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.

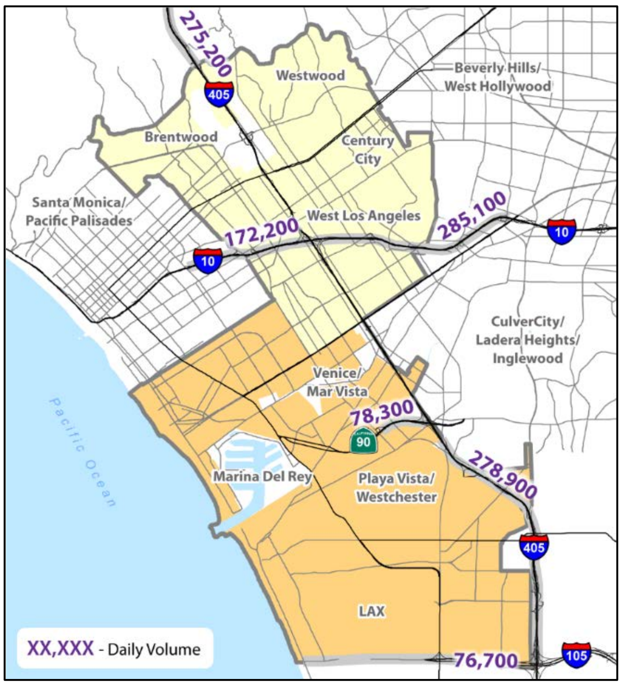
- Boulevard I (Major Highway Class I) – Class I Boulevards are generally defined as having three to four lanes in each direction along with a median turn lane. The width of a Class I Boulevard is usually 100 feet, with a typical sidewalk width of 18 feet and a target operating speed of 35 miles per hour (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.

