4.1 TRANSPORTATION, PARKING AND SAFETY

This section provides an overview of transportation and traffic and evaluates the construction and operational impacts associated with *Mobility Plan 2035* (MP 2035 or proposed project). Topics addressed include the circulation system; congestion management plan; emergency access; public transit; bicycle, and pedestrian facilities; 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.
- **Thresholds of Significance** lists the thresholds used in identifying significant impacts.
- **Impacts** discusses the methodology used to assess impacts, including an overall discussion of methodology and assumptions, followed by a listing of thresholds and how the MP 2035 is expected to perform for each of them.
- **Mitigation Measures** are identified as necessary and feasible to reduce identified significant adverse impacts.
- **Significance of Impacts after Mitigation** identifies residual impacts after application of mitigation measures**.**

REGULATORY FRAMEWORK

FEDERAL

Americans with Disabilities Act of 1990. Titles I, II, III, and V of the Americans with Disabilities Act of 1990 (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.

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

Statewide Transportation Improvement Program. Caltrans administers the Statewide Transportation Improvement Program (STIP) 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. The Congestion Management Program (CMP) 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. Senate Bill 743 (SB 743) directs the Office of Planning and Research (OPR) to develop revisions to the California Environmental Quality Act (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 this guidance is 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 2012-2035 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS), the Regional Transportation Improvement Plan (RTIP), the Regional Comprehensive Plan (RCP), and 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/ Sustainable Communities Strategy and Regional Transportation Improvement Program. SCAG adopted the 2012-2035 RTP/SCS in April 2012. The 2012-2035 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 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 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 2012-2035 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.

Los Angeles County Metropolitan Transportation Agency 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 LOS E (unless exceeded in base year conditions) for highway segments and key roadway intersections on this system. For all CMP facilities within the project study area a traffic impact analysis (TIA) 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.

Los Angeles County Metropolitan Transportation Agency Long Range Transportation Plan. The 2009 LRTP includes funding for general categories of improvements, such as Arterial Improvements, Non-motorized 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 the City of Los Angeles. 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.

Los Angeles County Metropolitan Transportation Agency Complete Streets Policy. Metro's recently adopted Complete Streets policy is reinforcing the Complete Streets Act (AB 1358). Effective January 1, 2017, Metro is requiring that all local jurisdictions within Los Angeles County must adopt a Complete Streets Policy, an adopted City Council Resolution supporting Complete Streets, or an adopted General Plan consistent with the 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 Transportation Element. The City of Los Angeles General Plan provides growth and development policies by providing a comprehensive long-range view of the City as a whole. The General Plan provides a comprehensive strategy for accommodating long-term growth should it occur as projected. The City of Los Angeles General Plan Transportation Element, adopted in 1999, 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. The MP 2035 builds upon the goals, objectives, and policies of the City's Transportation Element.

Great Streets for Los Angeles – Los Angeles Department of Transportation Strategic Plan. In September 2014, the Mayor's Office and City of 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's 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 bike share program. Expand bus service and improve its quality and connectivity with surrounding neighborhoods.
- A 21st Century LADOT: 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.

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 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. The City of Los Angeles 2010 Bicycle Plan (Bicycle Plan or 2010 Plan) adopted on March 1, 2011 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 Bicycle Plan has been updated to reflect public input received since the Bicycle Plan was adopted on March 1, 2011. The 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 Bicycle Lane Network, Bicycle Enhanced Network (BEN), and Neighborhood Enhanced Network (NEN) as described in **Chapter 3.0, Project Description**. The Technical Design Handbook has been incorporated into the new Complete Streets Design Guide 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.

Los Angeles City Municipal Code. Los Angeles City Municipal Code (LAMC) Section 12.37 contains requirements related to highway and collector street dedication and improvement.

LAMC Section 17.05 contains standards that would be updated to expand the role of the Street Standards Committee and to reflect the City's new focus on complete streets.

Ordinance No. 182242 amends LAMC Sections 12.04, 12.24, 12.32, and 13.15 and adds a new Section 13.17 to enable the establishment of Modified Parking Requirement (MPR) Districts. MPR Districts allow 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.

EXISTING SETTING

OVERVIEW

The study area is defined by the boundaries of the City of Los Angeles, illustrated in **Figure 4.1-1**. The City of Los Angeles is served by a circulation system that facilitates travel by multiple modes, including walking, bicycling, public transit, and motor vehicles. This circulation system includes an extensive network of freeways, highways, and local streets. The City of Los Angeles General Plan contains definitions, goals and objectives, and regulatory requirements for a variety of roadway classifications that make up the City's roadway system. The City has five general categories of roadway classifications, including Major Highway, Secondary Highway, Collector Street, and Local Street. These roadway classifications consider the level of traffic volume, roadway capacity, and its functions:

- Major highways generally provide four to eight lanes of travel and have access to intersecting freeways;
- Secondary highways typically have four travel lanes; and
- Collector and local streets provide two travel lanes.

The General Plan also recognizes Transit Priority Streets, Scenic Highways, and Non-Motorized Streets. Designations of Transit Priority Streets include Primary Transit Priority Streets, Transit Priority Streets, and Future Transit Priority Streets. Designations of Non-Motorized Streets include Class I, Class II, and Class III Bikeways, and Commuter Bikeways.

EXISTING HIGHWAY AND STREET SYSTEM

Regional Access

The City of Los Angeles includes seven freeways that traverse the 181 miles of the City and connect Los Angeles to its outer regions in the north-south and the east-west directions. They include Interstates (I) 5, 10, 105, 110, 210, 405, and United States Highway (US) 101. The City has eleven state highways (SR) 1, 2, 47, 60, 90, 103, 110, 118, 134, 170 and 187. Bicycles and pedestrians are not allowed on freeways, but are allowed on some state highways that function as arterial roads. Portions of state highways, including Pacific Coast Highway (SR-1), Santa Monica Boulevard (SR-2), Slauson Avenue (SR-90), and Venice Boulevard (SR-187), are currently designated as part of the citywide bikeway network. Freeways and state highways also accommodate transit vehicles.

Local Roadway Network

Los Angeles has over 7,500 miles of public streets that accommodate a variety of motorized vehicles, including private motor vehicles, taxis, freight vehicles, and transit vehicles. The experiences of pedestrians and bicyclists are also important users of the local roadway network. Pursuant to the California Vehicle Code, bicycles are allowed on any street within the local street system. The existing citywide bicycle network identifies a series of interconnected streets and pathways on which bicycling is encouraged. Most roadways are aligned on a grid system providing multiple route options for traveling throughout the City.

LOS ANGELES MOBILITY ELEMENT

Study Area

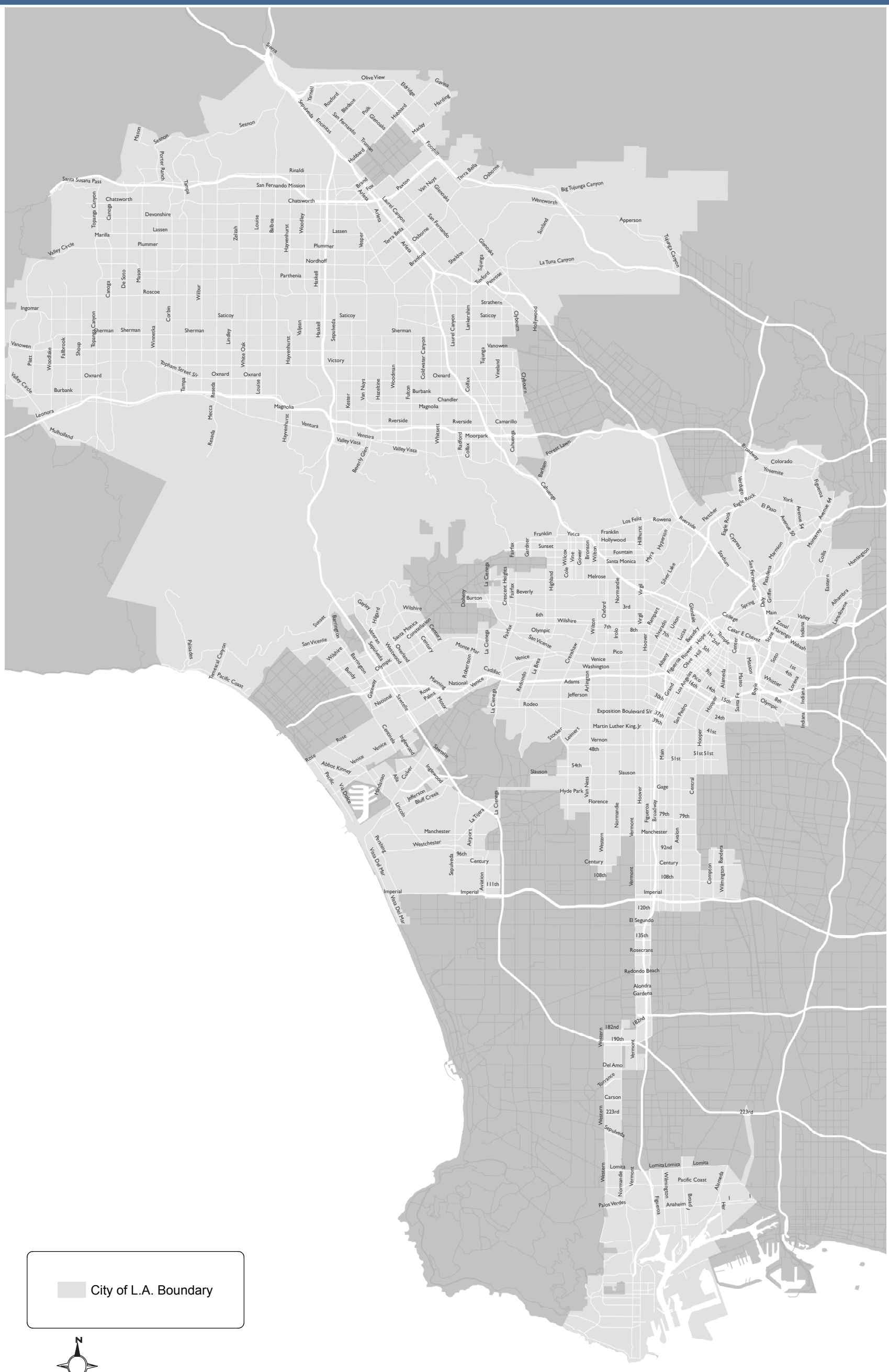

FIGURE 4.1-1

The City's street system is currently divided into four functional classifications: Major Highways, Secondary Highways, Collector Streets, and Local Streets, each described in **Table 4.1-1**. Local Streets comprise approximately 60 percent of the City's street system, while Major Highways, Secondary Highways, and Collector Streets, collectively known as "select streets," comprise approximately 40 percent of the local roadway network.[1]

TABLE 4.1-1: CITY OF LOS ANGELES STREET SYSTEM FUNCTIONAL CLASSIFICATION

Functional Classification	Approximate Share of Public Streets	Description
Major Highways	40%	Serve the major centers of activity of a metropolitan area, the highest traffic volume corridors, and the longest trip desires; carry a high proportion of the total urban area travel on a minimum of mileage. The system should be integrated, both internally and between major urban connections.
Secondary Highways		Interconnect with and augment the urban principal arterial system and provide service to trips of moderate length at a somewhat lower level of travel mobility than principal arterials. This system also distributes travel to geographic areas smaller than those identified with the Major Highway system.
Collector Streets		Provide both land access service and traffic circulation within residential neighborhoods, commercial and industrial areas. It differs from the arterial system in that facilities on the collector system may penetrate residential neighborhoods, distributing trips from the arterials through the area to the ultimate destination.
Residential Streets / Local Streets	60%	Comprises all facilities not on one of the higher systems. It serves primarily to provide direct access to abutting land and access to the higher order systems. It offers the lowest level of mobility and usually contains no bus routes. Service to through, traffic movement usually is deliberately discouraged.

SOURCE: *State of the Streets,* City of Los Angeles Department of Public Works Bureau of Street Services, 2011.

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 travelling on designated streets in the City. The City of Los Angeles has over 205 miles of routes equipped with FPS.[2]

EXISTING PUBLIC TRANSIT SERVICE

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

[1] *State of the Streets,* City of Los Angeles Department of Public Works Bureau of Street Services, 2011.
[2] Training Bulletin: Traffic Signal Preemption System for Emergency Vehicles, Los Angeles Fire Department, Bulletin No. 133, October, 2008.

Los Angeles County Metropolitan Transportation Authority. Metro provides bus, light rail and heavy rail services within Los Angeles County. There are two Metro heavy rail lines (i.e., Red and Purple) that operate in a dedicated subway. Metro's four light rail lines (i.e., Blue, Green, Gold, and Expo) use shorter trains than heavy rail, generally operate at slower speeds, receive power from overhead wires, and run along rights-of-way ranging from complete grade separation to at-grade operation in mixed-flow traffic. Metro's six types of bus service can be divided by operating conditions. Metro Liner service (i.e., the Orange and Silver Lines) operates either in an exclusive right-of-way or along High Occupancy Vehicle (HOV) or High Occupancy Toll (HOT) lanes. During the weekday PM peak period, headways are generally 5 to 10 minutes for each line. Metro also operates approximately 180 bus routes in mixed traffic on its Rapid, Express, Limited Stop, Local, and Shuttle services. These bus services vary considerably in speed, frequency and capacity.

Los Angeles Department of Transportation. LADOT provides local and commuter express bus services in the City. The DASH (originally Downtown Area Short Hop) operates 31 local routes covering Downtown Los Angeles and many outlying communities within the City. The Commuter Express operates 14 routes making a limited number of stops and transporting passengers between Downtown Los Angeles and other major centers within the City. All Commuter Express routes except for one operate during the peak hours only in the peak direction.

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

In addition, commuter rail services to Downtown are primarily provided by Metrolink and Amtrak. Metrolink covers six counties (Los Angeles County, Orange County, San Diego County, Riverside County, San Bernardino County and Ventura County) in Southern California with seven lines. Amtrak also serves communities along the coast in Southern California. Most passengers on Metrolink and Amtrak arrive at Union Station, from which connecting services to their destinations are provided by Metro or LADOT.

EXISTING BICYCLE AND PEDESTRIAN FACILITES

Bicycle Facilities. The existing bicycle network within the City of Los Angeles consists of approximately 500 miles of on- and off-street facilities, shown in **Figure 4.1-2**. Bicycle facilities are classified based on the typology presented in **Table 4.1-2**.

TABLE 4.1-2: BICYCLE CLASSIFICATION SYSTEM

Bicycle Facility Classification	Approximate Length	Description
Class I Bikeways (Bike Paths)	58 miles	Exclusive, car-free facilities that are typically not located within a roadway area. They are located within or adjacent to river corridors (Arroyo Seco, Ballona Creek, Los Angeles River), transit corridors (Orange Line), City parks (Balboa Park), or the coast (Venice Beach/Marvin Braude).
Class II Bikeways (Bike Lanes)	324 miles	Part of the street design that is dedicated only for bicycles and identified by a striped lane separating vehicle lanes from bicycle lanes. Lanes are most commonly found on major arterials (Sunset and Venice Boulevard) and on wide collector streets (Chandler Boulevard, Griffith Park Boulevard).
Class III Bikeways (Bike Routes and Bicycle Friendly Stre	121 miles	In-road bikeways where bicycles and motor vehicles share the roadway. They are typically intended for streets with low traffic volumes, signalized intersections at crossings or wide outside lanes. A Bicycle-Friendly Street shall be defined as a Local (Residential) and/or Collector Street that includes at least two traffic-calming engineering treatments in addition to signage and shared lane markings.

SOURCE: Approximate Length from *City of Los Angeles Bikeways,* Los Angeles Department of Transportation, accessed http://www.bicyclela.org/maps_main.htm, September 2013; Description adapted from *2010 Bicycle Plan*, Los Angeles Department of City Planning, 2011.

