17-Hour)	Daily
Existing Conditions (2014)						
CTCSP	4.2	3.4	7.6	-	-	-
WLA TIMP	2.9	2.1	5.0	-	-	-
Surface Streets	*3.4*	*2.6*	*6.0*	-	-	-
Freeways (Mainline)	*1.2*	*1.3*	*2.5*	-	-	-
Study Area	**4.6**	**3.9**	**8.6**	**-**	**-**	**-**
Future Without Project (Comparison To Existing)						
CTCSP	4.0	3.4	7.4	-4.6%	-0.6%	-2.8%
WLA TIMP	2.8	2.0	4.9	-2.6%	-1.6%	-2.2%
Surface Streets	*3.3*	*2.6*	*5.9*	*-3.1%*	*-0.3%*	*-1.9%*
Freeways (Mainline)	*1.2*	*1.4*	*2.6*	*-0.1%*	*1.7%*	*0.9%*
Study Area	**4.5**	**4.0**	**8.5**	**-2.3%**	**0.4%**	**-1.1%**
Future With Project (Comparison To Existing)						
CTCSP	3.8	3.3	7.1	-10.4%	-3.3%	-7.2%
WLA TIMP	2.7	2.0	4.7	-6.5%	-2.6%	-4.9%
Surface Streets	*3.1*	*2.5*	*5.7*	*-7.9%*	*-2.3%*	*-5.5%*
Freeways (Mainline)	*1.2*	*1.3*	*2.5*	*-2.4%*	*-1.4%*	*-1.8%*
Study Area	**4.3**	**3.9**	**8.2**	**-6.5%**	**-2.0%**	**-4.4%**
Future With Project (Comparison To Future Without Project)						
CTCSP	3.8	3.3	7.1	-6.0%	-2.8%	-4.5%
WLA TIMP	2.7	2.0	4.7	-4.0%	-1.1%	-2.8%
Surface Streets	*3.1*	*2.5*	*5.7*	*-5.0%*	*-2.0%*	*-3.7%*
Freeways (Mainline)	*1.2*	*1.3*	*2.5*	*-2.3%*	*-3.0%*	*-2.7%*
Study Area	**4.3**	**3.9**	**8.2**	**-4.3%**	**-2.3%**	**-3.4%**

Source: Westside Travel Demand Forecasting Model, 2015.

Under Existing conditions, people traveling by automobiles in the study area travel an average of 8.6 miles per capita daily. Under Future without Project conditions, daily VMT per capita decreases to 8.5 miles, approximately 1 percent below Existing levels. The implementation of the potential transportation improvements under the Proposed Project further reduces daily VMT per capita to 8.2 miles, which is 4.4 percent lower than Existing levels and 3.4 percent lower than Future without Project levels.

The decrease in VMT per capita under Future without Project conditions is primarily due to the additional land use densities expected with the forecasted changes in socioeconomic data (i.e., housing, population and employment growth). Additional density in the project area provides more opportunities for residents, workers and visitors to travel locally resulting in shorter trips (or fewer total trips within mixed-use developments). The planned transit improvements in the area, such as

Expo Light Rail Phase II and the Westside Purple Line Subway extension are also contributing to a reduction in vehicle trips along with reduced VMT.

VMT per capita is one potential metric for evaluating transportation impacts that may be included in revisions to the City of Los Angeles' CEQA Thresholds Guide. While the City of Los Angeles has not yet developed a threshold for this metric, the Proposed Project would result in an overall decrease in VMT per capita. Given this conclusion, under this potential new CEQA metric, impacts associated with the Proposed Project would be ***less than significant***.

The VMT discussion above focuses on roadways and freeway segments within the project area. To determine potential VMT changes in adjacent jurisdictions, VMT on roadways within one mile of the Specific Plan boundaries was forecasted with the Westside TDF model.

Table 4.6-26 provides information on VMT in jurisdictions within the study area. VMT on roadways within one mile of the specific plan boundaries are presented for Existing, Future without Project, and Future with Project conditions. VMT increases by 16.5 percent overall from Existing conditions to Future without Project conditions. With the implementation of the potential transportation improvements, a 0.6 percent decrease in daily VMT is projected to occur on nearby roadways in all neighboring jurisdictions under Future with Project conditions in comparison to Future without Project conditions.

Table 4.6-26 Vehicle Miles Traveled in Adjacent Jurisdictions in Study Area

City or County	Daily Vehicle Miles Traveled			Percent Change vs. Existing		Percent Change vs. Future without Project to Future With Project
	Existing (2014)	Future without Project	Future With Project	Future without Project	Future With Project	
Los Angeles County	773,590	813,830	808,300	6.8%	6.1%	-0.7%
Los Angeles	791,650	838,600	840,370	7.8%	8.0%	0.2%
Beverly Hills	341,830	357,650	345,240	6.0%	2.4%	-3.5%
Culver City	1,028,120	1,260,870	1,247,150	31.1%	29.7%	-1.1%
El Segundo	148,500	160,870	159,320	11.0%	9.9%	-1.0%
Hawthorne	93,390	102,230	101,130	12.5%	11.3%	-1.1%
Inglewood	536,490	602,120	602,690	16.3%	16.4%	0.1%
Santa Monica	577,710	686,850	690,160	25.7%	26.3%	0.5%
Total	**4,291,280**	**4,823,020**	**4,794,350**	**16.5%**	**15.8%**	**-0.6%**

Source: Westside Travel Demand Forecasting Model, 2015

Note:
VMT Reported reflects roadways within 1-mile of Project Area (i.e., the Specific Plan Boundaries).

CHAPTER 5
OTHER CEQA CONSIDERATIONS

Pursuant to Sections 15130 and 15126.2 of the State CEQA Guidelines, this chapter describes cumulative impacts, significant irreversible environmental changes, growth-inducing impacts, and significant environmental effects which cannot be avoided if the Proposed Project is implemented. In addition, Section 15128 of the State CEQA Guidelines states that an EIR shall contain a brief statement indicating reasons that various possible significant effects of a project were determined not to be significant. Effects determined to be less than significant for the Coastal Transportation Corridor Specific Plan (CTCSP) and West Los Angeles Transportation Improvement and Mitigation Specific Plan (WLA TIMP) Specific Plans Amendment Project are discussed in Section 5.5.

5.1 Cumulative Impacts

5.1.1 Introduction

Cumulative impacts are those environmental effects that, on their own, may not be considered adverse, but which, when combined with similar effects over time, result in substantial adverse effects. Cumulative effects are an important part of the environmental analysis because they allow decision makers to look not only at the impacts of an individual proposed project, but the overall impacts to a specific resource, ecosystem, or human community over time from many different projects.

The State CEQA Guidelines define cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." The analysis of cumulative impacts need not be as in-depth as what is performed relative to the proposed project, but instead is to "be guided by the standards of practicality and reasonableness."

As the cumulative impacts are the anticipated impacts of the project along with reasonably foreseeable growth, State CEQA Guidelines Section 15130(b)(1) states that the identification of reasonably foreseeable growth may be based on either:

- A list of past, present, and reasonably anticipated future projects producing related or cumulative impacts; or
- A summary of projections contained in an adopted general plan or related planning document designed to evaluate regional or area-wide conditions.

This chapter describes the cumulative impacts of the Proposed Project for each environmental resource analyzed in Chapter 4, *Environmental Impacts*. The basis of the cumulative impacts analysis, and the projects considered therein, are identified below.

As described in the introduction to Chapter 4, the EIR examines different scenarios to analyze environmental impacts of the Proposed Project. One of these, Future without Project (2035), includes currently funded projects that would be in place by 2035, and incorporates adopted growth projections that would occur in the Specific Plan areas as forecasted by the Southern California Association of Governments (SCAG) in the 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (SCAG, 2012). These projects and growth projections were included as part of the transportation model for the Future without Project scenario. This Future without Project scenario represents the reasonably foreseeable conditions without the Proposed Project. The cumulative impacts analysis adds to this future condition additional projects that may occur but that are either currently not approved or not funded. For this analysis, those additional projects include the Mobility Plan 2035, the Exposition Corridor Transit Neighborhood Plan (ECTNP), and the LAX Landside Access Modernization Program.

Mobility Plan 2035

The Mobility Plan 2035, or MP 2035, was adopted by the Los Angeles City Council in November, 2015. The MP 2035 is the City's Transportation Element of the General Plan and provides a transportation blueprint for the City through the foreseeable future (at least 2035)(City of Los Angeles, 2015a). MP 2035 was prepared in compliance with the 2008 Complete Streets Act, which mandates that the circulation element of a city's general plan be modified to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan. MP 2035 includes a number of changes to the City's circulation system, including policies, an Enhanced Complete Street System, an Action Plan, a Complete Streets Design Guide, and a revised Bicycle Plan, all of which will influence the network conditions in the study area and adjacent areas in the City of Los Angeles.

MP 2035 provides the framework for future planning documents, such as the proposed amendments to the CTCSP and WLA TIMP, which take a closer look at the transportation system in specific areas of the City and recommend more detailed implementation strategies to realize MP 2035. The proposed updates to the CTCSP and WLA TIMP project lists reflect the vision of MP 2035, however, they do not reflect full buildout of MP 2035. Rather, many of the projects contained in the updated project lists provide a first-step in implementing MP 2035. For example, Pico Boulevard is designated as part of the Moderate Plus Transit Enhanced Network (TEN) in MP 2035. For the purposes of analyzing the MP 2035 TEN, the Moderate Plus treatments were assumed to result in the conversion of one vehicular travel lane per direction to a bus only lane during peak periods. As part of the WLA TIMP proposed project list, transit would be prioritized on Pico Boulevard through the implementation of rapid bus service improvements with increased frequencies, stop improvements, and construction of a new rapid stop in Century City without the removal of vehicular capacity during the peak travel hours. As another example, Venice Boulevard is designated as part of both the TEN and Bicycle Enhanced Network (BEN) in MP 2035. While the Proposed Project does not reflect the ultimate improvements that could eventually occur as part of the TEN and BEN designations, such as dedicated transit lanes on Venice Boulevard, the proposed project lists reflect the following first-step improvements that would be consistent with the vision of providing enhanced transit and bicycle facilities along Venice Boulevard: 1) Cycle track throughout the project area, 2) Rapid bus improvements throughout the project area with increases in service frequency and stop improvements, and 3) Streetscape improvements between Lincoln Boulevard and Inglewood Boulevard.

Buildout of MP 2035 was not included in the Future without Project or Future with Project scenarios used in the analysis of the Proposed Project because, although MP 2035 has been adopted, the timing of implementation and funding sources have not yet been identified, and project design at the intersection level of detail has not been developed. However, the cumulative impacts analysis evaluates the impacts of the Proposed Project in conjunction with full build out of the MP 2035 multimodal improvements (including the Transit, Bicycle, Neighborhood, Pedestrian, and Vehicle Enhanced Networks) both within the Specific Plan areas and throughout the City.

Exposition Corridor Transit Neighborhood Plan

The ECTNP is a proposed Specific Plan that would guide future development within the Exposition Light Rail Corridor (City of Los Angeles, 2015b). The Specific Plan would include General Plan amendments and zone changes that would encourage infill development and a mix of uses within the identified areas to promote transit ridership, reduce automobile dependence, and create vibrant neighborhoods around the transit stations. The Project would (1) create four new zones and one new land use designation, and change zoning and land use designations within specified portions of the project area; (2) include public benefit requirements associated with tiered floor-to-area ratio (FAR) in the new zones; (3) create streetscape plans and modified street classifications for identified street segments in the project area; and (4) require design standards for new development within the project area (excluding R1 and R2 zones). The ECTNP would also include new open space regulations and parking regulations for select properties within the project area. Of the five new transit stations planned along this portion of the Exposition Corridor, four are located within the WLA TIMP Specific Plan area. The cumulative impacts analysis evaluates the impacts of the Proposed Project in conjunction with the land use changes associated with the ECTNP.

LAX Landside Access Modernization Program

The LAX Landside Access Modernization Program proposes a system of complementary ground transportation elements that will improve the circulation system in the immediate vicinity of the airport, and between the Central Terminal Area (CTA) and new remote parking facilities, a new consolidated rental car facility, and a multi-modal/transit facility planned by Metro as part of a light rail extension in the airport area. These new facilities, which would lie at the southern edge of the CTCSP, would be linked together and to the CTA through an Automated People Mover system that would provide fast, convenient, and reliable access to the CTA for passengers, employees, and other users of LAX (Los Angeles World Airports, 2015). On a regional level, the project is not expected to adversely alter travel patterns or the number of vehicle trips generated by the airport and the project-specific transportation improvements would not adversely affect the overall vehicle trips or vehicle miles traveled (VMT) reported for the Westside area.

Conditions Associated with Cumulative Development

The transportation planning efforts being undertaken in MP 2035, the ECTNP, and the LAX Landside Access Modernization Program would complement the transportation improvements that would be enabled by the CTCSP/WLA TIMP Specific Plans Amendment Project. The cumulative projects identified above would improve access to transit and concentrate growth in compact, mixed-use developments in close proximity to transit services. These projects are expected to result in shorter and fewer vehicle trips, and each additional resident and job is expected to contribute fewer VMT than current residents and employees, thereby decreasing the VMT per service population and increasing the number of people traveling by transit, biking, and walking.

Methodology for Cumulative Impact Analysis

In providing guidance pertaining to the analysis of cumulative impacts, Section 15064(h)(1) of the State CEQA Guidelines states: "…the lead agency shall consider whether the cumulative impact is significant and whether the effects of the project are cumulatively considerable." Therefore, the analysis of a project's contribution to a significant cumulative impact is a two-step process: first, a determination is made as to whether or not a cumulative impact would be significant. As per Section

15130(a)(2) of the State CEQA Guidelines, if it is determined that the cumulative impact is not significant, no further discussion needs to be provided in the EIR. However, if a cumulative impact is determined to be significant, then a determination must be made as to whether the project's contribution to the significant cumulative impact is cumulatively considerable. In making these determinations, the following definitions apply:

- A **cumulative impact** is the change in the environment which results from the incremental impact of the proposed project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor, but collectively significant, projects taking place over a period of time (State CEQA Guidelines Section 15355).
- A **significant cumulative impact** occurs when the cumulative impact from several projects, in conjunction with the proposed project, would result in a substantial adverse change in the physical environment. Alternately, the combined cumulative impact associated with the project's incremental effect and the effects of other projects may be determined to be **less than significant.**
- A **cumulatively considerable impact** occurs when the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects (PRC Section 21083, State CEQA Guidelines Section 15064[h][1]). A project's contribution to a significant cumulative impact may be determined to be **less than cumulatively considerable** based on the nature or degree of the project's contribution. Additionally, a project's contribution to a significant cumulative impact may be rendered less than cumulatively considerable through project-specific mitigation measures, or compliance with the requirements in a previously approved plan or mitigation program that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located, including funding its fair share of a cumulative mitigation measure or program. A project's contribution to a significant cumulative impact that has been determined to be less than cumulatively considerable is not significant (State CEQA Guidelines Section 15130[a][3]).

In accordance with these provisions, the potential for the Proposed Project, in conjunction with cumulative development, to result in significant impacts is identified in the analyses below. Where cumulatively significant impacts would occur, the potential for the Proposed Project to make a cumulatively considerable contribution to these impacts is determined.

The proposed amendments to the CTCSP and WLA TIMP would not entitle the transportation improvements identified on the updated project lists. As the individual improvements are not proposed for construction at this time, schedules and phasing plans have not been determined for these improvements and design details have not been developed. Therefore, the cumulative impacts of the Proposed Project, in conjunction with cumulative development, are evaluated at a conceptual level of detail.

5.1.2 Cumulative Impacts

5.1.2.1 Air Quality

The South Coast Air Quality Management District's (SCAQMD) approach for assessing cumulative air quality impacts is based on the Air Quality Management Plan's forecasts of attainment of ambient air quality standards in accordance with the requirements of the federal and state Clean Air Acts. The SCAQMD has set forth significance thresholds designed to assist in the attainment of ambient air quality standards. SCAQMD's thresholds are identified in Section 4.1, *Air Quality.* Specifically, mass daily pollutant emission thresholds for construction and operation are shown in Table 4.1-9, and localized significance thresholds are shown in Table 4.1-10. These significance thresholds are used to assess whether emissions from a proposed project, when added to other past, present, and reasonably foreseeable probable future projects, would be considered cumulatively significant. According to the SCAQMD, if an individual project results in air emissions of criteria pollutants that exceed the SCAQMD's recommended daily thresholds for project-specific impacts, then the project would also result in a cumulatively considerable net increase of these criteria pollutants. Conversely, projects that do not exceed the project-specific thresholds are not considered to be cumulatively significant.

Construction

Construction air quality impacts tend to be primarily local in nature (i.e., impacts such as fugitive dust and construction equipment emissions are mostly realized in the immediate area around a construction site), although construction-related air pollutant emissions also contribute incrementally to degradation of regional ambient air quality. Cumulative projects with the most notable potential to contribute to cumulative construction air quality impacts, adding to the construction-related impacts associated with the proposed CTCSP and WLA TIMP transportation improvements, would be those under construction at the same time and in the same general vicinity as the project-related improvements. As stated above, schedules and phasing plans have not been determined for the proposed transportation improvements. Therefore, evaluation of cumulative construction air quality impacts is provided at a conceptual level of detail. The basis used for determining significant air quality impacts, including both project-specific and cumulative impacts, is the thresholds established by the SCAQMD.

As described above in Section 5.1.1, cumulative actions include both funded projects that are included in the Future without Project scenario, as well as build-out of MP 2035, the ECTNP, and the LAX Landside Access Modernization Program.

As discussed in Section 4.1, *Air Quality*, the majority of the transportation improvements associated with the Proposed Project would result in a low level of construction activity. The regional emissions associated with the proposed transportation improvements would be at the low end of the intensity range of construction activities that occur in the region. Even considering the high construction intensity improvements, as shown in Table 4.1-13, project-related regional construction emissions of the nonattainment pollutants (inhalable particulate matter with diameter of ten microns or less [PM10], fine particulate matter with diameter of 2.5 microns or less [PM2.5], ozone [O_3] precursors, nitrogen oxides [NOx], and volatile organic compounds [VOC]) would not contribute to an existing or projected air quality violation and would not exceed SCAQMD emissions thresholds. Therefore, regional construction emissions related to the Proposed Project ***would not be cumulatively considerable***.

Localized construction-related pollutant emissions would be emitted by cumulative construction activities occurring at the same time and in the same general location as construction of transportation improvements associated with the Proposed Project. As shown in Table 4.1-18, construction activities for the majority of the transportation improvements would not result in significant localized pollutant emissions; impacts of these projects would be less than significant. However, as shown in Tables 4.1-16 and 4.1-17, peak daily localized emissions of particulate matter would exceed SCAQMD thresholds for the Lincoln Boulevard and Sepulveda Boulevard Bus Rapid Transit (BRTs) and the I-10 Ramp Reconfiguration at Bundy Drive (PM10) and the Lincoln Boulevard Bridge Enhancement (PM10 and PM2.5). Therefore, localized construction emissions associated with these improvements would be ***cumulatively considerable****.*

Operation

As noted in Section 5.1.1, the cumulative projects would improve access to transit and concentrate more growth in compact, mixed-use developments in close proximity to transit services. These projects are expected to result in shorter and fewer vehicle trips, and each additional resident and job is expected to contribute fewer VMT than current residents and employees, thereby decreasing the VMT per service population and increasing the number of people traveling by transit, biking and walking. Nevertheless, as identified in Table 4.6-24, total project-related VMT in the Specific Plan areas in the future would be greater than existing conditions due to background growth that will occur with or without the project. However, Future with Project VMT is expected to be 3.4 percent lower than Future without Project VMT. The cumulative projects identified in Section 5.1.1 would expand multi-modal facilities beyond those associated with the Proposed Project. As a result, it is expected that VMT would further decrease under cumulative conditions, although it is assumed that VMT may still be greater than existing conditions.

Although daily VMT in the study area may be higher in the future with cumulative development, emission rates per mile would be lower because of technological advances in vehicle emission control, turnover in the vehicle fleet, and new emission standards. As a result, maximum cumulative daily emissions of CO, VOC, NOx, PM10, PM2.5, and SOx are expected be lower than existing conditions and, therefore, would not exceed regional operational thresholds of significance. Therefore, operation of the Proposed Project, in combination with operation of future mobile sources under the MP 2035, ECTNP, the LAX Landside Access Modernization Program, and other funded projects consistent with the anticipated growth and development in the 2012-2035 RTP/SCS, would not result in a cumulatively significant air quality impact in the region. Cumulative impacts from operation would be ***less than significant***.

5.1.2.2 Biological Resources

Construction

Implementation of the Lincoln Boulevard Bridge Enhancement as part of the Proposed Project has the potential to result in significant impacts to biological resources associated with the Ballona Wetlands Ecological Reserve (BWER). As described in Section 4.2, *Biological Resources*, mitigation measures and compliance with all required permits would reduce potential impacts on migratory birds, special status species and habitat areas, other sensitive natural communities, and wetland resources to a level that is less than significant.

The cumulative projects identified in Section 5.1.1 do not have the potential to result in impacts to the BWER. MP 2035 does not include projects that would affect the BWER beyond the Lincoln Boulevard Bridge Enhancement discussed above. The ECTNP improvements are located over 4 miles north of the

BWER and the LAX Landside Access Modernization Program improvements are located several miles south. With regards to past projects and previously-approved future development, the most notable project is the Playa Vista project. The Playa Vista Phase I EIR determined that impacts to upland vegetation, federally-designated wetlands, and other sensitive habitat would be less than significant following mitigation. The EIR found that the project, when combined with other cumulative development (most notably the development of the Playa Vista Master Plan in its entirety) would result in a locally significant cumulative impact due to the loss of natural areas and increased disturbance from a higher density of people in the area (City of Los Angeles, 1992, Section V.D). Following completion of the Phase I EIR, the full build-out of Playa Vista was substantially reduced, which would lessen these cumulative impacts. The majority of impacts to biological resources associated with the Village at Playa Vista project were determined to be less than significant after mitigation. The EIR for that project found that loss of undeveloped area would be an unavoidable impact on foraging raptors and nesting common migrant birds (City of Los Angeles, 2003, Section D).

The loss of natural area associated with the Proposed Project is expected to be very minor as disturbance would be limited to areas immediately abutting existing roadways. All impacts to biological resources associated with the Proposed Project would be mitigated to a level that is less than significant. As a result, the project's contribution to potentially significant cumulative impacts to biological resources would ***not be cumulatively considerable***.

Operation

During operation, the proposed transportation improvements would operate within existing roadways, sidewalks, and rights-of-ways and would not result in adverse effects on biological resources. In addition, the Proposed Project would not add any population to the study area that could contribute to disturbance to biological resources. Therefore, operation of the Proposed Project, in combination with the cumulative development projects, would not result in a significant cumulative impact. Cumulative operational impacts to biological resources would be ***less than significant.***

5.1.2.3 Greenhouse Gas Emissions

Construction

The 2012-2035 RTP/SCS estimated that construction emissions in Los Angeles County would be approximately 0.2 percent of countywide greenhouse gas (GHG) emissions in 2035 (SCAG, 2012). These emissions include construction emissions from all development activity, not just transportation improvements. Construction emissions from cumulative development would be associated with construction equipment, construction-related truck trips, and worker commute trips. Similar to the Proposed Project, the MP 2035 and ECTNP do not propose construction of specific improvements. GHG emissions associated with the LAX Landside Access Modernization Program have not yet been determined, as the EIR for that project is currently in preparation.

As described in Section 4.3, *Greenhouse Gas Emissions*, most of the transportation improvements under the Proposed Project would not involve substantial construction activity, and the higher intensity construction improvements would not require substantial grading or excavation, which are activities that require heavy equipment and often use such equipment for extended periods.

When considered in combination with GHG emissions from construction from all development activity, as estimated in the 2012-2035 RTP/SCS, construction-related emissions associated with cumulative projects in the region would be a small portion of total construction emissions in Los Angeles, which themselves would represent a small fraction (0.2 percent) of all countywide GHG emissions in 2035 (SCAG, 2012). Moreover, the ongoing implementation of motor vehicle emission control and fuel mileage standards in new vehicles, along with the gradual transition to newer, cleaner, and more fuel efficient engines over time, would result in reduced GHG emissions per engine or vehicle by 2035. GHG construction emissions associated with cumulative development are considered in conjunction with cumulative operational emissions to evaluate significance. The combined emissions analysis is provided below.

Operation

As noted in Section 5.1.1, the cumulative projects would improve access to transit and concentrate more growth in compact, mixed-use developments in close proximity to transit services. These projects are expected to result in shorter and fewer vehicle trips, and each additional resident and job is expected to contribute fewer VMT than current residents and employees, thereby decreasing the VMT per service population and increase the number of people traveling by transit, biking and walking. Nevertheless, as identified in Table 4.6-24, total project-related VMT in the Specific Plan areas in the future would be greater than existing conditions due to background growth that will occur with or without the project. However, Future with Project VMT is expected to be 3.4 percent lower than Future without Project VMT. The cumulative projects identified in Section 5.1.1 would expand multi-modal facilities beyond those associated with the Proposed Project. As a result, it is expected that VMT would further decrease under cumulative conditions, although it is assumed that VMT would still be greater than existing conditions.

Combined Construction and Operation GHG Emissions

Although daily VMT in the study area may be higher in the future with cumulative development, emission rates per mile would be lower because of technological advances in vehicle emission control, turnover in the vehicle fleet, and new emission standards. Similar to the Proposed Project, construction-related GHG emissions associated with cumulative development would represent a small fraction of the operational emissions. Therefore, decreases in operational GHG emissions would outweigh increases in GHG emissions from construction activities. As a result, combined annual cumulative GHG emissions are expected be lower than existing conditions. Therefore, operation of the Proposed Project, in combination with operation of future mobile sources under the MP 2035, ECTNP, the LAX Landside Access Modernization Program, and other funded projects consistent with the anticipated growth and development in the 2012-2035 RTP/SCS, is expected to reduce GHG emissions in the region as compared to existing conditions or future without cumulative development conditions. Cumulative GHG impacts from combined construction and operation would be ***less than significant***.

5.1.2.4 Land Use and Planning

Construction

Cumulative development would result in short-term construction impacts throughout the Westside. Construction-related land use impacts, such as construction staging and right-of-way encroachments, generally would not be considered significant due to their temporary nature and limited duration. Cumulative construction could also result in temporary access disruptions to adjacent land uses. This could include disruption to residences, businesses, and other retail uses that are located within the Specific Plan area. Impacts and disruptions to access during construction would be temporary and would cease once construction is completed. Due to the urbanized nature of the study area, construction of cumulative projects would not be expected to have adverse impacts on surrounding land uses as construction activities would be consistent with the types of activities that commonly occur in an urban environment.