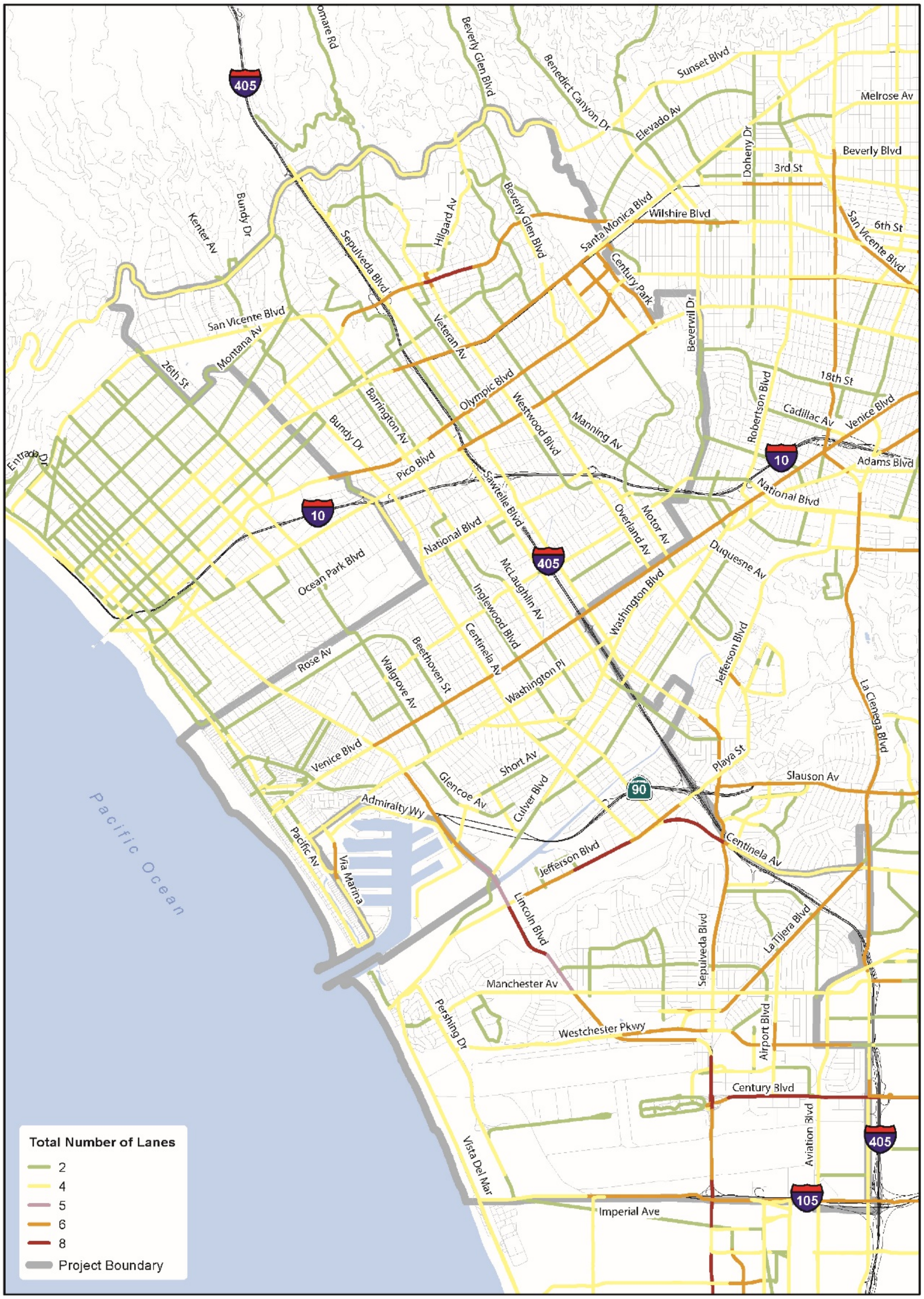


Figure 4.6-3 Number of Travel Lanes

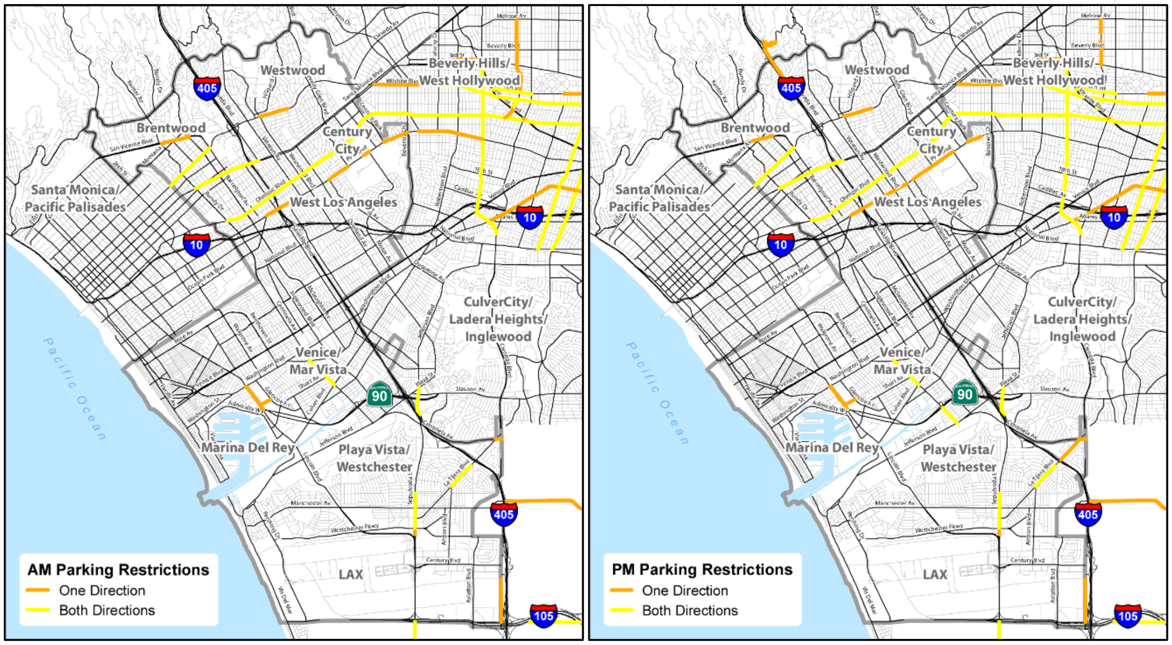


Figure 4.6-4 AM and PM Peak Period Parking Restrictions

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.