Existing Bicycle Network

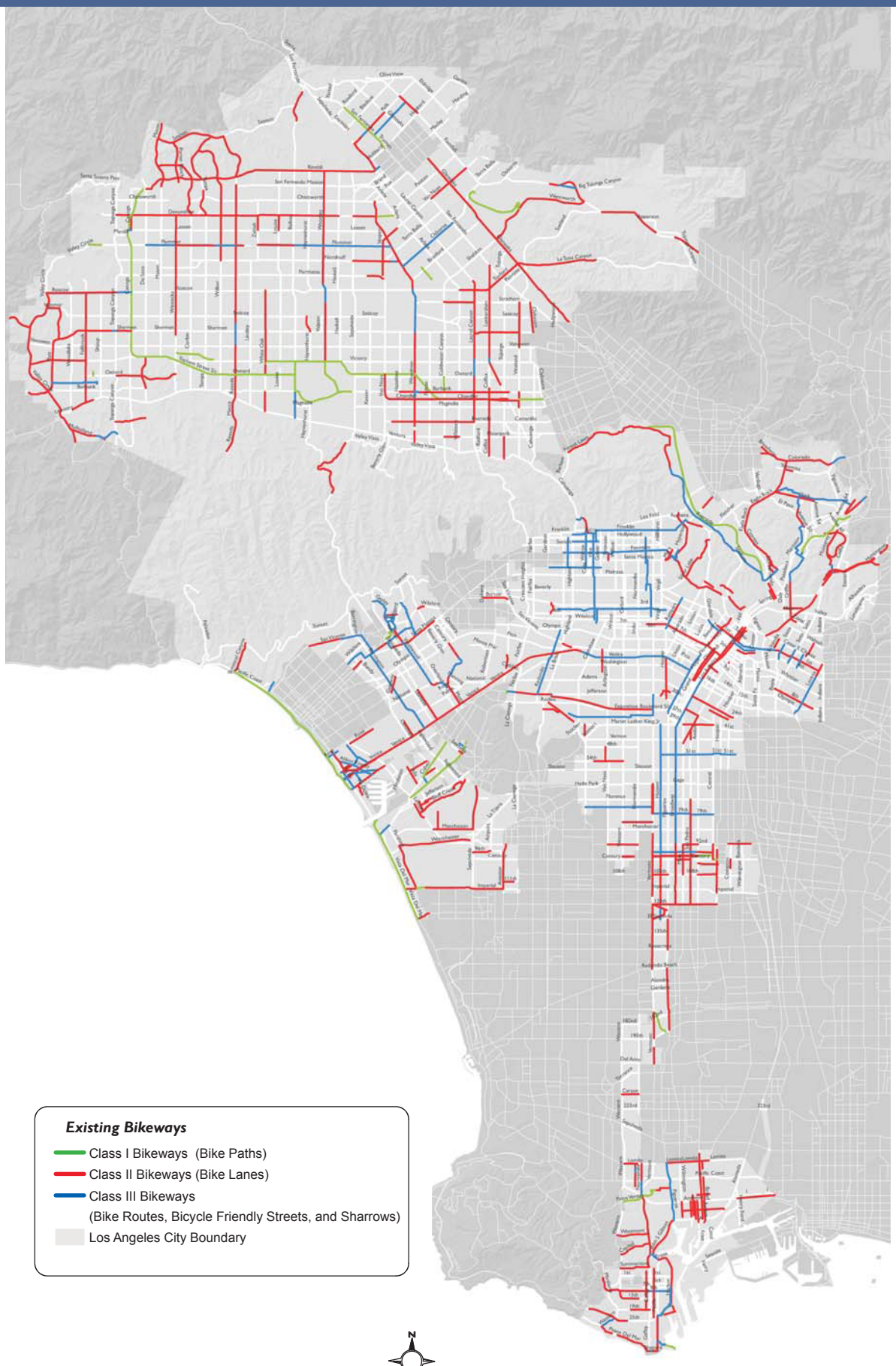

FIGURE 4.1-2

Source: LADOT, 2014.

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 Metro and LADOT 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.

Bikes are allowed on all Metrolink trains at all times with a capacity of up to three bikes per car. As part of its green initiative program, Metrolink also added special bike cars which could accommodate up to 18 bikes per car on select trains. Amtrak generally allows bikes onboard for free on select routes including Pacific Surfliner.

Pedestrian Facilities. In Los Angeles County, approximately 14 percent of trips are made by walking and nearly all trips require at least some amount of walking.[3] There are 40,000 intersections in the City of Los Angeles, 4,300 of which are signalized, and approximately 22,000 marked crosswalks.[4] An estimated 42 percent of the City's 10,750 miles of sidewalks are in disrepair.[5]

While nearly the entire City is heavily developed, development patterns and streetscape conditions vary considerably across the City. Parts of Downtown Los Angeles, Koreatown, Hollywood, and Westwood Village, for example, have a variety of pedestrian-oriented uses fronting the sidewalk. Some residential portions of the San Fernando Valley have narrower street widths and less-connected residential streets than other parts of the city, while other areas of the Valley are characterized by long blocks fronted by surface parking lots. Still other parts of the City are characterized by industrial land uses offering little in the way of pedestrian amenities.

The City of Los Angeles General Plan designates commercial and neighborhood activity centers that are characterized by ground floor retail and service uses oriented to pedestrians along the sidewalk as Pedestrian Priority Street segments. In general, sidewalks are 10 to 12 feet wide. Pedestrian Priority Street segments are recommended to have wider sidewalks of 15 to 17 feet in width and other pedestrian friendly features such as curb side parking, wide crosswalks with a minimum width of 15 feet, and traffic signal modifications to ensure longer pedestrian crossing times, where warranted.

EXISTING TRAVEL PATTERNS AND OPERATING CONDITIONS

Mode Split. The City of Los Angeles' Travel Demand Forecasting Model (travel demand model or model) estimates the mode split of existing peak period person trips within the City. Overall, over 80 percent of peak period person trips are made by automobile, over 14 percent are made by walking, over 3 percent by transit, and nearly 1 percent by bicycle. **Table 4.1-3** provides additional existing mode split detail by APC and **Table 4.1-4** provides a summary of peak period person trips by mode for all trips occurring in the City. 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.[6] Since the purpose of most transit trips nationwide is work (59.2 percent),[7] it is reasonable to expect a higher transit mode share for journey-to-work trips than for peak period trips of all purposes.

[3]Metro, Pedestrian Planning website, http://www.metro.net/projects/ped/, accessed March 1, 2012.
[4]The City of Los Angeles Transportation Profile, City of Los Angeles Department of Transportation, 2009.
[5]"A citizens sidewalk brigade for L.A.," Los Angeles Times, September 11, 2012.
[6]*Profile of the City of Los Angeles.* Southern California Association of Governments. May 2013. http://www.scag.ca.gov/Documents/LosAngeles.pdf.
[7]*2011 Public Transportation Fact Book*. American Public Transportation Association. April 2011. http://www.apta.com/resources/statistics/Documents/FactBook/APTA_2011_Fact_Book.pdf

TABLE 4.1-3: EXISTING PEAK PERIOD MODE SPLIT				
Area Planning Commission	**Auto**	**Transit**	**Bike**	**Walk**
1. North Valley	84.2%	2.3%	0.8%	12.7%
2. South Valley	83.1%	2.5%	0.9%	13.5%
3. Central	78.9%	4.4%	1.1%	15.6%
4. East Los Angeles	81.7%	3.5%	0.9%	13.9%
5. West Los Angeles	81.7%	2.4%	1.1%	14.9%
6. South Los Angeles	80.5%	4.0%	0.9%	14.7%
7. Harbor	83.9%	2.2%	0.8%	13.1%
CITY OF LOS ANGELES	**81.7%**	**3.1%**	**0.9%**	**14.2%**
SOURCE: City of Los Angeles Travel Demand Model, 2013.				

TABLE 4.1-4: EXISTING PEAK PERIOD PERSON TRIPS BY MODE (IN THOUSANDS)				
Area Planning Commission	**Auto**	**Transit**	**Bike**	**Walk**
1. North Valley	962	27	9	146
2. South Valley	1,161	35	12	188
3. Central	1,252	70	17	248
4. East Los Angeles	505	22	5	86
5. West Los Angeles	773	22	10	141
6. South Los Angeles	779	39	8	142
7. Harbor	275	7	3	43
CITY OF LOS ANGELES	**5,710**	**219**	**65**	**993**
SOURCE: City of Los Angeles Travel Demand Model, 2013.				

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.

Vehicular Travel Patterns. The City's travel demand model provides information about the type and number of trips and the amount of travel on the City's roadways. It should be noted that since traffic volumes are a result of the aggregate travel choices of thousands of individual drivers, variation in the daily and peak period volumes on any given facility is both expected and observed. The Federal Highway Administration (FHWA) and Caltrans guidelines recommend traffic models are calibrated to within 7-15 percent for arterials and freeway segments to account for this regular variation.[8] This range is based on studies that show that this range represents the average daily fluctuation in traffic for major roadways.[9] Accordingly, while specific and detailed LOS calculations are provided throughout this document, these estimates of both existing and operating conditions are subject to regular variation due to fluctuations in travel demand.

Trips Crossing City of Los Angeles Boundaries

Table 4.1-5 summarizes the share of trips in the City of Los Angeles by their origin and destination. Trips internal to the City (I-I) both begin and end within the City, though they might cross into other jurisdictions during some portion of the trip. Internal-to-External (I-X) trips begin in the City and end in another jurisdiction, while External-to-Internal (X-I) trips begin in a jurisdiction outside the City of Los Angeles and end within the City.

[8]Per the FHWA Calibration & Adjustment of System Planning Models (FHWA, December 1990); Caltrans Travel Forecasting Guidelines (Caltrans, 1992).

[9]Variability in Traffic Monitoring Data: Final Summary Report (US Department of Energy, August 1997).

TABLE 4.1-5: INTERNAL AND EXTERNAL DISTRIBUTION OF VEHICLE TRIPS WITH ORIGINS AND/OR DESTINATIONS IN THE CITY OF LOS ANGELES

Area Planning Commission	Internal to City of L.A.	Internal-to-External	External-to-Internal
1. North Valley	70%	15%	15%
2. South Valley	75%	12%	13%
3. Central	60%	20%	20%
4. East Los Angeles	45%	27%	28%
5. West Los Angeles	47%	27%	27%
6. South Los Angeles	52%	24%	24%
7. Harbor	30%	35%	35%
CITY OF LOS ANGELES	**58%**	**21%**	**21%**

SOURCE: City of Los Angeles Travel Demand Model, 2013.

Overall, more than half of the City's daily trips both begin and end within the City. There are a few exceptions: in the East Los Angeles, West Los Angeles, and Harbor Area Planning Commissions (APC), less than half and as few as 30 percent of trips are internal to the City; these APCs share boundaries with neighboring jurisdictions that have many attractive trip origins and destinations.

Vehicle Trips

On a typical weekday, travelers take over 9 million trips by automobile that either start from a point within the City of Los Angeles, end at a point within the City of Los Angeles, or both. More than one third of these trips are taken during the four-hour PM Peak Period between 3:00 and 7:00 p.m. **Table 4.1-6** provides additional vehicle trip information by APC.

TABLE 4.1-6: EXISTING VEHICLE TRIPS WITH ORIGINS AND/OR DESTINATIONS IN THE CITY OF LOS ANGELES

Area Planning Commission	AM Peak Period (3-Hour)	PM Peak Period (4-Hour)	Off-Peak Period (17-Hour)	Daily Total
1. North Valley	341,100	502,500	646,000	1,489,600
2. South Valley	420,500	637,300	819,300	1,877,100
3. Central	452,800	697,400	914,600	2,064,800
4. East Los Angeles	184,100	265,100	333,900	783,100
5. West Los Angeles	304,200	466,600	624,600	1,395,400
6. South Los Angeles	266,100	373,400	483,400	1,122,900
7. Harbor	98,000	140,800	180,400	419,200
CITY OF LOS ANGELES	**2,066,900**	**3,083,000**	**4,002,200**	**9,152,200**

SOURCE: City of Los Angeles Travel Demand Model, 2013.

Vehicle Miles Traveled

Motorists travel over 75 million vehicle miles on roadways within the City of Los Angeles on an average weekday. Nearly one third of these vehicle miles are traveled during the four-hour PM Peak Period between 3:00 and 7:00 p.m. Although they comprise only 181 miles of roadway network in support of the nearly 7,500 miles of surface roadways in the City of Los Angeles, freeway travel accounts for over half of all daily vehicle miles traveled (VMT) within the City. **Table 4.1-7** provides additional vehicle miles traveled information by APC.

TABLE 4.1-7: EXISTING VEHICLE MILES TRAVELED IN THE CITY OF LOS ANGELES				
Area Planning Commission	**AM Peak Period (3-Hour)**	**PM Peak Period (4-Hour)**	**Off-Peak Period (17-Hour)**	**Daily Total**
1. North Valley	1,526,300	2,214,500	2,308,300	6,049,100
2. South Valley	1,641,900	2,441,500	2,682,800	6,766,200
3. Central	1,589,300	2,404,200	2,496,000	6,489,500
4. East Los Angeles	751,700	1,113,100	1,058,700	2,923,500
5. West Los Angeles	1,275,200	1,907,000	2,305,700	5,487,900
6. South Los Angeles	1,447,700	2,191,300	2,049,800	5,688,800
7. Harbor	485,500	711,100	807,300	2,003,900
Surface Streets	***8,717,500***	***12,982,800***	***13,708,600***	***35,408,900***
Freeways (Mainline)	*8,291,800*	*11,686,800*	*19,878,800*	*39,857,400*
TOTAL, CITY OF LOS ANGELES	**17,009,400**	**24,669,600**	**33,587,200**	**75,266,200**
SOURCE: City of Los Angeles Travel Demand Model, 2013.				

Table 4.1-8 provides additional detail on vehicle miles traveled on freeway mainline segments within the City of Los Angeles. Interstates 405, 5, and 110 and US-101 are the most-traveled freeways in the City. Collectively, the four freeways account for over 25 million vehicle miles traveled, nearly two thirds of all freeway vehicle miles traveled within the City and more than one third of total vehicle miles traveled within the City.

TABLE 4.1-8: EXISTING VEHICLE MILES TRAVELED ON FREEWAY MAINLINE SEGMENTS IN THE CITY OF LOS ANGELES				
Freeway	**AM Peak Period (3-Hour)**	**PM Peak Period (4-Hour)**	**Off-Peak Period (17-Hour)**	**Daily Total**
I-5	1,207,500	1,673,500	2,943,700	5,824,700
I-10	741,500	1,056,400	1,922,000	3,719,900
US-101	1,226,100	1,725,800	3,079,900	6,031,800
I-105	358,900	514,000	953,000	1,825,900
I-110	1,058,400	1,504,200	2,510,100	5,072,700
I-210	487,600	702,400	945,200	2,135,200
I-405	1,685,600	2,372,300	4,390,100	8,448,000
SR-2	153,100	221,300	287,100	661,500
SR-60	94,700	129,500	207,300	431,500
SR-118	489,300	700,900	1,000,800	2,191,000
SR-134	524,000	719,100	1,075,200	2,318,300
SR-170	211,100	292,500	449,600	953,200
SR-47,103	54,000	75,100	114,400	243,500
TOTAL	**8,291,800**	**11,686,800**	**19,878,800**	**39,857,400**
SOURCE: City of Los Angeles Travel Demand Model, 2013.				

Vehicle Hours Traveled

Motorists spend over 3.7 million vehicle hours on roadways within the City of Los Angeles on an average weekday. More than 40 percent of these vehicle hours are traveled during the four-hour PM Peak Period between 3:00 and 7:00 p.m. Although they account for over half of all daily vehicle miles traveled within the City, freeways account for only about 40 percent of all vehicle hours, reflecting their higher travel speeds. **Table 4.1-9** provides additional vehicle hours traveled information by APC.

TABLE 4.1-9: EXISTING VEHICLE HOURS TRAVELED IN THE CITY OF LOS ANGELES

Area Planning Commission	AM Peak Period (3-Hour)	PM Peak Period (4-Hour)	Off-Peak Period (17-Hour)	Daily Total
1. North Valley	78,600	117,100	87,400	283,100
2. South Valley	93,900	146,000	112,500	352,400
3. Central	133,400	214,000	142,900	490,300
4. East Los Angeles	56,100	87,200	50,800	194,100
5. West Los Angeles	106,300	168,000	124,200	398,500
6. South Los Angeles	92,300	149,900	95,100	337,300
7. Harbor	25,700	38,900	33,600	98,200
Surface Streets	***586,300***	***921,100***	***646,400***	***2,153,800***
Freeways (Mainline)	*405,800*	*602,400*	*560,600*	*1,568,800*
TOTAL, CITY OF LOS ANGELES	**992,100**	**1,523,400**	**1,207,100**	**3,722,600**

SOURCE: City of Los Angeles Travel Demand Model, 2013.

Table 4.1-10 provides additional detail on vehicle hours traveled on freeway mainline segments within the City of Los Angeles. Motorists in the City spend the most time traveling on Interstates 405, 5, and 110 and US-10. Collectively, the four freeways account for over 1 million vehicle hours traveled, nearly 70 percent of all freeway vehicle hours traveled within the City. One out of every three minutes that motorists spend behind the wheel in the City is on these four freeways.

TABLE 4.1-10: EXISTING VEHICLE HOURS TRAVELED ON FREEWAY MAINLINE SEGMENTS IN THE CITY OF LOS ANGELES

Freeway	AM Peak Period (3-Hour)	PM Peak Period (4-Hour)	Off-Peak Period (17-Hour)	Daily Total
I-5	71,100	94,600	86,800	252,500
I-10	38,400	60,700	55,200	154,300
US-101	69,400	103,800	96,600	269,800
I-105	13,800	21,800	23,600	59,200
I-110	49,300	75,900	70,500	195,700
I-210	15,100	22,500	18,100	55,700
I-405	93,300	142,300	137,500	373,100
SR-2	6,500	9,500	6,000	22,000
SR-60	4,200	6,000	5,600	15,800
SR-118	13,400	20,300	19,800	53,500
SR-134	21,300	31,300	26,300	78,900
SR-170	8,200	11,200	11,600	31,000
SR-47,103	1,800	2,400	3,100	7,300
TOTAL	**405,800**	**602,400**	**560,600**	**1,568,800**

SOURCE: City of Los Angeles Travel Demand Model, 2013.