Construction resulting from the proposed transportation improvements associated with the Proposed Project would occur within or adjacent to existing transportation right-of-ways and would not isolate communities, or alter the existing land use conditions in the community. Generally, construction activities associated with the Proposed Project could result in similar construction impacts as other cumulative projects, including temporary land use impacts related to construction staging, temporary right-of-way encroachments, or temporary access disruptions to adjacent land uses. Given the temporary nature of construction activities, project-related impacts would be less than significant.

When considered in combination with construction related to MP 2035 transportation improvements, the ECTNP, the LAX Landside Access Modernization Program, and other funded projects that are consistent with regional growth and development forecasts in the RTP/SCS, cumulative construction-related impacts are not expected to isolate communities or alter the existing land use conditions in the community. Therefore, cumulative construction-related impacts to land use and planning would be ***less than significant***.

Operation

Projects considered in the cumulative land use and planning analysis, including MP 2035, the ECNTP, the LAX Landside Access Modernization Program, and previously-approved and funded regional development, would take place within an already urbanized context and would not result in land use changes that would create land use conflicts. Buildout of the MP 2035 and implementation of the LAX Landside Access Modernization Program would not result in any changes in land uses. The transportation improvements associated with MP 2035 would occur along existing transportation corridors and, therefore, would not physically divide or isolate an existing community. The LAX Landside Access Modernization Program would implement planned transportation improvements on parcels that are designated for such uses. The ECTNP proposes to modify land use designations along the Exposition Light Rail Corridor in order to guide future development within the corridor in a manner that encourages infill development and a mix of uses to promote transit ridership, reduce automobile dependence, and create vibrant neighborhoods around the transit stations (City of Los Angeles, 2015b). The types of land uses proposed by the ECTNP would not be out of character with the surrounding community, nor would the project disrupt, divide, or isolate any existing neighborhoods or communities. Projects included in the Future without Project scenario are currently approved and funded; these projects were determined to be consistent with their respective land use designations, or those land use designations were modified through the project approval process to ensure consistency.

As discussed in Section 4.4, *Land Use and Planning,* the proposed updates to the Transportation Impact Assessment (TIA) fees would not alter future land use patterns or result in any direct or indirect physical impacts associated with the alteration of land use development patterns that could result in significant impacts associated with land use and planning, including changes that would physically divide an established community. Moreover, the Proposed Project would not result in any changes in General Plan land use designations or zoning classifications. No new roadways or transportation corridors are proposed that would divide or isolate existing neighborhoods or communities. The proposed transportation improvements would not establish new land uses. Operation of the proposed transportation improvements would be compatible with surrounding land uses and would improve safety, access, and alternative modes of transportation in the surrounding area.

Following implementation of the Proposed Project, operation of projects on the lists of transportation improvements could result in indirect impacts to land use. While there would be no change in land use or zoning, there could be removal of some on-street parking. Implementation of some of the transportation improvement projects, such as BRT and cycle tracks, could decrease the width or number of driving lanes. Off-street parking and street parking on adjacent streets would not be affected, and the proposed loss of on-street parking is not anticipated to permanently prevent or disrupt access to surrounding land uses.

Implementation of the Proposed Project, combined with transportation improvements associated with the MP 2035, the coordination of land use and transportation development in the ECTNP, and the airport access improvements planned as part of the LAX Landside Access Modernization Program, would provide enhanced accessibility for non-vehicular modes of transportation and would increase accessibility of residents to local goods and services. This would enhance community character and the cohesion of the community. Implementation of these projects and other funded projects would be consistent with the goals and growth assumptions included in the 2012-2035 RTP/SCS. Overall, cumulative impacts to land use and planning associated with the Proposed Project, in combination with cumulative development in the region, would be ***less than significant***.

5.1.2.5 Noise and Vibration

Construction

Construction of the cumulative development projects would result in temporary increases in noise levels generated by construction equipment, construction-related truck trips, and worker commute trips. Noise levels would fluctuate depending on the construction activities, equipment type, duration of activity, distance between the noise source and receptor, and presence of barriers that attenuate noise. Cumulative projects with the potential to contribute to cumulative construction-related noise and vibration impacts would be those under construction at the same time and in the same general vicinity as the project-related improvements. As stated previously, schedules and phasing plans have not been determined for the transportation improvements identified as part of the Proposed Project. Therefore, evaluation of cumulative construction-related noise and vibration impacts is provided at a conceptual level of detail.

As discussed in Section 4.5, *Noise and Vibration*, even with mitigation, construction-related noise and vibration impacts from the transportation improvements associated with the Proposed Project would be significant and unavoidable. Construction activities related to the transportation improvements in MP 2035, the development proposed in the ECTNP, and anticipated growth and development in the RTP/SCS could occur concurrently with construction related to the Proposed Project within the project area. As the LAX Landside Access Modernization Program would occur on a corridor that would not require notable construction under the Proposed Project, no cumulative construction-related impacts would occur from this project.

In general, construction-related activities from the Proposed Project and from cumulative development could individually result in significant noise and vibration impacts. If projects located in proximity to the same sensitive receptors were to occur concurrently, cumulative noise and vibration impacts could result. Potential cumulative noise and vibration levels would be intermittent, temporary, and would comply with the time restrictions and other relevant provisions in the Los

Angeles Municipal Code. Moreover, each project that would result in high noise and/or vibration levels at nearby sensitive receptors would be required to comply with mitigation measures identified in their respective environmental documents. Even with these measures, concurrent construction activities from nearby related projects would generate noise and vibration at each site and cumulative construction activities may exceed thresholds of significance for noise and vibration at nearby sensitive land uses. While specific project timelines and implementation schedules are not known, for purposes of this EIR, it is assumed that construction-related noise and vibration levels could result in significant cumulative impacts and the Proposed Project's contribution to these significant cumulative impacts would be ***cumulatively considerable***.

Operation

Cumulative development in the region would generate operational noise and vibration that would contribute to cumulative operational noise and vibration impacts. Operational impacts associated with the MP 2035 and the LAX Landside Access Modernization Program would include the implementation of transportation improvements in addition to those associated with the Proposed Project. Introducing additional transit operations, particularly bus operations associated with the MP 2035, could result in noise impacts to sensitive uses that are located in close proximity to these operations. Under the ECTNP, land use designations would be changed to create mixed use areas and infill development around transit stations. The development of mixed land uses in proximity to one another could result in noise impacts to sensitive uses.

Operational changes associated with the Proposed Project that could increase noise levels in the Specific Plan area include higher vehicle speeds resulting from enhanced mobility and the operation of BRT. As discussed in Section 4.5, *Noise and Vibration,* curb-running BRT may increase noise levels at some sensitive land uses by more than 3 A-weighted decibels (dBA). This would be a significant impact that could not be mitigated.

It is not expected that improvements associated with the LAX Landside Access Modernization Program, combined with the Proposed Project, would result in cumulative impacts, as the LAX-related improvements would occur on a corridor that would not have any transit improvements under the Proposed Project. However, noise from BRT operations associated with the Proposed Project, combined with other local sources of noise from the MP 2035, could increase cumulative noise in certain areas. In addition, changes in land use designations under the ECTNP could place noise-sensitive land use in proximity to bus operations that would be implemented as part of the Proposed Project. While details about the projects associated with the MP 2035, or specific development that could occur with implementation of the ECTNP, are not known, for purposes of this EIR, it is assumed that noise levels related to operations could result in significant cumulative impacts and the Proposed Project's contribution to this significant cumulative impact would be ***cumulatively considerable***.

5.1.2.6 Transportation

Construction

Construction impacts related to implementation of the transportation improvements under the Proposed Project would be short-term and significant. Standard construction techniques (e.g., preparation of a traffic control plan, flagmen, etc.) would reduce construction-related impacts associated with the Proposed Project, however, even with implementation of mitigation, it is expected that project-related construction impacts to transportation would be significant and unavoidable. Concurrent construction activity from nearby projects related to the MP 2035, ECNTP, and other development projected in the RTP/SCS would result in cumulative traffic impacts. In general, cumulative construction-related traffic impacts would be localized and short-term. Nevertheless, despite the short-term nature of cumulative construction-related traffic effects and the fact that each cumulative project in the area would be required to mitigate construction-related traffic and parking impacts, it is anticipated that cumulative construction impacts would be significant and the Proposed Project's contribution to this significant cumulative impact would be ***cumulatively considerable***.

Operation

Traffic Impacts

As described in Section 4.6, *Transportation*, potential impacts to the circulation system associated with the Proposed Project were analyzed for transportation improvements included in the updated project lists. Volume-to-capacity (V/C) ratios and level of service (LOS) calculations were prepared for Existing, Future without Project, and Future with Project conditions. The "volume-weighted" average of the V/C ratio under Future with Project conditions for all of the analyzed roadway segments would exceed that of existing conditions (0.80 to 0.85 during the AM peak hour and 0.86 to 0.93 during the PM peak hour) and Future without Project conditions (0.83 to 0.85 during the AM peak hour and 0.90 to 0.93 during the PM peak hour). The number of roadway links projected to operate at unsatisfactory levels of service (LOS E or F) under Future with Project conditions exceed the number for existing conditions (21 percent to 29 percent during the AM peak hour and 29 percent to 40 percent in the PM peak hour) and Future without Project conditions (24 percent to 29 percent during the AM peak hour and 34 percent to 40 percent in the PM peak hour).

With the implementation of MP 2035, many of the projects included in the Proposed Project's updated project lists would be extended outside of the Specific Plan boundaries, resulting in a more robust multi-modal network throughout the City of Los Angeles. Full buildout of MP 2035 would also likely require the conversion of additional vehicular travel lanes both within and outside of the Specific Plan boundaries into transit-only lanes or bicycle facilities. The additional growth that would potentially occur with implementation of the ECTNP may worsen congestion in portions of the Specific Plan boundaries beyond the levels identified in the Future with Project conditions. Under current CEQA guidelines and City thresholds, this is considered to be a significant impact. The contribution of the Proposed Project to this cumulative traffic impact would be ***cumulatively considerable***.

Diversion of Traffic

The EIR modeling analysis conducted for the Proposed Project accounts for potential redistribution of vehicular traffic from highly congested links to links that have more available capacity. Along roadways where the Proposed Project would cause significant traffic congestion, diversion of trips could occur onto adjacent parallel routes. It is anticipated that diversion would not occur on streets that operate at LOS D or better during peak periods because the average delay is not substantial. However, for the street segments where the LOS would degrade from D to E or F, some trips could divert to adjacent streets to avoid longer travel times through congested locations. While the Residential Neighborhood Traffic Management (NTM) plans required by LADOT can alleviate neighborhood traffic intrusion from individual developments within the Specific Plan areas, regional growth and associated increases in activity levels may still result in vehicles diverting to residential roadways. On a regional level, traffic in the study area is anticipated to increase in conjunction with regional population, housing, and employment growth projected to occur in the future by SCAG. This growth will occur with or without implementation of the Proposed Project and cumulative projects. The background growth influences the transportation analysis by accounting for the increased activity levels under Future with Project conditions, although, as stated, those increases will occur with or without the project. It is possible that diversions evaluated under the Future with Project conditions could increase with implementation of the MP 2035, as full buildout of that program would remove additional travel lanes in the Specific Plan area. Therefore, the diversion of traffic associated with cumulative conditions would be a significant cumulative impact and the contribution of the Proposed Project to neighborhood intrusion impacts would be ***cumulatively considerable***.

Congestion Management Program

As defined by the Congestion Management Program (CMP), a significant impact would occur when a project would increase traffic demand on a CMP facility by 2 percent of capacity (V/C ≥ 0.02), causing LOS F (V/C > 1.00); if the facility is already at LOS F, a significant impact would occur when a project would increase traffic demand on a CMP facility by 2 percent of capacity (V/C ≥ 0.02). On a regional level, traffic in the study area is anticipated to increase in conjunction with regional population, housing, and employment growth projected to occur in the future by SCAG. This growth will occur with or without implementation of the Proposed Project and cumulative projects. The background growth influences the transportation analysis by accounting for the increased activity levels under Future with Project conditions, although, as stated, those increases will occur with or without the project. Consequently, when comparing traffic operations on the freeway system under Future with Project conditions to existing conditions, peak period congestion would continue to increase as a result of background growth. As stated in Section 5.1.1, with the addition of the cumulative projects, future VMT in the region would be expected to decrease compared to Future without Project conditions. Nevertheless, total future VMT with background growth and cumulative projects would be greater than existing conditions. Therefore, cumulative contributions to CMP freeway segment impacts would be a significant cumulative impact and the Proposed Project's contribution would be ***cumulatively considerable***.

Fire Protection and Emergency Access

A project would normally have a significant impact on fire protection if it would require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service. It is not expected that cumulative development, including the Proposed Project, would require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service. Los Angeles Fire Department (LAFD) has a mandate to protect public safety and must respond to changing circumstances and therefore would act to maintain response times. Based on information provided in LAFD's Strategic Plan 2015-2017 (LAFD, 2015) and from meetings with LAFD staff, the ability to provide adequate fire protection services is dependent on numerous factors including staffing levels, mutual aid agreements, deployment strategies, and technological advances in equipment. Moreover, LAFD's primary determinant for assessing future service needs is based on their cumulative review and analysis of past incidents. Options available to LAFD include expanding the Fire Preemption System, increasing staffing levels, and adding new fire station(s) to underserved areas. The potential for new fire station construction is speculative at the present time and is therefore not analyzed in this document. Depending on the location of new fire protection facilities, if they are determined to be needed, operational impacts (primarily noise) could occur; however, such impacts are not foreseeable at this time. Therefore, cumulative impacts to fire protection and emergency access would be ***less than significant***.

5.2 Significant Irreversible Environmental Changes

An EIR must examine irreversible changes to the environment. More specifically, the State CEQA Guidelines require an EIR to consider whether "uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely" (State CEQA Guidelines Section 15126.2(c)). A "nonrenewable resource" refers to the physical features of the natural environment, such as land, waterways, etc.

Additionally, per Section 15126.2(c), the analysis of significant irreversible environmental changes should consider primary or secondary impacts that commit future generations to similar uses.

Implementation of the Proposed Project would update the TIA fee program and the list of transportation improvements and mitigation measures to be funded, in part, by the impact fees collected from new development. In addition, the proposed amendments would result in administrative changes and minor revisions to the CTCSP and WLA TIMP consistent with local and regional transportation policies. The Proposed Project does not involve any construction and would not result in direct impacts to land use and planning. Implementation of the Proposed Project would indirectly lead to the construction and operation of transportation improvement projects within the project area. The purpose of the proposed updated lists of transportation improvements is to improve mobility in the CTCSP and WLA TIMP Specific Plan areas.

Construction

Implementation of the transportation improvements would involve the consumption of building materials during construction, such as aggregate (sand and gravel), metals (e.g., steel, copper, lead), and petrochemical construction materials (e.g., plastics). This would represent the loss of non-renewable resources, which are generally not retrievable. Aggregate resources are regionally available. Their use for construction of the proposed transportation improvements would not have an adverse effect upon the availability of these resources. Similarly, other building materials, such as metals, petrochemicals, and other construction materials, are market-driven commodities for which adequate supplies are anticipated in the long-term.

Construction of the improvements would also require energy resources such as electricity, natural gas, and various transportation-related fuels. This would represent the loss of non-renewable resources, which are generally not retrievable. These energy resources are not in short supply and their use for project-related construction would not have an adverse effect upon their availability.

Implementation of the Lincoln Boulevard Bridge Enhancement would place permanent structures in the Ballona Channel in order to support the bridge improvements. As identified in Section 4.2, *Biological Resources,* impacts to habitat or wetland resources would be mitigated to a level that is less than significant. Moreover, the presence of these structures would not alter the fundamental nature of the channel or result in a permanent change in biological resources that live in, or rely on, the channel. Nevertheless, if a loss of wetlands resources were to occur, this would be an irreversible environmental change.

Operation

Operation of the proposed transportation improvements would require relatively little use of resources. As described in the transportation analysis (Section 4.6), the multi-modal improvements on the updated lists of transportation improvements would result in higher VMT compared to existing conditions. The increase in VMT is associated with increased growth that will occur with or without the Proposed Project. The Future with Project scenario would result in lower VMT compared to the Future without Project scenario. Therefore, implementation of the Proposed Project would not result in project-related increase in the use of fossil fuels and would not cause significant environmental impacts related to the unnecessary, inefficient, or wasteful use of resources.

5.3 Growth-Inducing Impacts

Section 15126(d) of the State CEQA Guidelines requires that an EIR discuss the ways in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. This includes projects which would remove obstacles to population growth. Generally, a project is considered to result in growth inducing effects if it causes one of the following:

- The extension of infrastructure (sewer, water, etc.) to an area currently undeveloped and/or lacking adequate infrastructure; or
- The provision of housing or employment to an area currently undeveloped or lacking adequate housing or employment.

The project area is currently a fully developed, populated urban area. While the Proposed Project could lead to transportation improvements, such as enhanced transit and bicycle facilities, which would improve mobility, the Proposed Project would not extend infrastructure to undeveloped areas or areas currently lacking adequate infrastructure. Rather, the transportation projects that would be implemented as a result of the updated lists of transportation improvements in the CTCSP and WLA TIMP would enhance the existing transportation network in the project area. Growth is expected in the project area with or without the amendments to the Specific Plans and the Proposed Project would not change the amount or type of growth anticipated to occur. Implementation of the Proposed Project would facilitate movement within the CTCSP and WLA TIMP areas as growth continues. It would accommodate anticipated infill or density-related growth as envisioned in the Framework and Community Plans. Therefore, implementation of the transportation improvements associated with the Proposed Project would not directly or indirectly induce growth.

5.4 Significant Environmental Effects that Cannot be Avoided if the Proposed Project is Implemented

Chapter 4, *Environmental Impacts*, of this EIR provides a comprehensive identification of the environmental effects of the Proposed Project, including the level of significance both before and after mitigation.

Implementation of the Proposed Project *would not* result in significant and unavoidable impacts in the following resource areas:

- **Biological Resources:** There would be no significant and unavoidable impacts on biological resources, including migratory birds, special status species and habitat areas, other sensitive natural communities, and wetland resources, associated with the construction or operation of the Proposed Project.
- **Greenhouse Gas Emissions:** There would be no significant effects related to construction or operational GHG emissions as a result of the Proposed Project.
- **Land Use and Planning:** There would be no significant effects related to land use and planning as a result of construction or operation of the Proposed Project.

Implementation of the Proposed Project *would* result in the following significant and unavoidable impacts:

- **Air Quality:** Localized effects from daily emissions associated with construction of the Lincoln Boulevard Bridge Enhancement (PM10 and PM2.5), the Lincoln Boulevard and Sepulveda Boulevard BRTs (PM10), and the I-10 Ramp Reconfiguration at Bundy Drive (PM10) would be significant and unavoidable.

  Localized construction-related pollutant emissions, in combination with construction of other cumulative development, could result in significant cumulative impacts.
- **Noise and Vibration:** Construction of the transportation improvements associated with the Proposed Project would result in localized and temporary significant and unavoidable noise and human annoyance-related vibration impacts. Operation of the Proposed Project would include a number of improvements to bus service. It is possible that curb-running BRT could increase noise levels at some sensitive land uses by more than 3 dBA. This would be a significant and unavoidable impact.

  Construction-related noise and vibration levels associated with project-related construction, in combination with construction of other cumulative development, could result in significant cumulative impacts. Operation of the Proposed Project, in conjunction with other cumulative development, could result in significant cumulative noise impacts.
- **Transportation:** Even with implementation of standard construction techniques, project-related construction impacts to transportation would be significant and unavoidable. Under current CEQA guidelines and City thresholds, implementation of the proposed transportation improvements would result in significant and unavoidable impacts related to vehicular traffic. The Proposed Project would also result in significant and unavoidable impacts related to neighborhood traffic intrusion and CMP freeway segments.

  Impacts related to construction, and operational impacts on vehicular traffic, neighborhood traffic intrusion, and CMP freeway segments associated with cumulative development would be cumulatively significant.

5.5 Effects Determined to be Less than Significant

Section 15128 of the State CEQA Guidelines states that an EIR shall contain a brief statement indicating reasons that various possible significant effects of a project were determined not to be significant and, therefore, were not discussed in detail in the EIR. A Notice of Preparation (NOP) was prepared for the Proposed Project and is included in Appendix C, *Notice of Preparation/Scoping,* of this Draft EIR. The NOP provides a detailed discussion of potential environmental impact areas and identifies both the topics to be addressed in the EIR as well as those topics that were determined to not require analysis in the EIR, for the reasons explained therein. In the NOP, the City determined that impacts of the Proposed Project would be less than significant for following resource areas: aesthetics, agricultural and forestry resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, mineral resources, population and housing, public services, recreation, and utilities and service system.

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CHAPTER 6
ALTERNATIVES

6.1 Introduction

Section 15126.6 of the State CEQA Guidelines requires an EIR to describe a range of reasonable alternatives to the project, or to the location of the project, "which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparable merits of the alternatives." The analysis of alternatives shall focus on alternatives "which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of project objectives, or would be more costly."

The selection and discussion of alternatives is intended to foster public participation and informed decision making. An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and/or speculative. The State CEQA Guidelines further require the analysis of a No Project Alternative, and the identification of the Environmentally Superior Alternative. Where the Environmentally Superior Alternative is the No Project Alternative, the EIR shall also identify an Environmentally Superior Alternative among the other alternatives.

In addition, Section 15126.6 of the State CEQA Guidelines requires an EIR to identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination.

Accordingly, several alternatives to the Proposed Project were considered, and five alternatives were selected for further analysis, as detailed below.

Case law suggests that the discussion of alternatives need not be exhaustive and that alternatives be subject to a construction of reasonableness. The impacts of the alternatives may be discussed in less detail than the environmental effects of the Proposed Project.

6.2 Project-Level Impacts

As identified in Chapter 4, *Environmental Impacts*, and Section 5.4, *Significant Environmental Effects that Cannot be Avoided if the Proposed Project is Implemented*, of this EIR, implementation of the Proposed Project would result in the following significant and unavoidable impacts:

- **Air Quality:**
  - Localized construction impacts (localized and temporary) from construction of transportation improvements
    - Exceedance of standards for inhalable particulate matter with diameter of ten microns or less (PM10) and fine particulate matter with diameter of 2.5 microns or less (PM2.5) by the Lincoln Boulevard Bridge Enhancement, and standards for PM10 by the Lincoln Boulevard and Sepulveda Boulevard Bus Rapid Transit (BRTs) and the Interstate-1 (I-10) Ramp Reconfiguration at Bundy Drive

        - Cumulative pollutant emissions impacts (PM10 and PM2.5)

- **Noise and Vibration:**
    - Construction impacts (localized and temporary) from construction of transportation improvements
        - Exceedance of established noise standards
        - Temporary or periodic increases in ambient noise levels
        - Groundborne vibrations
        - Cumulative impacts from exceedance of established noise standards and groundborne vibrations
    - Operational impacts (permanent) from curb-running bus operations
        - Exceedance of established noise standards
        - Permanent increase in ambient noise levels
        - Cumulative impacts from exceedance of noise standards and permanent increase in ambient noise levels
- **Transportation:**
    - Construction impacts (localized and temporary) from construction of transportation improvements
        - Traffic Impacts
        - Cumulative traffic impacts
    - Operational impacts (permanent)
        - Circulation system from vehicle traffic (based on current thresholds)
        - Neighborhood traffic intrusion
        - CMP and state freeway segments
        - Cumulative impacts related to vehicular traffic, neighborhood traffic intrusion, and Congestion Management Program (CMP) freeway segments

6.3 Project Objectives

The core or fundamental objectives of the transportation improvements that would be funded by the proposed amendments to the Specific Plans are to improve transportation options for multimodal travel on the Westside, reduce vehicle miles traveled, and reduce greenhouse gas emissions. These objectives, as well as additional primary and secondary objectives of the transportation improvements and overall Specific Plan amendments, are articulated below.

Primary Objectives of the Transportation Improvements:

- Provide transportation options and accommodations for multiple modes of travel (i.e., transit, bicycle, pedestrian, vehicle), within existing available right-of-way (right-of-way), as part of a transportation system that is consistent with the City of Los Angeles' General Plan Framework Element and General Plan Mobility Element; Community Plans for the Westwood, Brentwood-Pacific Palisades, West Los Angeles, Palms-Mar Vista-Del Rey, Venice, and Westchester-Playa Del Rey communities; and the Los Angeles International Airport (LAX) Specific Plan.

- Produce fewer auto trips per capita and decrease vehicle miles traveled (VMT) per capita by increasing multimodal transportation options and promoting best practices in transportation demand management.

- Reduce greenhouse gas emissions, as mandated by Assembly Bill (AB) 32 and Senate Bill (SB) 375, by reducing automobile dependence and offering multiple modes of transportation.

- Enhance mobility along key Westside transportation corridors within the Specific Plan areas, particularly by planning for dedicated transit lines that serve north-south corridors and provide connections to planned east-west transit lines.

- Enhance the transportation system by planning for better regional transit connectivity and "first mile-last mile" solutions (such as better pedestrian conditions, bike share/improved bicycle facilities, and circulator bus service).

- Encourage walking and bicycling as a means to safely and conveniently access transit and circulate within and between neighborhoods.

- Develop a multimodal transportation plan for the Westside that reflects the collective input of Westside community members, as gathered through a formal public outreach process.

- Develop transportation improvements that reflect consultation with multiple neighboring jurisdictions, transit service providers, and transportation planning agencies on the Westside.

- Develop a transportation system on the Westside that is efficient, sustainable, feasible, and fiscally responsible.

Secondary Objectives of the Transportation Improvements:

- Enhance the streetscape environment on portions of major arterials by improving neighborhood aesthetics and identity; implementing sustainable landscaping practices; bolstering local business patronage; and providing a pleasant and safe active transportation experience.

- Identify different types of parking strategies, such as demand-based pricing schemes, capacity management, travel demand management programs, and urban design guidelines, to manage parking supply.

The objectives of the proposed amendments to the Specific Plans include the following:

Primary Objectives of the Specific Plan Amendments:

- Develop amendments to the Coastal Transportation Corridor Specific Plan (CTCSP) and West Los Angeles Transportation Improvement and Mitigation Specific Plan (WLA TIMP)that are aligned with city and state policies concerning transportation, including the City of Los Angeles' General Plan Framework Element, General Plan Mobility Element, Los Angeles Department of Transportation (LADOT) Traffic Study Policies and Procedures, and State legislation (including AB 3005 and SB 743) that reprioritize transportation improvements to focus on access to transit and active transportation as strategies to reduce dependence on vehicular travel, and reduce VMT and associated greenhouse gas emissions.

- Develop amendments to the CTCSP and WLA TIMP that are aligned with City policies for the study area, as articulated in the Community Plans for the Westwood, Brentwood-Pacific Palisades, West Los Angeles, Palms-Mar Vista-Del Rey, Venice, and Westchester-Playa Del Rey communities, and the LAX Specific Plan.