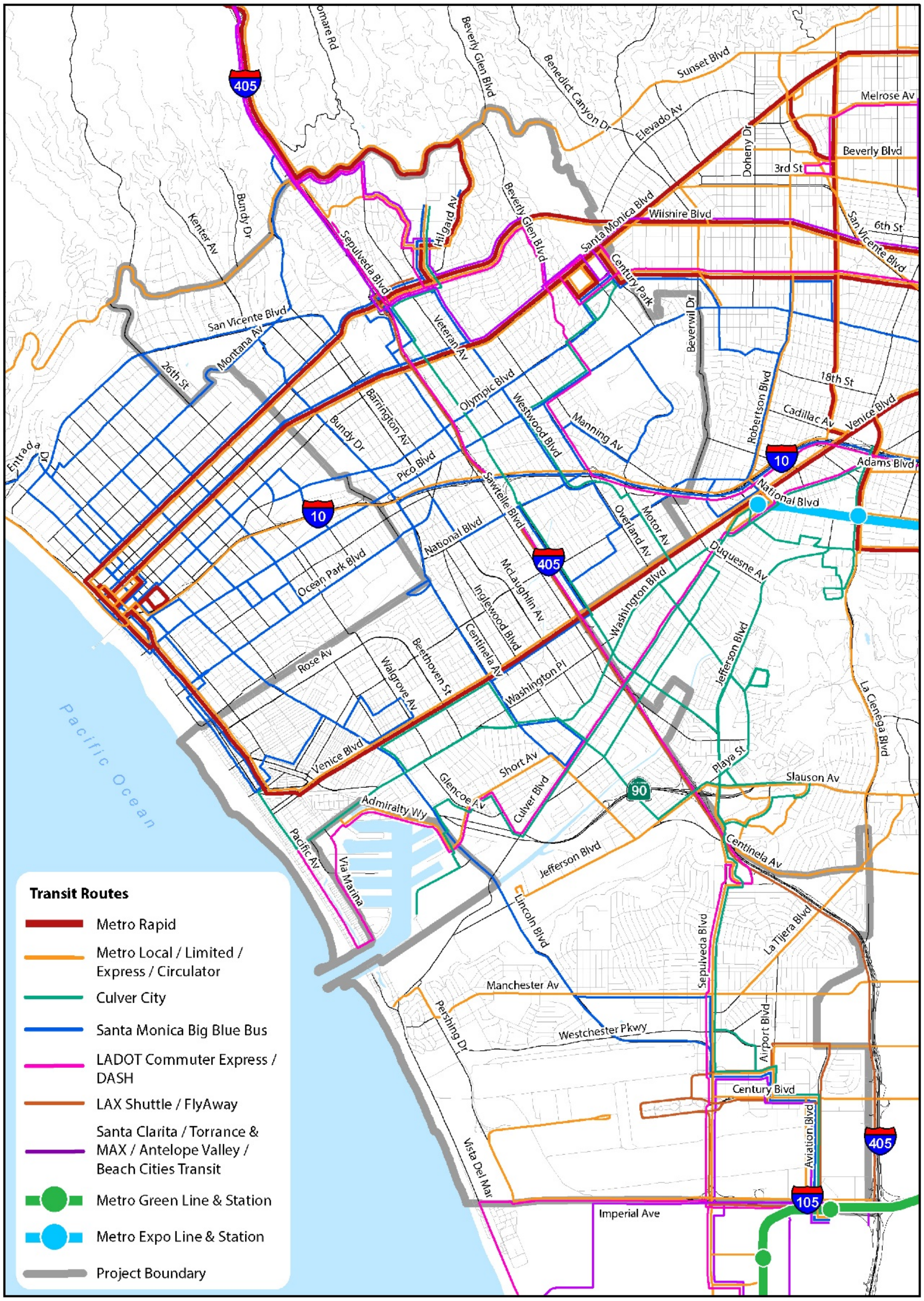
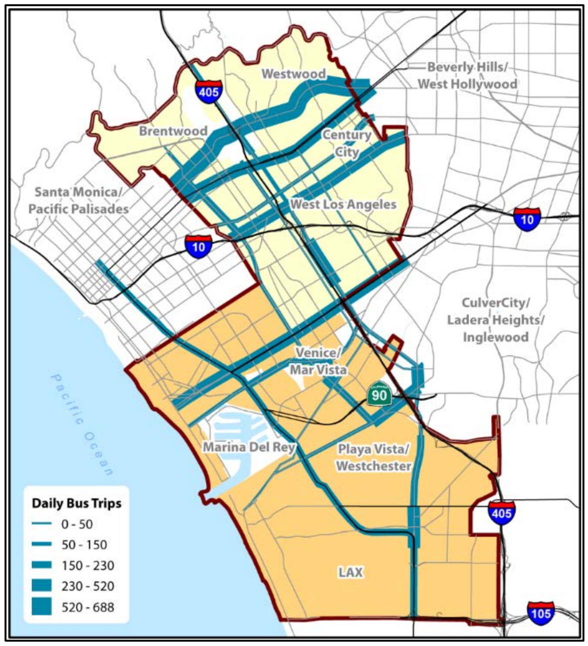


Figure 4.6-5 Transit Service



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.