Existing Levels of Service. The AM and PM peak period vehicle/capacity (V/C) and corresponding LOS for the roadways in the City of Los Angeles are summarized in **Table 4.1-11** and **Table 4.1-12** by APC. The results reported in these tables reflect the operating conditions of all roadway segments classified as major highways, secondary highways, and collector streets within the City of Los Angeles. In both the AM and PM peak periods, the Central APC has the highest share of segments operating at LOS E or F, followed closely by East Los Angeles and West Los Angeles. In the AM peak, over 20 percent of Central APC segments operate at LOS E or F, increasing to 30 percent in the PM peak. Citywide, nearly 13 percent of street segments operate at LOS E or F in the AM peak, rising to nearly 18 percent in the PM peak.

TABLE 4.1-11: SUMMARY OF EXISTING AM PEAK PERIOD ROADWAY SEGMENTS OPERATING CONDITIONS

Area Planning Commission	Percent of Segments Operating at: /a/				Weighted Average V/C Ratio (all segments) /a/
	LOS D or Better	LOS E	LOS F	Unsatisfactory LOS (E or F)	
1. North Valley	95.7%	1.6%	2.6%	4.3%	0.583 (LOS A)
2. South Valley	95.1%	2.1%	2.9%	4.9%	0.614 (LOS B)
3. Central	78.8%	8.6%	12.6%	21.2%	0.774 (LOS C)
4. East Los Angeles	79.5%	6.0%	14.5%	20.5%	0.815 (LOS D)
5. West Los Angeles	79.6%	6.7%	13.8%	20.4%	0.791 (LOS C)
6. South Los Angeles	87.2%	5.4%	7.3%	12.8%	0.715 (LOS C)
7. Harbor	94.9%	2.2%	2.9%	5.1%	0.614 (LOS B)
CITY OF LOS ANGELES	**87.2%**	**4.8%**	**8.0%**	**12.8%**	**0.712 (LOS C)**

/a/ Segments include major highways, secondary highways, and collector streets within the City of Los Angeles.
SOURCE: Fehr & Peers, 2013.

TABLE 4.1-12: SUMMARY OF EXISTING PM PEAK PERIOD ROADWAY SEGMENTS OPERATING CONDITIONS

Area Planning Commission	Percent of Segments Operating at: /a/				Weighted Average V/C Ratio (all segments) /a/
	LOS D or Better	LOS E	LOS F	Unsatisfactory LOS (E or F)	
1. North Valley	94.8%	2.1%	3.1%	5.2%	0.599 (LOS A)
2. South Valley	92.2%	3.9%	3.9%	7.8%	0.649 (LOS B)
3. Central	70.0%	11.0%	19.0%	30.0%	0.814 (LOS D)
4. East Los Angeles	73.8%	8.6%	17.6%	26.2%	0.806 (LOS D)
5. West Los Angeles	70.9%	9.3%	19.8%	29.1%	0.828 (LOS D)
6. South Los Angeles	81.3%	7.5%	11.2%	18.7%	0.769 (LOS C)
7. Harbor	93.5%	3.1%	3.4%	6.5%	0.624 (LOS B)
CITY OF LOS ANGELES	**82.1%**	**6.7%**	**11.3%**	**17.9%**	**0.743 (LOS C)**

/a/ Segments include major highways, secondary highways, and collector streets within the City of Los Angeles.
SOURCE: Fehr & Peers, 2013.

Existing Transit Ridership. Metro ridership data indicate a total of 1.1 million daily boardings at transit stops within the City of Los Angeles under existing conditions. The Central APC, well connected by bus and rail transit, is home to 17 percent of the City's population and 29 percent of its jobs, but accounts for nearly half of its transit boardings.[10] **Table 4.1-13** presents details by APC and time of day.

TABLE 4.1-13: EXISTING TRANSIT BOARDINGS

Area Planning Commission	Peak Period (7-Hour)	Off-Peak Period (17-Hour)	Daily
1. North Valley	33,100	28,000	61,100
2. South Valley	77,200	62,900	140,100
3. Central	280,800	245,700	526,500
4. East Los Angeles	44,900	38,600	83,600
5. West Los Angeles	19,100	16,300	35,400
6. South Los Angeles	140,500	118,700	259,300
7. Harbor	6,100	5,200	11,300
CITY OF LOS ANGELES	**601,800**	**515,500**	**1,117,200**

SOURCE: Metro, 2013.

[10]SCAG, *2012-2035 RTP/SCS*, Socioeconomic Data.

THRESHOLDS OF SIGNIFICANCE

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

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;
- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;
- Substantially change transportation safety in the City of Los Angeles;
- 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.

The above thresholds are general in nature and address a broad range of projects. In addition, as noted above, the Governor's OPR has circulated suggested (preliminary discussion draft) changes to these thresholds to remove automobile delay as a significant impact under CEQA and to focus on VMT and the potential to induce more traffic into an area. These changes are currently being circulated for comment and are therefore not used in this document.

CITY OF LOS ANGELES CEQA THRESHOLDS GUIDELINES

The City of Los Angeles CEQA Threshold Guidelines 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.

The methodology and thresholds for street segments are incorporated in the Circulation System threshold used in this Recirculated Draft EIR as described below.

Thresholds for intersections are not used because the street segment capacity analysis incorporated in the Circulation System threshold 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.

The methodology and thresholds for freeway capacity are incorporated in the CMP – Freeway Segment Analysis threshold used in this Recirculated Draft EIR as described below.

The methodology and thresholds for neighborhood intrusion impacts are included in the Neighborhood Intrusion Impacts threshold used in this Recirculated Draft EIR as described below.

The methodology and thresholds for project access are incorporated in the Safety, Emergency Access, and Consistency with Plans thresholds used in this Recirculated Draft EIR as described below.

Parking has been removed as a threshold under CEQA as described below.

This Recirculated Draft EIR evaluates the thresholds for in-street construction impacts qualitatively because there is currently no specific project or detailed information regarding a particular construction projects that would occur as a result of the proposed project.

The following sections describe how the above criteria have been applied to the MP 2035, a long-range transportation planning project.

CONSISTENCY WITH PLANS

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 it would exceed the applicable thresholds identified below.

Los Angeles Department of Transportation Threshold Guidelines for Street Segments. Based on the criteria set forth in the City of Los Angeles CEQA Thresholds Guide (2006), the determination of significance shall be made on a case-by-case basis. The roadway system is considered to be significantly impacted by traffic generated as a result of future development under the proposed project if one or both of the following criteria are met:

- The "volume-weighted" average of the V/C ratio under the Year 2035 Project conditions for all of the analyzed roadway segments exceeds that of the Existing traffic conditions and/or Future No 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 No 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 City of Los Angeles.

NEIGHBORHOOD INTRUSION

The proposed project would have a significant impact related to neighborhood intrusion if it increases 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, the proposed project is assessed qualitatively against these thresholds for purposes of this Recirculated Draft EIR.

CONGESTION MANAGEMENT PROGRAM

The Metro 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 MP 2035 is not resulting in land use changes within the City of Los Angeles, the CMP analysis is not required. However, for the purposes of showing changes in travel demand on the state highway system within the City, the CMP analysis was conducted for the CMP freeway segments. The CMP defines a significant impact to a CMP freeway or arterial monitoring location as follows:

- For purposes of 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).

EMERGENCY ACCESS

The proposed project would have a significant impact if it would result in inadequate emergency vehicle access.

PUBLIC TRANSIT, BICYCLE, OR PEDESTRIAN FACILITIES

The proposed project would have a significant impact if it would 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 other specific LOS methodologies or quantitative thresholds for performance have been defined by the City.

PARKING

Parking deficits are considered to be social effects, rather than impacts on the physical environment as defined by CEQA, but there may be secondary physical environmental impacts, such as increased traffic congestion at intersections, air quality impacts, safety impacts, noise impacts caused by congestion, or land use impacts. The proposed project would have a significant impact if secondary effects related to parking contribute to impacts described by the other significance thresholds (noise, air quality, etc.).

SAFETY

The proposed project would have a significant impact if it would substantially change transportation safety. No specific methodologies or quantitative thresholds for safety have been defined by the City. CEQA guidelines broadly define a safety impact threshold as "substantially increase hazards due to a design feature (sharp curves or dangerous intersections) or incompatible land uses (farm equipment). MP 2035 does not include specific design features or modify land uses that are expected to be incompatible with safe transportation operations.

CONSTRUCTION

The proposed project would have a significant impact if it would require construction activities to take place within a major or secondary highway right-of-way which would necessitate temporary lane, alley, or street closures for more than one day; require construction activities to take place within a collector or local street right-of-way which would necessitate temporary lane, alley, or street closures for more than seven days; result in the loss of regular vehicular or pedestrian access to an existing land use for more than one day; or result in the temporary loss for more than one day of an existing bus stop or rerouting of a bus route that serves the project site.

A discussion of each of these impact areas is presented in the Impacts section.

ADDITIONAL PERFORMANCE METRICS AND RECOMMENDED THRESHOLDS

California Senate Bill 743 directs the Office of Planning and Research 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 level of service 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 above, the following performance metrics are also evaluated for informational purposes:

Mode Split. Any increase in the peak-period auto mode share would be an undesirable outcome.

Transit Boardings. Any decrease in the number of daily transit boardings would be an undesirable outcome.

Vehicle Trips. Any increase in the number of daily vehicle trips would be an undesirable outcome.

Vehicle Miles Traveled. Any increase in the total number of vehicle miles traveled Citywide would be an undesirable outcome.

Vehicle Hours Traveled. Any increase in the total number of vehicle hours traveled Citywide would be an undesirable outcome.

Accessibility. Any decrease in the percent of the City's total population or employment within one-quarter mile of the BEN would be an undesirable outcome.

Any decrease in the percent of the City's total population or employment within one-quarter mile of the Transit Enhanced Network (TEN) would be an undesirable outcome.

Accessibility to the Vehicle Enhanced Network (VEN) is presented for informational purposes; concentrating future growth in areas that can encourage travel by actives modes, such as in close proximity to the BEN and TEN, may result in a decrease in the percent of the City's total population or employment within one quarter mile of the VEN.

METHODOLOGY

OVERVIEW

This section describes the way this report assesses impacts on the transportation system. It includes an overall discussion of methodology and assumptions, followed by a discussion of how the MP 2035 is expected to perform for each of the thresholds described above.

Planning in response to Climate Change has been underway for some time. In 2005 Executive Order (EO) 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 Assembly Bill 32 (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 greenhouse gas reduction goals outlined in AB 32. Reductions in GHG emissions would be achieved by, for example, 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 VMT 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 greenhouse gas emissions.

As part of its response to the 2012-2035 RTP/SCS, the City of Los Angeles initiated the MP 2035. The MP 2035 provides a City-wide coherent transportation plan to provide the transportation framework on which to build

balanced land use plans. The City undertakes land use planning through its 35 community plans (that are on an approximate 15-year update cycle). Presuming the MP 2035 is approved (in a form deemed acceptable to decision-makers), future community plans would start with the MP 2035 as one of the components around which land use plans are oriented. Priority would be given to updating community plans with high concentrations of transit in order to maximize the use of regional transit. The City is undertaking a number of complimentary, parallel planning efforts. Because these efforts are being undertaken in parallel they cannot be fully reflective of each other. Therefore, the environmental analyses for each project take a conservative view when analyzing traffic impacts. Land use plans are generally oriented towards reducing trips and trip lengths by locating uses in proximity to each other and in proximity to known transit. These land use planning efforts would enhance the beneficial effects of the MP 2035.

It is anticipated that both transportation infrastructure planning (as presented in the 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. The MP 2035 will provide the framework for future community plans and specific plans that will take a closer look at the MP 2035 VEN, BEN, TEN and Pedestrian Enhanced Districts (PEDs) in specific areas of the City and will recommend more-detailed implementation strategies to realize the MP 2035. More detailed land use planning may reveal the need for changes to the MP 2035, which will be undertaken (through a General Plan Amendment process) as needed to reflect these more detailed planning efforts.

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, Senate Bill 743 was considered and ultimately enacted into state law. SB 743 makes several changes to the California Environmental Quality Act 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 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 level of service 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 study area is generally defined by the boundaries of the City of Los Angeles. Analysis results are summarized both at the citywide level and by APC. **Figure 4.1-3** displays the seven APCs. Although the MP 2035 policies do not directly apply to freeways in the City, the policies could influence motorists' decisions to use the freeway network; potential impacts at Congestion Management Program freeway monitoring stations within the City of Los Angeles are reported. Finally, because Los Angeles is an important part of the greater Southern California region and many trips that use facilities within Los Angeles originate or are destined for locations beyond the city boundaries, impacts to traffic on roadways in neighboring jurisdictions are also reported. 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 4.1-14**. LADOT has established LOS D as a minimum satisfactory LOS. 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 are obtained from the calibrated City of Los Angeles Travel Demand Model.

LOS ANGELES MOBILITY ELEMENT

Area Planning Commissions

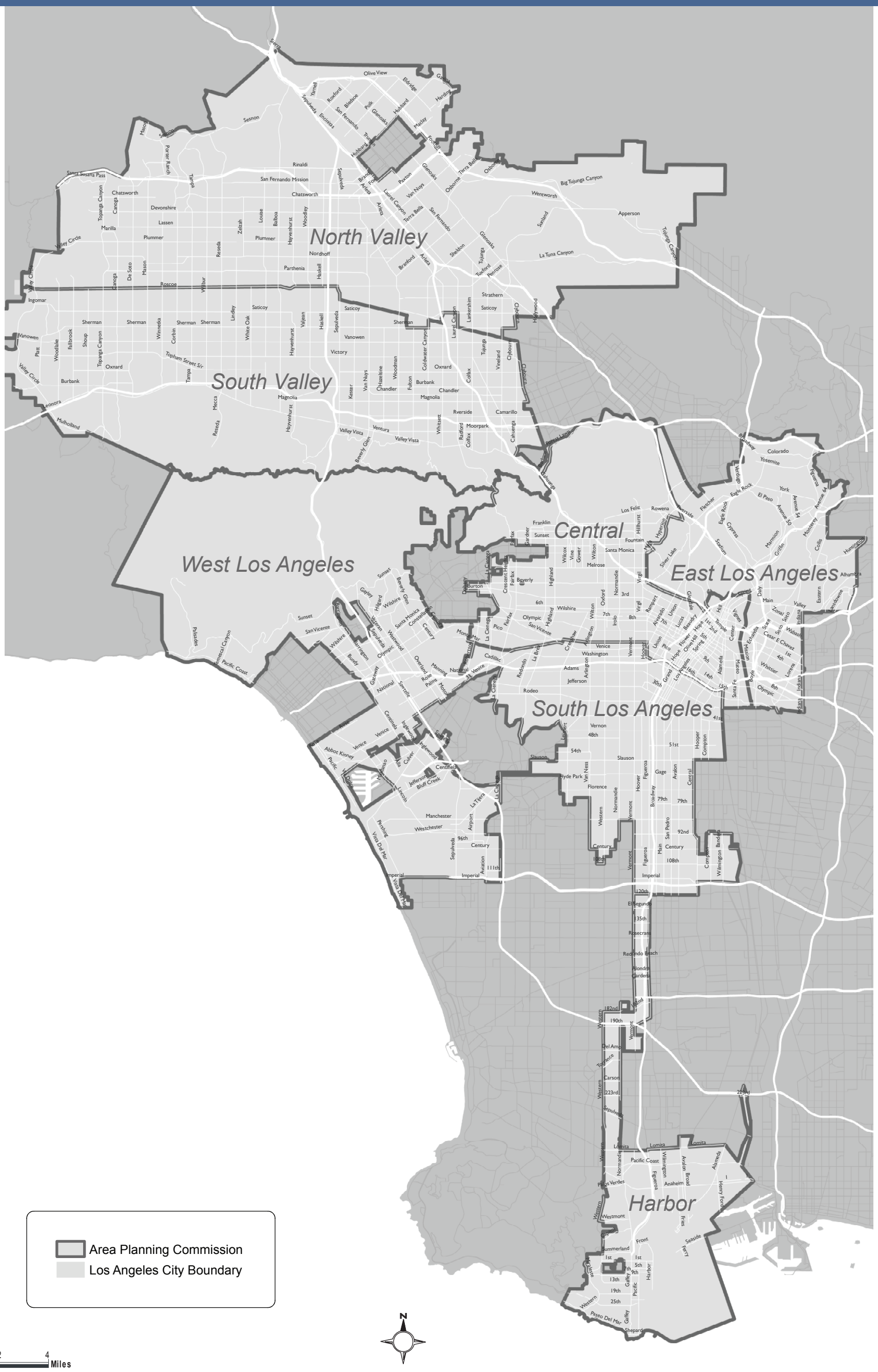

FIGURE 4.1-3

Source: Fehr & Peers, 2013.