- Ensure the costs for transportation improvements within the study area are fairly distributed among all future land uses that will contribute to transportation impacts.

- Update Transportation Impact Assessment (TIA) fees to provide a mechanism to fund specific transportation improvements that aims to decrease the cumulative impacts of new development and increase person throughput by increasing mobility options within the Westside.

- Update the TIA fee methodology to better align with a multimodal approach to planning for future transportation improvements.

- Update the TIA fee methodology to reflect an improved approach for measuring and addressing transportation impacts.

Secondary Objectives of the Specific Plan Amendments:

- Establish TIA fees that do not hinder the development of housing for diverse income levels in the Westside, including affordable housing for moderate, low, and very low income levels.

- Streamline the Specific Plan implementation process by aligning the CTCSP and WLA TIMP Specific Plan procedures with established City procedures.

- Develop consistent policy language between the CTCSP and WLA TIMP in order to make them easier to implement and administer.

6.4 Selection of Alternatives for Analysis

According to the State CEQA Guidelines, the discussion of alternatives should focus on alternatives to a project or its location that can feasibly avoid or lessen the significant effects of the project. The State CEQA Guidelines further indicate that the range of alternatives included in this discussion should be sufficient to allow decision makers a reasoned choice. The alternatives discussion should provide decision makers with an understanding of the merits and disadvantages of these alternatives.

Alternatives to the Proposed Project were identified on the basis of their ability to feasibly attain most of the basic objectives of the project while lessening or avoiding the project's significant environmental effects. Alternatives were identified based on 1) feasibility, 2) the potential to avoid or lessen significant project-related impacts, 3) their ability to meet project objectives, and 4) their ability to reasonably inform the decision-maker and the public regarding a range of options. The alternative selection did not consider an alternative that would reduce impacts through the addition of new right-of-way to the City's circulation plan as it was determined to be inconsistent with the Mobility Plan 2035 goals and policies regarding the use of existing right-of-way and the reduction of VMT. The alternatives selection also considered community input and a desire to evaluate options with potentially lesser costs.

There are no feasible and reasonable alternatives that would avoid or substantially lessen the significant impacts associated with the Proposed Project and would satisfy a majority of project goals and objectives. Even without the project, permanent significant operational impacts related to traffic are expected due to increased development and background growth. These include impacts to the vehicular circulation system, impacts resulting from neighborhood intrusion, and impacts to CMP and state freeway facilities. The alternatives selected and evaluated in this section satisfy some project objectives, even if they impede others, and are expected to reduce the intensity of at least one significant environmental effect caused by the Proposed Project.

Given that the Proposed Project is comprised of numerous transportation improvements throughout the Westside, it is not reasonable to separately evaluate alternatives to each proposed transportation improvement or corridor, nor is that required by CEQA. Rather the Proposed Project is evaluated as a package of transportation improvements. Aside from the No Project Alternative, the alternatives evaluated in this EIR are variations on the Proposed Project. Only variations that could meet core or fundamental project objectives, which include improving transportation options for multimodal travel (consistent with the Complete Streets Act, SB 743, the 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy [RTP/SCS], General Plan Framework Element, and the MP 2035), reducing vehicle miles traveled (consistent with the SB 743, 2012-2035 RTP/SCS General Plan Framework Element, and MP 2035), and reducing greenhouse gas emissions (consistent with a number of state regulatory initiatives, including AB 32, SB 375, and SB 743, as well as regional and local plans, such as the 2012-2035 RTP/SCS, Green LA Plan, General Plan Framework Element, and MP 2035), were selected. With respect to the City's overall objectives as reflected in the General Plan Framework Element, the alternatives selection strives to connect transportation and land use planning serving a balanced distribution of land uses and promoting an improved quality of life by reducing vehicle trips and associated air emissions. These alternatives were developed to be more consistent with the City's latest transportation improvement implementation strategies. Two alternatives (2A and 2B) offer variations to the list of proposed transportation improvements – variations that do not include key dedicated transit lines. Two other alternatives (3A and 3B) offer variations on how the Proposed Project's transportation improvements would be achieved within the limited existing right-of-way available. Some of the Proposed Project's transportation improvements (such as dedicated transit or bike lanes) may require reallocation of existing roadway. Alternatives 3A and 3B provide the information necessary to compare the impacts of removing parking lanes versus vehicle travel lanes. The evaluation of variations on the Proposed Project provides the decision maker with information necessary to understand the merits and disadvantages of key components of the Proposed Project.

The following alternatives were evaluated in this EIR.

- **Alternative 1 - No Project:** Section 15126.6(e) of the State CEQA Guidelines requires evaluation of the No Project Alternative. As described in the State CEQA Guidelines, the purpose of describing and analyzing the No Project Alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. Therefore, as required by the State CEQA Guidelines, the No Project Alternative consists of conditions that might be expected to occur in the foreseeable future if the Proposed Project was not approved.

  The No Project Alternative assumes continued implementation of the current CTC and WLA TIMP Specific Plans, with continuation of current fees (with annual adjustments) and implementation of existing project lists. Under the No Project Alternative, select roadway widenings and intersection improvements would continue to remain on the project lists, and more projects aimed at increasing vehicle capacity in the Westside would be considered for implementation. While widening opportunities are limited, some vehicle capacity projects were assumed to be implemented in the Westside under the No Project Alternative. These improvements would require acquisition of right-of-way, including the demolition of buildings on parcels adjacent to existing roadways. Acquisition could occur either through development dedications (which would occur gradually over time as parcels are redeveloped) or if the City of Los Angles were to acquire portions or whole parcels. For the most part, acquired parcels would consist of commercial and retail uses, although some residential uses may also require acquisition. Demolition of commercial and retail uses would be disruptive and would physically alter the makeup of existing communities. In addition, elimination of neighborhood commercial uses could result in residents traveling greater distances to access necessary amenities. Acquisition of private property to enable the roadway widenings would also be very costly. Consequently, the project lists under the No Project Alternative reflect transportation projects that would be difficult to implement and the associated improvements to vehicle operations/level of service (LOS) may not be realized. However, for the purposes of comparing the environmental impacts of the No Project Alternative to the Proposed Project, limited roadway widening projects resulting in increased vehicular capacity are evaluated in this section.

- **Alternative 2A – No Sepulveda Boulevard BRT:** Under Alternative 2A, the proposed BRT on Sepulveda Boulevard would be eliminated from the CTCSP and WLA TIMP proposed transportation improvement lists. The current lane configuration on Sepulveda Boulevard would be maintained (i.e., no loss of vehicular capacity). All elements of the Proposed Project other than the Sepulveda Boulevard BRT are included in Alternative 2A. This alternative is expected to result in a reduction to the following significant impacts from the Proposed Project: (1) operational traffic along Sepulveda Boulevard in the project area by maintaining existing vehicular capacity, (2) neighborhood traffic intrusion, and (3) air quality, noise and vibration, and traffic impacts related to construction in the area around Sepulveda Boulevard.

- **Alternative 2B – No Lincoln Boulevard BRT:** Under Alternative 2B, the proposed BRT on Lincoln Boulevard would be eliminated from the CTCSP proposed transportation improvement list. The current lane configuration on the majority of Lincoln Boulevard would be maintained (i.e., no loss of vehicular capacity). Under this alternative, the Lincoln Boulevard Bridge would still be widened to accommodate additional vehicle lanes, bicycle lanes, and pedestrian access. All elements of the Proposed Project other than the Lincoln Boulevard BRT are included in Alternative 2B. This alternative is expected to result in a reduction to the following significant impacts from the Proposed Project: (1) operational traffic along Lincoln Boulevard in the project area by maintaining existing vehicular capacity, (2) neighborhood traffic intrusion, and (3) air quality, noise and vibration, and traffic impacts related to construction in the area around Lincoln Boulevard.

- **Alternative 3A – Reduced Parking:** The Proposed Project assumes that when additional right-of-way for projects (such as BRT and bicycle facilities) is needed, it would be provided through a combination of vehicular capacity reductions (lane conversions) along with on-street parking removal. Under the Reduced Parking Alternative, when additional right-of-way is required, it would be provided solely by removing street parking, with no conversion of vehicle travel lanes. All of the transportation improvements associated with the Proposed Project are included in this alternative; this alternative offers a distinction as to how right-of-way would be utilized in order to implement the proposed transportation improvements. This alternative is expected to result in a reduction to the following significant impacts from the Proposed Project: (1) operational traffic along certain corridors in the Specific Plan areas by maintaining existing vehicular capacity, and (2) neighborhood traffic intrusion.
- **Alternative 3B – Reduced Vehicle Capacity:** The Proposed Project assumes that when additional right-of-way for projects (such as BRT and bicycle facilities) is needed, it would be provided through a combination of vehicular capacity reductions (lane conversions) along with on-street parking removal. Under this alternative, when additional right-of-way is required, it would be provided solely by converting vehicle travel lanes into transit/bicycle facilities, with no removal of on-street parking. All of the transportation improvements associated with the Proposed Project are included in this alternative; this alternative offers a distinction as to how right-of-way would be utilized for the proposed transportation improvements. This alternative would not reduce or eliminate any significant impacts associated with the Proposed Project. This alternative was selected in order to provide decision makers and the public with a choice in transportation priorities.

6.5 Alternatives Considered but Rejected as Infeasible

In accordance with the State CEQA Guidelines, an EIR should identify any alternatives that were considered by the lead agency but were rejected as infeasible and briefly explain the reasons underlying the lead agency's determination. Section 15126.6(c) of the State CEQA Guidelines states the following:

> The EIR should identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination…Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts.

Seven alternatives were considered but rejected as infeasible, as follows:

- **Residential Fee Exemption Alternative –** This alternative would continue the TIA fee exemption on new residential development, resulting in fewer fees collected. There would be no change to the proposed projects lists under the Residential Fee Exemption Alternative. Since AB 1600 requires all users to pay their fair share, the lost revenues under this alternative could not be made up by increasing the fees on other uses; therefore, backfill funding from other sources would be required as the TIA fees would fund a lower percentage of the project costs. As such, this alternative would not meet one of the primary objectives of the Specific Plan Amendments: "Ensure the costs for transportation improvements within the study area are fairly distributed among all future land uses that will contribute to transportation impacts." No other sources of funding have been identified that would make up for the loss of funding under this alternative. Moreover, the Residential Fee Exemption Alternative would not reduce or avoid any of the significant environmental effects associated with the Proposed Project, as the same transportation improvements would be implemented under this alternative. Because the Residential Fee Exemption Alternative would not meet one of the primary project objectives (fair-share) and would not avoid or substantially lessen any of the significant effects of the Proposed Project, the alternative will not be carried forward for analysis in the EIR.

- **Reduced Fee Alternative –** The Reduced Fee Alternative would reduce the proposed TIA fees associated with the Proposed Project. There would be no change to the proposed transportation improvement lists under the Reduced Fee Alternative. The Reduced Fee Alternative could be implemented in a few different ways: modify exemption for free-standing/locally serving retail <20,000 square feet, reduce the residential fee, include a more aggressive affordable housing credit, or cap fees at a specified amount. If selected fees were reduced, or capped, fewer fees would be collected. Since Assembly Bill 1600 requires all users to pay their fair share, the lost revenues under this alternative could not be made up by increasing the fees on other uses; therefore, backfill funding from other sources would be required as the TIA fees would fund a lower percentage of the project costs. As such, this alternative would not meet one of the primary objectives of the Specific Plan Amendments: "Ensure the costs for transportation improvements within the study area are fairly distributed among all future land uses that will contribute to transportation impacts." No other sources of funding have been identified that would make up for the loss of funding under this alternative. Moreover the environmental impacts of the Reduced Fee Alternative would not reduce or avoid any of the significant environmental effects associated with the Proposed Project. Because the Reduced Fee Alternative would not meet one of the primary project objectives (fair-share) and would not avoid or substantially lessen any of the significant effects of the Proposed Project, the alternative will not be carried forward for analysis in the EIR.

- **Maintain Existing Lincoln Bridge Alternative –** Under this alternative, the Lincoln Bridge would not be widened (i.e., Lincoln Bridge Widening would be eliminated from the CTCSP proposed transportation improvement list). Lincoln Boulevard is a major transportation corridor in the Westside, spanning from LAX to Santa Monica, and serves daily traffic volumes ranging from 44,000 to 62,000 vehicles. The Lincoln Bridge is a bottleneck in traffic flow, primarily in the southbound direction where Lincoln Boulevard reduces from three to two travel lanes over the bridge. Traffic congestion would be worse under the existing bridge configuration as compared to the Proposed Project. Currently, the existing bridge is not wide enough to accommodate multimodal transportation options, including transit, bicycle facilities, or pedestrian access. Elimination of the bridge widening from the proposed transportation improvement list would foreclose the option of accommodating a transit only lane, bicycle facilities and sidewalks on the bridge. As a result, the VMT benefits, and the related greenhouse gas (GHG) emission reduction benefits, associated with the provision of multimodal transportation options that would be accommodated by the bridge widening would not be realized. Although the bridge widening would add a third southbound travel lane, this lane addition would not be expected to result in induced traffic demand that would offset the VMT and GHG emission reduction benefits associated with the provision of multimodal options. This is because the bridge widening would only relieve an existing bottleneck in a very specific area. Currently, Lincoln Boulevard provides three travel lanes in both directions north and south of the bridge; it is only on the bridge itself, and on the bridge approach and departure, that the southbound lanes are reduced to two. Elimination of the bottleneck is not expected to result in a substantial increase in demand along the corridor overall. Therefore, it anticipated that maintaining the existing Lincoln Boulevard Bridge (i.e., eliminating the proposed widening of the bridge) would result in higher VMT and greater greenhouse gas emissions in the future than would occur under the Proposed Project. This alternative would not meet the key primary objective of the project transportation improvements of providing multimodal transportation options along this major corridor. In addition, this alternative would not meet other primary objectives of the project transportation improvements, including reduction of greenhouse gas emissions through provision of multiple modes of transportation; enhancing mobility along key Westside transportation corridors, particularly by planning for dedicated transit lines that serve north-south corridors; and encouraging walking and bicycling. Because this alternative would not address most of the primary objectives of the Proposed Project along this major transportation corridor, the alternative will not be carried forward for analysis in the EIR.

- **Light Rail Transit (LRT) on Sepulveda Boulevard and Lincoln Boulevard Alternative –** Under this alternative, LRT instead of BRT would be provided on Sepulveda and on Lincoln boulevards. This alternative has the potential to result in lower VMT in the region, provided demand is sufficient that ridership would be greater than BRT in the planning horizon. If demand were sufficient to provide greater ridership than LRT, traffic congestion would be decreased along these corridors within the planning horizon, which would be accompanied by a decrease in air quality and greenhouse gas emissions. However, construction-related impacts would be greater than the Proposed Project. Costs under this alternative would be substantially higher than the Proposed Project, resulting in either higher fees or fewer of the transportation improvement projects being implemented within the planning horizon. If fewer projects were implemented, other project objectives may not be realized, with the potential for environmental impacts to occur, such as increased air quality and greenhouse gas emissions from greater vehicular traffic on other corridors in the absence of proposed transportation improvements. At this time, the costs associated with LRT on Sepulveda Boulevard and Lincoln Boulevard would be so high as to hinder the TIA fee program's ability to partially fund and build out a comprehensive transportation multimodal network on the Westside. Therefore the LRT on Sepulveda Boulevard and Lincoln Boulevard Alternative will not be carried forward for analysis in the EIR.

- **Westwood Boulevard Transit or Bike Lanes with Travel Lane Removal Alternative –** This alternative would include transit and/or bike lanes on Westwood Boulevard to provide for multimodal travel options by removing a travel lane(s). The elimination of vehicular travel lanes would result in greater traffic congestion along Westwood Boulevard compared to the Proposed Project. This alternative would not eliminate or reduce any significant impacts associated with the Proposed Project. For these reasons, the alternative will not be carried forward for analysis in the EIR.

- **Reduced Bicycle Enhancement Alternative** – This alternative would exclude bicycle enhancements that would require the elimination of vehicle lanes. This alternative would reduce congestion impacts by retaining vehicle lanes. However, because this alternative would not achieve the primary project objective of increasing modal opportunities, the alternative will not be carried forward for analysis in the EIR.

- **Reduced Bus Improvement Alternative** – The curb-running bus improvements associated with the Proposed Project could potentially result in significant operational noise impacts from increased bus operations in proximity to sensitive receptors. This alternative would eliminate curb-running bus improvements that would result in significant operational noise impacts. This could be accomplished by either eliminating curb-running bus projects from selected corridors where impacts to sensitive receptors could occur or by limiting the frequency of new bus activity along these corridors to a level that would ensure that increases in operational noise would not exceed 3 A-weighted decibels (dBA) at sensitive receptors, which is the level at which operational noise impacts are considered to be significant. The Reduced Bus Improvement Alternative is the only alternative that would avoid this potentially significant operational noise impact. However, this alternative would not achieve the fundamental and primary project objectives of increasing modal opportunities, reducing vehicle trips and VMT per Capita, and reducing GHG. Improvements to bus service—including curb-running bus service, BRT, expanded service routes and frequency, and other improvements—are a key to the mobility improvements associated with the Proposed Project, and represent the greatest factor in achieving reduced VMT and reduced VMT per Capita in the future compared to Future without Project conditions. Moreover, at the current level of planning, a significant operational noise impact associated with curb-running bus activity cannot be affirmatively determined. The conclusion in Section 4.5, *Noise and Vibration*, states that it is not likely that improvements to bus service, including the provision of curb-running BRT, would result in significant impacts. However, in the absence of detailed information regarding expanded bus routes and operational frequency, the EIR makes a conservative assumption that bus activity *may* result in significant impacts at sensitive receptors. Therefore, it is possible that a significant impact would not occur with implementation of the Proposed Project. If this were the case, reducing bus improvements would not avoid or reduce the severity of a significant impact associated with the Proposed Project. For these reasons, this alternative will not be carried forward for analysis in the EIR.

6.6 Analysis Methodology

Each of the alternatives selected for analysis is evaluated in sufficient detail to determine whether its overall environmental impacts would be lesser, similar, or greater in comparison to the impacts of the Proposed Project. The impact analysis sections for the Proposed Project (within Chapter 4, *Environmental Impacts*, of this EIR) identify mitigation measures that would reduce the environmental impacts of the Proposed Project. The following analyses assume that equally effective mitigation measures would apply to the alternatives.

As discussed in the NOP prepared for the Proposed Project (provided in Appendix C, *Notice of Preparation/Scoping,* of this Draft EIR), the City determined, pursuant to State CEQA Guidelines Section 15060(d), that impacts of the Proposed Project would be less than significant for the following resource areas: aesthetics, agricultural and forestry resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, mineral resources, population and housing, public services, recreation, and utilities and service systems. As the build alternatives evaluated in this section are variations on the Proposed Project, they would not reasonably be expected to have significant impacts on any of these environmental areas; therefore, discussion of these environmental areas is not included in the analysis of the build alternatives. However, it is possible that implementation of the No Project Alternative could result in impacts to these environmental areas. These potential impacts are addressed in Section 6.7.1.7 below.

The alternatives analysis includes the following:

- An evaluation of the environmental impacts anticipated to occur for each environmental issue analyzed in Chapter 4, *Environmental Impacts*, of this EIR and a determination as to the significance of those impacts. This discussion also includes an analysis of whether the alternative would avoid or substantially lessen any of the significant environmental impacts associated with the Proposed Project. Where the impacts of the alternative and the Proposed Project were roughly equivalent, the comparative impact is said to be similar.
- Identification of the Environmentally Superior Alternative.

6.7 Comparative Impact Analysis

This section describes the potential environmental impacts associated with each alternative, as compared to the impacts of the Proposed Project. **Table 6-1** summarizes the comparative effects, with the supporting analysis provided in the subsections that follow. Conclusions indicated in Table 6-1 regarding the level of significance of impacts assume mitigation (i.e., level of significance after mitigation).

The core or fundamental objectives of the Proposed Project are to improve transportation options for multimodal travel on the Westside, reduce vehicle miles traveled, and reduce greenhouse gas emissions. Other than the No Project Alternative, the alternatives evaluated offer variations on Proposed Project that still meet these core objectives. Alternatives 2A and 2B offer variations to the proposed transportation improvement list that do not include key dedicated transit lines. Alternatives 3A and 3B offer variations on how the Proposed Project's transportation improvements would be achieved within the limited existing right-of-way available. Some of the Proposed Project's transportation improvements (such as dedicated transit or bike lanes) may require reallocation of existing roadway space. Alternatives 3A and 3B provide a comparative analysis of removing parking lanes versus vehicle travel lanes.

6.7.1 Alternative 1 - No Project

The No Project Alternative assumes continued implementation of current CTC and WLA TIMP Specific Plans, with continuation of current fees (with annual adjustments) and implementation of existing project lists. Under the No Project Alternative, select roadway widenings and intersection improvements would continue to remain on the project lists, and more projects aimed at increasing vehicle capacity in the Westside would be considered for implementation. While widening opportunities are limited, some vehicle capacity projects were assumed to be implemented in the Westside under the No Project Alternative. As noted in Section 6.4, implementation of these projects would require acquisition of private property and demolition of community-serving uses that would be disruptive to existing communities and very costly. Consequently, the project lists under the No Project Alternative reflect transportation projects that would be difficult to implement and the associated improvements to vehicle operations/LOS may not be realized. However, for the purposes of comparing the environmental impacts of the No Project Alternative to the Proposed Project, limited roadway widening projects resulting in increased vehicular capacity are evaluated in this section.

As compared to the Proposed Project, fewer multimodal transportation improvements would be added to the Westside. Without the Proposed Project's transportation improvements, fewer vehicle lanes and parking lanes would be removed. The No Project Alternative would provide greater vehicle roadway capacity but less transit capacity, less multimodal connectivity, and fewer active transportation options throughout the study area. The No Project Alternative would result in major construction on a substantially greater number of roadways in the Specific Plan areas. In addition, the level of construction activity along the roadways to be widened would be greater than would occur under the Proposed Project as projects under the No Project Alternative would require additional right-of-way, and would involve demolition of adjacent land uses. The following analysis discusses the potential impacts associated with Alternative 1, the No Project Alternative, compared to those of the Proposed Project.

6.7.1.1 Air Quality

Conflict with Air Quality Plans. As with the Proposed Project, the No Project Alternative would not result in alterations in land use patterns in the project area and would not affect future regional development anticipated in the 2012-2035 RTP/SCS or incorporated as assumptions in the Air Quality Management Plan (AQMP). If all of the improvements on the current project lists were completed, the No Project Alternative would provide increased vehicular roadway capacity in the Westside but the implementation of multimodal transportation improvements would be substantially lower than under the Proposed Project.

The purpose of the 2012 AQMP is to provide updated air pollution control strategies to bring the South Coast Air Basin (SoCAB) into compliance with federal ambient air quality standards. The AQMP relies upon a number of strategies to meet the federal ambient air quality standards, including promotion of a sustainable transportation system that emphasizes transit and non-motorized transportation and that improves multimodal mobility and minimizes VMT. These goals are also reflected in the 2012-2035 RTP/SCS, the City of Los Angeles Air Quality Element, and the MP 2035. The Proposed Project is anticipated to reduce daily project area VMT by 3.4 percent as compared to future conditions without the Proposed Project. Per capita VMT would decrease by 4.4 percent compared to existing conditions and by 3.4 percent compared to Future without Project conditions. With its emphasis on improvements to the vehicular network, it is expected that total VMT and VMT per Capita would be greater under the No Project Alternative than under the Proposed Project, with a comparative increase in air emissions. In addition, the No Project Alternative would not provide for multimodal transportation options throughout the Westside. By adding more vehicular capacity, and not promoting a reduction in per capita VMT, the No Project Alternative would increase air emissions in comparison to the Proposed Project. As a result, the No Project Alternative would not achieve the same level of consistency with the AQMP, the 2012-2035 RTP/SCS, the City of Los Angeles Air Quality Element, or the MP 2035 as would the Proposed Project.