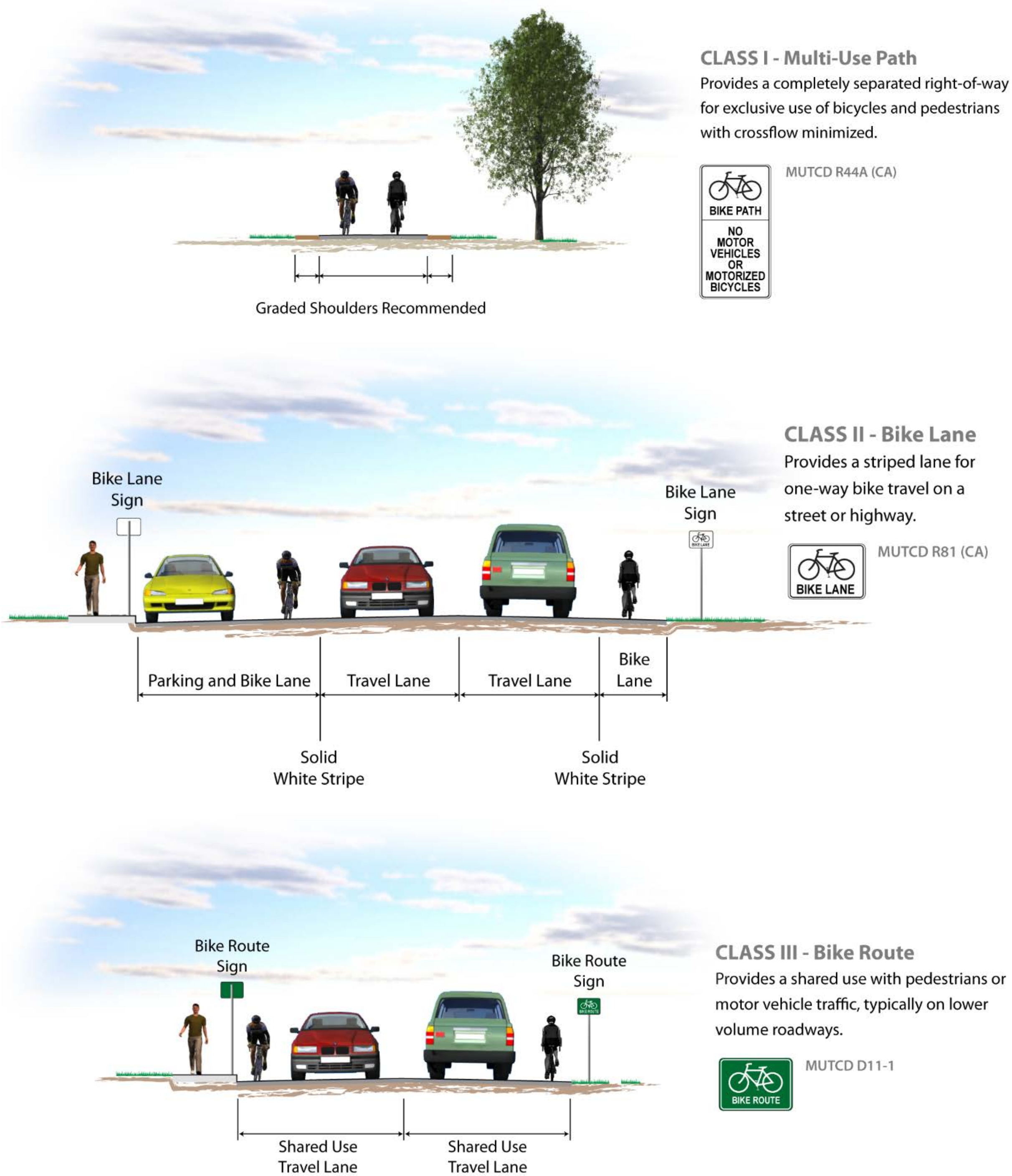


Figure 4.6-7 Bicycle Facility Design Features

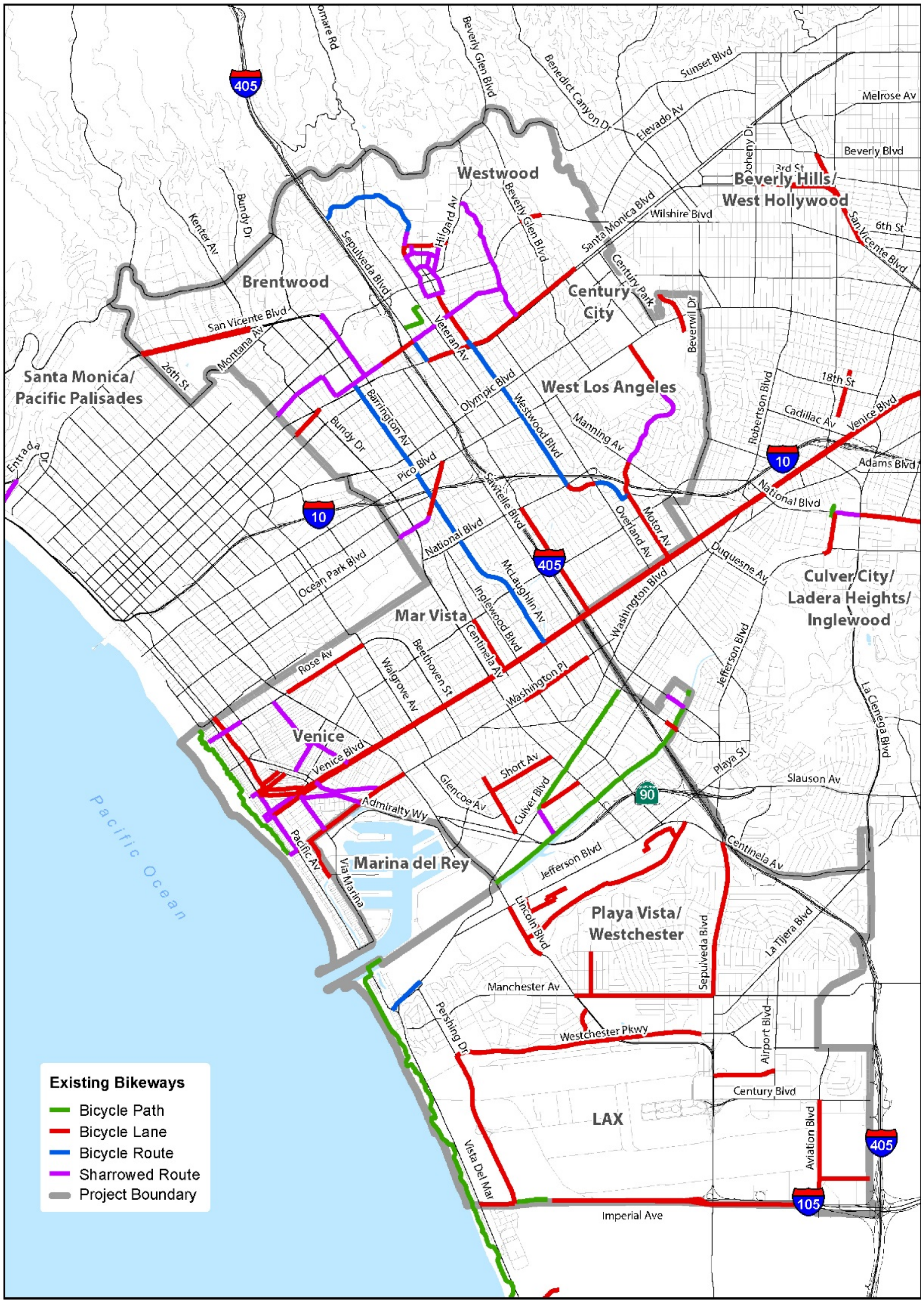


Figure 4.6-8 Bicycle Facilities

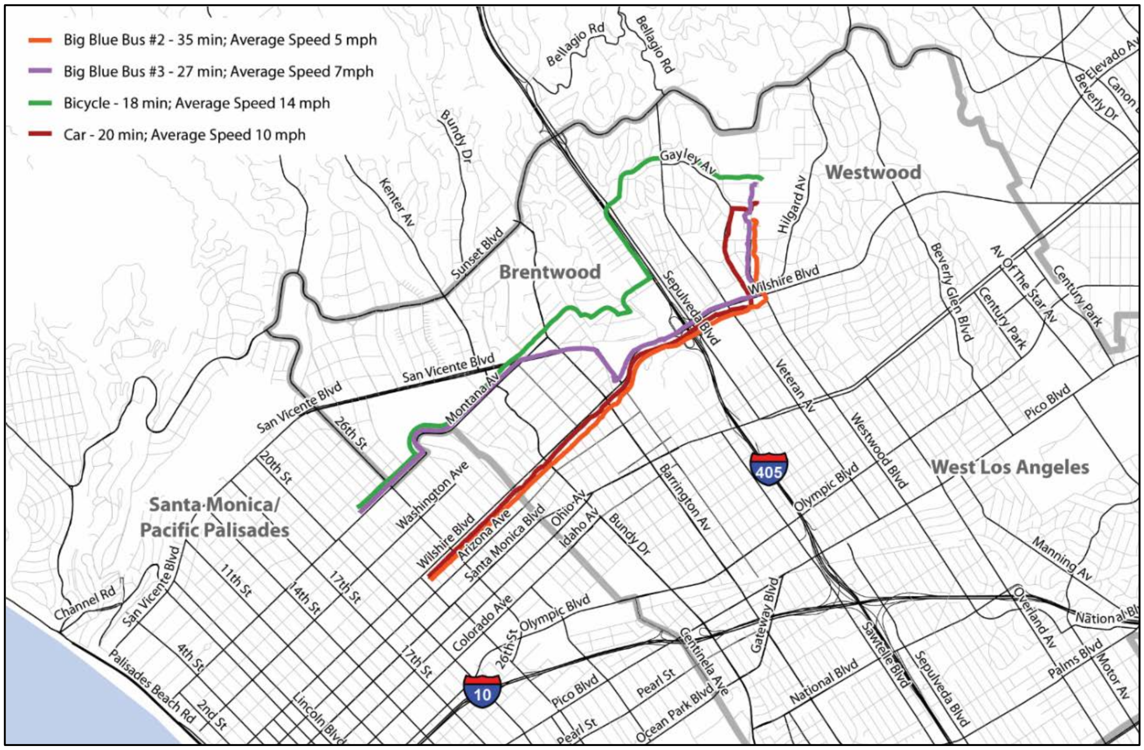


Figure 4.6-9 Travel Time Comparison