TABLE 4.1-14: ROADWAY SEGMENT LEVEL OF SERVICE DEFINITIONS

Level of Service	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*, 1985.

Plans that involve large areas and are not expected to be fully implemented until Year 2035 or beyond (such as mobility element updates) are not analyzed effectively by detailed intersection V/C analyses. In this case, roadway segment analysis is sufficient to determine service capacity of the roadway network within the City.

SB 743 directs the 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 LOS. 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 model used to analyze the MP 2035 is based on the City's Transportation Strategic Plan (TSP) model, developed by Fehr & Peers, which uses the TransCAD Version 4.8 Build 500 modeling software and was initially calibrated and validated to 2008 conditions. Since the development of the TSP model, the City has used this forecasting tool on multiple projects and it is now referred to as the City of Los Angeles' Travel Demand Forecasting (TDF) Model. A more complete description of the TDF is contained in **Appendix C**.

The City of Los Angeles TDF model has been updated by Fehr & Peers to reflect additional land use and transportation network detail related to recent planning studies, such as the City's Wilmington EMPOWER (a mobility plan for the Wilmington neighborhood) and Westside Mobility Plan, and reflect travel conditions based on more recent available data (2009, 2010, and 2011 traffic counts). Within the model, the City of Los Angeles is divided into 1,411 Transportation Analysis Zones (TAZs), each with corresponding socioeconomic data (SED) and connections to the roadway and transit networks. The model captures

planned growth within the City, including special generators, such as the Port of Los Angeles, LAX Airport, and Universities. The model forecasts AM and PM peak period and daily vehicle and transit flows on the transportation network within the study.

Since the development of the City's TDF Model, SCAG adopted the 2012-2035 RTP/SCS. The 2012-2035 RTP/SCS Model 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 MP 2035, the SED for the City's TDF Model were updated to reflect the most recent growth forecasts in 2012-2035 RTP/SCS. In addition, the roadway and transit networks have been updated to reflect the assumptions contained in the 2012-2035 SCAG RTP. Appendix C summarizes the updates made to the City's TDF Model used in the MP 2035. **Table 4.1-15** summarizes the existing and future model population assumptions.

TABLE 4.1-15: SUMMARY OF MODEL POPULATION VALUES

Area Planning Commission	Existing (2012)	Future (2035)	Growth	Percent Change
1. North Valley	712,500	743,700	31,200	4.4%
2. South Valley	763,700	819,200	55,500	7.3%
3. Central	727,100	842,200	115,100	15.8%
4. East Los Angeles	429,600	445,500	15,900	3.7%
5. West Los Angeles	433,900	459,000	25,100	5.8%
6. South Los Angeles	730,000	803,100	73,100	10.0%
7. Harbor	207,600	210,200	2,600	1.3%
CITY OF LOS ANGELES	**4,004,400**	**4,322,900**	**318,500**	**8.0%**

SOURCE: SCAG RTP Model, 2012.

The City's TDF Model future year network assumptions have been updated to include funded projects expected to be implemented by year 2035 from:

- The Metro 2013 Call For Projects;
- The Street and Transportation Projects Oversight Committee project list; and
  The 2012-2035 RTP/SCS (financially constrained) Model.

The updated City of Los Angeles TDF model was used to generate the baseline (existing) and future conditions data for the MP 2035. Given the programmatic nature of the impact analysis and large study area, the City's TDF model reflects the most recent and applicable data at a Citywide level to report baseline and future transportation characteristics. Through the model updates described above and outlined in **Appendix C**, the City's TDF model is consistent with the growth and transportation improvements in the adopted the 2012-2035 RTP/SCS, which reflects both the City of LA and SCAG region.

The MP 2035 includes the same land use assumptions as the Future No Project conditions. In order to analyze project impacts, a set of Future With Project transportation network assumptions was developed by modifying the transportation network for Future No Project to incorporate new facilities associated with MP 2035. To determine changes in travel patterns and identify potential impacts, a reasonable set of assumptions needed to be made on how the network would change with the implementation of MP 2035. In addition, **Table 4.1-16** lists the modeling assumptions applied to the roadway network in areas covered by each of MP 2035's enhanced networks.

TABLE 4.1-16: PROJECT ENHANCED NETWORKS MODEL ASSUMPTIONS

Enhanced Network	Treatment Level	Model Assumptions
Vehicle-Enhanced Network	Moderate	• Reduce vehicle travel times by 10 percent • Add one vehicular travel lane per direction if all-day parking is available, or convert one off-peak parking lane per direction to a full-time vehicular travel lane
	Comprehensive	• Reduce vehicle travel times by 10 percent • Add one vehicular travel lane per direction if all-day parking is available –OR– convert one off-peak parking lane per direction to a full-time vehicular travel lane • Increase effective vehicular capacity by 10 percent
Transit-Enhanced Network	Moderate	• No change to lane configuration • Double frequency of bus service
	Moderate Plus	• Convert one vehicular travel lane per direction to a bus only lane during peak periods • Double frequency of bus service
	Comprehensive	• Convert one vehicular travel lane per direction to a bus only lane for the full day • Double frequency of bus service
Bicycle-Enhanced Network/ Bicycle Lane Network	Moderate and Moderate Plus	• Remove one vehicular travel lane per direction to accommodate a bicycle lane or buffered bicycle lane
	Comprehensive	• Remove one vehicular travel lane per direction to accommodate a cycle track

SOURCE: Fehr & Peers, 2014.

The model simulates existing 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 automobile and transit 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 to be implemented as part of the MP 2035, 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 TAZ level to calculate the effects of the MP 2035's TDM policies 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 at the APC level, including:

- Travel mode shares ("mode split")
- Transit boardings
- Vehicle trips
- Vehicle miles traveled
- Vehicle hours traveled
- Volume-to-capacity ratios

There is a complex interplay between City actions and desired MP 2035 outcomes. 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. Outcomes are related to a number of factors, many of which are outside of the City's direct influence. 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 provision consistent with the regional SCS. If these outcomes are not realized with the proposed project actions described in MP 2035, the

City may implement increased or additional travel demand management strategies including but not limited to congestion pricing, tolling, local fuel and/or VMT taxes, vehicle conversion incentives, transit passes, bike share passes, additional regional SCS strategies, and other strategies as appropriate to further shift travel to more efficient modes.

Changing Travel Behavior and VMT Trends. As discussed throughout this Recirculated Draft 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.

Traffic models are substantially based on past precedent. The model-estimated changes in circulation system conditions 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.[11]

The traffic 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 in to 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, possibly by a substantial amount.

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 above, it is anticipated the Governor's OPR will provide additional guidance on CEQA review of transportation impacts.

Analysis Scenarios. Two recent CEQA cases address analysis scenarios: 1) *Sunnyvale West Neighborhood Assoc. v. City of Sunnyvale City Council (6th Dist. 2010) 190 Cal.App.4th 1351* (Sunnyvale West) and 2) *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority (2013) 57 Cal.4th 439* (Expo II). The first case indicated that project impacts should be compared directly to existing conditions. The second case clarified that comparison to an existing condition may *not* be appropriate if there is, "substantial evidence that an analysis based on existing conditions would tend to be misleading or without informational value to EIR users."

For a planning project that would be implemented over time, comparison of full buildout to existing conditions would be misleading and of no informational value because the MP 2035 cannot be built out

[11]Boarnet, Marlon J., Andy Hong, Jeongwoo Lee, Xize Wang, Weijie Wang. 2013. The Exposition Light Rail Line Study A Before-and-After Study of the Impact of New Light Rail Transit Service. *USC Sol Price School of Public Policy.* 59-61.

immediately. Impacts would not occur in the context of existing conditions but rather in the future context once the MP 2035 has had time to be realized. For a planning project, significance of impacts is appropriately assessed based on a comparison between Future (at the earliest time buildout could reasonably be expected) Project conditions and Future No Project conditions. The MP 2035 is a plan that is anticipated to be implemented over time with all improvements anticipated to be realized in 2035 or beyond. Therefore, an analysis of potential transportation network changes and associated traffic impacts compared to existing traffic could be misleading since the land uses changes will not occur immediately.

Nonetheless, for purposes of disclosure, an analysis of what would happen if the proposed project were fully implemented by 2035 was compared to both Future No Project and Existing conditions. For CEQA purposes, significance of impacts is assessed based on a comparison between Project conditions to both Existing and Future No Project conditions to inform the decision-maker as to how impacts would change in the future with adoption of the MP 2035 compared to conditions without the implementation of the project.

ACCESSIBILITY METRICS.

The accessibility metrics evaluate how well the enhanced networks proposed as part of the MP 2035 provide access to employment and residential locations within the City of Los Angeles. For purposes of this analysis, the enhanced networks are defined as follows:

- BEN
  - Future No Project – includes all bicycle paths and protected bicycle lanes expected to be completed by year 2035 without the implementation of the MP 2035.
  - Project – includes Future No Project, NEN, Bicycle Lane Network, and Moderate, Moderate Plus and Comprehensive treatments from the BEN.
- TEN
  - Future No Project – includes existing and funded rail, Metrolink, and fixed bus guideway facilities expected to be completed by year 2035 without the implementation of the MP 2035.
  - Project – includes Future No Project, Moderate, Moderate Plus, and Comprehensive treatments from the TEN.
- VEN
  - Future No Project – consists of the freeway network within the City of Los Angeles.
  - Project – includes Future No Project, Moderate, and Comprehensive treatments from the VEN.

Three accessibility metrics, Population Accessibility, Employment Accessibility, and Network Coverage, were calculated for each enhanced network, scenario, and treatment type described above.

Population and Employment Accessibility. The Population and Employment Accessibility metrics are expressed as the percentage of the City of Los Angeles' total 2035 population or employment located within a quarter-mile, street-network buffer of each combination of enhanced network, scenario, and treatment type. Calculations using a one-mile, street-network buffer are also provided for comparison.

Calculation of the BEN accessibility metrics can serve as an example of the process used to calculate accessibility. First, a separate quarter-mile, network-based buffer is created for each facility type identified for the BEN: Future No Project, Neighborhood Streets, Bicycle Lane Network, and Moderate, Moderate Plus and Comprehensive treatments. Rather than calculating a straight-line or "as the crow flies" buffer, each buffer searches out from the enhanced segment for a quarter-mile distance along the city's entire street network. 2035 population data from the TAZs within these buffers are then aggregated and presented as a percentage of the total population of all TAZs within City of Los Angeles limits. The calculation process for employment accessibility is comparable, aggregating 2035 total employment instead of total population.

In situations where an area falls within the buffer of two or more treatment types for a given network and scenario, it is classified as having access only to the most intense treatment. For example, population and

employment in a block that is within a quarter-mile of both a project Neighborhood Street and a project Comprehensive segment is included in the Comprehensive calculation only, not the Neighborhood Street calculation, to avoid double-counting population and employment. The hierarchy from highest to lowest priority is: Comprehensive, Moderate Plus, Moderate, Neighborhood Streets, Future No Project; not all treatments apply in all enhanced networks and scenarios.

Future No Project accessibility is initially calculated to capture all population and employment within the quarter-mile network buffer and again to capture only the population and employment that is not already covered by one of the other enhanced treatments. The same calculation process is repeated for the TEN and VEN.

Network Coverage. Network Coverage is a simple measure of the length of each enhanced network facility type, by scenario. The citywide value for the entire 7,500-mile Los Angeles street network is provided for comparison.

IMPACTS

IMPACT 4.1-1 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. This is a less than significant impact.

The City of Los Angeles General Plan Transportation Element, adopted in 1999, includes a discussion of the existing roadway infrastructure in the City of Los Angeles. Goals, objectives, and policies are included in the 1999 Transportation Element to ensure the efficient circulation within the City and region. The MP 2035 builds upon the goals and policies of the 1999 Transportation Element and proposes an extensive network of transit, bicycle and vehicle corridors (TEN, BEN, NEN and VEN) as well as neighborhood and pedestrian enhancements (NEN and PED) to achieve the City's transportation objectives.

The 2012-2035 RTP/SCS provides a regional plan to meet region-specific GHG reduction targets. The 2012-2035 RTP/SCS identifies a variety of strategies to be employed across the region to link transportation and land use planning in order to reduce greenhouse gas emissions. As part of its response to the 2012-2035 RTP/SCS, the City of Los Angeles initiated MP 2035. MP 2035 provides a City-wide coherent transportation plan to provide the transportation framework on which to build balanced land use plans through community plan updates. These land use planning efforts would enhance the beneficial effects of MP 2035.

Policies included in the proposed project are analyzed for consistency with the goals of the 2012-2035 RTP/SCS. **Table 4.1-17** presents the 2012-2035 RTP/SCS goals. While the MP 2035 would replace the 1999 Transportation Element, it builds upon many of the concepts included in that document; the MP 2035 consistency with the goals and objectives of the current City of Los Angeles 1999 Transportation Element of the General Plan is presented in **Table 4.1-18** in order to illustrate that the proposed MP 2035 is consistent with and builds upon the previous Transportation Element that it would replace.

The MP 2035 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. Therefore, the proposed project would have a less than significant impact related to consistency with other plans.

TABLE 4.1-17: ANALYSIS OF POTENTIAL CONFLICTS WITH SCAG 2012-2035 RTP/SCS GOALS

Goal	Analysis
RTP/SCS G1: Align the plan investments and policies with improving regional economic development and competitiveness.	**Consistent:** The MP 2035 includes policies related to establishing a Great Streets Program including economic revitalization efforts; increasing public awareness about the economic value and necessity of goods movement; providing regionally significant transportation improvements for goods movement; facilitating the provision of adequate on- and off-street loading areas; and promoting economic revitalization through investments in the Great Streets Initiative and the development of transit-oriented development corridors.
RTP/SCS G2: Maximize mobility and accessibility for all people and goods in the region.	**Consistent: The** MP 2035 includes a goal of "Access for All Angelenos" that aligns directly with RTP/SCS G2. The MP 2035 recommends policies for transportation improvements that support mobility for people and goods through enhancements of public transportation, walking and bicycling to make them viable alternatives to automobile travel. The MP 2035 includes supporting policies that relate to considering walking as a component of all other transportation modes; accommodating the needs of disabled persons when modifying or installing infrastructure in the public right-of-way; providing efficient, convenient, affordable, and attractive transit services for all residents, workers, and visitors; supporting "first-mile, last-mile solutions"; promoting Union Station as the major regional rail hub; improving transit access to major regional destinations, job centers and inter-modal facilities; and maintaining public alley access.
RTP/SCS G3: Ensure travel safety and reliability for all people and goods in the region.	**Consistent: The** MP 2035 includes a goal of "Safety First" that aligns directly with RTP/SCS G3. MP 2035 includes policies that relate to considering the safety of school children as a priority over vehicular movement; prioritizing the implementation of bicycling and pedestrian safety improvements around community facilities and locations with strong pedestrian presence; promoting awareness of safe driving, walking, and bicycling habits; promoting design and enforcement approaches to encourage motorist adherence to speed limits; evaluating the effectiveness of the state's speed limit requirements; reducing conflicts and improving safety at railroad crossings; and maintaining the street system in safe, good to excellent condition.
RTP/SCS G4: Preserve and ensure a sustainable regional transportation system.	**Consistent: The** MP 2035 includes policies related to seeking equitable and reliable resources for capital improvements; expanding funding to improve the built environment for bicyclists, pedestrians, and vulnerable users; and dedicating revenues generated by commercial vehicles to roadway related purposes.
RTP/SCS G5: Maximize the productivity of our transportation system.	**Consistent: The** MP 2035 includes policies that relate to supporting a comprehensive, integrated transportation database and digital platform that manages existing assets and dynamically updates users with new information; communicating and partnering with SCAG, Metro, adjacent cities and local transit operators to plan and operate a cohesive regional transportation system; facilitating the development of innovative mobility technologies and models in the private sector; evaluating the effectiveness of new strategies through the collection and analysis of information on the transportation system; and prioritizing future transportation, operations, and maintenance related improvements based upon the following criteria: person throughput, safety improvements, environmental benefits, population density served;
RTP/SCS G6: Protect the environment and health for our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking).	**Consistent:** The MP 2035 includes policies related to establishing a Great Streets Program including green street design features; reducing vehicle miles traveled per capita; preserving and enhancing a greenway network that provides opportunity for both leisure and active travel, ecological habitat and stormwater capture and infiltration; limiting exposure to air pollution from transportation-related sources; developing design standards for new and retrofitted parking lots and parking structures; facilitating regular "street opening" events and repurposing of the roadway; continuing to encourage the adoption of alternative fuels and vehicle technologies, and supporting infrastructure; considering walking as a component of all other transportation modes and ensure high-quality pedestrian access in all site planning and public roadway improvements; implementing a balanced transportation system using Complete Streets Standards to ensure the safety and mobility of all users, including pedestrians, cyclists, motorists, children, seniors, homeless, and people with disabilities; prioritizing the implementation of bicycling and pedestrian safety improvements around community facilities and locations with a strong presence of pedestrians; and expanding funding to improve the built environment for bicyclists, pedestrians, and vulnerable users by dedicating at least 20 percent of the Measure R local return set-asides for bicycle and pedestrian facilities.
RTP/SCS G7: Actively encourage and create incentives for energy efficiency, where possible.	**Consistent:** The MP 2035 includes policies relating to facilitating the development of innovative mobility technologies and models in the private sector; continuing to encourage the adoption of alternative fuels and vehicle technologies, and supporting infrastructure; and evaluating the effectiveness of new strategies through the collection and analysis of information on the transportation system.
RTP/SCS G8: Encourage land use and growth patterns that facilitate transit and non-motorized transportation.	**Consistent:** The MP 2035 includes policies relating to supporting land use decisions and design features that result in fewer vehicle trips by providing greater proximity and access to neighborhood services; encouraging a mix of land uses that serve residents', students', and/or employees' needs in areas near transit and prioritizing land uses that generate high levels of transit ridership at major transit stops; and prioritizing future transportation, operations, and maintenance related improvements based upon the following criteria: person throughput, safety improvements, environmental benefits, population density served.
RTP/SCS G9: Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.	**Consistent:** The MP 2035 includes policies relating to expanding the safety and security of truck related operations through the establishment of inspection stations, freeway service patrols and increased security measures at the Port of Los Angeles; and supporting a comprehensive, integrated transportation database and digital platform that manages existing assets and dynamically updates users with new information.