Table 6-1 Comparison of Alternatives to the Proposed Project

	Project		Alternative 1 No Project		Alternative 2A No Sepulveda Blvd BRT		Alternative 2B No Lincoln Blvd BRT		Alternative 3A Reduced Parking		Alternative 3B Reduced Vehicle Capacity	
	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation
Air Quality												
Conflict with Air Quality Plans	LS	LS	LS – Similar	LS – Greater	LS – Similar	LS – Greater	LS – Similar	LS – Greater	LS – Similar	LS – Similar	LS – Similar	LS – Similar
Violate Air Quality Standard	LS	LS	LS – Similar	LS – Greater	LS – Fewer	LS – Greater	LS – Fewer	LS – Greater	LS – Similar	LS – Similar	LS – Similar	LS – Similar
Cumulative Impacts	**SU**	LS	**SU – Greater**	LS – Greater	**SU – Fewer**	LS – Greater	**SU – Fewer**	LS – Greater	**SU – Similar**	LS – Similar	**SU – Similar**	LS – Similar
Substantial Pollutant Concentrations	**SU**	LS	**SU – Greater**	LS –Greater	**SU – Fewer**	LS – Greater	**SU – Fewer**	LS – Greater	**SU – Similar**	LS – Similar	**SU – Similar**	LS – Similar
Odors	LS	LS	LS – Similar	LS – Similar	LS – Similar	LS – Similar	LS – Similar	LS – Similar	LS – Similar	LS – Similar	LS – Similar	LS – Similar
Biological Resources												
Effects on Sensitive Species/Habitats/Wetlands	M	LS	M – Greater (Birds); **NI** (BWER)	LS – Similar	M – Similar	LS – Similar	M – Similar	LS – Similar	M – Similar	LS – Similar	M – Similar	LS – Similar
Effects on Migratory Species/Wildlife Corridors	M	LS	M – Greater	LS – Similar	M – Similar	LS – Similar	M – Similar	LS – Similar	M – Similar	LS – Similar	M – Similar	LS – Similar
Greenhouse Gas Emissions												
GHG Emissions	LS	LS	LS – Similar	LS – Greater	LS – Fewer	LS – Greater	LS – Fewer	LS – Greater	LS – Similar	LS – Similar	LS – Similar	LS – Similar
Impede Attainment of SCAG Reduction Targets	LS	LS	LS – Similar	LS – Greater	LS – Similar	LS – Greater	LS – Similar	LS – Greater	LS – Similar	LS – Similar	LS – Similar	LS – Similar
Conflict with GHG Reduction Policies	LS	LS	LS – Similar	LS – Greater	LS – Similar	LS – Greater	LS – Similar	LS – Greater	LS – Similar	LS – Similar	LS – Similar	LS – Similar
Land Use and Planning												
Physically Divide a Community	LS	LS	LS – Similar	LS – Greater	LS – Fewer	LS – Fewer	LS – Fewer	LS – Fewer	LS – Similar	LS – Greater	LS – Similar	LS - Fewer
Conflict with Applicable Plans	LS	LS	LS – Greater	LS – Greater	LS – Similar	LS – Greater	LS – Similar	LS – Greater	LS – Similar	LS – Similar	LS – Similar	LS – Similar
Noise and Vibration												
Exceed General Plan/Noise Ordinance Standards	**SU**	**SU**	**SU – Greater**	**LS**	**SU – Fewer**	**SU – Similar**	**SU – Fewer**	**SU – Similar**	**SU – Similar**	**SU – Similar**	**SU – Similar**	**SU – Similar**
Excessive Groundborne Vibration/Noise	**SU**	LS	**SU – Greater**	LS – Similar	**SU – Fewer**	LS – Similar	**SU – Fewer**	LS – Similar	**SU – Similar**	LS – Similar	**SU – Similar**	LS – Similar
Substantial Permanent Increase in Ambient Noise	NA	**SU**	NA	**LS**	NA	**SU – Similar**	NA	**SU – Similar**	NA	**SU – Similar**	NA	**SU – Similar**
Substantial Temporary Increase in Ambient Noise	**SU**	NA	**SU – Greater**	NA	**SU – Fewer**	NA	**SU – Fewer**	NA	**SU – Similar**	NA	**SU – Similar**	NA
Exposure to Aircraft-Related Noise	LS	LS	LS – Similar	LS – Similar	LS – Similar	LS – Similar	LS – Similar	LS – Similar	LS – Similar	LS – Similar	LS – Similar	LS – Similar
Transportation												
Conflict with Transportation Plans	--	LS	--	LS – Greater	--	LS – Greater	--	LS – Greater	--	LS – Similar	--	LS – Similar
Circulation System Performance Standards	--	**SU**	--	**SU – Similar or Fewer**	--	**SU – Similar or Fewer**	--	**SU – Similar or Fewer**	--	**SU – Fewer**	--	**SU – Greater**
Neighborhood Traffic Intrusion	--	**SU**	--	**SU – Similar or Fewer**	--	**SU – Similar or Fewer**	--	**SU – Similar or Fewer**	--	**SU – Fewer**	--	**SU – Greater**
Conflict with CMP	--	**SU**	--	**SU** – Similar	--	**SU – Similar**	--	**SU – Similar**	--	**SU – Similar**	--	**SU – Similar**
Fire Protection/Emergency Access	--	LS	--	LS – Similar	--	LS – Similar	--	LS – Similar	--	LS – Similar	--	LS – Similar
Public Transit, Bicycle, Pedestrian Facilities	--	LS	--	LS – Greater	--	LS – Greater	--	LS – Greater	--	LS – Similar	--	LS - Similar
Transportation Safety	--	LS	--	LS – Greater	--	LS – Similar	--	LS – Similar	--	LS – Similar	--	LS – Similar
Construction on Major Corridors	**SU**	NA	**SU – Greater**	NA	**SU – Fewer**	NA	**SU – Fewer**	NA	**SU – Similar**	NA	**SU** – Similar	NA
Parking	--	LS	--	LS – Fewer	--	LS – Fewer	--	LS – Fewer	--	LS – Greater	--	LS – Fewer
Consideration of Potential New Metrics	--	LS	--	PS	--	LS – Similar or Greater	--	LS – Similar or Greater	--	LS – Similar	--	LS – Similar

Source: CDM Smith, Fehr & Peers, 2015.

Key:

LS = Less Than Significant NA = Not Applicable PS = Potentially Significant (only used in association with possible new transportation metrics)

M = Less Than Significant with Mitigation NI = No Impact **SU** = Significant and Unavoidable

Notes:

A designation of "Greater" indicates that the impact would be greater as compared to the Proposed Project. In cases where the impact is a measure of consistency, an alternative that would be less consistent than the Proposed Project would have a greater impact.

For Transportation, construction-related impacts are identified as a separate topic (Construction on Major Corridors) as opposed to in each impact discussion.

Bold highlighted text denotes a change in the level of significance as compared to the Proposed Project.

Red text denotes an increase in the severity of a significant impact as compared to the Proposed Project, although the impact would remain significant and unavoidable.

Green text denotes a decrease in the severity of a significant impact as compared to the Proposed Project, although the impact would remain significant and unavoidable.

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Violate Air Quality Standards. Similar to the Proposed Project, the No Project Alternative would generate construction emissions from construction of roadway improvements. As with the Proposed Project, construction emissions under the No Project Alternative would not exceed South Coast Air Quality Management District (SCAQMD) thresholds, and construction impacts would not conflict with or obstruct implementation of the AQMP. Therefore, as with the Proposed Project, the No Project Alternative would not result in a significant impact related to air quality standards.

As explained in Section 6.7.1.6, with background growth and induced demand, the No Project Alternative would result in higher total VMT compared to existing conditions. Although traffic volumes would be higher, pollutant emissions from mobile sources are expected to be much lower due to technological advances in vehicle emission control, turnover in the vehicle fleet, and new emission standards. As a result, similar to the Proposed Project, emissions under the No Project Alternative would not exceed the SCAQMD significance thresholds. Although emissions would be less than significant under the No Project Alternative, with its emphasis on improvements to the vehicular network, VMT in the future under this alternative would be greater than under the Proposed Project and emissions would be higher.

Cumulatively Considerable Increase in Criteria Pollutants. Similar to the Proposed Project, the No Project Alternative would generate regional emissions from construction of roadway improvements. As with the Proposed Project, construction emissions of the nonattainment pollutants (PM10, PM2.5, and ozone (O_3) precursors [nitrogen oxides (NOx) and volatile organic compounds (VOC)]) under the No Project Alternative would be less than the SCAQMD significance thresholds. Therefore, regional construction emissions related to the No Project Alternative would not be cumulatively considerable, and impacts would be less than significant. However, it is anticipated that, similar to the Proposed Project, localized construction emissions of particulate matter associated with some of the transportation improvements would exceed SCAQMD thresholds. Therefore, localized construction emissions related to the No Project Alternative would be cumulatively considerable. This would be a significant impact.

With the technology advances noted above, as with the Proposed Project, operation of the proposed transportation improvements under the No Project Alternative would result in a decrease in emissions of the nonattainment pollutants PM10, PM2.5, and O_3 precursors (NOx and VOC) compared to existing conditions. Therefore, as with the Proposed Project, operational emissions associated with the No Project Alternative would not be cumulatively considerable and this impact would be less than significant. However, with its emphasis on improvements to the vehicular network, the No Project Alternative would generate more operational emissions and contribute less towards eliminating the region's cumulative impacts than the Proposed Project.

Expose Sensitive Receptors to Substantial Pollutant Concentrations. Under the No Project Alternative, there would be limited street and intersection approach widening projects associated with implementing the current CTCSP and WLA TIMP project lists. During construction, it is likely that PM10 and PM2.5 emissions associated with fugitive dust and engine exhaust could exceed the SCAQMD's Localized Significance Thresholds (LST), due to the potential proximity of these improvements to sensitive receptors. This would be a significant impact. Given the greater number of roadway improvements as compared to the Proposed Project, it is expected that LST impacts would occur in a larger number of locations than the Proposed Project.

Similar to the Proposed Project, it is expected that toxic air contaminant (TAC) emissions in the form of diesel particulate matter (DPM) would be emitted from heavy-duty diesel powered equipment. DPM emissions would be expected to be typical for urban environments in the study area. Nevertheless, based on Office of Environmental Health Hazard Assessment's (OEHHA)recently adopted methodology for estimating risk, the road and intersection widening projects could generate emissions that would exceed the SCAQMD thresholds for TACs. This would be a significant and likely unavoidable impact. This impact would be similar to the impact associated with the Proposed Project.

Relative to operations, as with the Proposed Project, under the No Project Alternative, with the vehicle emission control technologies noted above, emissions of mobile source air toxics (MSAT) would be lower than existing conditions and impacts would be less than significant. Although pollutant concentrations would be less than significant under the No Project Alternative, with its emphasis on improvements to the vehicular network, VMT in the future under this alternative would be greater than under the Proposed Project and concentrations would be higher.

Objectionable Odors Affecting a Substantial Number of People. Similar to the Proposed Project, the No Project Alternative would not create objectionable odors affecting a substantial number of people, and the impact would be less than significant.

6.7.1.2 Biological Resources

Adverse Effects on Sensitive Species, Sensitive Habitats, or Wetlands. The No Project Alternative would avoid significant but mitigable impacts to special status species and habitat in the Ballona Wetlands Ecological Reserve (BWER) that would occur from construction of the Lincoln Boulevard Bridge Enhancement included in the Proposed Project.

Similar to the Proposed Project, some of the No Project Alternative improvements could result in the removal, trimming, or disturbance of street trees and ornamental landscaping that have the potential to support nesting migratory birds that are protected by the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code (CFGC). Construction activities occurring within the nesting season would have the potential to result in the removal or destruction of an active nest or direct mortality or injury of individual birds. Because the No Project Alternative would entail some roadway widening projects, impacts compared to the Proposed Project would likely be greater. As with the Proposed Project, this is a potentially significant impact; with mitigation, this impact would be less than significant.

Adverse Effects on Migratory Species or Wildlife Corridors. Habitat within the project area is generally fragmented and of low value (e.g., ornamental landscaping) and does not provide viable linkages or migration corridors between habitat areas. However, as noted above, street trees within or immediately adjacent to right-of-ways could potentially support migratory birds. As with the Proposed Project, construction activities associated with the No Project Alternative could result in the removal or destruction of an active nest or direct mortality or injury of individual birds. Because the No Project Alternative would entail some roadway widening projects, impacts compared to the Proposed Project would likely be greater. This would be a potentially significant impact; with mitigation, this impact would be less than significant.

6.7.1.3 Greenhouse Gas Emissions

Generation of GHG Emissions. Similar to the Proposed Project, the No Project Alternative would generate construction emissions from construction of roadway improvements. The 2012-2035 RTP/SCS estimated that construction emissions from all development activity in Los Angeles County would be approximately 0.2 percent of countywide GHG emissions in 2035 (Southern California Association of Governments [SCAG], 2012). As with the Proposed Project, construction-related emissions associated with the No Project Alternative would be a small portion of total construction emissions estimated in the 2012-2035 RTP/SCS, which themselves are expected to represent only 0.2 percent of countywide GHG emissions in 2035.

As with the Proposed Project, as explained in Section 6.7.1.6 below, with background growth and induced demand, the No Project Alternative would result in higher total VMT compared to existing conditions. Although traffic volumes would be higher, pollutants emissions from mobile sources are expected to be much lower due to technological advances in vehicle emission control, turnover in the vehicle fleet, and new emission standards. As a result, similar to the Proposed Project, under the No Project Alternative, impacts related to GHG emissions associated with operations, combined with amortized construction-related GHG emissions, would be less than significant. However, with its emphasis on improvements to the vehicular network, VMT in the future under this alternative would be greater than the Proposed Project and GHG emissions would be higher.

Impede Attainment of SCAG's per Capita Emission Reduction Targets. The Proposed Project is anticipated to reduce daily project area VMT by 3.4 percent as compared to future conditions without the Proposed Project and by 4.4 percent compared to existing conditions, with related decreases in GHG emissions. With its emphasis on improvements to the vehicular network, it is expected that total VMT and VMT per Capita would be greater under the No Project Alternative than under the Proposed Project. In addition, the No Project Alternative would not provide for multimodal transportation options throughout the Westside. By adding more vehicular capacity, and not promoting a reduction in per capita VMT, the No Project Alternative would increase GHG emissions in comparison to the Proposed Project. However, due to technological advances in vehicle emissions systems, projected turnover in the vehicle fleet, and future emission standards, GHG emissions associated with the No Project Alternative would be lower than existing conditions. Therefore, the No Project Alternative would not impede attainment of SCAG's per Capita emission reduction targets, although this alternative would not advance the goals of the RTP/SCS on the Westside to the extent associated with the Proposed Project, nor would it implement strategies developed by SCAG aimed at meeting GHG emission reduction targets.

Conflict with GHG Reduction Policies. As noted above, the Proposed Project is anticipated to reduce daily project area VMT by 3.4 percent as compared to future conditions without the Proposed Project and by 4.4 percent compared to existing conditions. With its emphasis on improvements to the vehicular network, it is expected that total VMT and VMT per Capita would be greater under the No Project Alternative than under the Proposed Project. In addition, the No Project Alternative would not provide for multimodal transportation options throughout the Westside. By adding more vehicular capacity, and not promoting a reduction in per capita VMT, the No Project Alternative would increase GHG emissions in comparison to the Proposed Project. As a result, the No Project Alternative would not achieve the same level of consistency with the 2012-2035 RTP/SCS, MP 2035, Plan for a Healthy Los Angeles, or Green LA Plan as would the Proposed Project.

6.7.1.4 Land Use and Planning

Division of a Community. Similar to the Proposed Project, construction of transportation facilities associated with the No Project Alternative would be expected to result in temporary, short-term access disruptions to adjacent land uses. Due to their temporary and generally short-term nature, these impacts would be less than significant.

As with the Proposed Project, new transportation facilities associated with the No Project Alternative would not be incompatible with surrounding land uses and would not create a barrier which could divide or isolate a community. However, unlike the Proposed Project, a limited number of right-of-ways and roadway cross sections would be wider compared to existing conditions under the No Project Alternative. The widening of limited number of right-of-ways under the No Project Alternative could encroach on existing private parcels and require the demolition of buildings on parcels adjacent to existing roadways. For the most part, acquired parcels would consist of commercial and retail uses, although some residential uses may also require acquisition. Demolition of commercial and retail uses would be disruptive and could physically alter the makeup of existing communities. In the absence of detailed information regarding necessary acquisition and demolition, the level of impact resulting from these changes cannot be determined at this time. However, these changes would not physically divide an established community. Therefore, impacts would be less than significant.

Land Use Plan Consistency. The No Project Alternative would not result in any changes in General Plan land designations or zoning classifications. However, compared to the Proposed Project, the No Project Alternative would not provide a robust list of multimodal transportation improvements and would not be responsive to the policies encouraging alternative transportation and sustainability contained in regional and local adopted plans. Specifically, the No Project Alternative would not fulfill the mandate of the California Complete Streets Act, as reflected in the recently-adopted MP 2035 and in the 2012-2035 RTP/SCS, to plan for a balanced, multimodal transportation network that meets the needs of all users. Moreover, it would not implement the improvements envisioned in MP 2035 or serve to reduce VMT per Capita in the study area. As some of these policies are intended to reduce environmental impacts to air quality and GHG, the inconsistency could increase impacts compared to the Proposed Project.

As with the Proposed Project, construction of the transportation improvements under the No Project Alternative would comply with existing City regulations governing construction, including prohibitions on roadway construction during peak hours. There are no policies in applicable land use plans that are directed at construction activities. Therefore, construction impacts would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect and impacts would be less than significant.

6.7.1.5 Noise and Vibration

Expose Persons or Generate Excessive Noise Levels above Standards or Generate a Substantial Temporary or Permanent Increase in Ambient Noise Levels. Under the No Project Alternative, there would be several street widening projects associated with implementing the current project lists in the CTC and WLA TIMP Specific Plans. Construction equipment at times could generate noise levels up to 97 dBA at 50 feet from a sensitive noise receptor. As with the Proposed Project, even with adherence to the Los Angeles Municipal Code (LAMC), some construction activities associated with the No Project Alternative could exceed ambient noise levels by 10 dBA or more for more than one day at a noise sensitive use. Similarly, the No Project Alternative could result in noise impacts associated with construction activities that could exceed existing ambient noise levels by 5 dBA or more at any noise sensitive use for more than ten days over a three month period. These impacts would be infrequent and of short duration and would only affect a small number of sensitive receptors. Nevertheless, as with the Proposed Project, this would be a significant and unavoidable impact.

During operations, increased vehicular capacity may increase traffic and vehicle speeds on some roadways, which could increase traffic-related noise levels. These changes would not reach a level that would exceed noise standards; as a result, noise impacts from vehicular traffic would be less than significant. The No Project Alternative does not envision regional multimodal improvements to the extent that would occur under the Proposed Project, and does not identify specific improvements, such as curb-running rapid buses and BRT that would be implemented under the Proposed Project. Therefore, under the No Project Alternative, the significant and unavoidable noise impact associated with improvements to bus service under the Proposed Project would not occur.

Generate Excessive Groundborne Vibration. Construction of road widening projects under the No Project Alternative would occur in proximity to nearby structures and sensitive receptors. Based on the typical construction equipment likely to be used during construction, it is not anticipated that construction activities would generate vibration that would adversely affect structures. However, construction activities could exceed the human annoyance vibration threshold for frequent events. Human annoyance impacts from vibration associated with the majority of construction activities would be infrequent and of short duration and would only affect a small number of sensitive receptors. Nevertheless, this would be a significant and unavoidable impact.

Similar to the Proposed Project, under the No Project Alternative, operational vibration impacts from vehicular traffic would be less than significant.

Expose People Within Proximity to Airports to Excessive Noise Levels. As with the Proposed Project, construction of transportation improvements associated with the No Project Alternative would not expose construction workers to excessive airport-related noise. Therefore, impacts would be less than significant.

Land uses in the project area would not change under the No Project Alternative. Therefore, the project would not expose residents to excessive airport-related noise and no operational impact would occur.

6.7.1.6 Transportation

Conflict with Transportation Policies, Plans, or Programs. Overall, the No Project Alternative would be generally consistent with applicable regional and local adopted plans and policies. The Proposed Project contains a more robust multimodal list of transportation improvements than the No Project Alternative and is much more responsive to the policies encouraging alternative transportation and sustainability contained in regional and local adopted plans. Nevertheless, as with the Proposed Project, impacts relating to consistency with adopted policies, plans and programs under the No Project Alternative would be less than significant. Compared to the Proposed Project, the No Project Alternative would provide more vehicular capacity and fewer multimodal opportunities; as a result, this alternative would generate more auto travel and result in higher VMT. Therefore, the No Project Alternative would be less consistent with adopted transportation policies, plans, and programs than the Proposed Project.

Exceed Thresholds for Roadway Operations on the Vehicular Circulation System. The No Project Alternative would continue to implement the projects in the current Specific Plans. This alternative would provide increased vehicular capacity through limited road widening projects and intersection improvements in the Westside, but the multimodal transportation improvements would be substantially less than under the Proposed Project. The projects remaining on the list of transportation improvements that have not yet been constructed primarily consist of roadway widening projects. These projects would be expected to improve traffic operations and LOS in the near-term; however, operations would likely be worse under Future with No Project Alternative conditions in comparison to existing conditions due to background growth and induced vehicle demand. On a regional level, traffic in the study area is anticipated to increase in conjunction with regional population, housing, and employment growth projected to occur in the future. This growth will occur with or without implementation of the No Project Alternative. The background growth influences the transportation analysis by accounting for the increased activity levels under Future with No Project Alternative conditions. Consequently, when comparing traffic operations under Future with No Project Alternative conditions to existing conditions, peak period congestion would be expected to continue to increase. In addition, research has shown that the demand for driving increases in congested areas when additional roadway capacity is provided, commonly referred to as induced demand (Handy, 2015). Specifically, a capacity expansion of 10 percent may result in an increase in VMT of 3 to 6 percent in the near-term and 6 to 10 percent in the long-term. As with the Proposed Project, impacts relating to roadway operations on the vehicular circulation system under the No Project Alternative would be significant and unavoidable. Compared to the Proposed Project, the No Project Alternative would provide additional roadway capacity that has the potential to result in modest improvements to vehicle operations in the near-term. However, it is expected that background growth and induced demand would erode these improvements to vehicle operations in the long-term. As a result, although it is possible that impacts to vehicle operations under the No Project Alternative could be less than the Proposed Project, it is expected that these impacts would likely be similar to the Proposed Project.

Consideration of New Potential Metrics. The No Project Alternative would provide increased vehicular roadway capacity, but the multimodal improvements would be substantially less than the Proposed Project. The Proposed Project benefits of distributing travelers across all modes of transportation (mode split) would not be realized under the No Project Alternative, and transit ridership would not increase to the levels envisioned with the Proposed Project. Induced demand resulting from roadway widenings would cause an increase in overall VMT and VMT per Capita in the Specific Plan areas. Mode split improvements and the associated reductions in VMT that would occur under the Proposed Project and that would help to meet the State's goals of reducing greenhouse gas emissions, as mandated by AB 32 and SB 375, would not occur under the No Project Alternative. In addition, these performance indicators are potential metrics for evaluating transportation impacts that may be included in future revisions to City's L.A. CEQA Thresholds Guide. While the City of Los Angeles has not yet developed thresholds for these metrics, the No Project Alternative would result in a decrease in mode shares for transit, biking and walking and an increase in VMT in comparison to the Proposed Project. Given this conclusion, the No Project Alternative could result in a significant adverse transportation impact under these potential new CEQA metrics.

Exceed Thresholds for Neighborhood Traffic Intrusion. The No Project Alternative would continue to implement the projects in the current Specific Plans. This alternative would provide increased vehicular roadway capacity, but the multimodal transportation improvements would be substantially less than under the Proposed Project. The projects remaining on the current lists of transportation improvements that have not yet been constructed primarily consist of roadway widening projects. These projects would be expected to improve traffic operations along select corridors in the Specific Plan area in the near-term; however, overall operations would be worse under Future with No Project Alternative conditions in comparison to existing conditions. Along roadways where significant traffic congestion would occur under the No Project Alternative, diversion of trips could occur onto adjacent parallel routes. It is anticipated that diversion would not occur on streets that operate at LOS D or better during peak periods because the average delay is not substantial. However, for the street segments where the LOS would degrade from D to E or F, some trips could divert to adjacent streets to avoid longer travel times through congested locations. On a regional level, traffic in the study area is anticipated to increase in conjunction with regional population, housing, and employment growth projected to occur in the future. This growth will occur with or without implementation of the No Project Alternative. The background growth influences the transportation analysis by accounting for the increased activity levels under Future with No Project Alternative conditions. In addition, research has shown that the demand for driving increases in congested areas when additional roadway capacity is provided, commonly referred to as induced demand. Consequently, when comparing neighborhood traffic intrusion under Future with No Project Alternative conditions to existing conditions, traffic intrusion would be expected to continue to increase. As with the Proposed Project, impacts relating to neighborhood traffic intrusion under the No Project Alternative would be significant and unavoidable. Compared to the Proposed Project, the No Project Alternative would provide additional roadway capacity that has the potential to result in modest improvements to vehicle operations in the near-term, with a resulting decrease in neighborhood traffic intrusion. However, it is expected that background growth and induced demand would erode these improvements to vehicle operations in the long-term. As a result, the impact to neighborhood traffic intrusion would likely be similar to the Proposed Project.

Exceed Thresholds for CMP and State Freeway Facilities. The No Project Alternative would continue to implement the projects in the current Specific Plans. The No Project Alternative would provide increased vehicular capacity through road widening projects and intersection improvements in the Westside, but the multimodal transportation improvements would be substantially less than under the Proposed Project. The projects remaining on the list of transportation improvements that have not yet been constructed primarily consist of roadway widening projects. These projects would be expected to improve traffic operations along select corridors in the Specific Plan area in the near-term; however, overall operations would be worse under Future with No Project Alternative conditions in comparison to existing conditions. On a regional level, traffic in the study area is anticipated to increase in conjunction with regional population, housing, and employment growth projected to occur in the future. This growth will occur with or without implementation of the No Project Alternative. The background growth influences the transportation analysis by accounting for the increased activity levels under Future with No Project Alternative conditions. Consequently, when comparing traffic operations on CMP and state freeway facilities under Future with No Project Alternative conditions to existing conditions, congestion would be expected to continue to increase. As with the Proposed Project, impacts relating to CMP and state freeway facilities under the No Project Alternative would be significant and unavoidable. Compared to the Proposed Project, the No Project Alternative would result in similar impacts to CMP and state freeway facilities.

Adversely Affect Fire Protection Services/Emergency Access. The No Project Alternative would continue to implement the projects in the current Specific Plans. Based on the City's adopted threshold of significance, the No Project Alternative would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service. Los Angeles Fire

Department (LAFD) is responsible for public safety and must respond to changing circumstances and therefore would act to maintain response times. The steps that LAFD would have to take to maintain public safety are not reasonably foreseeable at this time. Options available to LAFD include expanding the Fire Preemption System, increasing staffing levels, and adding new fire stations(s) to underserved areas. The potential for new fire station construction is speculative at the present time and is therefore not analyzed as part of the No Project Alternative. Depending on the location of new fire protection facilities, operational impacts (primarily noise) could occur; however, such impacts are unforeseeable at this time. As with the Proposed Project, impacts relating to emergency access under the No Project Alternative would be less than significant.

Disrupt Public Transit, Bicycle, or Pedestrian Facilities. Overall, the No Project Alternative would not disrupt existing public transit, bicycle, or pedestrian facilities or interfere with planned facilities. The Proposed Project contains a more robust multimodal list of transportation improvements than the No Project Alternative and is much more responsive to the policies encouraging alternative transportation and sustainability contained in regional and local adopted plans. As with the Proposed Project, impacts relating to the disruption to existing public transit, bicycle, or pedestrian facilities or interference with planned facilities under the No Project Alternative would be less than significant. Compared to the Proposed Project, the No Project Alternative would result in more roadway widenings to accommodate vehicular travel and would be less compatible with existing public transit, bicycle, or pedestrian facilities and planned facilities compared to the multimodal improvements envisioned as part of the Proposed Project.

Substantially Change Transportation Safety. The No Project Alternative would continue to implement the projects in the current Specific Plans. The No Project Alternative would provide increased vehicular capacity through road widening projects in the Westside, but the multimodal transportation improvements would be substantially less than under the Proposed Project. In addition, the roadway widenings contained in the No Project Alternative could result in an increase in travel speeds on select corridors in the Specific Plan areas due to capacity increases in the near-term. Automobile speed is a major factor in the severity of collisions with bicyclists and pedestrians, the most vulnerable roadway users. Collisions with a vehicle traveling at 20 miles per hour results in a 5 percent pedestrian fatality rate, and fatalities increase to 40, 80 and 100 percent when the vehicle speed increases to 30, 40 and 50 miles per hour, respectively (U. S. Department of Transportation National Highway Traffic Safety Administration, 1999). However, the transportation system improvements under the No Project Alternative would not introduce new safety hazards at intersections or along roadway segments, as they would be designed based on City standards. As with the Proposed Project, impacts relating to transportation safety would be less than significant. Compared to the Proposed Project, the No Project Alternative could increase travel speeds on select corridors and, along with an increase in the overall VMT in the study area, could lead to more transportation collisions than would occur under the Proposed Project.