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

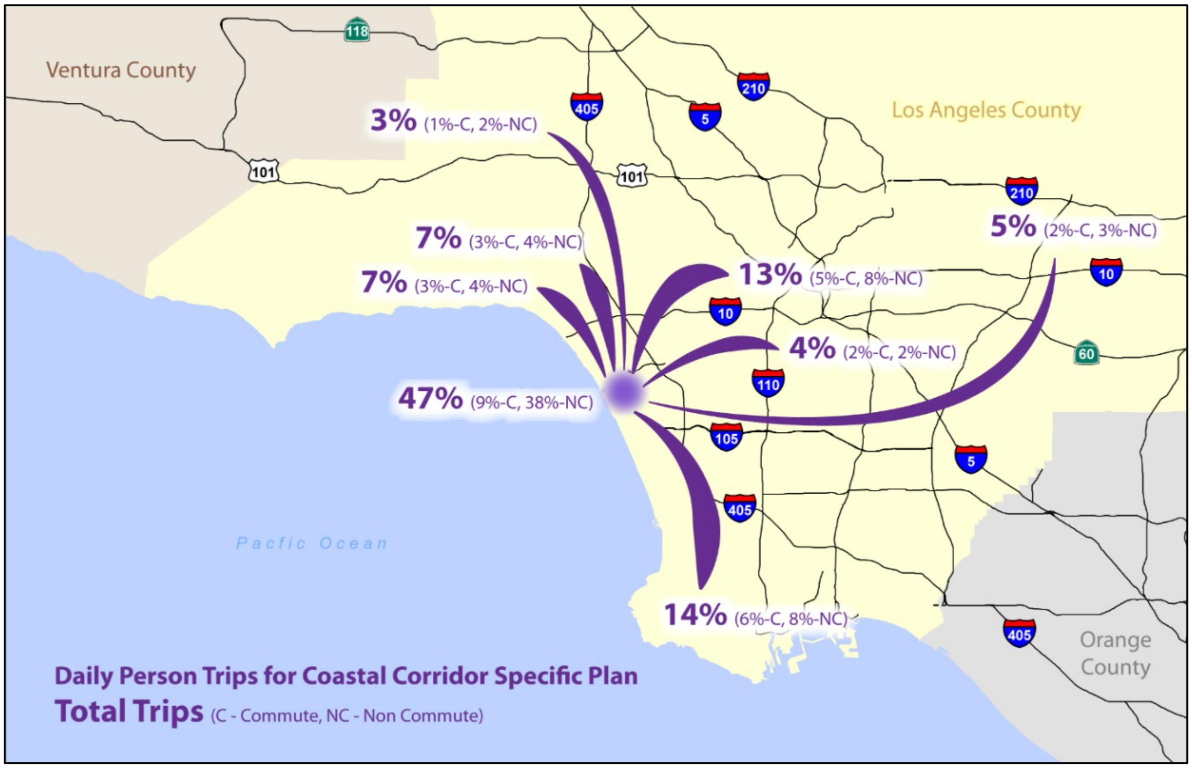
To better describe the travel patterns to, from, and within the study area, the travel characteristics of person trips were explored in further detail. The land use patterns within the study area and concentrations of employment centers result in an influx of weekday commute trips. Based on estimates 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