SOURCE: SCAG RTP/SCS Goals provided by Nadler, Jonathan. "SCAG Comments on the Notice of Preparation of a Draft Environmental Impact Report for the City of Los Angeles Mobility Element Update [120130087]" May 2013. Consistency with MP 2035 provided by Fehr & Peers, 2014.

TABLE 4.1-18: ANALYSIS OF POTENTIAL CONFLICTS WITH CITY OF LOS ANGELES 1999 TRANSPORTATION ELEMENT GOALS AND OBJECTIVES

Goal/Objective	Goal/Objective Description	Analysis
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.	**Consistent:** The MP 2035 includes a goal of "Access for All Angelenos" that aligns directly with Goal A. MP 2035 recommends policies for transportation improvements that support mobility for people and goods through enhancements of public transportation, walking and bicycling to make them viable alternatives to automobile travel. The MP 2035 includes supporting policies that relate to considering walking as a component of all other transportation modes; accommodating the needs of disabled persons when modifying or installing infrastructure in the public right-of-way; providing efficient, convenient, affordable, and attractive transit services for all residents, workers, and visitors; supporting "first-mile, last-mile solutions"; promoting Union Station as the major regional rail hub; improving transit access to major regional destinations, job centers and inter-modal facilities; and maintaining public alley access.
Objective 1	Expand neighborhood transportation services and programs to enhance neighborhood accessibility.	**Consistent:** The MP 2035 includes policies relating to implementing a balanced transportation system using Complete Streets Standards to ensure the safety and mobility of all users, including pedestrians, cyclists, motorists, children, seniors, homeless, and people with disabilities; prioritizing the implementation of bicycling and pedestrian safety improvements around community facilities and locations with a strong presence of pedestrians; supporting "first-mile, last-mile solutions" such as multi-modal transportation services, organizations, and activities in the areas around transit stations and major bus stops (transit stops) to maximize multi-modal connectivity and access for transit riders; considering walking as a component of all other transportation modes and ensuring high-quality pedestrian access in all site planning and public roadway improvements; and continuing to preserve and enhance a series of inter-connected scenic highways and byways, Neighborhood Friendly Streets, paths (walking, bicycle), and trails (hiking, walking, bicycle, equine) that provide opportunity for both leisure and active travel, ecological habitat and stormwater capture and infiltration that connects communities with open space parks, beaches, schools, and other community assets.
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.	**Consistent:** The MP 2035 includes policies relating to implementing a balanced transportation system using Complete Streets Standards to ensure the safety and mobility of all users, including pedestrians, cyclists, motorists, children, seniors, homeless, and people with disabilities; prioritizing the implementation of bicycling and pedestrian safety improvements around community facilities and locations with a strong presence of pedestrians; considering the installation of context sensitive, multi-modal improvements (transit, bicycle, pedestrian) to mitigate a project's traffic impacts before considering a roadway widening or other vehicle enhancing features; considering walking as a component of all other transportation modes and ensuring high-quality pedestrian access in all site planning and public roadway improvements; providing all residents, workers and visitors with efficient, convenient, affordable, and attractive transit services; supporting "first-mile, last-mile solutions" such as multi-modal transportation services, organizations, and activities in the areas around transit stations and major bus stops (transit stops) to maximize multi-modal connectivity and access for transit riders; improving transit access and service to major regional destinations, job centers, and inter-modal facilities; partnering with the private sector to foster the success of Transportation Management Organizations (TMOs) in the City's commercial districts; encouraging employers to adopt TDM strategies such as commuter incentives, telecommuting programs, and flexible work schedules; continuing to encourage the adoption of alternative fuels and vehicle technologies, and supporting infrastructure; establishing a series PEDs and accompanying evaluation criteria to prioritize areas for pedestrian improvements; establishing the TEN within the City's arterial system to improve the performance and reliability of existing and future bus service; establishing the BEN within the City's arterial system to provide safe, convenient, and comfortable regional facilities for cyclists of all types and abilities; and establishing the Vehicle VEN on a sub-set of the City's arterial system to provide access to the regional freeway system.
Objective 3	Support development in regional centers, community centers, major economic activity areas and along mixed-use boulevards as designated in the Community Plans.	**Consistent:** The MP 2035 includes policies relating to supporting land use decisions and design features that result in fewer vehicle trips by providing greater proximity and access to neighborhood services; encouraging a mix of land uses that serve residents', students', and/or employees' needs in areas near transit and prioritize land uses that generate high levels of transit ridership at major transit stops; improving transit access and service to major regional destinations, job centers, and inter-modal facilities; and promoting economic revitalization and growth through smart investments in the Great Streets Initiative and the development of transit-oriented development (TOD) corridors.
Objective 4	Preserve the existing character of lower density residential areas and maintain pedestrian-oriented environments where appropriate.	**Consistent:** The MP 2035 includes policies relating to designing streets and enforcing speed laws so that motorists adhere to intended speeds on all City roadways; evaluating the effectiveness of the State's speed limit requirements on street safety and performance; establishing a series of PED areas and accompanying evaluation criteria to prioritize areas for pedestrian improvements; continuing to preserve and enhance a series of inter-connected scenic highways and byways, Neighborhood Friendly Streets, paths (walking, bicycle), and trails (hiking, walking, bicycle, equine) that provide opportunity for both leisure and active travel, ecological habitat and stormwater capture and infiltration that connects communities with open space parks, beaches, schools, and other community assets; considering walking as a component of all other transportation modes and ensure high-quality pedestrian access in all site planning and public roadway improvements; and limiting exposure to air pollution from transportation-related sources.

TABLE 4.1-18: ANALYSIS OF POTENTIAL CONFLICTS WITH CITY OF LOS ANGELES 1999 TRANSPORTATION ELEMENT GOALS AND OBJECTIVES

Goal/Objective	Goal/Objective Description	Analysis
Objective 5	Provide for the efficient movement of goods and for adequate access to intermodal facilities.	**Consistent:** The MP 2035 includes policies relating to reducing conflicts and improving safety at railroad crossings; expanding the safety and security of truck related operations through the establishment of inspection stations, freeway service patrols and increased security measures at the Port of Los Angeles; establishing the VEN on a sub-set of the City's arterial system to provide access to the regional freeway system; implementing projects that would provide regionally significant transportation improvements for goods movement; discouraging the vacation and/or closure of public alleys; increasing public awareness about the economic value and necessity of goods movement in the Los Angeles region; balancing on and off-street parking supply with other transportation and land-use objectives; facilitating the provision of adequate on and off-street loading areas; and dedicating revenues generated by commercial vehicles to roadway related purposes.
Objective 6	Incorporate available local, state, and federal funding opportunities to provide sufficient financing for transportation improvements and programs.	**Consistent:** The MP 2035 includes policies relating to seeking equitable and reliable resources for capital improvements such as the maintenance and operations of streets, bridges, and stormwater management/green streets; expanding funding to improve the built environment for bicyclists, pedestrians, and vulnerable users by dedicating at least 20% of the Measure R local return set-asides for bicycle and pedestrian facilities; and dedicating revenues generated by commercial vehicles to roadway related purposes.
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.	**Consistent:** The MP 2035 includes policies relating to evaluating the effectiveness of the State's speed limit requirements on street safety and performance; supporting a comprehensive, integrated transportation database and digital platform that manages existing assets and dynamically updates users with new information; facilitating communications between citizens and the City in reporting and receiving responses on non-emergency street improvements; communicating and partnering with SCAG, Metro, adjacent cities and local transit operators to plan and operate a cohesive regional transportation system; and evaluating the effectiveness of new strategies through the collection and analysis of information on the transportation system.
Goal B	A street system maintained in a good to excellent condition adequate to facilitate the movement of those reliant on the system.	**Consistent:** The MP 2035 has a goal of "World Class Infrastructure that aligns directly with Goal B. The MP 2035 includes policies relating to enhancing roadway safety by maintaining the street system in good to excellent condition adequate to facilitate the movement of those reliant on the system; maintaining the City's Bridges in quality condition and incorporating pedestrian and bicycle enhancements when retrofitting or installing a new bridge; and supporting a comprehensive, integrated transportation database and digital platform that manages existing assets and dynamically updates users with new information.
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.	**Consistent:** The MP 2035 includes policies relating to supporting a comprehensive, integrated transportation database and digital platform that manages existing assets and dynamically updates users with new information; and facilitating communications between citizens and the City in reporting and receiving responses on non-emergency street improvements.
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.	**Consistent:** The MP 2035 includes policies relating to enhancing roadway safety by maintaining the street system in good to excellent condition adequate to facilitate the movement of those reliant on the system; maintaining the City's Bridges in quality condition and incorporating pedestrian and bicycle enhancements when retrofitting or installing a new bridge; and supporting a comprehensive, integrated transportation database and digital platform that manages existing assets and dynamically updates users with new information.
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.	**Consistent:** The MP 2035 includes policies relating to establishing a series of PED areas and accompanying evaluation criteria to prioritize areas for pedestrian improvements; establishing the BEN within the City's arterial system to provide safe, convenient, and comfortable regional facilities for cyclists of all types and abilities; and continuing to preserve and enhance a series of inter-connected scenic highways and byways, Neighborhood Friendly Streets, paths (walking, bicycle), and trails (hiking, walking, bicycle, equine) that provide opportunity for both leisure and active travel, ecological habitat and stormwater capture and infiltration that connects communities with open space parks, beaches, schools, and other community assets.
Objective 10	Make the street system accessible, safe, and convenient for bicycle, pedestrian, and school child travel.	**Consistent:** The MP 2035 includes policies relating to implementing a balanced transportation system using Complete Streets Standards to ensure the safety and mobility of all users, including pedestrians, cyclists, motorists, children, seniors, homeless, and people with disabilities; considering the safety of school children as a priority over vehicular movement on all streets regardless of highway classifications, especially near schools; prioritizing the implementation of bicycling and pedestrian safety improvements around community facilities and locations with a strong presence of pedestrians; promoting awareness on safe driving, walking, and bicycling habits to decrease transportation risks and increase safe, efficient and enjoyable travel in the City; maintaining the City's bridges in quality condition and incorporate pedestrian and bicycle enhancements when retrofitting or installing a new bridge; considering the installation of context sensitive, multi-modal improvements (transit, bicycle, pedestrian) to mitigate a project's traffic impacts before considering a roadway widening or other vehicle enhancing features; considering walking as a component of all other transportation modes and ensure high-quality pedestrian access in all site planning and public roadway improvements; accommodate the needs of disabled persons when modifying or installing infrastructure in the public right-of-way; supporting "first-mile, last-mile solutions" such as multi-modal transportation services, organizations, and activities in the areas around transit stations and major bus stops (transit stops) to maximize multi-modal connectivity and access for transit riders; facilitating regular "street opening" events and repurposing of the roadway; prioritizing future transportation, operations, and maintenance related improvements based upon person throughput, safety improvements, environmental benefits, population density served; and expanding funding to improve the built environment for bicyclists, pedestrians, and vulnerable users by dedicating at least 20% of the Measure R local return set-asides for bicycle and pedestrian facilities.

SOURCE: City of Los Angeles General Plan, *Transportation Element*, adopted 1999 and Fehr Peers, 2013.

MITIGATION MEASURES

No mitigation measures are necessary.

IMPACT 4.1-2 The proposed project would have a significant impact to the circulation system, as it would exceed the applicable thresholds established by the City. This is a significant adverse impact.

V/C ratios and LOS calculations were prepared for Future No Project and Project conditions using the same methodology as described in the Existing Setting section. The AM and PM peak period V/C and corresponding LOS for the roadways in the City of Los Angeles are summarized in **Table 4.1-19** and **Table 4.1-20** by APC for Existing Conditions, Future No Project, and Project conditions. Because of the large number of segments among the Existing conditions, Future No Project, and Project scenarios LOS calculations are presented on a percent-of-total basis.

TABLE 4.1-19: SUMMARY OF AM PEAK PERIOD ROADWAY OPERATING CONDITIONS

Area Planning Commission	Percent of Segments /a/ Operating at:				Weighted Average V/C Ratio (all segments) /a/
	LOS D or Better	LOS E	LOS F	Unsatisfactory LOS (E or F)	
EXISTING CONDITIONS					
1. North Valley	95.70%	1.60%	2.60%	4.30%	0.583 (LOS A)
2. South Valley	95.10%	2.10%	2.90%	4.90%	0.614 (LOS B)
3. Central	78.80%	8.60%	12.60%	21.20%	0.774 (LOS C)
4. East Los Angeles	79.50%	6.00%	14.50%	20.50%	0.815 (LOS D)
5. West Los Angeles	79.60%	6.70%	13.80%	20.40%	0.791 (LOS C)
6. South Los Angeles	87.20%	5.40%	7.30%	12.80%	0.715 (LOS C)
7. Harbor	94.90%	2.20%	2.90%	5.10%	0.614 (LOS B)
CITY OF LOS ANGELES	**87.20%**	**4.80%**	**8.00%**	**12.80%**	**0.712 (LOS C)**
FUTURE NO PROJECT					
1. North Valley	94.80%	1.70%	3.50%	5.20%	0.664 (LOS B)
2. South Valley	93.10%	3.10%	3.80%	6.90%	0.649 (LOS B)
3. Central	73.30%	9.00%	17.70%	26.70%	0.824 (LOS D)
4. East Los Angeles	77.10%	6.80%	16.10%	22.90%	0.835 (LOS D)
5. West Los Angeles	74.00%	8.10%	17.90%	26.00%	0.849 (LOS D)
6. South Los Angeles	83.80%	6.70%	9.50%	16.20%	0.750 (LOS C)
7. Harbor	93.20%	2.80%	4.10%	6.80%	0.648 (LOS B)
CITY OF LOS ANGELES	**83.90%**	**5.60%**	**10.50%**	**16.10%**	**0.759 (LOS C)**
FUTURE WITH PROJECT					
1. North Valley	87.06%	4.70%	8.24%	12.94%	0.747 (LOS C)
2. South Valley	84.57%	6.57%	8.86%	15.43%	0.738 (LOS C)
3. Central	51.58%	10.76%	37.67%	48.42%	1.063 (LOS F)
4. East Los Angeles	66.71%	7.65%	25.64%	33.29%	0.946 (LOS E)
5. West Los Angeles	64.67%	7.58%	27.75%	35.33%	0.932 (LOS E)
6. South Los Angeles	70.91%	9.79%	19.29%	29.09%	0.855 (LOS D)
7. Harbor	85.17%	4.40%	10.43%	14.83%	0.745 (LOS C)
CITY OF LOS ANGELES	**71.43%**	**7.78%**	**20.79%**	**28.57%**	**0.886 (LOS D)**

/a/ Segments include major highways, secondary highways, and collector streets within the City of Los Angeles. Weighted Average V/C Ratios reflect the average V/C ratio of all segments in a given category, weighted proportionally by the volume of vehicular travel that occurs on each segment.
SOURCE: Fehr & Peers, 2014.