Construction Activities on Major Corridors. The No Project Alternative would continue to implement the projects in the current Specific Plans. The projects remaining on the lists of transportation improvements that have not yet been constructed primarily consist of roadway widening projects. Some of the improvements in the No Project Alternative would consist of roadway restriping and limited changes to the physical configuration of curbs, and thus, would likely be short in duration (lasting up to a few weeks), while other projects, such as roadway widenings, would require longer construction duration. As with the Proposed Project, temporary construction impacts would be significant and unavoidable. However, the No Project Alternative would result in a higher level of construction activity on a substantially greater number of roadways than the Proposed Project.

Parking. Parking deficits are considered to be social effects, rather than impacts on the physical environment as defined by CEQA. While a project's social impacts need not be treated as significant impacts on the environment, the secondary physical impacts that could be triggered by a social impact must be addressed. The No Project Alternative would continue to implement the projects in the current Specific Plans. The projects remaining on the list of transportation improvements that have not yet been constructed primarily consist of roadway widening projects. While some projects may result in the removal of on-street parking, it is speculative at this time to conclude that any particular parking will be removed for the No Project Alternative or that such removal would result in a significant impact. As with the Proposed Project, under the No Project Alternative, traffic impacts related to parking would be less than significant.

6.7.1.7 Other Environmental Topics

The limited roadway widening projects associated with the No Project Alternative have the potential to result in impacts to environmental topics that would not be affected by the Proposed Project. If the widening were to require the demolition of existing land uses, impacts to aesthetics could occur. Depending on the nature of the affected land uses, demolition could also result in impacts to historic resources. In addition, public utilities could be affected during construction. Standard mitigation measures are available to address many of the impacts typically associated with these resources, if warranted. It is expected that impacts to these environmental resources associated with the No Project Alternative would be less than significant.

6.7.2 Alternative 2A – No Sepulveda Boulevard BRT

Under Alternative 2A, the proposed BRT on Sepulveda Boulevard would be eliminated from the Proposed Project's transportation improvement lists. All other transportation improvements associated with the Proposed Project are included in this alternative. As compared to the Proposed Project, Alternative 2A would maintain current vehicle capacity along Sepulveda Boulevard. Alternative 2A would not provide an alternate dedicated north/south transit lane to serve the Westside and connect to existing and planned east/west transit. Alternative 2A would have comparatively more vehicle capacity along Sepulveda Boulevard but less transit capacity along this corridor and fewer multimodal connections to intersecting corridors. Alternative 2A assumes that the combination of lower transit capacity and greater vehicle capacity along this corridor would result in more VMT in the study area as compared to the Proposed Project. Alternative 2A would also result in less construction activity along Sepulveda Boulevard. The following analysis discusses the potential impacts associated with Alternative 2A compared to those of the Proposed Project.

6.7.2.1 Air Quality

Conflict with Air Quality Plans. As with the Proposed Project, Alternative 2A would not result in any alterations in land use in the project area and would not affect future regional development anticipated in the 2012-2035 RTP/SCS or incorporated as assumptions in the AQMP. Overall, Alternative 2A would improve mobility in the Westside by providing transportation options and conditions that would promote use of alternative forms of transportation, including public transit, bicycles and walking. However, elimination of the Sepulveda Boulevard BRT would not provide a dedicated transit line option on Sepulveda Boulevard, which is a major transportation corridor in the project area.

The purpose of the 2012 AQMP is to provide updated air pollution control strategies to bring the SoCAB into compliance with federal ambient air quality standards. The AQMP relies upon a number of strategies to meet the federal ambient air quality standards, including promotion of a sustainable transportation system that emphasizes transit and non-motorized transportation and that increases multimodal mobility and minimizes VMT. These goals are also reflected in the 2012-2035 RTP/SCS, the City of Los Angeles Air Quality Element, and MP 2035. The Proposed Project is anticipated to reduce daily project area VMT by 3.4 percent as compared to future conditions without the Proposed Project. Per capita VMT would decrease by 4.4 percent compared to existing conditions and by 3.4 percent compared to Future without Project conditions. Without the Sepulveda Boulevard BRT, it is expected that total VMT and VMT per Capita would be greater under Alternative 2A than under the Proposed Project, with a comparative increase in air emissions. Nevertheless, Alternative 2A would still reduce VMT per Capita in the project area compared to existing and Future without Project conditions and would result in a reduction in daily VMT compared to the Future without Project scenario. Overall, Alternative 2A would be aligned with the 2012-2035 RTP/SCS as well as relevant air quality policy objectives of the City's Air Quality Element, Plan for a Healthy Los Angeles, and MP 2035, although to a lesser degree than the Proposed Project.

Violate Air Quality Standards. Alternative 2A would reduce construction emissions compared to the Proposed Project as it would not include a center-running BRT on Sepulveda Boulevard. As with the Proposed Project, construction emissions under Alternative 2A would not exceed SCAQMD thresholds, and construction impacts would not conflict with or obstruct implementation of the AQMP. Therefore, as with the Proposed Project, Alternative 2A would not result in a significant impact related to air quality standards.

With background growth, Alternative 2A would result in higher total VMT compared to existing conditions. Although traffic volumes would be higher due to background growth, pollutant emissions from mobile sources are expected to be much lower due to technological advances in vehicle emission control, turnover in the vehicle fleet, and new emission standards. As a result, similar to the Proposed Project, emissions under this alternative would not exceed the SCAQMD significance thresholds. Although emissions would be less than significant under Alternative 2A, with the elimination of BRT on Sepulveda Boulevard, VMT in the future under this alternative would be greater than under the Proposed Project and emissions would be higher.

Cumulatively Considerable Increase in Criteria Pollutants. As noted above, with the elimination of the Sepulveda Boulevard BRT, regional construction emissions under Alternative 2A would be lower than those associated with the Proposed Project. Under both Alternative 2A and the Proposed Project, regional construction emissions of the nonattainment pollutants (PM10, PM2.5, and O_3 precursors [NOx and VOC]) would be less than the SCAQMD significance thresholds. Therefore, regional construction emissions related to Alternative 2A would not be cumulatively considerable, and impacts would be less than significant. With the elimination of the Sepulveda Boulevard BRT, localized construction emissions associated with construction of this improvement would not occur. However, localized construction emissions of particulate matter associated with the construction of other transportation improvements under this alternative would exceed SCAQMD thresholds. Therefore, localized construction emissions related to Alternative 2A would be cumulatively considerable. This would be a significant impact.

With the technology advances noted above, as with the Proposed Project, operation of the proposed transportation improvements under Alternative 2A would result in a decrease in emissions of the nonattainment pollutants PM10, PM2.5, and O_3 precursors (NOx and VOC) compared to existing conditions. Therefore, as with the Proposed Project, operational emissions associated with Alternative 2A would not be cumulatively considerable and this impact would be less than significant. However, by eliminating the Sepulveda Boulevard BRT, Alternative 2A would generate more operational emissions and contribute less towards eliminating the region's cumulative impacts than the Proposed Project.

Expose Sensitive Receptors to Substantial Pollutant Concentrations. As with the Proposed Project, construction of the Lincoln Boulevard Bridge Enhancement, the Lincoln Boulevard BRT, and the I-10 Ramp Reconfiguration at Bundy Drive would exceed SCAQMD’s LSTs for particulate matter and the threshold for TACs. This would be a significant and unavoidable impact. However, in comparison with the Proposed Project, with elimination of the Sepulveda Boulevard BRT under Alternative 2A, significant and unavoidable impacts associated with pollutant concentrations and TAC emissions from construction of this improvement would not occur.

Relative to operations, as with the Proposed Project, under Alternative 2A, with the vehicle emission control technologies noted above, emissions of mobile source air toxics would be lower than existing conditions and impacts would be less than significant. Although impacts would be less than significant under Alternative 2A, with the elimination of BRT on Sepulveda Boulevard, VMT in the future under this alternative would be greater than under the Proposed Project and pollutant concentrations would be higher.

Objectionable Odors Affecting a Substantial Number of People. Similar to the Proposed Project, Alternative 2A would not create objectionable odors affecting a substantial number of people, and the impact would be less than significant.

6.7.2.2 Biological Resources

Adverse Effects on Sensitive Species, Sensitive Habitats, or Wetlands. Elimination of the Sepulveda BRT would not change the construction and operations impacts to biological resources associated with the Proposed Project. Construction of the Lincoln Boulevard Bridge Enhancement would result in significant but mitigable impacts to special-status species and habitat in the BWER. As with the Proposed Project, other proposed transportation improvements could result in the removal, trimming, or disturbance of street trees and ornamental landscaping that have the potential to support nesting migratory birds that are protected by the MBTA and the CFGC. Construction activities occurring within the nesting season would have the potential to result in the removal or destruction of an active nest or direct mortality or injury of individual birds. As with the Proposed Project, this is a potentially significant impact; with mitigation, this impact would be less than significant.

Adverse Effects on Migratory Species or Wildlife Corridors. Habitat within the project area is generally fragmented and of low value (e.g., ornamental landscaping) and does not provide viable linkages or migration corridors between habitat areas. However, as noted above, street trees within or immediately adjacent to right-of-ways could potentially support migratory birds. As with the Proposed Project, construction activities associated with Alternative 2A could result in the removal or destruction of an active nest or direct mortality or injury of individual birds. This would be a potentially significant impact; with mitigation, this impact would be less than significant.

6.7.2.3 Greenhouse Gas Emissions

Generation of GHG Emissions. As with the Proposed Project, construction of the proposed transportation improvements under Alternative 2A would result in temporary increases in GHG emissions, although Alternative 2A would have reduced construction-related GHG emissions compared to the Proposed Project as it would not include the construction of a center-running BRT on Sepulveda Boulevard. The 2012-2035 RTP/SCS estimated that construction emissions from all development activity in Los Angeles County would be approximately 0.2 percent of countywide GHG emissions in 2035 (SCAG, 2012). As with the Proposed Project, construction-related emissions associated with Alternative 2A would be a small portion of total construction emissions estimated in the 2012-2035 RTP/SCS, which themselves are expected to represent only 0.2 percent of countywide GHG emissions in 2035.

As with the Proposed Project, with background growth, Alternative 2A would result in higher total VMT compared to existing conditions. Although traffic volumes would be higher due to background growth, pollutants emissions from mobile sources are expected to be much lower due to technological advances in vehicle emission control, turnover in the vehicle fleet, and new emission standards. As a result, similar to the Proposed Project, under Alternative 2A, impacts related to GHG emissions associated with operations, combined with amortized construction-related GHG emissions, would be less than significant. However, with the elimination of BRT on Sepulveda Boulevard, VMT in the future under this alternative would be greater than under the Proposed Project and GHG emissions would be higher.

Impede Attainment of SCAG's per Capita Emission Reduction Targets. The Proposed Project is anticipated to reduce daily project area VMT by 3.4 percent as compared to future conditions without the Proposed Project and by 4.4 percent compared to existing conditions, with related decreases in GHG emissions. Without the Sepulveda Boulevard BRT, it is expected that total VMT and VMT per Capita would be greater under Alternative 2A than under the Proposed Project, with a comparative increase in GHG emissions. Nevertheless, Alternative 2A would still reduce VMT per Capita in the project area compared to existing and Future without Project conditions and would result in a reduction in daily VMT compared to the Future without Project scenario. Moreover, due to technological advances in vehicle emissions systems, projected turnover in the vehicle fleet, and future emission standards, GHG emissions associated with the Alternative 2A would be lower than existing conditions and slightly lower than Future without Project conditions. As the majority of the transportation improvements would still be implemented, Alternative 2A would advance the strategies provided in the 2012-2035 RTP/SCS to reach GHG emission reduction targets. Therefore, Alternative 2A would not impede attainment of SCAG's per Capita GHG emission reduction targets established in the 2012-2035 RTP/SCS and the impact would be less than significant.

Conflict with GHG Reduction Policies. As with the Proposed Project, the transportation improvements under Alternative 2A would increase mobility options, increase access to alternative modes of transportation, and reduce future transportation emissions. Per Capita GHG emissions under this alternative would be consistent with the 2012-2035 RTP/SCS regional CO_2 emission reduction targets and with SB 375. Without the Sepulveda Boulevard BRT, it is expected that total VMT and VMT per Capita would be greater under Alternative 2A than under the Proposed Project, with a comparative increase in GHG emissions. Nevertheless, Alternative 2A would still reduce VMT per Capita in the project area compared to existing and Future without Project conditions and would result in a reduction in daily VMT compared to the Future without Project scenario. Overall, Alternative 2A would be aligned with GHG reduction plans and policies contained in the 2012-2035 RTP/SCS, MP

2035, Plan for a Healthy Los Angeles, and Green LA Plan, although to a lesser degree than the Proposed Project.

6.7.2.4 Land Use and Planning

Division of a Community. Alternative 2A would eliminate construction-related access disruptions to land uses adjacent to the Sepulveda Boulevard BRT. However, similar to the Proposed Project, under this alternative, such disruptions would occur in other parts of the Specific Plan areas during construction of the other proposed transportation improvements. Due to their temporary and generally short-term nature, these impacts would be less than significant.

As with the Proposed Project, under Alternative 2A, transportation improvements would occur within or adjacent to existing right-of-ways, and would not alter the existing land use compatibility or create a barrier which could divide or isolate a community. With the elimination of the Sepulveda Boulevard BRT, there would be no loss in parking along this corridor, and no impacts to surrounding land uses associated with a loss of parking. However, as with the Proposed Project, parking loss in other parts of the Specific Plan areas would occur that could indirectly affect businesses. The change in parking availability would not cause a disruption of land uses that would constitute a significant land use impact. Therefore, as with the Proposed Project, Alternative 2A would not result in land use incompatibilities, or physically disrupt, divide, or isolate an existing neighborhood or community, and impacts would be less than significant.

Land Use Plan Consistency. With the elimination of the Sepulveda Boulevard BRT, Alternative 2A would not implement an important component of MP 2035 for the Westside and, as compared to the Proposed Project, would not be as well aligned with the 2012-2035 RTP/SCS. However, throughout the remainder of the Specific Plan areas, as with the Proposed Project, the mobility improvements under Alternative 2A would be consistent with regional and local adopted plans and policies.

As with the Proposed Project, construction of the transportation improvements under Alternative 2A would comply with existing City regulations governing construction, including prohibitions on roadway construction during peak hours. There are no policies in applicable land use plans that are directed at construction activities. Therefore, construction impacts would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect and impacts would be less than significant.

6.7.2.5 Noise and Vibration

Expose Persons or Generate Excessive Noise Levels above Standards or Generate a Substantial Temporary or Permanent Increase in Ambient Noise Levels. As with the Proposed Project, under Alternative 2A, construction of transportation improvements would occur in proximity to sensitive receptors. These construction activities could generate noise levels up to 97 dBA at 50 feet. In many cases, construction of these improvements may occur over a period of just a few days in any one location; nevertheless, even with adherence to the LAMC, construction activities associated with Alternative 2A could exceed ambient noise levels by 5 dBA or more at a noise sensitive use for more than ten days in a three-month period and could exceed existing ambient noise levels by 10 dBA or more at a noise sensitive use for more than one day. In general, these impacts would be infrequent and of short duration and would only affect a small number of sensitive receptors. Nevertheless, as with the Proposed Project, this would be a significant and unavoidable impact, although Alternative 2B would eliminate noise impacts associated with the construction of the Sepulveda Boulevard BRT.

During operations, as with the Proposed Project, enhanced mobility under Alternative 2A may change vehicle speeds on some roadways, which could result in changes in noise levels. Decreased vehicle speeds could result in lower vehicle noise levels on some roadways during some periods compared to existing conditions, while increases in bus and private vehicle speeds on other roadways and/or during other time periods could result in higher vehicle noise levels compared to existing conditions. In addition, vehicle trips would increase in the study area due to background growth. Increased vehicle trips and speeds would not reach a level that would exceed noise standards; as a result, noise impacts from vehicular traffic would be less than significant.

Alternative 2A would result in the implementation of the same curb-running rapid buses and BRT on Lincoln Boulevard as the Proposed Project. As with the Proposed Project, curb-running rapid buses and BRT could increase noise levels at some sensitive land uses by more than 3 dBA. This would be a significant and unavoidable impact.

Generate Excessive Groundborne Vibration. Construction-related vibration impacts under Alternative 2A would be similar to the Proposed Project, except that Alternative 2A would not result in vibration impacts associate with construction of the Sepulveda Boulevard BRT. Similar to the Proposed Project, under Alternative 2A, construction activities associated with other transportation improvements would occur in proximity to nearby structures and sensitive receptors. Based on the typical construction equipment likely to be used during construction, it is not anticipated that construction activities would generate vibration that would adversely affect structures. However, construction activities could exceed the human annoyance vibration threshold for frequent events. Human annoyance impacts from vibration associated with the majority of construction activities would be infrequent and of short duration and would only affect a small number of sensitive receptors. Moreover, implementation of recommended mitigation measures would reduce human annoyance impacts associated with vibration to the extent feasible. Nevertheless, even with mitigation, vibration at some locations would be a significant and unavoidable impact. As with the Proposed Project, under Alternative 2A, operational vibration impacts from vehicular traffic would be less than significant.

Expose People Within Proximity to Airports to Excessive Noise Levels. As with the Proposed Project, construction of transportation improvements associated with Alternative 2A would not expose construction workers to excessive airport-related noise levels. Therefore, impacts would be less than significant.

Land uses in the project area would not change under Alternative 2A. Therefore, the project would not expose residents to excessive airport-related noise and no operational impact would occur.

6.7.2.6 Transportation

Conflict with Transportation Policies, Plans, or Programs. Overall, Alternative 2A would be consistent with applicable regional and local adopted plans and policies. As with the Proposed Project, impacts relating to consistency with adopted policies, plans, and programs under Alternative 2A would be less than significant. Compared to the Proposed Project, Alternative 2A would generate more auto travel along Sepulveda Boulevard due to the increased vehicle capacity and lack of BRT service and, therefore, would be less consistent with adopted transportation policies, plans, and programs that promote multimodal travel.

Exceed Thresholds for Roadway Operations on the Vehicular Circulation System. Alternative 2A would implement the proposed transportation improvements, with the exception of the Sepulveda Boulevard BRT. While traffic operations on Sepulveda Boulevard would likely result in fewer LOS impacts without the implementation of BRT service, overall congestion in the Specific Plan areas would still be expected to increase under Alternative 2A in comparison to existing conditions due to background growth. On a regional level, traffic in the study area is anticipated to increase in conjunction with regional population, housing, and employment growth projected to occur in the future. This growth will occur with or without implementation of Alternative 2A. The background growth influences the transportation analysis by accounting for the increased activity levels under Future with Alternative 2A conditions. Consequently, when comparing traffic operations under Future with Alternative 2A conditions to existing conditions, peak period congestion would be expected to continue to increase. As with the Proposed Project, impacts relating to roadway operations on the vehicular circulation system under Alternative 2A would be significant and unavoidable. Compared to the Proposed Project, Alternative 2A would maintain existing roadway capacity along Sepulveda Boulevard, which has the potential to result in slightly lesser impacts to vehicle operations along this corridor as compared to the Proposed Project. However, it is expected that background growth would result in similar congestion levels along the corridor in the long-term as compared to the Proposed Project. As a result, although it is possible that impacts to vehicle operations under Alternative 2A could be less than the Proposed Project, it is expected that these impacts would likely be similar to the Proposed Project.

Consideration of New Potential Metrics. Alternative 2A would implement the proposed transportation improvements, with the exception of the Sepulveda Boulevard BRT. The Proposed Project benefits of distributing travelers across all modes of transportation (mode split) would not be realized to the same extent under Alternative 2A due to the lack of the Sepulveda BRT to serve activity centers and east-west transit lines, and transit ridership would not increase to the levels envisioned with the Proposed Project. The implementation of the other projects on the updated project lists would continue to improve mode split and continue to result in a decrease in VMT and VMT per Capita in comparison to Future without Project conditions. The mode split improvements and the associated reductions in VMT would help to meet the State's goals of reducing greenhouse gas emissions, as mandated by AB 32 and SB 375. In addition, these performance indicators are potential metrics for evaluating transportation impacts that may be included in future revisions to City’s L.A. CEQA Thresholds Guide. While the City of Los Angeles has not yet developed thresholds for these metric, Alternative 2A would result in an increase in mode shares for transit, biking and walking and a decrease in VMT in comparison to Future without Project conditions. Given this conclusion, Alternative 2A would not result in a significant adverse transportation impact under these potential new CEQA metrics.

Exceed Thresholds for Neighborhood Traffic Intrusion. Alternative 2A would implement the proposed transportation improvements, with the exception of the Sepulveda Boulevard BRT. While traffic operations on Sepulveda Boulevard could be marginally better without the implementation of BRT service, overall congestion in the Specific Plan areas would still be expected to increase under Alternative 2A compared to existing conditions and would not be substantially different from the Proposed Project. Along roadways where Alternative 2A would cause significant traffic congestion, diversion of trips could occur onto adjacent parallel routes. It is anticipated that diversion would not occur on streets that operate at LOS D or better during peak periods because the average delay is not substantial. However, for the street segments where the LOS would degrade from D to E or F, some trips could divert to adjacent streets to avoid longer travel times through congested locations. On a regional level, traffic in the study area is anticipated to increase in conjunction with regional population, housing, and employment growth projected to occur in the future. This growth will occur with or without implementation of Alternative 2A. The background growth influences the transportation analysis by accounting for the increased activity levels under Future with Alternative 2A conditions. Consequently, when comparing neighborhood traffic intrusion under Future with Alternative 2A conditions to existing conditions, traffic intrusion would be expected to continue to increase. As with the Proposed Project, impacts relating to neighborhood traffic intrusion under Alternative 2A would be significant and unavoidable. Compared to the Proposed Project, Alternative 2A would maintain the existing roadway capacity along Sepulveda Boulevard, which could result in fewer vehicles diverting to neighborhood streets. However, it is expected that background growth would result in similar congestion levels along the corridor in the long-term and the impact to neighborhood traffic intrusion would likely be similar to the Proposed Project.

Exceed Thresholds for CMP and State Freeway Facilities. Alternative 2A would implement the proposed transportation improvements, with the exception of the Sepulveda Boulevard BRT. While traffic operations on Sepulveda Boulevard could be marginally better without the implementation of BRT service, overall congestion in the Specific Plan areas would still be expected to increase under Alternative 2A compared to existing conditions and would not be substantially different from the Proposed Project. On a regional level, traffic in the study area is anticipated to increase in conjunction with regional population, housing, and employment growth projected to occur in the future. This growth will occur with or without implementation of Alternative 2A. The background growth influences the transportation analysis by accounting for the increased activity levels under Future with Alternative 2A conditions. Consequently, when comparing traffic operations on CMP and state freeway facilities under Future with Alternative 2A conditions to existing conditions, congestion would be expected to continue to increase. As with the Proposed Project, impacts relating to CMP and state freeway facilities under Alternative 2A would be significant and unavoidable. Compared to the Proposed Project, the Alternative 2A would result in similar impacts to CMP and state freeway facilities.

Adversely Affect Fire Protection Services/Emergency Access. Based on the City's adopted threshold of significance, Alternative 2A would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service. LAFD is responsible for public safety and must respond to changing circumstances and therefore would act to maintain response times. The steps that LAFD would have to take to maintain public safety are not reasonably foreseeable at this time. Options available to LAFD include expanding the Fire Preemption System, increasing staffing levels, and adding new fire stations(s) to underserved areas. The potential for new fire station construction is speculative at the present time and is therefore not analyzed as part of Alternative 2A. Depending on the location of new fire protection facilities, operational impacts (primarily noise) could occur; however, such impacts are unforeseeable at this time. As with the Proposed Project, impacts relating to emergency access under Alternative 2A would be less than significant.

Disrupt Public Transit, Bicycle, or Pedestrian Facilities. Overall, Alternative 2A would not disrupt existing public transit, bicycle, or pedestrian facilities or interfere with planned facilities. As with the Proposed Project, impacts relating to the disruption to existing public transit, bicycle, or pedestrian facilities or interference with planned facilities under Alternative 2A would be less than significant. Compared to the Proposed Project, Alternative 2A would result in fewer high capacity transit services and would be less compatible with existing public transit, bicycle, or pedestrian facilities and planned facilities compared to the Proposed Project.

Substantially Change Transportation Safety. None of the transportation system improvements under Alternative 2A would introduce new safety hazards at intersections or along roadway segments, as most would be designed to improve safety for all roadway users. As with the Proposed Project, impacts relating to transportation safety would be less than significant.

Construction Activities on Major Corridors. Implementation of transportation improvements under Alternative 2A would mostly consist of roadway restriping and limited changes to the physical configuration of curbs, and thus, would likely be short in duration (lasting up to a few weeks), while other projects, such as the Lincoln Boulevard Bridge Enhancement, I-10 Ramp Reconfiguration at Bundy Drive, and center-running BRT on Lincoln Boulevard, would require longer construction duration. Without the Sepulveda BRT, no construction-related impacts would occur along Sepulveda Boulevard; however, the other temporary construction-related impacts would occur. As with the Proposed Project, temporary construction impacts would be significant and unavoidable.

Parking. Parking deficits are considered to be social effects, rather than impacts on the physical environment as defined by CEQA. While a project's social impacts need not be treated as significant impacts on the environment, the secondary physical impacts that would be triggered by a social impact must be addressed. Some of the transportation projects contained in Alternative 2A have the potential to remove on-street parking in certain locations while others provide parking solutions. For the purpose of analyzing potential impacts at a programmatic level, assumptions needed to be made as to how the projects could be implemented based on conceptual designs. For example, it was assumed that the Lincoln Boulevard center-running BRT project would remove parking from one side of the street along the corridor and from both sides of the street at station locations. However, it is not certain that parking would be removed for this project as the corridor would need to be studied in further detail before any improvements are implemented. Through these additional studies, it may be found that on-street parking should be maintained in exchange for a reduction in vehicle capacity (i.e., vehicle travel lane conversions to bus-only lanes) or other off-street parking solutions required in certain locations along the corridor may be proposed. Individual projects would be studied in further detail as the Proposed Project would not, itself, entitle or otherwise approve any transportation projects. Based on this, it is speculative at this time to conclude that any particular parking would be removed under Alternative 2A. As with the Proposed Project, traffic impacts related to parking under Alternative 2A would be less than significant.

6.7.3 Alternative 2B – No Lincoln Boulevard BRT

Under Alternative 2B, the proposed BRT on Lincoln Boulevard would be eliminated from the Proposed Project's transportation improvement lists. All other transportation improvements associated with the Proposed Project, including the Lincoln Boulevard Bridge Enhancement project, are included in this alternative. As compared to the Proposed Project, Alternative 2B would maintain current vehicle capacity along Lincoln Boulevard and add vehicle capacity in the area near the bridge. Alternative 2B would not provide an alternate dedicated north/south transit lane to serve the Westside and connect to existing and planned east/west transit. Alternative 2B would have comparatively more vehicle capacity along Lincoln Boulevard but less transit capacity along this corridor and fewer multimodal connections to intersecting corridors. Alternative 2B assumes that the combination of lower transit capacity and greater vehicle capacity along this corridor would result in more VMT in the study area as compared to the Proposed Project. Alternative 2B would also result in slightly less construction activity along Lincoln Boulevard. The following analysis discusses the potential impacts associated with Alternative 2B compared to those of the Proposed Project.