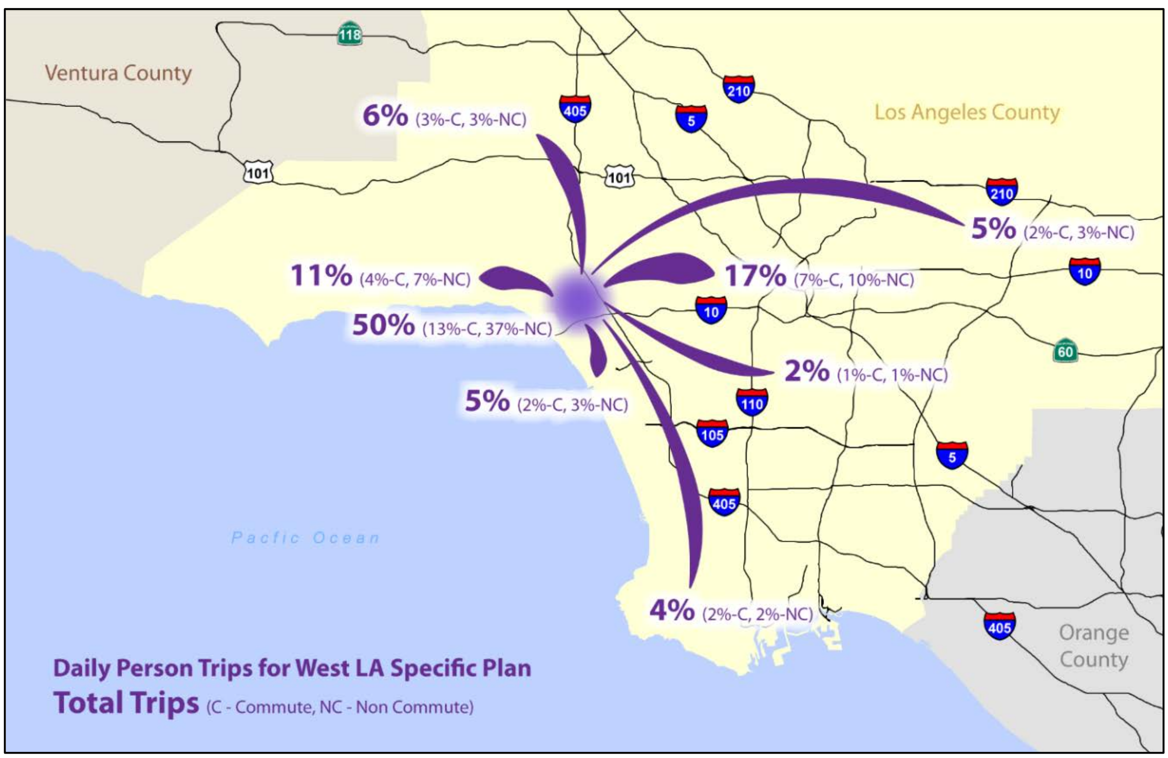
The daily person trip characteristics for the CTCSP and WLA TIMP are displayed in **Figure 4.6-10** and **Figure 4.6-11**, respectively. These figures reflect person trips with either an origin or destination in the specific plan areas. The figures display the general directionality of the travel patterns 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