TABLE 4.1-20: SUMMARY OF PM PEAK PERIOD ROADWAY OPERATING CONDITIONS

Area Planning Commission	Percent of Segments /a/ Operating at:				Weighted Average V/C Ratio (all segments) /a/
	LOS D or Better	LOS E	LOS F	Unsatisfactory LOS (E or F)	
EXISTING CONDITIONS					
1. North Valley	94.80%	2.10%	3.10%	5.20%	0.599 (LOS A)
2. South Valley	92.20%	3.90%	3.90%	7.80%	0.649 (LOS B)
3. Central	70.00%	11.00%	19.00%	30.00%	0.814 (LOS D)
4. East Los Angeles	73.80%	8.60%	17.60%	26.20%	0.806 (LOS D)
5. West Los Angeles	70.90%	9.30%	19.80%	29.10%	0.828 (LOS D)
6. South Los Angeles	81.30%	7.50%	11.20%	18.70%	0.769 (LOS C)
7. Harbor	93.50%	3.10%	3.40%	6.50%	0.624 (LOS B)
CITY OF LOS ANGELES	**82.10%**	**6.70%**	**11.30%**	**17.90%**	**0.743 (LOS C)**
FUTURE NO PROJECT					
1. North Valley	92.90%	2.70%	4.40%	7.10%	0.705 (LOS C)
2. South Valley	90.30%	4.00%	5.80%	9.70%	0.712 (LOS C)
3. Central	58.50%	12.90%	28.60%	41.50%	0.917 (LOS E)
4. East Los Angeles	63.50%	9.80%	26.70%	36.50%	0.944 (LOS E)
5. West Los Angeles	71.40%	8.80%	19.80%	28.60%	0.913 (LOS E)
6. South Los Angeles	81.00%	8.00%	11.00%	19.00%	0.855 (LOS D)
7. Harbor	93.10%	3.30%	3.60%	6.90%	0.712 (LOS C)
CITY OF LOS ANGELES	**78.10%**	**7.30%**	**14.60%**	**21.90%**	**0.839 (LOS D)**
FUTURE WITH PROJECT					
1. North Valley	82.68%	6.42%	10.90%	17.32%	0.791 (LOS C)
2. South Valley	79.18%	7.99%	12.83%	20.82%	0.805 (LOS D)
3. Central	38.77%	11.31%	49.92%	61.23%	1.154 (LOS F)
4. East Los Angeles	52.91%	9.41%	37.68%	47.09%	1.060 (LOS F)
5. West Los Angeles	59.63%	9.52%	30.84%	40.37%	1.003 (LOS F)
6. South Los Angeles	66.00%	11.11%	22.89%	34.00%	0.967 (LOS E)
7. Harbor	84.76%	3.94%	11.30%	15.24%	0.813 (LOS D)
CITY OF LOS ANGELES	**64.26%**	**9.04%**	**26.71%**	**35.74%**	**0.971 (LOS E)**

/a/ Segments include major highways, secondary highways, and collector streets within the City of Los Angeles.
SOURCE: Fehr & Peers, 2014.

Under Existing conditions in both the AM and PM peak periods, the Central APC has the highest share of segments operating at LOS E or F, followed closely by East Los Angeles and West Los Angeles. In the AM peak, over 20 percent of Central APC segments operate at LOS E or F, increasing to 30 percent in the PM peak. Citywide, nearly 13 percent of street segments operate at LOS E or F in the AM peak, rising to nearly 18 percent in the PM peak.

Under Future No Project conditions, the percent of segments operating at LOS E or F increases in all APCs during both the AM and PM peak periods, except in the West Los Angeles APC during the PM peak, where the share of segments operating at LOS E or F decreases slightly from 29.1 percent to 28.6 percent. Citywide, the share of segments operating at LOS E or F increases from 12.8 percent to 16.1 percent in the AM peak and from 17.9 percent to 21.9 percent in the PM peak.

Under 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 No Project conditions in both the AM and PM peak periods. The "volume-weighted" average of the V/C ratio under Project conditions for all of the analyzed roadway segments also exceeds that of both the Existing traffic conditions and Future No Project conditions in both the AM and PM peak periods. On BEN and TEN roadways, converting selected vehicle travel lanes to transit lanes or bicycle lanes reduces the capacity available to vehicular traffic, increasing the V/C ratio. Although some of this increase is offset by a reduction in vehicular traffic due to shifts to other modes and routes (see discussion of Vehicle Trips below), motorists will continue to drive on BEN and TEN roadways.

V/C ratios also increase on some roadways parallel to the BEN and TEN when motorists divert to other routes.

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 travel model's peak hour forecasts and LOS results. The extent to which trips would divert to adjacent 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 broad scope of the project and the uncertainty around the final design options that may be implemented. However, it is anticipated that increased traffic would occur on some roadways parallel to the BEN and TEN. Therefore, without mitigation, the proposed project would result in a significant impact to the vehicular circulation system based on peak period LOS and V/C ratios.

The model-estimated changes in circulation system conditions reflect a likely worst-case, vehicle-centric estimate 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.

SB 743 directs the Office of Planning and Research 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 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 LOS that are considered significant under the current legal and policy framework would no longer be considered significant if analyzed using the new criteria.

MITIGATION MEASURES

The following mitigation measures identify physical improvements to intersections that would reduce project impacts. Physical intersection improvements that would conflict with the MP 2035 goals were considered to be infeasible.

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

T2 The City shall implement appropriate TDM measures in the City of Los Angeles including potential trip-reducing measures such as bike share strategies, bike parking, expansion of car share programs near high density areas, bus stop improvements (e.g. shelters and "next bus" technologies), crosswalk improvements, pedestrian wayfinding signage, etc.

SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Impacts related to transportation were determined to be significant without mitigation. Implementation of Mitigation Measures **T1** and **T2** would ensure that mitigation measures would be completed to reduce the level of impacts and that detailed analyses would be completed for projects that could result in transportation impacts. However, since the implementation of Mitigation Measures **T1** and **T2** cannot be certain to reduce the level of impacts to less than significant, the proposed project would result in a significant and unavoidable impact related to level of service of roadways within the City based on current thresholds.

Mitigation Measures **T1** and **T2** are 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.

SB 743 directs the Office of Planning and Research 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 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 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 4.1-3 The proposed project would have a significant impact related to neighborhood intrusion as it could exceed established thresholds. This is a significant adverse impact.

Under 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 No Project conditions in both the AM and PM peak periods. The "volume-weighted" average of the V/C ratio under Project conditions for all of the analyzed roadway segments also exceeds that of both the Existing traffic conditions and Future No Project conditions in both the AM and PM peak periods. On BEN and TEN roadways, converting selected vehicle travel lanes to transit lanes or bicycle lanes reduces the capacity available to vehicular traffic, increasing the V/C ratio. Although some of this increase is offset by a reduction in vehicular traffic due to shifts to other modes and routes (see discussion of Vehicle Trips below), motorists would continue to drive on BEN and TEN roadways. V/C ratios would also increase on some roadways parallel to the BEN and TEN when motorists divert to other routes.

The proposed project could increase ADT volume on local residential streets in amounts equal to or greater than the following:

ADT increase ≥ 16% where final ADT would be < 1,000
ADT increase ≥ 12% where final ADT would be ≥ 1,000 and < 2,000
ADT increase ≥ 10% where final ADT would be ≥ 2,000 and < 3,000
ADT increase ≥ 8% where final ADT would be ≥ 3,000

The EIR modeling analysis accounts for potential redistribution of vehicular traffic from highly congested links to links that have more available capacity. While not every local street is included in the model, the cumulative effect of cut-through traffic is accounted for on the modeled 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. 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 broad scope of the project 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. Therefore the proposed project could result in a significant impact related to neighborhood intrusion.

MITIGATION MEASURE

T3 In areas where implementation of the proposed project could potentially result in diversion of traffic to adjacent residential streets, LADOT shall monitor traffic on identified residential streets, upon request submitted through the Council Office, to determine if traffic diversion occurs. If traffic on residential streets is found to be significantly impacted, in accordance with LADOT's Traffic Study Policies and procedures, LADOT will work with neighborhood residents to identify and implement appropriate traffic calming measures.

SIGNIFICANCE OF IMPACTS AFTER MITIGATION

The implementation of Mitigation Measure **T3** would reduce the level of impact related to neighborhood intrusion but impacts could remain significant. Mitigation Measure **T3** is consistent with the Mayor's Office and LADOT's Great Streets for Los Angeles Strategic Plan that identifies the need to protecting neighborhoods from traffic intrusion and vehicle speeding.

IMPACT 4.1-4 The proposed project would have a significant impact related to CMP freeway segments, as it would increase the volume to capacity ratio on some freeway segments (already at or ending at, LOS F) by more than 2%. This is a significant adverse 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 MP 2035 is not resulting in land use changes within the City of Los Angeles, the CMP analysis is not required. However, for the purposes of showing changes in travel demand on the state highway system within the City, the CMP analysis was conducted for the CMP freeway segments.

There are 28 CMP freeway monitoring locations within the City of Los Angeles. Data from the Performance Measurement System (PeMS) along with the City of Los Angeles' Travel Demand Model were used for evaluating freeway mainline segments at the CMP locations in the City of Los Angeles. Morning and evening peak hour information and traffic volumes per direction were collected from the model.

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 4.1-21**.

TABLE 4.1-21: LEVEL OF SERVICE THRESHOLDS FOR CMP FREEWAY MAINLINE SEGMENTS

Level of Service	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: Metro, *Congestion Management Program*, 2010.

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 No Project LOS is worse than LOS E. In such cases, the Future No Project LOS is the standard and any increase in V/C ratio ≥ 0.02 is an impact.

Freeway segment volumes based on Caltrans PeMS data were used to establish the CMP LOS conditions during the PM peak hour for existing conditions. The analysis was then performed to evaluate Project conditions for the 28 CMP freeway-monitoring locations within the City of Los Angeles. Data from the City of Los Angeles' Travel Demand Model were used for evaluating freeway mainline segments at the CMP locations in the City of Los Angeles under Project conditions. Evening peak hour information and traffic volumes per direction were collected from the model. Future No Project volumes were calculated as the difference between the model Future No Project volumes and the model Existing volumes added to the existing freeway segment volumes based on PeMS data. Similarly, Future With Project volumes were calculated as the difference between the model Future With Project volumes and the model Existing volumes added to the existing freeway segment volumes based on PeMS data. Southbound data were not available for CMP freeway monitoring location 1045 on Harbor Freeway (I-110) south of C Street from PeMS.

Table 4.1-22 presents the freeway segment LOS for each of the 28 CMP freeway monitoring locations within the City of Los Angeles under both Existing and Future With Project conditions. This analysis concludes that five CMP freeway segments in the City of Los Angeles are reported to operate LOS F during the PM peak hour under Future With Project conditions based on the CMP methodology (highlighted in grey in **Table 4.1-22**).

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 results 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.

As defined by the CMP, a significant impact occurs when a project increases traffic demand on a CMP facility by 2 percent of capacity ($V/C \geq 0.02$), 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 ($V/C \geq 0.02$). Since bottlenecks in the freeway network are resulting in artificially low vehicle counts at some CMP monitoring stations and vehicle LOS experienced by drivers is worse than reported based on the CMP methodology, increases in $V/C \geq 0.02$ for facilities shown to be operating at LOS E or better (highlighted in grey in **Table 4.1-22**) may also experience a significant impact resulting from the proposed project.

TABLE 4.1-22: CMP FREEWAY ANALYSIS – EXISTING AND FUTURE WITH PROJECT PM PEAK HOUR CONDITIONS

CMP Station	Direction	Lanes	Capacity	Existing Conditions			Future With Project Conditions			Change in V/C
				Volume	V/C	CMP LOS	Volume	V/C	CMP LOS	
1001 Glendale Freeway (SR-2) Round Top Drive Postmile R17.78	NB	5	10,000	6,702	0.670	C	6,283	0.628	C	-0.042
	SB	5	10,000	3,623	0.362	B	3,947	0.395	B	0.032
1004 Golden State Fwy (I-5) Stadium Wy Postmile 21.8	NB	5	10,000	9,155	0.916	D	9,977	0.998	E	0.082
	SB	5	10,000	5,613	0.561	C	6,938	0.694	C	0.133
1005 Golden State Fwy (I-5) s/o Colorado Blvd Ext Postmile 25.5	NB	5	10,000	8,264	0.826	D	8,435	0.843	D	0.017
	SB	5	10,000	7,491	0.749	C	8,496	0.850	D	0.101
1007 Golden State Fwy (I-5) n/o Jct Rte 170 @ Osborne St Postmile 36.9	NB	6	12,000	6,784	0.565	C	6,722	0.560	C	-0.005
	SB	6	12,000	8,132	0.678	C	8,650	0.721	C	0.043
1011 Santa Monica Fwy (I-10) e/o Overland Ave Postmile R6.75	EB	5	10,000	5,661	0.566	C	6,308	0.631	C	0.065
	WB	4	8,000	7,024	0.878	D	7,354	0.919	D	0.041
1012 Santa Monica Fwy (I-10) e/o La Brea Ave UC Postmile R10.71	EB	5	10,000	6,174	0.617	C	7,100	0.710	C	0.093
	WB	5	10,000	7,231	0.723	C	7,716	0.772	D	0.049
1013 Santa Monica Fwy (I-10) Budlong Ave Postmile R13.53	EB	6.25	12,500	6,418	0.513	B	7,293	0.583	C	0.070
	WB	6.25	12,500	6,958	0.557	C	7,526	0.602	C	0.045
1014 San Bernadino Fwy (I-10) @ East LA City Limit Postmile 19.67	EB	6	12,000	6,599	0.550	C	7,272	0.606	C	0.056
	WB	6	12,000	5,078	0.423	B	6,009	0.501	B	0.078
1036 Hollywood Fwy (I-101) n/o Vignes St Postmile 0.46	NB	4	8,000	8,384	1.048	F(0)	9,429	1.179	F(0)	0.131
	SB	4	8,000	6,490	0.811	D	7,305	0.913	D	0.102
1037 Hollywood Fwy (I-101) s/o Santa Monica Blvd Postmile 5.2	NB	4	8,000	6,124	0.766	C	6,786	0.848	D	0.083
	SB	4	8,000	7,222	0.903	D	8,416	1.052	F(0)	0.149

TABLE 4.1-22: CMP FREEWAY ANALYSIS – EXISTING AND FUTURE WITH PROJECT PM PEAK HOUR CONDITIONS

CMP Station	Direction	Lanes	Capacity	Existing Conditions			Future With Project Conditions			Change in V/C
				Volume	V/C	CMP LOS	Volume	V/C	CMP LOS	
1038 Ventura Fwy (I-101) Coldwater Canyon Ave Postmile 13.98	NB	5	10,000	7,758	0.776	D	8,128	0.813	D	0.037
	SB	5	10,000	7,804	0.780	D	8,502	0.850	D	0.070
1039 Ventura Fwy (I-101) Winnetka Ave Postmile 23.4	NB	5	10,000	7,819	0.782	D	9,077	0.908	D	0.126
	SB	5	10,000	7,985	0.799	D	8,401	0.840	D	0.042
1041 Century Fwy (I-105) e/o Sepulveda Blvd (Jct Rte 1) Postmile R1.00	EB	3	6,000	2,617	0.436	B	2,758	0.460	B	0.024
	WB	3	6,000	2,717	0.453	B	2,611	0.435	B	-0.018
1045 Harbor Fwy (I-110) Wilmington s/o C St Postmile 2.77	NB	4	8,000	2,584	0.323	A	2,982	0.373	B	0.050
	SB	4	8,000	N/A	N/A	N/A	435	0.054	A	N/A
1046 Harbor Fwy (I-110) Manchester Blvd Postmile 15.88	NB	6	12,000	6,963	0.580	C	7,511	0.626	C	0.046
	SB	6	12,000	8,224	0.685	C	8,489	0.707	C	0.022
1047 Harbor Fwy (I-110) Slauson Ave Postmile 17.95	NB	6	12,000	6,665	0.555	C	7,357	0.613	C	0.058
	SB	6	12,000	6,726	0.561	C	7,168	0.597	C	0.037
1048 Harbor Fwy (I-110) s/o Rte 101 Postmile 23.96	NB	4	8,000	6,878	0.860	D	7,881	0.985	E	0.125
	SB	4	8,000	6,944	0.868	D	8,095	1.012	F(0)	0.144
1049 Harbor Fwy (I-110) @ Alpine St Postmile 23.96	NB	3	6,000	5,061	0.844	D	5,570	0.928	D	0.085
	SB	3	6,000	5,328	0.888	D	6,034	1.006	F(0)	0.118
1052 Ronald Reagan Fwy (SR-118) e/o Woodley Ave Postmile R9.10	EB	6	12,000	5,959	0.497	B	7,306	0.609	C	0.112
	WB	6	12,000	7,327	0.611	C	8,868	0.739	C	0.128
1053 Ronald Reagan Fwy (SR-118) w/o Jct Rte 210 Postmile R13.44	EB	4	8,000	5,126	0.641	C	5,537	0.692	C	0.051
	WB	4	8,000	4,948	0.619	C	6,947	0.868	D	0.250
1054 SR-134 @ Forman Ave Postmile 1.26	EB	5	10,000	5,959	0.596	C	6,280	0.628	C	0.032
	WB	5	10,000	6,130	0.613	C	6,747	0.675	C	0.062
1057 Hollywood Fwy (SR-170) s/o Sherman Wy Postmile R17.62	NB	5	10,000	4,188	0.419	B	4,813	0.481	B	0.063
	SB	5	10,000	2,490	0.249	A	2,473	0.247	A	-0.002

TABLE 4.1-22: CMP FREEWAY ANALYSIS – EXISTING AND FUTURE WITH PROJECT PM PEAK HOUR CONDITIONS

CMP Station	Direction	Lanes	Capacity	Existing Conditions			Future With Project Conditions			Change in V/C
				Volume	V/C	CMP LOS	Volume	V/C	CMP LOS	
1058 Foothill Fwy (I-210) e/o Polk St Postmile R3.57	EB	3	6,000	2,205	0.368	B	392	0.065	A	-0.302
	WB	3	6,000	4,013	0.669	C	6,046	1.008	F(0)	0.339
1059 Foothill Fwy (I-210) @ Terra Bella St Postmile R7.19	EB	4	8,000	5,575	0.697	C	5,052	0.632	C	-0.065
	WB	4	8,000	4,205	0.526	B	5,736	0.717	C	0.191
1069 San Diego Fwy (I-405) n/o La Tijera Blvd Postmile 24.27	NB	5	10,000	6,829	0.683	C	7,026	0.703	C	0.020
	SB	5	10,000	8,001	0.800	D	7,937	0.794	D	-0.006
1070 San Diego Fwy (I-405) n/o Venice Blvd Postmile 28.3	NB	5	10,000	6,054	0.605	C	6,668	0.667	C	0.061
	SB	5	10,000	7,852	0.785	D	8,155	0.815	D	0.030
1071 San Diego Fwy (I-405) s/o Mullholland Dr Postmile 35.81	NB	5	10,000	7,811	0.781	D	8,423	0.842	D	0.061
	SB	5	10,000	5,369	0.537	B	6,099	0.610	C	0.073
1072 San Diego Fwy (I-405) n/o Roscoe Blvd Postmile 44.27	NB	5	10,000	5,818	0.582	C	6,335	0.633	C	0.052
	SB	5	10,000	4,974	0.497	B	5,318	0.532	B	0.034

N/A: Not Available.
SOURCE: Fehr & Peers, 2015.