6.7.3.1 Air Quality

Conflict with Air Quality Plans. As with the Proposed Project, Alternative 2B would not result in any alterations in land use in the project area and would not affect future regional development anticipated in the 2012-2035 RTP/SCS or incorporated as assumptions in the AQMP. Overall, Alternative 2B would improve mobility in the Westside by providing transportation options and conditions that would promote use of alternative forms of transportation, including public transit, bicycles and walking. However, elimination of the Lincoln Boulevard BRT would not provide transit options on Lincoln Boulevard, which is a major transportation corridor in the project area.

The purpose of the 2012 AQMP is to provide updated air pollution control strategies to bring the SoCAB into compliance with federal ambient air quality standards. The AQMP relies upon a number of strategies to meet the federal ambient air quality standards, including promotion of a sustainable transportation system that emphasizes transit and non-motorized transportation and that increases multimodal mobility and minimizes VMT. These goals are also reflected in the 2012-2035 RTP/SCS, the City of Los Angeles Air Quality Element, and MP 2035. The Proposed Project is anticipated to reduce daily project area VMT by 3.4 percent as compared to future conditions without the Proposed Project. Per capita VMT would decrease by 4.4 percent compared to existing conditions and by 3.4 percent compared to Future without Project conditions. Without the Lincoln Boulevard BRT, it is expected that total VMT and VMT per Capita would be greater under Alternative 2B than under the Proposed Project, with a comparative increase in air emissions. Nevertheless, Alternative 2B would still reduce VMT per Capita in the project area compared to existing and Future without Project conditions and would result in a reduction in daily VMT compared to the Future without Project scenario. Overall, Alternative 2B would be aligned with the 2012-2035 RTP/SCS as well as relevant air quality policy objectives of the City's Air Quality Element, Plan for a Healthy Los Angeles, and MP 2035, although to a lesser degree than the Proposed Project.

Violate Air Quality Standards. Alternative 2B would have reduced construction emissions compared to the Proposed Project as it would not include a center-running BRT on Lincoln Boulevard. As with the Proposed Project, construction emissions under Alternative 2B would not exceed SCAQMD thresholds, and construction impacts would not conflict with or obstruct implementation of the AQMP. Therefore, as with the Proposed Project, Alternative 2B would not result in a significant impact related to air quality standards.

With background growth, Alternative 2B would result in higher total VMT compared to existing conditions. Although traffic volumes would be higher due to background growth, pollutant emissions from mobile sources are expected to be much lower due to technological advances in vehicle emission control, turnover in the vehicle fleet, and new emission standards. As a result, similar to the Proposed Project, emissions under this alternative would not exceed the SCAQMD significance thresholds. Although emissions would be less than significant under Alternative 2B, with the elimination of BRT on Lincoln Boulevard, VMT in the future under this alternative would be greater than under the Proposed Project and emissions would be higher.

Cumulatively Considerable Increase in Criteria Pollutants. As noted above, with the elimination of the Lincoln Boulevard BRT, regional construction emissions under Alternative 2B would be lower than those associated with the Proposed Project. Under both Alternative 2B and the Proposed Project, regional construction emissions of the nonattainment pollutants (PM10, PM2.5, and O_3 precursors [NOx and VOC]) would be less than the SCAQMD significance thresholds. Therefore, regional construction emissions related to Alternative 2B would not be cumulatively considerable, and impacts would be less than significant. With the elimination of the Lincoln Boulevard BRT, localized construction emissions associated with construction of this improvement would not occur. However, localized construction emissions of particulate matter associated with the construction of other transportation improvements under this alternative would exceed SCAQMD thresholds. Therefore, localized construction emissions related to Alternative 2B would be cumulatively considerable. This would be a significant impact.

With the technology advances noted above, as with the Proposed Project, operation of the proposed transportation improvements under Alternative 2B would result in a decrease in emissions of the nonattainment pollutants PM10, PM2.5, and O_3 precursors (NOx and VOC) compared to existing conditions. Therefore, as with the Proposed Project, operational emissions associated with Alternative 2B would not be cumulatively considerable and this impact would be less than significant. However, by eliminating the Lincoln Boulevard BRT, Alternative 2B would generate more operational emissions and contribute less towards eliminating the region's cumulative impacts than the Proposed Project.

Expose Sensitive Receptors to Substantial Pollutant Concentrations. As with the Proposed Project, construction of the Lincoln Boulevard Bridge Enhancement, the Sepulveda Boulevard BRT, and the I-10 Ramp Reconfiguration at Bundy Drive would exceed SCAQMD's LSTs for particulate matter and the threshold for TACs. This would be a significant and unavoidable impact. However, in comparison with the Proposed Project, with elimination of the Lincoln Boulevard BRT under Alternative 2A, significant and unavoidable impacts associated with pollutant concentrations and TAC emissions from construction of this improvement would not occur.

Relative to operations, as with the Proposed Project, under Alternative 2B, with the vehicle emission control technologies noted above, emissions of mobile source air toxics would be lower than existing conditions and impacts would be less than significant. Although impacts would be less than significant under Alternative 2B, with the elimination of BRT on Lincoln Boulevard, VMT in the future under this alternative would be greater than under the Proposed Project and pollutant concentrations would be higher.

Objectionable Odors Affecting a Substantial Number of People. Similar to the Proposed Project, Alternative 2B would not create objectionable odors affecting a substantial number of people, and the impact would be less than significant.

6.7.3.2 Biological Resources

Adverse Effects on Sensitive Species, Sensitive Habitats, or Wetlands. Although it would eliminate the Lincoln Boulevard BRT, Alternative 2B would still include enhancements to the Lincoln Boulevard Bridge, including widening Lincoln Boulevard north and south of the bridge and widening or replacing the bridge itself, in order to relieve the current bottleneck the bridge creates and provide active transportation improvements (such as bike facilities and sidewalks). Therefore, the construction and operations related impacts to biological resources under Alternative 2B would be the same as for the Proposed Project. Construction of the Lincoln Boulevard Bridge Enhancement would result in significant but mitigable impacts to special-status species and habitat in the BWER. As with the Proposed Project, other proposed transportation improvements could result in the removal, trimming, or disturbance of street trees and ornamental landscaping that have the potential to support nesting migratory birds that are protected by the MBTA and the CFGC. Construction activities occurring within the nesting season would have the potential to result in the removal or destruction of an active nest or direct mortality or injury of individual birds. As with the Proposed Project, this is a potentially significant impact; with mitigation, this impact would be less than significant.

Adverse Effects on Migratory Species or Wildlife Corridors. Habitat within the project area is generally fragmented and of low value (e.g., ornamental landscaping) and does not provide viable linkages or migration corridors between habitat areas. However, as noted above, street trees within or immediately adjacent to right-of-ways could potentially support migratory birds. As with the Proposed Project, construction activities associated with Alternative 2B could result in the removal or destruction of an active nest or direct mortality or injury of individual birds. This would be a potentially significant impact; with mitigation, this impact would be less than significant.

6.7.3.3 Greenhouse Gas Emissions

Generation of GHG Emissions. As with the Proposed Project, construction of the proposed transportation improvements under Alternative 2B would result in temporary increases in GHG emissions, although Alternative 2B would have reduced construction-related GHG emissions compared to the Proposed Project as it would not include a center-running BRT on Lincoln Boulevard. The 2012-2035 RTP/SCS estimated that construction emissions from all development activity in Los Angeles County would be approximately 0.2 percent of countywide GHG emissions in 2035 (SCAG, 2012). As with the Proposed Project, construction-related emissions associated with Alternative 2B would be a small portion of total construction emissions estimated in the 2012-2035 RTP/SCS, which themselves are expected to represent only 0.2 percent of countywide GHG emissions in 2035.

As with the Proposed Project, with background growth, Alternative 2B would result in higher total VMT compared to existing conditions. Although traffic volumes would be higher due to background growth, pollutants emissions from mobile sources are expected to be much lower due to technological advances in vehicle emission control, turnover in the vehicle fleet, and new emission standards. As a result, similar to the Proposed Project, under Alternative 2B, impacts related to GHG emissions associated with operations, combined with amortized construction-related GHG emissions, would be less than significant. However, with the elimination of BRT on Lincoln Boulevard, VMT in the future under this alternative would be greater than under the Proposed Project and GHG emissions would be higher.

Impede Attainment of SCAG's per Capita Emission Reduction Targets. The Proposed Project is anticipated to reduce daily project area VMT by 3.4 percent as compared to future conditions without the Proposed Project and by 4.4 percent compared to existing conditions, with related decreases in GHG emissions. Without the Lincoln Boulevard BRT, it is expected that total VMT and VMT per Capita would be greater under Alternative 2B than under the Proposed Project, with a comparative increase in GHG emissions. Nevertheless, Alternative 2B would still reduce VMT per Capita in the project area compared to existing and Future without Project conditions and would result in a reduction in daily VMT compared to the Future without Project scenario. Moreover, due to technological advances in vehicle emissions systems, projected turnover in the vehicle fleet, and future emission standards, GHG emissions associated with the Alternative 2B would be lower than existing conditions and slightly lower than Future without Project conditions. As the majority of the transportation improvements would still be implemented, Alternative 2B would advance the strategies provided in the 2012-2035 RTP/SCS to reach GHG emission reduction targets. Therefore, Alternative 2B would not impede attainment of SCAG's per Capita GHG emission reduction targets established in the 2012-2035 RTP/SCS and the impact would be less than significant.

Conflict with GHG Reduction Policies. As with the Proposed Project, the transportation improvements under Alternative 2B would increase mobility options, increase access to alternative modes of transportation, and reduce future transportation emissions. Per Capita GHG emissions under this alternative would be consistent with the 2012-2035 RTP/SCS regional CO_2 emission reduction targets and with SB 375. Without the Lincoln Boulevard BRT, it is expected that total VMT would be greater under Alternative 2B than under the Proposed Project, with a comparative increase in GHG emissions. Nevertheless, Alternative 2B would still reduce VMT per Capita in the project area compared to existing and Future without Project conditions and would result in a reduction in daily VMT compared to the Future without Project scenario. Overall, Alternative 2B would be aligned with GHG reduction plans and policies contained in the 2012-2035 RTP/SCS, MP 2035, Plan for a Healthy Los Angeles, and Green LA Plan, although to a lesser degree than the Proposed Project.

6.7.3.4 Land Use and Planning

Division of a Community. Alternative 2B would eliminate construction-related access disruptions to land uses adjacent to the Lincoln Boulevard BRT. However, similar to the Proposed Project, under this alternative, such disruptions would occur in other parts of the Specific Plan areas during construction of the other proposed transportation improvements. Due to their temporary and generally short-term nature, these impacts would be less than significant.

As with the Proposed Project, under Alternative 2B, transportation improvements would occur within or adjacent to existing right-of-ways, and would not alter the existing land use compatibility or create a barrier which could divide or isolate a community. With the elimination of the Lincoln Boulevard BRT, there would be no loss in parking along this corridor, and no impacts to surrounding land uses associated with a loss of parking. However, as with the Proposed Project, parking loss in other parts of the Specific Plan areas would occur that could indirectly affect businesses. The change in parking availability would not cause a disruption of land uses that would constitute a significant land use impact. Therefore, as with the Proposed Project, Alternative 2B would not result in land use incompatibilities, or physically disrupt, divide, or isolate an existing neighborhood or community, and impacts would be less than significant.

Land Use Plan Consistency. With the elimination of the Lincoln Boulevard BRT, Alternative 2B would not implement an important component of MP 2035 for the Westside and, as compared to the Proposed Project, would not be as well aligned with the 2012-2035 RTP/SCS. However, throughout the remainder of the Specific Plan areas, as with the Proposed Project, the mobility improvements under Alternative 2B would be consistent with regional and local adopted plans and policies.

As with the Proposed Project, construction of the transportation improvements under Alternative 2B would comply with existing City regulations governing construction, including prohibitions on roadway construction during peak hours. There are no policies in applicable land use plans that are directed at construction activities. Therefore, construction impacts would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect and impacts would be less than significant.

6.7.3.5 Noise and Vibration

Expose Persons or Generate Excessive Noise Levels above Standards or Generate a Substantial Temporary or Permanent Increase in Ambient Noise Levels. As with the Proposed Project, under Alternative 2B, construction of transportation improvements would occur in proximity to sensitive receptors. These construction activities could generate noise levels up to 97 dBA at 50 feet. In many cases, construction of these improvements may occur over a period of just a few days in any one location; nevertheless, even with adherence to the LAMC, construction activities associated with Alternative 2B could exceed ambient noise levels by 5 dBA or more at a noise sensitive use for more than ten days in a three-month period and could exceed existing ambient noise levels by 10 dBA or more at a noise sensitive use for more than one day. In general, these impacts would be infrequent and of short duration and would only affect a small number of sensitive receptors. Nevertheless, as with the Proposed Project, this would be a significant and unavoidable impact, although Alternative 2B would eliminate noise impacts associated with the construction of the Lincoln Boulevard BRT.

During operations, as with the Proposed Project, enhanced mobility under Alternative 2B may change vehicle speeds on some roadways, which could result in changes in noise levels. Decreased vehicle speeds could result in lower vehicle noise levels on some roadways during some periods compared to existing conditions, while increases in bus and private vehicle speeds on other roadways and/or during other time periods could result in higher vehicle noise levels compared to existing conditions. In addition, vehicle trips would increase in the study area due to background growth. Increased vehicle trips and speeds would not reach a level that would exceed noise standards; as a result, noise impacts from vehicular traffic would be less than significant.

Alternative 2B would result in the implementation of the same curb-running rapid buses and BRT on Sepulveda Boulevard as the Proposed Project. As with the Proposed Project curb-running rapid buses and BRT could increase noise levels at some sensitive land uses by more than 3 dBA. This would be a significant and unavoidable impact.

Generate Excessive Groundborne Vibration. Construction-related vibration impacts under Alternative 2B would be similar to the Proposed Project, except that Alternative 2B would not result in vibration impacts associate with construction of the Lincoln Boulevard BRT. Similar to the Proposed Project, under Alternative 2A, construction activities associated with other transportation improvements would occur in proximity to nearby structures and sensitive receptors. Based on the typical construction equipment likely to be used during construction, it is not anticipated that construction activities would generate vibration that would adversely affect structures. However, construction activities could exceed the human annoyance vibration threshold for frequent events. Human annoyance impacts from vibration associated with the majority of construction activities would be infrequent and of short duration and would only affect a small number of sensitive receptors. Moreover, implementation of recommended mitigation measures would reduce human annoyance impacts associated with vibration to the extent feasible. Nevertheless, even with mitigation, vibration at some locations would be a significant and unavoidable impact. As with the Proposed Project, under Alternative 2B, operational vibration impacts from vehicular traffic would be less than significant.

Expose People Within Proximity to Airports to Excessive Noise Levels. As with the Proposed Project, construction of transportation improvements associated with Alternative 2B would not expose construction workers to excessive airport-related noise levels. Therefore, impacts would be less than significant.

Land uses in the project area would not change under Alternative 2B. Therefore, the project would not expose residents to excessive airport-related noise and no operational impact would occur.

6.7.3.6 Transportation

Conflict with Transportation Policies, Plans, or Programs. Overall, Alternative 2B would be consistent with applicable regional and local adopted plans and policies. As with the Proposed Project, impacts relating to consistency with adopted policies, plans, and programs under Alternative 2B would be less than significant. Compared to the Proposed Project, Alternative 2B would generate more auto travel along Lincoln Boulevard due to the increased vehicle capacity and lack of BRT service and, therefore, would be less consistent with adopted transportation policies, plans, and programs that promote multimodal travel.

Exceed Thresholds for Roadway Operations on the Vehicular Circulation System. Alternative 2B would implement the proposed transportation improvements, with the exception of the Lincoln Boulevard BRT. While traffic operations on Lincoln Boulevard would likely result in fewer LOS impacts without the implementation of BRT service, overall congestion in the Specific Plan areas would still be expected to increase under Alternative 2B in comparison to existing conditions due to background growth. On a regional level, traffic in the study area is anticipated to increase in conjunction with regional population, housing, and employment growth projected to occur in the future. This growth will occur with or without implementation of Alternative 2B. The background growth influences the transportation analysis by accounting for the increased activity levels under Future with Alternative 2B conditions. Consequently, when comparing traffic operations under Future with Alternative 2B conditions to existing conditions, peak period congestion would be expected to continue to increase. As with the Proposed Project, impacts relating to roadway operations on the vehicular circulation system under Alternative 2B would be significant and unavoidable. Compared to the Proposed Project, Alternative 2B would maintain existing roadway capacity along Lincoln Boulevard, which has the potential to result in slightly lesser impacts to vehicle operations along this corridor as compared to the Proposed Project. However, it is expected that background growth would result in similar congestion levels along the corridor in the long-term as compared to the Proposed Project. As a result, although it is possible that impacts to vehicle operations under Alternative 2B could be less than the Proposed Project, it is expected that these impacts would likely be similar to the Proposed Project.

Consideration of New Potential Metrics. Alternative 2B would implement the proposed transportation improvements, with the exception of the Lincoln Boulevard BRT. The Proposed Project benefits of distributing travelers across all modes of transportation (mode split) would not be realized to the same extent under Alternative 2B due to the lack of the Lincoln BRT to serve activity centers and east-west transit lines, and transit ridership would not increase to the levels envisioned with the Proposed Project. The implementation of the other projects on the updated project lists would continue to improve mode split and continue to result in a decrease in VMT and VMT per Capita in comparison to Future without Project conditions. The mode split improvements and the associated reductions in VMT would help to meet the State's goals of reducing greenhouse gas emissions, as mandated by AB 32 and SB 375. In addition, these performance indicators are potential metrics for evaluating transportation impacts that may be included in future revisions to City's L.A. CEQA Thresholds Guide. While the City of Los Angeles has not yet developed thresholds for these metrics, Alternative 2B would result in an increase in mode shares for transit, biking and walking and a decrease in VMT in comparison to Future without Project conditions. Given this conclusion, Alternative 2B would not result in a significant adverse transportation impact under these potential new CEQA metrics.

Exceed Thresholds for Neighborhood Traffic Intrusion. Alternative 2B would implement the proposed transportation improvements, with the exception of the Lincoln Boulevard BRT. While traffic operations on Lincoln Boulevard could be marginally better without the implementation of BRT service, overall congestion in the Specific Plan areas would still be expected to increase under Alternative 2B compared to existing conditions and would not be substantially different from the Proposed Project. Along roadways where Alternative 2B would cause significant traffic congestion, diversion of trips could occur onto adjacent parallel routes. It is anticipated that diversion would not occur on streets that operate at LOS D or better during peak periods because the average delay is not substantial. However, for the street segments where the LOS would degrade from D to E or F, some trips could divert to adjacent streets to avoid longer travel times through congested locations. On a regional level, traffic in the study area is anticipated to increase in conjunction with regional population, housing, and employment growth projected to occur in the future. This growth will occur with or without implementation of Alternative 2B. The background growth influences the transportation analysis by accounting for the increased activity levels under Future with Alternative 2B conditions. Consequently, when comparing neighborhood traffic intrusion under Future with Alternative 2B conditions to existing conditions, traffic intrusion would be expected to continue to increase. As with the Proposed Project, impacts relating to neighborhood traffic intrusion under Alternative 2B would be significant and unavoidable. Compared to the Proposed Project, Alternative 2B would maintain the existing roadway capacity along Lincoln Boulevard, which could result in fewer vehicles diverting to neighborhood streets. However, it is expected that background growth would result in similar congestion levels along the corridor in the long-term and the impact to neighborhood traffic intrusion would likely be similar to the Proposed Project.

Exceed Thresholds for CMP and State Freeway Facilities. Alternative 2B would implement the proposed transportation improvements, with the exception of the Lincoln Boulevard BRT. While traffic operations on Lincoln Boulevard could be marginally better without the implementation of BRT service, overall congestion in the Specific Plan areas would still be expected to increase under Alternative 2B compared to existing conditions and would not be substantially different from the Proposed Project. On a regional level, traffic in the study area is anticipated to increase in conjunction with regional population, housing, and employment growth projected to occur in the future. This growth will occur with or without implementation of Alternative 2B. The background growth influences the transportation analysis by accounting for the increased activity levels under Future with Alternative 2B conditions. Consequently, when comparing traffic operations on CMP and state freeway facilities under Future with Alternative 2B conditions to existing conditions, congestion would be expected to continue to increase. As with the Proposed Project, impacts relating to CMP and state freeway facilities under Alternative 2B would be significant and unavoidable. Compared to the Proposed Project, the Alternative 2B would result in similar impacts to CMP and state freeway facilities.

Adversely Affect Fire Protection Services/Emergency Access. Based on the City's adopted threshold of significance, Alternative 2B would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service. LAFD is responsible for public safety and must respond to changing circumstances and therefore would act to maintain response times. The steps that LAFD would have to take to maintain public safety are not reasonably foreseeable at this time. Options available to LAFD include expanding the Fire Preemption System, increasing staffing levels, and adding new fire stations(s) to underserved areas. The potential for new fire station construction is speculative at the present time and is therefore not analyzed as part of Alternative 2B. Depending on the location of new fire protection facilities, operational impacts (primarily noise) could occur; however, such impacts are unforeseeable at this time. As with the Proposed Project, impacts relating to emergency access under Alternative 2B would be less than significant.

Disrupt Public Transit, Bicycle, or Pedestrian Facilities. Overall, Alternative 2B would not disrupt existing public transit, bicycle, or pedestrian facilities or interfere with planned facilities. As with the Proposed Project, impacts relating to the disruption to existing public transit, bicycle, or pedestrian facilities or interference with planned facilities under Alternative 2B would be less than significant. Compared to the Proposed Project, Alternative 2B would result in fewer high capacity transit services and would be less compatible with existing public transit, bicycle, or pedestrian facilities and planned facilities compared to the Proposed Project.

Substantially Change Transportation Safety. None of the transportation system improvements under Alternative 2B would introduce new safety hazards at intersections or along roadway segments, as most would be designed to improve safety for all roadway users. As with the Proposed Project, impacts relating to transportation safety would be less than significant.

Construction Activities on Major Corridors. Implementation of transportation improvements under Alternative 2B would mostly consist of roadway restriping and limited changes to the physical configuration of curbs, and thus, would likely be short in duration (lasting up to a few weeks) while other projects, such as the Lincoln Boulevard Bridge Enhancement, I-10 Ramp Reconfiguration at Bundy Drive, and center-running BRT on Sepulveda Boulevard, would require longer construction duration. Without the Lincoln BRT, no construction-related impacts would occur along the majority of Lincoln Boulevard (except between Fiji Way and Jefferson Boulevard for the bridge improvements over the Ballona Creek); however, the other temporary construction-related impacts would occur. As with the Proposed Project, temporary construction impacts would be significant and unavoidable.

Parking. Parking deficits are considered to be social effects, rather than impacts on the physical environment as defined by CEQA. While a project's social impacts need not be treated as significant impacts on the environment, the secondary physical impacts that would be triggered by a social impact must be addressed. Some of the transportation projects contained in Alternative 2B have the potential to remove on-street parking in certain locations while others provide parking solutions. For the purpose of analyzing potential impacts at a programmatic level, assumptions needed to be made as to how the projects could be implemented based on conceptual designs. For example, it was assumed that the Sepulveda Boulevard center-running BRT project would remove parking from one side of the street along the corridor and from both sides of the street at station locations. However, it is not certain that parking would be removed for this project as the corridor would need to be studied in further detail before any improvements are implemented. Through these additional studies, it may be found that on-street parking should be maintained in exchange for a reduction in vehicle capacity (i.e., vehicle travel lane conversions to bus-only lanes) or other off-street parking solutions required in certain locations along the corridor may be proposed. Individual projects would be studied in further detail as the Proposed Project would not, itself, entitle or otherwise approve any transportation projects. Based on this, it is speculative at this time to conclude that any particular parking would be removed under Alternative 2B. As with the Proposed Project, traffic impacts related to parking under Alternative 2B would be less than significant.

6.7.4 Alternative 3A – Reduced Parking

All transportation improvements associated with the Proposed Project are included in this alternative. This alternative offers a distinction on how right-of-way is utilized for the proposed transportation improvements. Under this alternative, as with the Proposed Project, the majority of the proposed transportation improvements would be achieved within existing roadway right-of-ways. Under the Proposed Project, it is assumed that when additional right-of-way capacity for projects (such as BRT and bicycle facilities) is needed, it would be provided through a combination of vehicular capacity reductions (lane conversions) along with on-street parking removal. Under this alternative, the Reduced Parking Alternative, when additional right-of-way is required, it would be provided solely by removing street parking, where such parking is available, with no conversion of vehicle travel lanes. Most roadways within the Specific Plan area currently have on-street parking. However, on-street parking restrictions in which the parking lane becomes a vehicular travel lane to provide additional vehicle capacity are common during the morning and afternoon peak commute hours. Typically, the parking restriction on a roadway segment occurs only during the morning or afternoon peak hours depending on the directionality of vehicle flows (e.g., westbound vehicle demand is higher in the morning and eastbound vehicle demand is higher in the afternoon).

The physical distinctions between Alternative 3A and the Proposed Project are minimal, as right-of-way reallocation for transportation improvements would only be necessary on select roadway segments. Under this alternative, as compared to the Proposed Project, there would be marginally greater vehicle capacity and slightly fewer on-street parking spaces on select roadway segments. Overall, VMT in the study area would be similar to the Proposed Project. The following analysis discusses the potential impacts associated with the greater vehicle capacity and loss of parking under Alternative 3A compared to those of the Proposed Project.

6.7.4.1 Air Quality

Conflict with Air Quality Plans. Although Alternative 3A would alter the method for implementing transportation improvements in the study area (i.e., by removal of vehicle travel lanes to provide additional right-of-way for transit or bicycle facilities), the list of transportation improvements that would be implemented would not change. Therefore, as with the Proposed Project, Alternative 3A would not result in any alterations in land use in the project area and would not affect future regional development anticipated in the 2012-2035 RTP/SCS or incorporated as assumptions in the AQMP. Alternative 3A would improve mobility in the Westside by providing more transportation options and conditions that would promote use of alternative forms of transportation, including public transit, bicycles and walking.