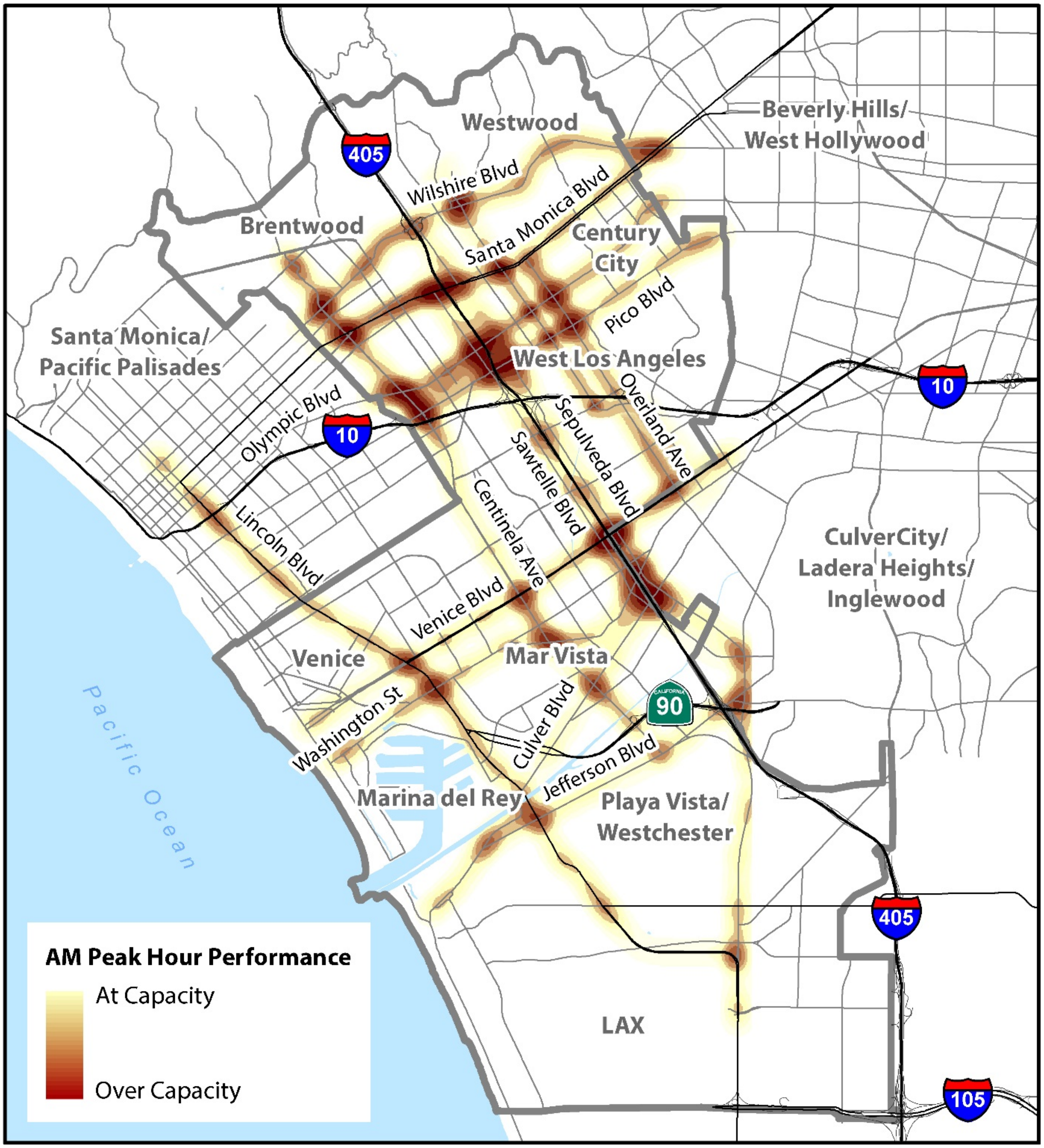


Figure 4.6-13A System Bottlenecks during AM Peak Hour

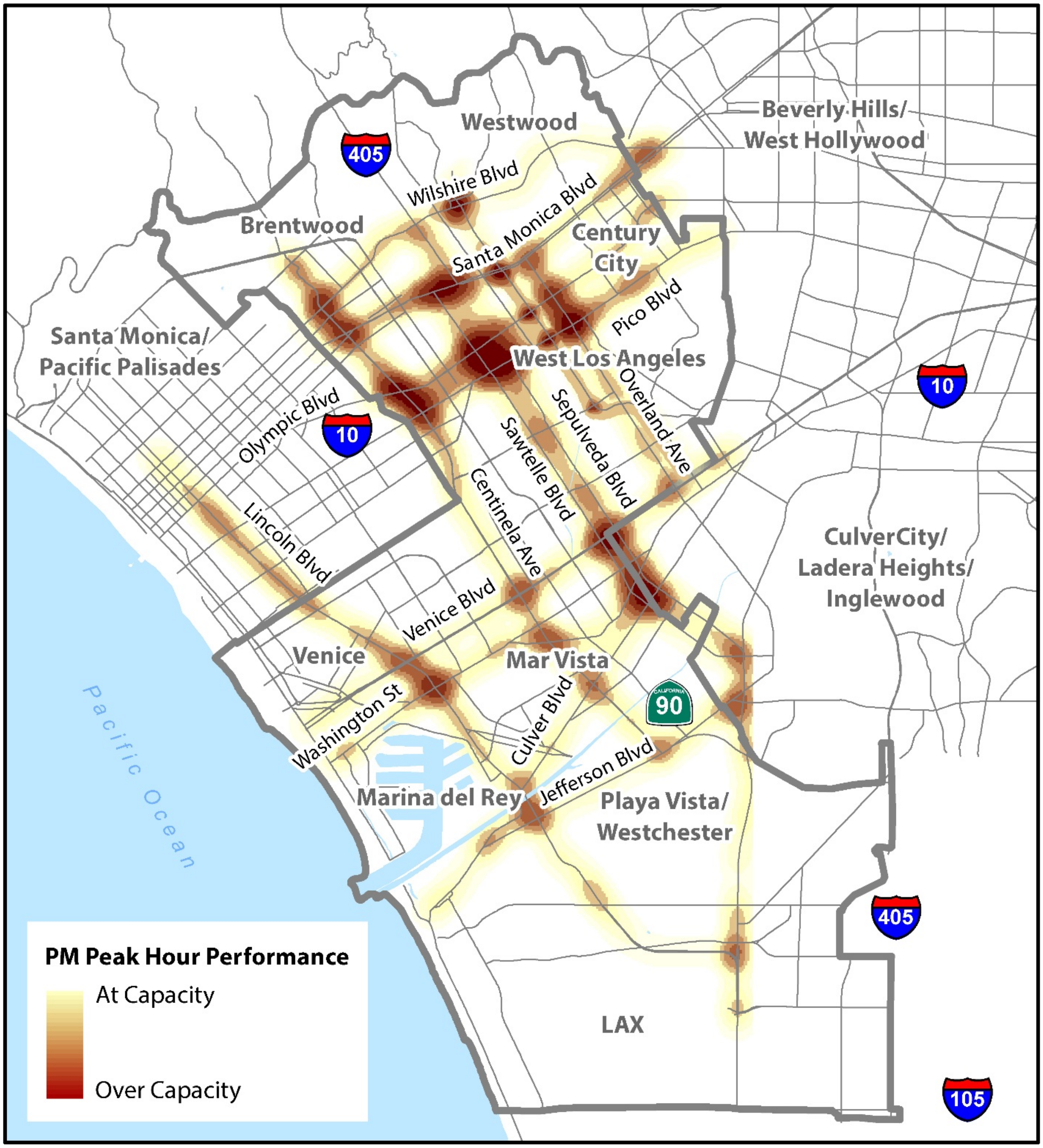


Figure 4.6-13B System Bottlenecks during PM Peak Hour

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).