Table 4.1-23 presents the freeway segment LOS for each of the 28 CMP freeway monitoring locations within the City of Los Angeles under both Future No Project and Future With Project conditions. This analysis concluded that five CMP freeway segments in the City of Los Angeles are reported to operate at unacceptable LOS (LOS F) during the PM peak under Future With Project conditions based on the CMP methodology (highlighted in grey in **Table 4.1-23**), while only one CMP freeway segment (also highlighted in grey) is expected to operate at LOS F under Future No Project conditions. Since bottlenecks in the freeway network are resulting in artificially low vehicle counts at some CMP monitoring stations and vehicle LOS experienced by drivers is worse than reported based on the CMP methodology, increases in V/C $\geq$ 0.02 for facilities shown to be operating at LOS E or better (highlighted in grey in **Table 4.1-23**) may also experience a significant impact resulting from the proposed project.

TABLE 4.1-23: CMP FREEWAY ANALYSIS – FUTURE NO PROJECT AND FUTURE WITH PROJECT PM PEAK HOUR CONDITIONS

CMP Station	Direction	Lanes	Capacity	Future No Project Conditions			Future With Project Conditions			Change in V/C
				Volume	V/C	CMP LOS	Volume	V/C	CMP LOS	
1001 Glendale Freeway (SR-2) Round Top Drive Postmile R17.78	NB	5	10,000	6,430	0.643	C	6,283	0.628	C	-0.015
	SB	5	10,000	4,038	0.404	B	3,947	0.395	B	-0.009
1004 Golden State Fwy (I-5) Stadium Wy Postmile 21.8	NB	5	10,000	9,149	0.915	D	9,977	0.998	E	0.083
	SB	5	10,000	6,221	0.622	C	6,938	0.694	C	0.072
1005 Golden State Fwy (I-5) s/o Colorado Blvd Ext Postmile 25.5	NB	5	10,000	8,522	0.852	D	8,435	0.843	D	-0.009
	SB	5	10,000	8,477	0.848	D	8,496	0.850	D	0.002
1007 Golden State Fwy (I-5) n/o Jct Rte 170 @ Osborne St Postmile 36.9	NB	6	12,000	5,937	0.495	B	6,722	0.560	C	0.065
	SB	6	12,000	8,306	0.692	C	8,650	0.721	C	0.029
1011 Santa Monica Fwy (I-10) e/o Overland Ave Postmile R6.75	EB	5	10,000	6,038	0.604	C	6,308	0.631	C	0.027
	WB	4	8,000	7,050	0.881	D	7,354	0.919	D	0.038
1012 Santa Monica Fwy (I-10) e/o La Brea Ave UC Postmile R10.71	EB	5	10,000	6,567	0.657	C	7,100	0.710	C	0.053
	WB	5	10,000	7,473	0.747	C	7,716	0.772	D	0.024
1013 Santa Monica Fwy (I-10) Budlong Ave Postmile R13.53	EB	6.25	12,500	6,855	0.548	C	7,293	0.583	C	0.035
	WB	6.25	12,500	7,210	0.577	C	7,526	0.602	C	0.025
1014 San Bernadino Fwy (I-10) @ East LA City Limit Postmile 19.67	EB	6	12,000	1,698	0.142	A	7,272	0.606	C	0.464
	WB	6	12,000	1,942	0.162	A	6,009	0.501	B	0.339
1036 Hollywood Fwy (I-101) n/o Vignes St Postmile 0.46	NB	4	8,000	9,045	1.131	F(0)	9,429	1.179	F(0)	0.048
	SB	4	8,000	6,472	0.809	D	7,305	0.913	D	0.104
1037 Hollywood Fwy (I-101) s/o Santa Monica Blvd Postmile 5.2	NB	4	8,000	6,327	0.791	D	6,786	0.848	D	0.057
	SB	4	8,000	5,317	0.665	C	8,416	1.052	F(0)	0.387
1038 Ventura Fwy (I-101) Coldwater Canyon Ave Postmile 13.98	NB	5	10,000	8,268	0.827	D	8,128	0.813	D	-0.014
	SB	5	10,000	8,105	0.810	D	8,502	0.850	D	0.040

TABLE 4.1-23: CMP FREEWAY ANALYSIS – FUTURE NO PROJECT AND FUTURE WITH PROJECT PM PEAK HOUR CONDITIONS

CMP Station	Direction	Lanes	Capacity	Future No Project Conditions			Future With Project Conditions			Change in V/C
				Volume	V/C	CMP LOS	Volume	V/C	CMP LOS	
1039 Ventura Fwy (I-101) Winnetka Ave Postmile 23.4	NB	5	10,000	8,932	0.893	D	9,077	0.908	D	0.015
	SB	5	10,000	8,591	0.859	D	8,401	0.840	D	-0.019
1041 Century Fwy (I-105) e/o Sepulveda Blvd (Jct Rte 1) Postmile R1.00	EB	3	6,000	2,779	0.463	B	2,758	0.460	B	-0.003
	WB	3	6,000	2,646	0.441	B	2,611	0.435	B	-0.006
1045 Harbor Fwy (I-110) Wilmington s/o C St Postmile 2.77	NB	4	8,000	2,724	0.340	A	2,982	0.373	B	0.032
	SB	4	8,000	-18	-0.002	A	435	0.054	A	0.057
1046 Harbor Fwy (I-110) Manchester Blvd Postmile 15.88	NB	6	12,000	7,507	0.626	C	7,511	0.626	C	0.000
	SB	6	12,000	8,391	0.699	C	8,489	0.707	C	0.008
1047 Harbor Fwy (I-110) Slauson Ave Postmile 17.95	NB	6	12,000	7,183	0.599	C	7,357	0.613	C	0.015
	SB	6	12,000	6,920	0.577	C	7,168	0.597	C	0.021
1048 Harbor Fwy (I-110) s/o Rte 101 Postmile 23.96	NB	4	8,000	7,101	0.888	D	7,881	0.985	E	0.097
	SB	4	8,000	4,453	0.557	C	8,095	1.012	F(0)	0.455
1049 Harbor Fwy (I-110) @ Alpine St Postmile 23.96	NB	3	6,000	5,180	0.863	D	5,570	0.928	D	0.065
	SB	3	6,000	5,658	0.943	E	6,034	1.006	F(0)	0.063
1052 Ronald Reagan Fwy (SR-118) e/o Woodley Ave Postmile R9.10	EB	6	12,000	6,663	0.555	C	7,306	0.609	C	0.054
	WB	6	12,000	8,047	0.671	C	8,868	0.739	C	0.068
1053 Ronald Reagan Fwy (SR-118) w/o Jct Rte 210 Postmile R13.44	EB	4	8,000	5,218	0.652	C	5,537	0.692	C	0.040
	WB	4	8,000	6,145	0.768	C	6,947	0.868	D	0.100
1054 SR-134 @ Forman Ave Postmile 1.26	EB	5	10,000	5,910	0.591	C	6,280	0.628	C	0.037
	WB	5	10,000	6,435	0.643	C	6,747	0.675	C	0.031
1057 Hollywood Fwy (SR-170) s/o Sherman Wy Postmile R17.62	NB	5	10,000	4,459	0.446	B	4,813	0.481	B	0.035
	SB	5	10,000	3,546	0.355	B	2,473	0.247	A	-0.107

TABLE 4.1-23: CMP FREEWAY ANALYSIS – FUTURE NO PROJECT AND FUTURE WITH PROJECT PM PEAK HOUR CONDITIONS

CMP Station	Direction	Lanes	Capacity	Future No Project Conditions			Future With Project Conditions			Change in V/C
				Volume	V/C	CMP LOS	Volume	V/C	CMP LOS	
1058 Foothill Fwy (I-210) e/o Polk St Postmile R3.57	EB	3	6,000	128	0.021	A	392	0.065	A	0.044
	WB	3	6,000	5,609	0.935	E	6,046	1.008	F(0)	0.073
1059 Foothill Fwy (I-210) @ Terra Bella St Postmile R7.19	EB	4	8,000	5,017	0.627	C	5,052	0.632	C	0.004
	WB	4	8,000	5,449	0.681	C	5,736	0.717	C	0.036
1069 San Diego Fwy (I-405) n/o La Tijera Blvd Postmile 24.27	NB	5	10,000	6,671	0.667	C	7,026	0.703	C	0.035
	SB	5	10,000	7,454	0.745	C	7,937	0.794	D	0.048
1070 San Diego Fwy (I-405) n/o Venice Blvd Postmile 28.3	NB	5	10,000	6,327	0.633	C	6,668	0.667	C	0.034
	SB	5	10,000	7,482	0.748	C	8,155	0.815	D	0.067
1071 San Diego Fwy (I-405) s/o Mullholland Dr Postmile 35.81	NB	5	10,000	8,143	0.814	D	8,423	0.842	D	0.028
	SB	5	10,000	5,965	0.596	C	6,099	0.610	C	0.013
1072 San Diego Fwy (I-405) n/o Roscoe Blvd Postmile 44.27	NB	5	10,000	5,902	0.590	C	6,335	0.633	C	0.043
	SB	5	10,000	5,000	0.500	B	5,318	0.532	B	0.032

N/A: Not Available.
SOURCE: Fehr & Peers, 2015.

MITIGATION MEASURE

T4 In areas where the implementation of the proposed project could potentially affect 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 in accordance with the goals and policies of MP 2035 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 Mitigation Measure **T4** would reduce the level of impact related to freeways and the CMP but impacts could remain significant. The proposed project could still have a significant impact related to CMP freeway segments as it could continue exceed the established threshold.

IMPACT 4.1-5 The proposed project would have a potentially significant impact as it could result in inadequate emergency vehicle access. This is a potentially significant impact.

The Los Angeles Fire Department (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.[12] The City of Los Angeles has over 205 miles of routes equipped with FPS. Where segment-level LOS would be significantly impacted, emergency vehicles may also be significantly impacted due to the project's location in a congested area of Los Angeles. Since the proposed project could contribute to increased delay for drivers in the areas of proposed change, and include design elements that impede emergency access, the proposed project would have a potentially significant impact related to inadequate emergency vehicle access.

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, or the center turn lanes. In addition, many of the roadway configurations as shown in the Complete Streets Design Guide would include continuous center left turn lanes, which facilitate emergency access when the thru lanes experience delays. In some instances, a roadway reconfiguration could improve emergency access where a continuous center left turn lane is introduced where it did not previously exist. 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.

MITIGATION MEASURE

T5 LADOT, LAFD and DCP shall coordinate and review design plans involving lane reallocation to ensure that emergency response access is adequately maintained (for example by expanding the Fire Preemption System).

SIGNIFICANCE OF IMPACTS AFTER MITIGATION

LAFD has a mandate to protect public safety and must respond to changing circumstances and therefore would act to maintain response times. The proposed project together with cumulative growth would increase congestion, which could impede emergency access. The steps that LAFD would have to take to maintain public safety are not reasonably foreseeable at this time. Options available to LAFD include expanding the Fire Preemption System, increasing staffing levels and adding new fire stations(s) to underserved areas. Any construction impacts associated with new fire protection facilities would be within the impacts discussed 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. Because CEQA requires comparison to existing conditions, and a number of factors will contribute to the need for new LAFD facilities, including project actions, and because it is not possible to foresee all potential stressors to the fire protection system to which the project would contribute, in the interests of being conservative even with implementation of Mitigation Measure **T5**, impacts are considered potentially significant.

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

IMPACT 4.1-6 The proposed project would not have a significant impact as it 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 is a less than significant impact.

The proposed project establishes a variety of multi-modal initiatives to provide a system that offers multiple transportation options, supports the strong link between land use and transportation, and advocates for continued growth, to accommodate a variety of uses, in proximity to transit stations and major bus stops. MP 2035 contains goals, objectives, and policies that support travel by all modes, including public transit, bicycling, and walking.

Public Transit Facilities. The TEN includes improvements such as infrastructure improvements in the right-of-way, 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; reduce single-occupancy vehicle trips; and integrate transit infrastructure investments with the identity of the surrounding street.

The proposed project contains numerous policies designed to increase the access to and effectiveness of the City's public transit facilities, including a multimodal access campaign, bus arrival information, improved boarding and alighting locations, transit coordination with neighboring jurisdictions, feeder bus service, transit coordination with major events, shuttle bus programs, multimodal mobility hubs, reduced parking requirements in transit areas, and transit neighborhood plans. 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, no impact related to the transit system would occur.

Bicycle Facilities. The proposed project includes a BEN and Bicycle Lane Network that would work in conjunction with existing paths and neighborhood facilities to provide a low-stress network of bikeways for all types of riders. Streets on the BEN would receive treatments beyond a regular bicycle lane or shared lane marking, such as buffered lanes, cycle tracks, and intersection enhancements.

The proposed project establishes policies and actions that create support for bicycling and use of the bicycle network, including a multimodal access campaign, improved wayfinding, annual bicycle counts, bicycle parking, on-street bicycle corrals, street openings, programming to support bicycling by students, bike racks on-board transit vehicles, bicycle path enhancements, bicycle valet at special events, a bicycle sharing program, and multimodal mobility hubs. 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, no impact related to the bicycle circulation system would occur.

Pedestrian Facilities. The proposed project includes PEDs near schools, transit stations, areas of high pedestrian activity, and areas with high collision frequency, or other placemaking opportunities. The PEDs typically include way-finding, street trees, pedestrian-scaled street lighting, enhanced crosswalks at all legs of the intersection, automatic pedestrian signals, reduced crossing lengths, wider sidewalks, and specialty paving and seating areas where special maintenance funding exists.

The proposed project places a major emphasis on walking in Los Angeles, acknowledging that every trip, regardless of mode, includes walking and that pedestrians are the most vulnerable roadway users. MP 2035 supports walking through numerous specific policies for streets, land uses, and urban design that all support an active and high quality pedestrian environment. Some of these improvements include pedestrian street lighting, annual pedestrian counts, collision monitoring and analysis, streamlined installation standards for pedestrian facilities, mid-block crossing enhancements, standards to ensure safe pedestrian passage through construction areas, adjustment of signal timing to allow more time for pedestrian crossings, incentives to retrofit parking lots and structures with pedestrian design features, and partnering with Safe Routes to School

initiatives. The MP 2035 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, no impact related to the pedestrian circulation system would occur.

MITIGATION MEASURES

No mitigation measures are necessary.

IMPACT 4.1-7 The proposed project would not substantially change transportation safety. This is 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, no impact related to safety would occur.

The implementation of bicycle facilities associated with the MP 2035 is anticipated to improve safety and health outcomes for bicyclists and other road users. 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.[13] Bicycle lanes, when accompanied by travel lane reductions can help reduce over-all vehicle speed.[14] 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 Federal Highway Administration assigns a crash modification factor of road diets of 29 percent, meaning the implementation of the road diet should reduce approximately one third of traffic collisions. The upgrade to fully protected bicycle lanes or cycle tracks has been shown to reduce the risk of injury by 90 percent.[15]

The bicyclist and pedestrian improvements envisioned in the MP 2035 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.[16] 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.[17] 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.[18]

[13]U. S. Department of Transportation National Highway Traffic Safety Administration. *Literature Review on Vehicle Travel Speeds and Pedestrian Injuries*. DOT HS 809 021, 1999.

[14]FHWA website. http://www.fhwa.dot.gov/publications/research/safety/10053/index.cfm.

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

[16]Jacobsen, P.L. 2003. Safety in Numbers: More Walkers and Bicyclists, Safety Walking and Bicycling. Injury Prevention 9~3!:205–209.