The purpose of the 2012 AQMP is to provide updated air pollution control strategies to bring the SoCAB into compliance with federal ambient air quality standards. The AQMP relies upon a number of strategies to meet the federal ambient air quality standards, including promotion of a sustainable transportation system that emphasizes transit and non-motorized transportation and that increases multimodal mobility and minimizes VMT. These goals are also reflected in the 2012-2035 RTP/SCS, the City of Los Angeles Air Quality Element, and MP 2035. The Proposed Project is anticipated to reduce daily project area VMT by 3.4 percent as compared to future conditions without the Proposed Project. Per Capita VMT would decrease by 4.4 percent compared to existing conditions and by 3.4 percent compared to Future without Project conditions. Under Alternative 3A, it is expected that total VMT and VMT per Capita would be similar to the Proposed Project, with similar air emissions. Overall, Alternative 3A would be aligned with the 2012-2035 RTP/SCS as well as relevant air quality policy objectives of the City's Air Quality Element, Plan for a Healthy Los Angeles, and MP 2035.

Violate Air Quality Standards. Alternative 3A would implement the same transportation improvements as the Proposed Project. As with the Proposed Project, construction emissions under this alternative would not exceed SCAQMD thresholds, and construction impacts would not conflict with or obstruct implementation of the AQMP. Therefore, as with the Proposed Project, Alternative 3A would not result in a significant impact related to air quality standards.

With background growth, Alternative 3A would result in higher total VMT compared to existing conditions. Although traffic volumes would be higher due to background growth, pollutants emissions from mobile sources are expected to be much lower due to technological advances in vehicle emission control, turnover in the vehicle fleet, and new emission standards. As a result, similar to the Proposed Project, emissions under this alternative would not exceed the SCAQMD significance thresholds.

Cumulatively Considerable Increase in Criteria Pollutants. Alternative 3A would implement the same transportation improvements as the Proposed Project. Under both Alternative 3A and the Proposed Project, regional construction emissions of the nonattainment pollutants (PM10, PM2.5, and O_3 precursors [NOx and VOC]) would be less than the SCAQMD significance thresholds. Therefore, regional construction emissions related to Alternative 3A would not be cumulatively considerable, and impacts would be less than significant. However, localized construction emissions of particulate matter associated with the construction of the proposed transportation improvements under this alternative would exceed SCAQMD thresholds. Therefore, localized construction emissions related to Alternative 3A would be cumulatively considerable. This would be a significant impact.

With the technology advances noted above, as with the Proposed Project, operation of the proposed transportation improvements under Alternative 3A would result in a decrease in emissions of the nonattainment pollutants PM10, PM2.5, and O_3 precursors (NOx and VOC) compared to existing conditions. Therefore, as with the Proposed Project, operational emissions associated with Alternative 3A would not be cumulatively considerable and this impact would be less than significant.

Expose Sensitive Receptors to Substantial Pollutant Concentrations. Alternative 3A would implement the same transportation improvements as the Proposed Project. Under both Alternative 3A and the Proposed Project, construction of the Lincoln Boulevard Bridge Enhancement, the Lincoln Boulevard and Sepulveda Boulevard BRTs, and the I-10 Ramp Reconfiguration at Bundy Drive would exceed SCAQMD's LSTs for particulate matter and the threshold for TACs. This would be a significant and unavoidable impact.

Relative to operations, as with the Proposed Project, under Alternative 3A, with the vehicle emission control technologies noted above, emissions of mobile source air toxics would be lower than existing conditions and impacts would be less than significant.

Objectionable Odors Affecting a Substantial Number of People. Similar to the Proposed Project, Alternative 3A would not create objectionable odors affecting a substantial number of people, and the impact would be less than significant.

6.7.4.2 Biological Resources

Adverse Effects on Sensitive Species, Sensitive Habitats, or Wetlands. Although Alternative 3A would alter the method for implementing transportation improvements in the study area (i.e., by removal of vehicle travel lanes to provide additional right-of-way for transit or bicycle facilities), the list of transportation improvements that would be implemented would not change. As a result, the construction and operations related impacts to biological resources under Alternative 3A would be the same as for the Proposed Project. Construction of the Lincoln Boulevard Bridge Enhancement would result in significant but mitigable impacts to special-status species and habitat in the BWER. As with the Proposed Project, other proposed transportation improvements could result in the removal, trimming, or disturbance of street trees and ornamental landscaping that have the potential to support nesting migratory birds that are protected by the MBTA and the CFGC. Construction activities occurring within the nesting season would have the potential to result in the removal or destruction of an active nest or direct mortality or injury of individual birds. As with the Proposed Project, this is a potentially significant impact; with mitigation, this impact would be less than significant.

Adverse Effects on Migratory Species or Wildlife Corridors. Habitat within the project area is generally fragmented and of low value (e.g., ornamental landscaping) and does not provide viable linkages or migration corridors between habitat areas. However, as noted above, street trees within or immediately adjacent to right-of-ways could potentially support migratory birds. As with the Proposed Project, construction activities associated with Alternative 3A could result in the removal or destruction of an active nest or direct mortality or injury of individual birds. This would be a potentially significant impact; with mitigation, this impact would be less than significant.

6.7.4.3 Greenhouse Gas Emissions

Generation of GHG Emissions. Alternative 3A would implement the same transportation improvements as the Proposed Project, therefore GHG impacts associated with construction activities would be the same. As with the Proposed Project, construction of the proposed transportation improvements under Alternative 3A would result in temporary increases in GHG emissions. The 2012-2035 RTP/SCS estimated that construction emissions from all development activity in Los Angeles County would be approximately 0.2 percent of countywide GHG emissions in 2035 (SCAG, 2012). As with the Proposed Project, construction-related emissions associated with Alternative 3A would be a small portion of total construction emissions estimated in the 2012-2035 RTP/SCS, which themselves are expected to represent only 0.2 percent of countywide GHG emissions in 2035.

As with the Proposed Project, with background growth, Alternative 3A would result in higher total VMT compared to existing conditions. Although traffic volumes would be higher due to background growth, pollutants emissions from mobile sources are expected to be much lower due to technological advances in vehicle emission control, turnover in the vehicle fleet, and new emission standards. As a result, similar to the Proposed Project, under Alternative 3A, impacts related to GHG emissions associated with operations, combined with amortized construction-related GHG emissions, would be less than significant.

Impede Attainment of SCAG's per Capita Emission Reduction Targets. The Proposed Project is anticipated to reduce daily project area VMT by 3.4 percent as compared to future conditions without the Proposed Project and by 4.4 percent compared to existing conditions, with related decreases in GHG emissions. Under Alternative 3A, it is expected that total VMT and VMT per Capita would be similar to the Proposed Project, with similar GHG emissions. Moreover, due to technological advances in vehicle emissions systems, projected turnover in the vehicle fleet, and future emission standards, GHG emissions associated with the Alternative 3A would be lower than existing conditions and slightly lower than Future without Project conditions. As all of the transportation improvements would still be implemented, Alternative 3A would advance the strategies provided in the 2012-2035 RTP/SCS to reach GHG emission reduction targets. Therefore, Alternative 3A would not impede attainment of SCAG's per Capita GHG emission reduction targets established in the 2012-2035 RTP/SCS and the impact would be less than significant.

Conflict with GHG Reduction Policies. Although Alternative 3A would alter the method for implementing transportation improvements in the study area (i.e., by removal of vehicle travel lanes to provide additional right-of-way for transit or bicycle facilities), the list of transportation improvements that would be implemented would not change. Therefore, as with the Proposed Project, the transportation improvements under Alternative 3A would increase mobility options, increase access to alternative modes of transportation, and reduce future transportation emissions. Per Capita GHG emissions under this alternative would be consistent with the 2012-2035 RTP/SCS regional CO_2 emission reduction targets and with SB 375. Alternative 3A would reduce VMT per Capita in the project area compared to existing and Future without Project conditions and would result in a reduction in daily VMT compared to the Future without Project scenario. Overall, Alternative 3A would be aligned with GHG reduction plans and policies contained in the 2012-2035 RTP/SCS, MP 2035, Plan for a Healthy Los Angeles, and Green LA Plan.

6.7.4.4 Land Use and Planning

Division of a Community. Although Alternative 3A would alter the method for implementing transportation improvements in the study area (i.e., by removal of on-street parking to provide additional right-of-way for transit or bicycle facilities), the list of transportation improvements that would be implemented would not change. Therefore, similar to the Proposed Project, construction of transportation facilities associated with Alternative 3A would be expected to result in temporary, short-term access disruptions to adjacent land uses. Due to their temporary and generally short-term nature, these impacts would be less than significant.

As with the Proposed Project, new transportation facilities associated with Alternative 3A would not be incompatible with surrounding land uses and would not create a barrier which could divide or isolate a community. On-street parking loss would be greater under Alternative 3A as compared to the Proposed Project since parking lane removal would be the primary method of achieving increased right-of-way when it is needed for transit and active transportation projects. Similar to the Proposed Project, parking loss could indirectly affect businesses; these affects would be greater under Alternative 3A. However, the change in parking availability would not cause a disruption of land uses that would constitute a significant land use impact. Therefore, as with the Proposed Project, Alternative 3A would not result in land use incompatibilities, or physically disrupt, divide, or isolate an existing neighborhood or community, and impacts would be less than significant.

Land Use Plan Consistency. As with the Proposed Project, construction and operation of the mobility improvements under Alternative 3A would be consistent with regional and local adopted plans and policies and impacts would be less than significant.

6.7.4.5 Noise and Vibration

Expose Persons or Generate Excessive Noise Levels above Standards or Generate a Substantial Temporary or Permanent Increase in Ambient Noise Levels. Although Alternative 3A would alter the method for implementing transportation improvements in the study area (i.e., by removal of on-street parking to provide additional right-of-way for transit or bicycle facilities), the list of transportation improvements that would be implemented would not change. As with the Proposed Project, under Alternative 3A, construction of transportation improvements would occur in proximity to sensitive receptors. These construction activities could generate noise levels up to 97 dBA at 50 feet. In many cases, construction of these improvements may occur over a period of just a few days in any one location; nevertheless, even with adherence to the LAMC, construction activities associated with Alternative 3A could exceed ambient noise levels by 5 dBA or more at a noise sensitive use for more than ten days in a three-month period and could exceed existing ambient noise levels by 10 dBA or more at a noise sensitive use for more than one day. In general, these impacts would be infrequent and of short duration and would only affect a small number of sensitive receptors. Nevertheless, as with the Proposed Project, this would be a significant and unavoidable impact.

During operations, as with the Proposed Project, enhanced mobility under Alternative 3A may change vehicle speeds on some roadways, which could result in changes in noise levels. Decreased vehicle speeds could result in lower vehicle noise levels on some roadways during some periods compared to existing conditions, while increases in bus and private vehicle speeds on other roadways and/or during other time periods could result in higher vehicle noise levels compared to existing conditions. In addition, vehicle trips would increase in the study area due to background growth. Moreover, by preserving vehicle capacity, it is expected that total vehicle trips would be marginally greater under Alternative 3A than under the Proposed Project. However, increased vehicle trips and speeds would not reach a level that would exceed noise standards; as a result, noise impacts from vehicular traffic would be less than significant.

Alternative 3A would result in the implementation of the same curb-running rapid buses and BRT as the Proposed Project. As with the Proposed Project, curb-running rapid buses and BRT could increase noise levels at some sensitive land uses by more than 3 dBA. This would be a significant and unavoidable impact.

Generate Excessive Groundborne Vibration. Construction-related vibration impacts under Alternative 3A would be the same as the Proposed Project. As with the Proposed Project, under Alternative 3A, construction activities would occur in proximity to nearby structures and sensitive receptors. Based on the typical construction equipment likely to be used during construction, it is not anticipated that construction activities would generate vibration that would adversely affect structures. However, construction activities could exceed the human annoyance vibration threshold for frequent events. Human annoyance impacts from vibration associated with the majority of construction activities would be infrequent and of short duration and would only affect a small number of sensitive receptors. Moreover, implementation of recommended mitigation measures would reduce human annoyance impacts associated with vibration to the extent feasible. Nevertheless, even with mitigation, vibration at some locations would be a significant and unavoidable impact. As with the Proposed Project, operational vibration impacts under Alternative 3A from vehicular traffic would be less than significant.

Expose People Within Proximity to Airports to Excessive Noise Levels. As with the Proposed Project, construction of transportation improvements associated with Alternative 3A would not expose construction workers to excessive airport-related noise levels. Therefore, impacts would be less than significant.

Land uses in the project area would not change under Alternative 3A. Therefore, the project would not expose residents to excessive airport-related noise and no operational impact would occur.

6.7.4.6 Transportation

Conflict with Transportation Policies, Plans, or Programs. Overall, Alternative 3A would be consistent with applicable regional and local adopted plans and policies. Alternative 3A would provide the same multimodal options as would the Proposed Project. As with the Proposed Project, impacts relating to consistency with adopted policies, plans, and programs under Alternative 3A would be less than significant.

Exceed Thresholds for Roadway Operations on the Vehicular Circulation System. Alternative 3A would implement the proposed transportation improvements and utilize additional right-of-way made available by the removal of on-street parking to the extent that on-street parking is currently available. Most roadways within the Specific Plan area currently have on-street parking. However, on-street parking restrictions in which the parking lane becomes a vehicular travel lane to provide additional vehicle capacity are common during the morning and afternoon peak commute hours. Typically, the parking restriction on a roadway segment occurs only during the morning or afternoon peak hours depending on the directionality of vehicle flows (e.g., westbound vehicle demand is higher in the morning and eastbound vehicle demand is higher in the afternoon). Therefore, the implementation of Alternative 3A would result in additional vehicle capacity but not on all roadway segments and not during all times of the day. Overall congestion in the Specific Plan areas would still be expected to increase under Alternative 3A in comparison to existing conditions due to background growth. On a regional level, traffic in the study area is anticipated to increase in conjunction with regional population, housing, and employment growth projected to occur in the future. This growth will occur with or without implementation of Alternative 3A. The background growth influences the transportation analysis by accounting for the increased activity levels under Future with Alternative 3A conditions. Consequently, when comparing traffic operations under Future with Alternative 3A conditions to existing conditions, peak period congestion would be expected to continue to increase. As with the Proposed Project, impacts relating to roadway operations on the vehicular circulation system under Alternative 3A would be significant and unavoidable. Compared to the Proposed Project, Alternative 3A would maintain the existing roadway capacity along select corridors through the removal of on-street parking, which has the potential to result in slightly lesser impacts to vehicle operations as compared to the Proposed Project while providing the same multimodal benefits.

Consideration of New Potential Metrics. Alternative 3A would implement the proposed transportation improvements and utilize additional right-of-way made available by the removal of on-street parking to the extent that on-street parking is currently available. The benefits of distributing travelers across all modes of transportation (mode split) would be similar to the Proposed Project, and transit ridership would also be expected to increase to the levels envisioned with the Proposed Project. The implementation of the projects on the updated project lists would continue to result in a decrease in VMT and VMT per Capita in comparison to Future without Project conditions. The mode split improvements and the associated reductions in VMT would help to meet the State's goals of reducing greenhouse gas emissions, as mandated by AB 32 and SB 375. In addition, these performance indicators are potential metrics for evaluating transportation impacts that may be included in future revisions to City’s L.A. CEQA Thresholds Guide. While the City of Los Angeles has not yet developed thresholds for these metrics, Alternative 3A would result in an increase in mode shares for transit, biking and walking and a decrease in VMT in comparison to Future without Project conditions. Given this conclusion, Alternative 3A would not result in a significant adverse transportation impact under these potential new CEQA metrics.

Exceed Thresholds for Neighborhood Traffic Intrusion. Alternative 3A would implement the proposed transportation improvements and utilize additional right-of-way made available by the removal of on-street parking to the extent that on-street parking is currently available. Overall congestion in the Specific Plan areas would still be expected to increase under Alternative 3A compared to existing conditions and would be slightly better as compared to the Proposed Project. Along roadways where Alternative 3A would cause significant traffic congestion, diversion of trips could occur onto adjacent parallel routes. It is anticipated that diversion would not occur on streets that operate at LOS D or better during peak periods because the average delay is not substantial. However, for the street segments where the LOS would degrade from D to E or F, some trips could divert to adjacent streets to avoid longer travel times through congested locations. On a regional level, traffic in the study area is anticipated to increase in conjunction with regional population, housing, and employment growth projected to occur in the future. This growth will occur with or without implementation of Alternative 3A. The background growth influences the transportation analysis by accounting for the increased activity levels under Future with Alternative 3A conditions. Consequently, when comparing neighborhood traffic intrusion under Future with Alternative 3A conditions to existing conditions, traffic intrusion would be expected to continue to increase. As with the Proposed Project, impacts relating to neighborhood traffic intrusion under Alternative 3A would be significant and unavoidable. Compared to the Proposed Project, Alternative 3A would maintain the existing roadway capacity along select corridors through the removal of on-street parking, which could result in fewer vehicles diverting to neighborhood streets.

Exceed Thresholds for CMP and State Freeway Facilities. Alternative 3A would implement the proposed transportation improvements and utilize additional right-of-way made available by the removal of on-street parking to the extent that on-street parking is currently available. While traffic operations on select roadways be marginally better under Alternative 3A, overall congestion in the Specific Plan areas would still be expected to increase compared to existing conditions and would not be substantially different from the Proposed Project. On a regional level, traffic in the study area is anticipated to increase in conjunction with regional population, housing, and employment growth projected to occur in the future. This growth will occur with or without implementation of Alternative 3A. The background growth influences the transportation analysis by accounting for the increased activity levels under Future with Alternative 3A conditions. Consequently, when comparing traffic operations on CMP and state freeway facilities under Future with Alternative 3A conditions to existing conditions, congestion would be expected to continue to increase. As with the Proposed Project, impacts relating to CMP and state freeway facilities under Alternative 3A would be significant and unavoidable. Compared to the Proposed Project, Alternative 3A would result in similar impacts to CMP and state freeway facilities.

Adversely Affect Fire Protection Services/Emergency Access. Based on the City's adopted threshold of significance, Alternative 3A would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service. LAFD is responsible for public safety and must respond to changing circumstances and therefore would act to maintain response times. The steps that LAFD would have to take to maintain public safety are not reasonably foreseeable at this time. Options available to LAFD include expanding the Fire Preemption System, increasing staffing levels, and adding new fire stations(s) to underserved areas. The potential for new fire station construction is speculative at the present time and is therefore not analyzed as part of Alternative 3A. Depending on the location of new fire protection facilities, operational impacts (primarily noise) could occur; however, such impacts are unforeseeable at this time. As with the Proposed Project, impacts relating to emergency access under Alternative 3A would be less than significant.

Disrupt Public Transit, Bicycle, or Pedestrian Facilities. Overall, Alternative 3A would not disrupt existing public transit, bicycle, or pedestrian facilities or interfere with planned facilities. As with the Proposed Project, impacts relating to the disruption to existing public transit, bicycle, or pedestrian facilities or interference with planned facilities under Alternative 3A would be less than significant.

Substantially Change Transportation Safety. None of the transportation system improvements under Alternative 3A would introduce new safety hazards at intersections or along roadway segments, as most would be designed to improve safety for all roadway users. As with the Proposed Project, impacts relating to transportation safety would be less than significant.

Construction Activities on Major Corridors. Implementation of transportation improvements under Alternative 3A would mostly consist of roadway restriping and limited changes to the physical configuration of curbs, and thus, would likely be short in duration (lasting up to a few weeks), while other projects, such as the Lincoln Boulevard Bridge Enhancement, I-10 Ramp Reconfiguration at Bundy Drive, and center-running BRT on Lincoln and Sepulveda boulevards, would require longer construction duration. As with the Proposed Project, temporary construction impacts under Alternative 3A would be significant and unavoidable.

Parking. Parking deficits are considered to be social effects, rather than impacts on the physical environment as defined by CEQA. While a project's social impacts need not be treated as significant impacts on the environment, the secondary physical impacts that would be triggered by a social impact must be addressed. Some of the transportation projects contained in Alternative 3A would remove on-street parking in certain locations while others provide parking solutions. For the purpose of analyzing potential impacts at a programmatic level, assumptions needed to be made as to how the projects could be implemented based on conceptual designs. Under Alternative 3A, it was assumed that some of the proposed transportation improvements would utilize additional right-of-way made available by the removal of on-street parking to the extent that on-street parking is currently available. Most roadways within the Specific Plan area currently have on-street parking. However, on-street parking restrictions in which the parking lane becomes a vehicular travel lane to provide additional vehicle capacity are common during the morning and afternoon peak commute hours. Typically, the parking restriction on a roadway segment occurs only during the morning or afternoon peak hours depending on the directionality of vehicle flows (e.g., westbound vehicle demand is higher in the morning and eastbound vehicle demand is higher in the afternoon). Alternative 3A would result in a loss of on-street parking spaces that could increase VMT if people drive farther to find parking or seek an alternate destination with more convenient parking. However, this increased VMT (attributed to finding parking) would be expected to be offset by implementing the parking projects and programs included in the Proposed Project. Hence, any secondary environmental impacts which may result from a shortfall in parking are anticipated to be minor and other transportation analyses reasonably address potential secondary impacts. As with the Proposed Project, traffic impacts related to parking under Alternative 3A would be less than significant.

6.7.5 Alternative 3B – Reduced Vehicle Capacity

All transportation improvements associated with the Proposed Project are included in this alternative. This alternative offers a distinction on how right-of-way is utilized for the proposed transportation improvements. Under this alternative, as with the Proposed Project, the majority of the proposed transportation improvements would be achieved within existing roadway right-of-ways. Under the Proposed Project, it is assumed that when additional right-of-way for projects (such as BRT and bicycle facilities) is needed, it would be provided through a combination of vehicular capacity reductions (lane conversions) along with on-street parking removal. Under this alternative, the Reduced Vehicle Capacity alternative, when additional right-of-way is required, right-of-way would be provided solely by converting vehicle travel lanes into transit/bicycle facilities, with no removal of on-street parking.

The physical distinctions between Alternative 3B and the Proposed Project are minimal, as right-of-way reallocation for transportation improvements would only be necessary on select roadway segments. Under this alternative, as compared to the Proposed Project, there would be marginally less vehicle capacity and slightly more on-street parking spaces on select roadway segments. Overall, VMT in the study area would be similar to the Proposed Project. The following analysis discusses the potential impacts associated with the reduced vehicle capacity under Alternative 3B compared to those of the Proposed Project.

6.7.5.1 Air Quality

Conflict with Air Quality Plans. Although Alternative 3B would alter the method for implementing transportation improvements in the study area (i.e., by removal of parking to provide additional right-of-way for transit or bicycle facilities), the list of transportation improvements that would be implemented would not change. Therefore, as with the Proposed Project, Alternative 3B would not result in any alterations in land use in the project area and would not affect future regional development anticipated in the 2012-2035 RTP/SCS or incorporated as assumptions in the AQMP. Alternative 3B would improve mobility in the Westside by providing more transportation options and conditions that would promote use of alternative forms of transportation, including public transit, bicycles, and walking.

The purpose of the 2012 AQMP is to provide updated air pollution control strategies to bring the SoCAB into compliance with federal ambient air quality standards. The AQMP relies upon a number of strategies to meet the federal ambient air quality standards, including promotion of a sustainable transportation system that emphasizes transit and non-motorized transportation and that increases multimodal mobility and minimizes VMT. These goals are also reflected in the 2012-2035 RTP/SCS, the City of Los Angeles Air Quality Element, and MP 2035. The Proposed Project is anticipated to reduce daily project area VMT by 3.4 percent as compared to future conditions without the Proposed Project. Per capita VMT would decrease by 4.4 percent compared to existing conditions and by 3.4 percent compared to Future without Project conditions. Under Alternative 3B, it is expected that total VMT and VMT per Capita would be similar to the Proposed Project, with similar air emissions. Alternative 3B would be aligned with the 2012-2035 RTP/SCS as well as relevant air quality policy objectives of the City's Air Quality Element, Plan for a Healthy Los Angeles, and MP 2035.

Violate Air Quality Standards. Alternative 3B would implement the same transportation improvements as the Proposed Project. As with the Proposed Project, construction emissions under this alternative would not exceed SCAQMD thresholds, and construction impacts would not conflict with or obstruct implementation of the AQMP. Therefore, as with the Proposed Project, Alternative 3B would not result in a significant impact related to air quality standards.

With background growth, Alternative 3B would result in higher total VMT compared to existing conditions. Although traffic volumes would be higher due to background growth, pollutants emissions from mobile sources are expected to be much lower due to technological advances in vehicle emission control, turnover in the vehicle fleet, and new emission standards. As a result, similar to the Proposed Project, emissions under this alternative would not exceed the SCAQMD significance thresholds.

Cumulatively Considerable Increase in Criteria Pollutants. Alternative 3B would implement the same transportation improvements as the Proposed Project. Under both Alternative 3B and the Proposed Project, regional construction emissions of the nonattainment pollutants (PM10, PM2.5, and O_3 precursors [NOx and VOC]) would be less than the SCAQMD significance thresholds. Therefore, regional construction emissions related to Alternative 3B would not be cumulatively considerable, and impacts would be less than significant. However, localized construction emissions of particulate matter associated with the construction of the proposed transportation improvements under this alternative would exceed SCAQMD thresholds. Therefore, localized construction emissions related to Alternative 3B would be cumulatively considerable. This would be a significant impact.

With the technology advances noted above, as with the Proposed Project, operation of the proposed transportation improvements under Alternative 3B would result in a decrease in emissions of the nonattainment pollutants PM10, PM2.5, and O_3 precursors (NOx and VOC) compared to existing conditions. Therefore, as with the Proposed Project, operational emissions associated with Alternative 3B would not be cumulatively considerable and this impact would be less than significant.

Expose Sensitive Receptors to Substantial Pollutant Concentrations. Alternative 3B would implement the same transportation improvements as the Proposed Project. Under both Alternative 3B and the Proposed Project, construction of the Lincoln Boulevard Bridge Enhancement, the Lincoln Boulevard and Sepulveda Boulevard BRTs, and the I-10 Ramp Reconfiguration at Bundy Drive would exceed SCAQMD's LSTs for particulate matter and the threshold for TACs. This would be a significant and unavoidable impact.

Relative to operations, as with the Proposed Project, under Alternative 3B, with the vehicle emission control technologies noted above, emissions of mobile source air toxics would be lower than existing conditions and impacts would be less than significant.

Objectionable Odors Affecting a Substantial Number of People. Similar to the Proposed Project, Alternative 3B would not create objectionable odors affecting a substantial number of people, and the impact would be less than significant.

6.7.5.2 Biological Resources

Adverse Effects on Sensitive Species, Sensitive Habitats, or Wetlands. Although Alternative 3B would alter the method for implementing transportation improvements in the study area (i.e., by removal of parking to provide additional right-of-way for transit or bicycle facilities), the list of transportation improvements that would be implemented would not change. Therefore, the construction and operations related impacts to biological resources under Alternative 3B would be the same as for the Proposed Project. Construction of the Lincoln Boulevard Bridge Enhancement would result in significant but mitigable impacts to special-status species and habitat in the BWER. As with the Proposed Project, other proposed transportation improvements could result in the removal, trimming, or disturbance of street trees and ornamental landscaping that have the potential to support nesting migratory birds that are protected by the MBTA and the CFGC. Construction activities occurring within the nesting season would have the potential to result in the removal or destruction of an active nest or direct mortality or injury of individual birds. As with the Proposed Project, this is a potentially significant impact; with mitigation, this impact would be less than significant.

Adverse Effects on Migratory Species or Wildlife Corridors. Habitat within the project area is generally fragmented and of low value (e.g., ornamental landscaping) and does not provide viable linkages or migration corridors between habitat areas. However, as noted above, street trees within or immediately adjacent to right-of-ways could potentially support migratory birds. As with the Proposed Project, construction activities associated with Alternative 3B could result in the removal or destruction of an active nest or direct mortality or injury of individual birds. This would be a potentially significant impact; with mitigation, this impact would be less than significant.

6.7.5.3 Greenhouse Gas Emissions

Generation of GHG Emissions. Alternative 3B would implement the same transportation improvements as the Proposed Project, therefore GHG impacts associated with construction activities would be the same. As with the Proposed Project, construction of the proposed transportation improvements under Alternative 3B would result in temporary increases in GHG emissions. The 2012-2035 RTP/SCS estimated that construction emissions from all development activity in Los Angeles County would be approximately 0.2 percent of countywide GHG emissions in 2035 (SCAG, 2012). As with the Proposed Project, construction-related emissions associated with Alternative 3B would be a small portion of total construction emissions estimated in the 2012-2035 RTP/SCS, which themselves are expected to represent only 0.2 percent of countywide GHG emissions in 2035.

As with the Proposed Project, with background growth, Alternative 3B would result in higher total VMT compared to existing conditions. Although traffic volumes would be higher due to background growth, pollutants emissions from mobile sources are expected to be much lower due to technological advances in vehicle emission control, turnover in the vehicle fleet, and new emission standards. As a result, similar to the Proposed Project, impacts related to GHG emissions associated with operations, combined with amortized construction-related GHG emissions, under Alternative 3B would be less than significant.

Impede Attainment of SCAG's per Capita Emission Reduction Targets. The Proposed Project is anticipated to reduce daily project area VMT by 3.4 percent as compared to future conditions without the Proposed Project and by 4.4 percent compared to existing conditions, with related decreases in GHG emissions. Under Alternative 3B, it is expected that total VMT and VMT per Capita would be similar to the Proposed Project, with similar GHG emissions. Moreover, due to technological advances in vehicle emissions systems, projected turnover in the vehicle fleet, and future emission standards, GHG emissions associated with the Alternative 3B would be lower than existing conditions and slightly lower than Future without Project conditions. As all of the transportation improvements would still be implemented, Alternative 3B would advance the strategies provided in the 2012-2035 RTP/SCS to reach GHG emission reduction targets. Therefore, Alternative 3B would not impede attainment of SCAG's per Capita GHG emission reduction targets established in the 2012-2035 RTP/SCS and the impact would be less than significant.

Conflict with GHG Reduction Policies. Although Alternative 3B would alter the method for implementing transportation improvements in the study area (i.e., by removal of parking to provide additional right-of-way for transit or bicycle facilities), the list of transportation improvements that would be implemented would not change. Therefore, as with the Proposed Project, the transportation improvements under Alternative 3B would increase mobility options, increase access to alternative modes of transportation, and reduce future transportation emissions. Per Capita GHG emissions under this alternative would be consistent with the 2012-2035 RTP/SCS regional CO_2 emission reduction targets and with SB 375. Alternative 3B would reduce VMT per Capita in the project area compared to existing and Future without Project conditions and would result in a reduction in daily VMT compared to the Future without Project scenario. Therefore, Alternative 3B would be aligned with GHG reduction plans and policies contained in the 2012-2035 RTP/SCS, MP 2035, Plan for a Healthy Los Angeles, and Green LA Plan.

6.7.5.4 Land Use and Planning

Division of a Community. Although Alternative 3B would alter the method for implementing transportation improvements in the study area (i.e., by removal of vehicle travel lanes to provide additional right-of-way for transit or bicycle facilities), the list of transportation improvements that would be implemented would not change. Therefore, similar to the Proposed Project, construction of transportation facilities associated with Alternative 3B would be expected to result in temporary, short-term access disruptions to adjacent land uses. Due to their temporary and generally short-term nature, these impacts would be less than significant.

As with the Proposed Project, new transportation facilities associated with Alternative 3B would not be incompatible with surrounding land uses and would not create a barrier which could divide or isolate a community. Unlike the Proposed Project, no loss of on-street parking would occur; as a result, indirect impacts to businesses related to a loss of parking would not occur under Alternative 3B. As with the Proposed Project, Alternative 3B would not result in land use incompatibilities, or physically disrupt, divide, or isolate an existing neighborhood or community, and impacts would be less than significant.

Land Use Plan Consistency. As with the Proposed Project, construction and operation of the mobility improvements under Alternative 3B would be consistent with regional and local adopted plans and policies and impacts would be less than significant.

6.7.5.5 Noise and Vibration

Expose Persons or Generate Excessive Noise Levels above Standards or Generate a Substantial Temporary or Permanent Increase in Ambient Noise Levels. Although Alternative 3B would alter the method for implementing transportation improvements in the study area (i.e., by removal of vehicle travel lanes to provide additional right-of-way for transit or bicycle facilities), the list of transportation improvements that would be implemented would not change. As with the Proposed Project, under Alternative 3B, construction of transportation improvements would occur in proximity to sensitive receptors. These construction activities could generate noise levels up to 97 dBA at 50 feet. In many cases, construction of these improvements may occur over a period of just a few days in any one location; nevertheless, even with adherence to the LAMC, construction activities associated with Alternative 3B could exceed ambient noise levels by 5 dBA or more at a noise sensitive use for more than ten days in a three-month period and could exceed existing ambient noise levels by 10 dBA or more at a noise sensitive use for more than one day. In general, these impacts would be infrequent and of short duration and would only affect a small number of sensitive receptors. Nevertheless, as with the Proposed Project, this would be a significant and unavoidable impact.

During operations, as with the Proposed Project, enhanced mobility under Alternative 3B may change vehicle speeds on some roadways, which could result in changes in noise levels. Decreased vehicle speeds could result in lower vehicle noise levels on some roadways during some periods compared to existing conditions, while increases in bus and private vehicle speeds on other roadways and/or during other time periods could result in higher vehicle noise levels compared to existing conditions. In addition, vehicle trips would increase in the study area due to background growth, however, by eliminating vehicle capacity to a greater degree than the Proposed Project, it is expected that total VMT would be reduced to a greater extent than under the Proposed Project. Increased vehicle trips and speeds would not reach a level that would exceed noise standards; as a result, noise impacts from vehicular traffic would be less than significant.

Alternative 3B would result in the implementation of the same curb-running rapid buses and BRT as the Proposed Project. As with the Proposed Project, curb-running rapid buses and BRT could increase noise levels at some sensitive land uses by more than 3 dBA. This would be a significant and unavoidable impact.

Generate Excessive Groundborne Vibration. Construction-related vibration impacts under Alternative 3B would be the same as the Proposed Project. As with the Proposed Project, under Alternative 3B, construction activities would occur in proximity to nearby structures and sensitive receptors. Based on the typical construction equipment likely to be used during construction, it is not anticipated that construction activities would generate vibration that would adversely affect structures. However, construction activities could exceed the human annoyance vibration threshold for frequent events. Human annoyance impacts from vibration associated with the majority of construction activities would be infrequent and of short duration and would only affect a small number of sensitive receptors. Moreover, implementation of recommended mitigation measures would reduce human annoyance impacts associated with vibration to the extent feasible. Nevertheless, even with mitigation, vibration at some locations would be a significant and unavoidable impact. As with the Proposed Project, under Alternative 3B, operational vibration impacts from vehicular traffic would be less than significant.

Expose People Within Proximity to Airports to Excessive Noise Levels. As with the Proposed Project, construction of transportation improvements associated with Alternative 3B would not expose construction workers to excessive airport-related noise levels. Therefore, impacts would be less than significant.

Land uses in the project area would not change under Alternative 3B. Therefore, the project would not expose residents to excessive airport-related noise and no operational impact would occur.

6.7.5.6 Transportation

Conflict with Transportation Policies, Plans, or Programs. Overall, Alternative 3B would be consistent with applicable regional and local adopted plans and policies. Alternative 3B would provide the same multimodal options as would the Proposed Project. As with the Proposed Project, impacts relating to consistency with adopted policies, plans and programs under Alternative 3B would be less than significant.

Exceed Thresholds for Roadway Operations on the Vehicular Circulation System. Alternative 3B would implement the proposed transportation improvements and utilize additional right-of-way made available by the conversion of vehicular travel lanes to other multimodal facilities, such as bus-only lanes or bicycle facilities. Therefore, the implementation of Alternative 3B would result in a reduction in vehicle capacity. Overall congestion in the Specific Plan areas would continue to increase under Alternative 3B in comparison to existing conditions due to background growth. On a regional level, traffic in the study area is anticipated to increase in conjunction with regional population, housing, and employment growth projected to occur in the future. This growth will occur with or without implementation of Alternative 3B. The background growth influences the transportation analysis by accounting for the increased activity levels under Future with Alternative 3B conditions. Consequently, when comparing traffic operations under Future with Alternative 3B conditions to existing conditions, peak period congestion would be expected to continue to increase. As with the Proposed Project, impacts relating to roadway operations on the vehicular circulation system under Alternative 3B would be significant and unavoidable. Compared to the Proposed Project, Alternative

3B would provide less roadway capacity along select corridors through the conversion of vehicular travel lanes, which has the potential to result in slightly greater impacts to vehicle operations as compared to the Proposed Project.

Consideration of New Potential Metrics. Alternative 3B would implement the proposed transportation improvements and utilize additional right-of-way made available by the conversion of vehicular travel lanes to other multimodal facilities. The benefits of distributing travelers across all modes of transportation (mode split) would be similar to the Proposed Project, and transit ridership would also be expected to increase to the levels envisioned with the Proposed Project. The implementation of the projects on the updated project lists would continue to result in a decrease in VMT and VMT per Capita in comparison to Future without Project conditions. The mode split improvements and the associated reductions in VMT would help to meet the State's goals of reducing greenhouse gas emissions, as mandated by AB 32 and SB 375. In addition, these performance indicators are potential metrics for evaluating transportation impacts that may be included in future revisions to City's L.A. CEQA Thresholds Guide. While the City of Los Angeles has not yet developed thresholds for these metrics, Alternative 3B would result in an increase in mode shares for transit, biking and walking and a decrease in VMT in comparison to Future without Project conditions. Given this conclusion, Alternative 3B would not result in a significant adverse transportation impact under these potential new CEQA metrics.

Exceed Thresholds for Neighborhood Traffic Intrusion. Alternative 3B would implement the proposed transportation improvements and utilize additional right-of-way made available by the conversion of vehicular travel lanes to other multimodal facilities, such as bus-only lanes or bicycle facilities. Therefore, the implementation of Alternative 3B would result in a reduction in vehicle capacity. Overall congestion in the Specific Plan areas would continue to increase under Alternative 3B compared to existing conditions and would not be substantially different from the Proposed Project. Along roadways where Alternative 3B would cause significant traffic congestion, diversion of trips could occur onto adjacent parallel routes. It is anticipated that diversion would not occur on streets that operate at LOS D or better during peak periods because the average delay is not substantial. However, for the street segments where the LOS would degrade from D to E or F, some trips could divert to adjacent streets to avoid longer travel times through congested locations. On a regional level, traffic in the study area is anticipated to increase in conjunction with regional population, housing, and employment growth projected to occur in the future. This growth will occur with or without implementation of Alternative 3B. The background growth influences the transportation analysis by accounting for the increased activity levels under Future with Alternative 3B conditions. Consequently, when comparing neighborhood traffic intrusion under Future with Alternative 3B conditions to existing conditions, traffic intrusion would be expected to continue to increase. As with the Proposed Project, impacts relating to neighborhood traffic intrusion under Alternative 3B would be significant and unavoidable. Compared to the Proposed Project, Alternative 3B would provide reduced roadway capacity along select corridors through the conversion of vehicular travel lanes to other multimodal facilities, which could result in more vehicles diverting to neighborhood streets and the impact to neighborhood traffic intrusion would likely be greater than the Proposed Project.

Exceed Thresholds for CMP and State Freeway Facilities. Alternative 3B would implement the proposed transportation improvements and utilize additional right-of-way made available by the conversion of vehicular travel lanes to other multimodal facilities, such as bus-only lanes or bicycle facilities. Overall congestion in the Specific Plan areas would continue to increase compared to existing conditions and would not be substantially different from the Proposed Project. On a regional level, traffic in the study area is anticipated to increase in conjunction with regional population, housing, and employment growth projected to occur in the future. This growth will occur with or without implementation of Alternative 3B. The background growth influences the transportation analysis by accounting for the increased activity levels under Future with Alternative 3B conditions. Consequently, when comparing traffic operations on CMP and state freeway facilities under Future with Alternative 3B conditions to existing conditions, congestion would be expected to continue to increase. As with the Proposed Project, impacts relating to CMP and state freeway facilities under Alternative 3B would be significant and unavoidable. Compared to the Proposed Project, Alternative 3B would result in similar impacts to CMP and state freeway facilities.

Adversely Affect Fire Protection Services/Emergency Access. Based on the City's adopted threshold of significance, Alternative 3B would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service. LAFD is responsible for public safety and must respond to changing circumstances and therefore would act to maintain response times. The steps that LAFD would have to take to maintain public safety are not reasonably foreseeable at this time. Options available to LAFD include expanding the Fire Preemption System, increasing staffing levels, and adding new fire stations(s) to underserved areas. The potential for new fire station construction is speculative at the present time and is therefore not analyzed as part of Alternative 3B. Depending on the location of new fire protection facilities, operational impacts (primarily noise) could occur; however, such impacts are unforeseeable at this time. As with the Proposed Project, impacts relating to emergency access under Alternative 3B would be less than significant.

Disrupt Public Transit, Bicycle, or Pedestrian Facilities. Overall, Alternative 3B would not disrupt existing public transit, bicycle or pedestrian facilities or interfere with planned facilities. As with the Proposed Project, impacts relating to the disruption to existing public transit, bicycle, or pedestrian facilities or interference with planned facilities under Alternative 3B would be less than significant.

Substantially Change Transportation Safety. None of the transportation system improvements under Alternative 3B would introduce new safety hazards at intersections or along roadway segments, as most would be designed to improve safety for all roadway users. As with the Proposed Project, impacts relating to transportation safety would be less than significant.

Construction Activities on Major Corridors. Implementation of transportation improvements under Alternative 3B would mostly consist of roadway restriping and limited changes to the physical configuration of curbs, and thus, would likely be short in duration (lasting up to a few weeks), while other projects, such as the Lincoln Boulevard Bridge Enhancement, I-10 Ramp Reconfiguration at Bundy Drive, and center-running BRT on Lincoln and Sepulveda boulevards, would require longer construction duration. As with the Proposed Project, temporary construction impacts under Alternative 3B would be significant and unavoidable.

Parking. Parking deficits are considered to be social effects, rather than impacts on the physical environment as defined by CEQA. While a project's social impacts need not be treated as significant impacts on the environment, the secondary physical impacts that would be triggered by a social impact must be addressed. For the purpose of analyzing potential impacts at a programmatic level, assumptions needed to be made as to how the projects could be implemented based on conceptual designs. Under Alternative 3B, it was assumed that some of the proposed transportation improvements would utilize additional right-of-way made available by the conversion of vehicular travel lanes to other multimodal facilities and maintain existing on-street parking. As with the

Proposed Project, traffic impacts related to parking under Alternative 3B would be less than significant.

6.8 Environmentally Superior Alternative

The State CEQA Guidelines Section 15126.6(e)(2) requires that an "environmentally superior" alternative be selected among the alternatives that are evaluated in the EIR. In general, the Environmentally Superior Alternative is the alternative that would be expected to generate the fewest adverse impacts. If the No Project Alternative is identified as environmentally superior, then another environmentally superior alternative shall be identified among the other alternatives.

Table 6-1 provides a tabular comparison of the environmental impacts of each alternative, as compared to the impacts of the Proposed Project. The comparative determination is subject to a degree of subjectivity, as some impact categories address more than one consideration. In addition, in some cases, differences between an alternative and the Proposed Project may not be substantial. In other cases, an alternative may reduce or avoid significant impacts associated with the Proposed Project in one area, but exacerbate significant impacts in another area. As shown in the table, there is no single alternative that would be environmentally superior with respect to every environmental issue. Therefore, the determination of the environmentally superior alternative was based on the impacts of each alternative as a whole.

Based on an evaluation of comparative impacts Alternative 3A, the Reduced Parking Alternative, is considered to be the environmentally superior alternative. Alternative 3A is the only alternative that would reduce the severity of one of the significant operational impacts associated with the Proposed Project without increasing the severity of other significant impacts. By implementing all of the proposed transportation improvements associated with the Proposed Project, but doing so in a way that would maintain existing roadway capacity on select corridors through the removal of on-street parking, Alternative 3A has the potential to result in slightly lesser impacts to vehicle operations (i.e., congestion) and a slightly lesser occurrence of neighborhood traffic diversion, while fulfilling all of the project objectives.

Compared to Alternative 3A, Alternatives 2A and 2B would have fewer construction-related impacts associated with air quality, noise, vibration, and construction traffic. However, construction impacts would be temporary and short-term. In the long-term, Alternatives 2A and 2B would not result in the same reduction in impacts associated with vehicle operations as would Alternative 3A, or the reduction in operational impacts associated with neighborhood traffic diversion. Moreover, Alternatives 2A and 2B would not implement one of the key transportation improvements associated with the Proposed Project (i.e., the Sepulveda Boulevard or Lincoln Boulevard BRTs, respectively). As a result, these alternatives would not achieve the same consistency with regional air quality, GHG, land use, or transportation plans as would Alternative 3A, and would only partially fulfill one of the key objectives of the Proposed Project (i.e., the provision of dedicated transit lines that serve north-south corridors and provide connections to planned east-west transit lines).

As compared to Alternative 3A, by decreasing vehicle capacity, Alternative 3B would increase the severity of significant and unavoidable impacts relating to transportation performance standards and neighborhood traffic intrusion.

Under the No Project Alternative, some of the significant impacts associated with the Proposed Project would be reduced or avoided. Specifically, the No Project Alternative would avoid significant but mitigable impacts to the BWER that would occur with construction of the Lincoln Boulevard Bridge Enhancement under the Proposed Project. In addition, under the No Project Alternative, significant and unavoidable operational noise impacts associated with curb-running rapid buses and BRT would not occur. However, the No Project Alternative would increase VMT and VMT per Capita, which would result in increased operational criteria pollutant and GHG emissions, and would not result in the same level of consistency with plans and policies concerning transportation in comparison to the Proposed Project. The No Project Alternative would also result in greater construction impacts, and would increase the severity of significant and unavoidable impacts associated with air quality, noise, vibration, and construction traffic. In addition, street widenings associated with the No Project Alternative would require the acquisition of private parcels and the demolition of buildings adjacent to existing roadways, which would be disruptive and could physically alter the makeup of existing neighborhoods and communities. While land use impacts would be less than significant under the No Project Alternative, disruption to existing neighborhoods would be greater than under the Proposed Project. Moreover, the No Project Alternative would not achieve the primary objectives of the Proposed Project with respect to the provision of multimodal transportation options, reducing VMT and VMT per Capita, reducing greenhouse gas emissions, and enhancing mobility on key transportation corridors.

CHAPTER 7

REFERENCES AND LIST OF ACRONYMS

7.1 References

The following documents were referenced during the preparation of this EIR:

Chapter 1 Introduction

No references were cited in this chapter.

Chapter 2 Executive Summary

No references were cited in this chapter.

Chapter 3 Project Description

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Chapter 4 Environmental Impacts

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7.2 List of Acronyms

µg/m3	Microgram Per Cubic Meter
AB	Assembly Bill
ADA	Americans with Disabilities Act
ADT	Average Daily Traffic
AQMP	Air Quality Management Plan
asl	Above Sea Level
ATCM	Airborne Toxic Control Measures
ATSAC	Automated Traffic Surveillance and Control
BACT	Best Available Control Technology
BEN	Bicycle Enhanced Network
BRT	Bus Rapid Transit
BWER	Ballona Wetlands Ecological Reserve
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CAS	Climate Adaptation Strategy
CCAA	California Clean Air Act
CCC	California Coastal Commission
CCR	California Code of Regulations
CCTV	Closed-Circuit Television
CDFW	California Department of Fish and Wildlife
CDP	Coastal Development Permit
CDPH	California Department of Public Health
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFCs	Chlorofluorocarbons
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CH_4	Methane
CMP	Congestion Management Plan
CNDDB	California Natural Diversity Data Base
CNEL	Community Noise Equivalent Level
CNG	Compressed Natural Gas
CNPS	California Native Plant Society
CNRA	California Natural Resources Agency

CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
CTA	Central Terminal Area
CTC	Coastal Transportation Corridor
CTCSP	Coastal Transportation Corridor Specific Plan
CWA	Clean Water Act
dB	Decibel
dBA	A-Weighted Decibel
DCP	Department of City Planning
DOT	Department of Transportation
DPM	Diesel Particulate Matter
DPW	Department of Public Works
DU	Dwelling Unit
DWP	Department of Water and Power
ECTNP	Exposition Corridor Transit Neighborhood Plan
ED	Emergency Department
EIR	Environmental Impact Report
EMFAC	Emission Factors Model
EO	Executive Order
ESA	Endangered Species Act
ESHA	Environmentally Sensitive Habitat Area
FAR	Floor Area Ratio
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FP	Fully Protected
FPS	Fire Preemption System
FTA	Federal Transit Administration
g/mi	Grams Per Mile
GHG	Greenhouse Gas
GWP	Global Warming Potential
HACLA	Housing Authority of the City of Los Angeles
HAP	Hazardous Air Pollutant
HCFCs	Hydrochlorofluorocarbons
HCP	Habitat Conservation Plan
HFCs	Hydrofluorocarbons
HQTAs	High Quality Transit Areas
I-10	Santa Monica Freeway
I-105	Century Freeway
I-405	San Diego Freeway
I-I	Internal
I-X	Internal-to-External

in/sec	inches per second
IPCC	Intergovernmental Panel on Climate Change
ITS	Intelligent Transportation System
LA	Los Angeles
LADCP	Los Angeles Department of City Planning
LADOT	Los Angeles Department of Transportation
LAFD	Los Angeles Fire Department
LAMC	Los Angeles Municipal Code
LAX	Los Angeles International Airport
Lbs/day	Pounds Per Day
LCFS	Low Carbon Fuel Standard
LCP	Local Coastal Program
Ldn	Day-Night Average Sound Levels
Leq	Equivalent Noise Level
LIP	Local Implementation Plan
LOS	Level of Service
LRT	Light Rail Transit
LRTP	Long Range Transportation Plan
LS	Less Than Significant
LST	Localized Significance Thresholds
LUP	Land Use Plan
Lv	Levels
M	Less Than Significant with Mitigation
m	Meters
MACT	Maximum Achievable Control Technology
MBTA	Migratory Bird Treaty Act
Metro	Los Angeles County Metropolitan Transportation Authority
MFDU	Multiple Family Dwelling Unit
mg/m^3	Milligrams Per Cubic Meter
MHTL	Mean High Tide Line
MM	Mitigation Measures
MMRP	Mitigation Monitoring and Reporting Program
MMT	Million Metric Tons
MP	Mobility Plan
mpg	Miles Per Gallon
mph	Miles Per Hour
MPO	Metropolitan Planning Organization
MPR	Modified Parking Requirement
MSAT	Mobile Source Air Toxics or Mode Split Adjustment Tool
N_2O	Nitrous Oxide
NA	Not Analyzed or Not Applicable

NAAQS	National Ambient Air Quality Standards
NCCP	Natural Community Conservation Plans
NCP	Noise Control Plan
NEN	Neighborhood Enhanced Network
NEPA	National Environmental Policy Act
NES	Natural Environment Study
NESHAP	National Emission Standards for Hazardous Air Pollutants
NHTSA	National Highway Traffic Safety Administration
NI	No Impact
NO_2	Nitrogen Dioxide
NO_X	Nitrogen Oxide
NOAA	National Oceanic and Atmospheric Administration
NOP	Notice of Preparation
NTM	Neighborhood Traffic Management
O_3	Ozone
O-D	Origin-Desination
OEHHA	California Office of Environmental Health Hazard Assessment
ONAC	Office of Noise Abatement and Control
ONC	Office of Noise Control
OPR	Office of Planning and Research
Pb	Lead
PeMS	Performance Measurement System
PFCs	Perfluorinated Compounds
PM	Particulate Matter
PM10	Particulate Matter with an Equivalent Aerodynamic Diameter of 10 Micrometers or Less
PM2.5	Particulate Matter with an Equivalent Aerodynamic Diameter of 2.5 Micrometers or Less
ppb	Parts Per Billion
ppm	Parts Per Million
PPV	Peak Particle Velocity
PRC	Public Resources Code
PSD	Prevention of Significant Deterioration
RCNM	Roadway Construction Noise Model
RCP	Regional Comprehensive Plan
RMS	Root Mean Square
ROG	Reactive Organic Gases
ROW	Right-Of-Ways
RTIP	Regional Transportation Improvement Program
RTP	Regional Transportation Plan
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy

RWQCB	Regional Water Quality Control Board
SANDAG	San Diego Association of Governments
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Community Strategies
SEA	Sensitive Ecological Area
SED	Socioeconomic Data
sf	Square Feet
SoCAB	South Coast Air Basin
SO_2	Sulfur Dioxide
SOx	Sulfur Oxides
SSC	Species of Special Concern
STIP	Statewide Transportation Improvement Project
SU	Significant Unavoidable
TAC	Toxic Air Contaminant
TDF	Travel Demand Forecasting
TDM	Travel Demand Management
TEN	Transit Enhanced Network
TIA	Transportation Impact Assessment
TMA	Transportation Management Associations
TMO	Transportation Management Organizations
TNM	Traffic Noise Model
TOD	Transit-Oriented Development
UCLA	University of California, Los Angeles
U.S.	United States
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Suvey
V/C	Volume-To-Capacity
VdB	Vibration Decibel
VDECS	CARB-Verified Diesel Emissions Control Strategies
VMT	Vehicle Miles Traveled
VOCs	Volatile Organic Compounds
WL	Watch List
WLA TIMP	West Los Angeles Transportation Improvement and Mitigation Specific Plan
WMP	Westside Mobility Plan
X-I	External-to-Internal

CHAPTER 8

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The individuals listed below were involved in the preparation of this EIR.

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