[17]Marshall, Wesley E., N. W. Garrick. 2011. *Evidence on Why Bike-Friendly Cities Are Safer For All Road Users. Environmental Practice 13* (1) March 2011.

[18]*Ibid.*

Inclusion of protected bicycle lanes, like those proposed in the MP 2035, 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 35 percent and 58 percent decrease respectively in injuries to all road users.[19] In the same study, implementation of bus/bike lanes in First and Second Avenues led to a 37 percent decrease in injury crashes.[20]

There are no roadway-specific plans at this time. It is anticipated that as community plans are revised and refined, the roadway network within each planning area will be refined in concert with land use changes. Without such detail, it is not possible, using available traffic analysis procedures, to estimate some types of impacts. In addition, ongoing individual development proposals must be reviewed on a case-by-case basis as they arise and as details such as driveway locations or intersection modifications become known. The City cannot address these project impacts in this Recirculated Draft EIR as it would be too speculative to try to determine how any particular development would be constructed. In addition, Section 15145 of the CEQA Guidelines specifically states that if a particular impact or project is too speculative for evaluation, then analysis in the EIR is not required.

MITIGATION MEASURES

No mitigation measures are necessary.

IMPACT 4.1-8 **The proposed project would have a potentially significant impact as it could result in construction activities within major and/or secondary highway right-of-way which could necessitate temporary lane, alley, or street closures for more than one day; result in construction activities within collectors and/or local street right-of-way which could necessitate temporary lane, alley, or street closures for more than seven days; result in the loss of regular vehicular or pedestrian access to an existing land use for more than one day; or result in the temporary loss for more than one day of an existing bus stop or rerouting of a bus route that serves local areas. This is a potentially significant adverse impact.**

Construction-related impacts generally would not be considered significant due to their temporary and limited duration. Implementation of on-street improvements related to the enhanced networks 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. Therefore, temporary and short-term construction related impacts would occur; however, these impacts would be less than significant.

MITIGATION MEASURE

T6 Construction activities will be managed through the implementation of a traffic control plan to mitigate the impact of traffic disruption and to ensure the safety of all users of the affected roadway. The MP 2035 will address construction duration and activities and include measures such as operating a temporary traffic signal or using flagmen adjacent to construction activities, as appropriate.

[19] NY DOT, *Measuring the Street: New Metrics for 21st Century Streets*, 2012.
[20] *Ibid.*

SIGNIFICANCE OF IMPACT AFTER MITIGATION

The implementation of Mitigation Measure **T6** would reduce the level of impact related to construction to a less than significant level.

PARKING

Parking deficits are considered to be social effects, rather than impacts on the physical environment as defined by CEQA. Under CEQA, a project's social impacts need not be treated as significant impacts on the environment. Environmental documents must address the secondary physical impacts that would be triggered by a social impact (CEQA Guidelines Section 15131). The social inconvenience of parking deficits, such as having to hunt for scare parking spaces, is not an environmental impact, but there may be secondary physical environmental impacts, such as increased traffic congestion at intersections, air quality impacts, safety impacts, noise impacts caused by congestion, or land use impacts. Also, loss of parking could result in land use changes (see **Section 4.2 Land Use and Planning**). Analysis of the transportation network generally assumes that implementing the Bicycle Lane Network/BEN and TEN would result in the conversion of vehicle travel lanes, not on-street parking, to bicycle or transit lanes. Implementation of the VEN does include conversion of on-street parking to vehicle travel lanes during peak periods in the case of the Moderate-treatment section of Balboa Boulevard and during the full day in the case of Comprehensive-treatment sections of Alameda Street, Balboa Boulevard, Gaffey Street, La Cienega Boulevard, Nordoff Street, Olympic Boulevard, Pacific Coast Highway, Slauson Avenue, Sunset Boulevard, Topanga Canyon Boulevard, Victory Boulevard, to the extent that on-street parking currently exists along those sections.

Transportation analysis accounts for potential secondary effects, such as cars circling and looking for a parking space in areas of limited parking supply, by assuming that all drivers would attempt to find parking along study streets and then seek parking farther away if convenient parking is unavailable. The proposed project would result in a loss of 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 would typically be off-set by a reduction in vehicle trips due to others who are aware of constrained parking conditions in a given area. 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, the proposed project would result in less-than-significant traffic impacts related to parking.

In addition, the City's establishment of 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. Potential land use impacts resulting from changes in parking are addressed by Mitigation Measure **LU1** in **Section 4.2 Land Use and Planning**.

OTHER METRICS

As discussed above, OPR has developed draft guidance for revisions to the CEQA Guidelines to establish new criteria for determining the significance of transportation impacts and providing alternative metrics for traffic level of service. The transportation analysis in this document relies on the legal context and policy framework in place at the time of project initiation. As discussed above, 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 (currently draft) criteria.

Regarding *Induced Vehicle Travel and Transportation Projects*, overall the proposed project would reduce the vehicular capacity of the roadway network. The implementation of the enhanced networks would require the repurposing of existing vehicular travel lanes into transit of bicycle facilities. As presented in further detail below, the proposed project would result in an overall reduction of VMT. Given this conclusion, the proposed project would not result in a significant transportation impact under the new CEQA guidance.

As discussed above, the new draft guidance focuses on per-capita VMT. Other potential metrics that could be considered in include total VMT, vehicle trips, and peak period mode split. These alternate criteria are addressed below and provide as additional information for the project. Significance thresholds for these metrics have not been established by the City of Los Angeles.

Mode Split. **Table 4.1-24** summarizes changes in peak period mode split among the Existing conditions, Future No Project, and Future With Project scenarios by APC and for the City as a whole, and **Table 4.1-25** summarizes the peak period person trips by mode.

TABLE 4.1-24: PEAK PERIOD MODE SPLIT

	Mode Split				Percent Change			
Area Planning Commission	**Auto**	**Transit**	**Bike**	**Walk**	**Auto**	**Transit**	**Bike**	**Walk**
EXISTING								
1. North Valley	84.2%	2.3%	0.76%	12.7%	–	–	–	–
2. South Valley	83.1%	2.5%	0.87%	13.5%	–	–	–	–
3. Central	78.9%	4.4%	1.09%	15.6%	–	–	–	–
4. East Los Angeles	81.7%	3.5%	0.85%	13.9%	–	–	–	–
5. West Los Angeles	81.7%	2.4%	1.10%	14.9%	–	–	–	–
6. South Los Angeles	80.5%	4.0%	0.86%	14.7%	–	–	–	–
7. Harbor	83.9%	2.2%	0.81%	13.1%	–	–	–	–
City of Los Angeles	**81.7%**	**3.1%**	**0.9%**	**14.2%**	**–**	**–**	**–**	**–**
FUTURE NO PROJECT								
					Comparison to Existing			
1. North Valley	82.5%	2.5%	1.0%	14.1%	-2.0%	7.3%	29.4%	10.4%
2. South Valley	81.8%	2.7%	1.0%	14.5%	-1.6%	8.0%	16.5%	7.4%
3. Central	77.7%	4.5%	1.2%	16.6%	-1.6%	3.5%	9.1%	6.3%
4. East Los Angeles	80.9%	3.5%	0.9%	14.7%	-1.0%	0.9%	7.4%	5.2%
5. West Los Angeles	79.8%	3.0%	1.3%	15.9%	-2.3%	28.1%	16.4%	7.0%
6. South Los Angeles	79.9%	4.1%	0.9%	15.1%	-0.7%	2.9%	5.1%	2.9%
7. Harbor	83.0%	2.4%	0.9%	13.8%	-1.0%	7.3%	4.8%	5.1%
City of Los Angeles	**80.4%**	**3.4%**	**1.1%**	**15.2%**	**-1.6%**	**7.8%**	**13.8%**	**6.8%**
FUTURE WITH PROJECT								
					Comparison to Existing			
1. North Valley	78.4%	3.5%	1.7%	16.4%	-6.9%	51.4%	124.2%	28.6%
2. South Valley	77.9%	3.7%	1.9%	16.6%	-6.3%	45.4%	114.0%	23.2%
3. Central	70.3%	5.8%	3.1%	20.8%	-10.9%	32.4%	185.6%	33.1%
4. East Los Angeles	75.2%	4.7%	2.2%	17.9%	-8.0%	35.2%	161.2%	28.2%
5. West Los Angeles	74.0%	4.2%	2.9%	18.9%	-9.4%	77.2%	162.6%	27.3%
6. South Los Angeles	73.3%	5.6%	2.1%	19.0%	-8.9%	41.4%	143.8%	29.2%
7. Harbor	78.5%	3.5%	1.7%	16.3%	-6.4%	56.5%	113.2%	24.3%
City of Los Angeles	**74.9%**	**4.6%**	**2.3%**	**18.3%**	**-8.4%**	**44.9%**	**150.4%**	**28.5%**
					Comparison to Future No Project			
1. North Valley	–	–	–	–	-4.9%	41.0%	73.3%	16.5%
2. South Valley	–	–	–	–	-4.8%	34.7%	83.8%	14.6%
3. Central	–	–	–	–	-9.5%	28.0%	161.8%	25.2%
4. East Los Angeles	–	–	–	–	-7.1%	34.0%	143.1%	21.9%
5. West Los Angeles	–	–	–	–	-7.3%	38.4%	125.6%	19.0%
6. South Los Angeles	–	–	–	–	-8.2%	37.4%	131.9%	25.6%
7. Harbor	–	–	–	–	-5.4%	45.9%	103.5%	18.2%
City of Los Angeles	–	–	–	–	-6.9%	34.4%	120.1%	20.4%

SOURCE: City of Los Angeles Travel Demand Model, 2013.

TABLE 4.1-25: PEAK PERIOD PERSON TRIPS BY MODE (IN THOUSANDS)

	Mode Split				Percent Change			
Area Planning Commission	**Auto**	**Transit**	**Bike**	**Walk**	**Auto**	**Transit**	**Bike**	**Walk**
EXISTING								
1. North Valley	962	27	9	146	–	–	–	–
2. South Valley	1,161	35	12	188	–	–	–	–
3. Central	1,252	70	17	248	–	–	–	–
4. East Los Angeles	505	22	5	86	–	–	–	–
5. West Los Angeles	773	22	10	141	–	–	–	–
6. South Los Angeles	779	39	8	142	–	–	–	–
7. Harbor	275	7	3	43	–	–	–	–
City of Los Angeles	**5,710**	**219**	**65**	**993**	**–**	**–**	**–**	**–**
FUTURE NO PROJECT								
					Comparison to Existing			
1. North Valley	960	29	12	164	-0.3%	9.3%	31.7%	12.4%
2. South Valley	1,250	42	15	221	7.6%	18.1%	27.4%	17.5%
3. Central	1,373	80	21	293	9.7%	15.2%	21.5%	18.4%
4. East Los Angeles	533	23	6	97	5.7%	7.7%	14.7%	12.3%
5. West Los Angeles	804	31	13	160	4.0%	36.3%	23.9%	13.9%
6. South Los Angeles	855	44	10	162	9.8%	13.8%	16.3%	13.8%
7. Harbor	273	8	3	45	-0.6%	7.8%	5.2%	5.6%
City of Los Angeles	**6,050**	**255**	**80**	**1,142**	**6.0%**	**16.2%**	**22.6%**	**15.0%**
FUTURE WITH PROJECT								
					Comparison to Existing			
1. North Valley	912	41	20	191	-5.2%	54.1%	128.3%	30.9%
2. South Valley	1,190	56	28	253	2.5%	59.0%	134.1%	34.7%
3. Central	1,243	103	55	368	-0.8%	47.5%	218.2%	48.3%
4. East Los Angeles	496	31	15	118	-1.8%	44.3%	178.8%	36.8%
5. West Los Angeles	746	42	29	191	-3.5%	88.7%	179.6%	35.5%
6. South Los Angeles	785	60	22	203	0.8%	56.4%	169.7%	42.9%
7. Harbor	258	11	6	54	-6.0%	57.2%	114.2%	24.8%
City of Los Angeles	**5,634**	**343**	**175**	**1,375**	**-1.3%**	**56.1%**	**169.8%**	**38.4%**
					Comparison to Future No Project			
1. North Valley	–	–	–	–	-4.9%	41.0%	73.3%	16.5%
2. South Valley	–	–	–	–	-4.8%	34.7%	83.8%	14.6%
3. Central	–	–	–	–	-9.5%	28.0%	161.8%	25.3%
4. East Los Angeles	–	–	–	–	-7.0%	34.0%	143.1%	21.9%
5. West Los Angeles	–	–	–	–	-7.2%	38.4%	125.6%	19.0%
6. South Los Angeles	–	–	–	–	-8.2%	37.4%	132.0%	25.6%
7. Harbor	–	–	–	–	-5.4%	45.9%	103.5%	18.2%
City of Los Angeles	–	–	–	–	**-6.9%**	**34.4%**	**120.1%**	**20.4%**

SOURCE: City of Los Angeles Travel Demand Model, 2013.

Under Existing conditions, auto is the dominant mode of transportation across the City, ranging from 78.9 percent to 84.2 percent of all peak period person trips, averaging 81.7 percent citywide. The Central APC has the lowest share of auto trips and highest share of transit, bike, and walk trips, while the North Valley APC has the highest auto mode share and lowest bike and walk mode shares; the Harbor APC has the lowest transit mode share.

Under Future No Project conditions, the average auto mode share declines slightly from 81.7 percent to 80.4 percent citywide. The Central APC continues to have the lowest auto mode share and the highest share of transit, bike, and walk modes. Shifts in the North Valley APC from driving to walking, biking, and transit leave the Harbor APC in the position of having the highest auto mode share of 83.0 percent.

Future With Project conditions reduce the average auto mode share more than 8 percent from Existing conditions and just under 7 percent from Future No Project conditions, to 74.9 percent citywide. The largest absolute increases in the share of other modes accrue to walking, followed by transit and biking. On a relative basis, biking increases the most, nearly 170 percent over Existing conditions, followed by transit (56 percent) and walking (38 percent). These changes in mode split are based on the travel demand model,

which provides 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.

Transit Boardings. **Table 4.1-26** summarizes changes in transit boardings under the Existing conditions, Future No Project, and Future With Project scenarios by APC and for the City as a whole. The table includes transit boardings at all stop locations in the City of Los Angeles. Existing ridership numbers reflect Metro data from 2013. Future No Project and Future With Project ridership numbers reflect the percent increases in transit ridership estimated by the travel demand model applied to the Existing ridership numbers.

TABLE 4.1-26: TRANSIT BOARDINGS WITHIN THE CITY OF LOS ANGELES

	Transit Boardings			Percent Change		
Area Planning Commission	**Peak Period (7-Hour)**	**Off Peak Period (17-Hour)**	**Daily**	**Peak Period (7-Hour)**	**Off Peak Period (17-Hour)**	**Daily**
EXISTING						
1. North Valley	33,100	28,000	61,100	–	–	–
2. South Valley	77,200	62,900	140,100	–	–	–
3. Central	280,800	245,700	526,500	–	–	–
4. East Los Angeles	44,900	38,600	83,600	–	–	–
5. West Los Angeles	19,100	16,300	35,400	–	–	–
6. South Los Angeles	140,500	118,700	259,300	–	–	–
7. Harbor	6,100	5,200	11,300	–	–	–
City of Los Angeles	**601,800**	**515,500**	**1,117,200**	**–**	**–**	**–**
FUTURE NO PROJECT						
				Comparison to Existing		
1. North Valley	34,100	30,800	64,300	3.0%	10.0%	5.2%
2. South Valley	88,200	72,100	160,300	14.2%	14.6%	14.4%
3. Central	290,100	278,100	560,700	3.3%	13.2%	6.5%
4. East Los Angeles	49,900	42,700	92,700	11.1%	10.6%	10.9%
5. West Los Angeles	30,300	24,300	54,800	58.6%	49.1%	54.8%
6. South Los Angeles	181,000	147,900	329,800	28.8%	24.6%	27.2%
7. Harbor	6,100	5,400	11,500	0.0%	3.8%	1.8%
City of Los Angeles	**677,000**	**603,700**	**1,274,700**	**12.5%**	**17.1%**	**14.1%**
FUTURE WITH PROJECT						
				Comparison to Existing		
1. North Valley	47,000	41,600	88,100	42.0%	48.6%	44.2%
2. South Valley	127,100	96,600	225,200	64.6%	53.6%	60.7%
3. Central	344,300	319,100	658,000	22.6%	29.9%	25.0%
4. East Los Angeles	71,300	55,400	127,900	58.8%	43.5%	53.0%
5. West Los Angeles	50,900	38,700	90,100	166.5%	137.4%	154.5%
6. South Los Angeles	248,800	196,100	447,900	77.1%	65.2%	72.7%
7. Harbor	9,300	7,100	16,500	52.5%	36.5%	46.0%
City of Los Angeles	**906,900**	**774,000**	**1,681,500**	**50.7%**	**50.1%**	**50.5%**
				Comparison to Future No Project		
1. North Valley	–	–	–	37.8%	35.1%	37.0%
2. South Valley	–	–	–	44.1%	34.0%	40.5%
3. Central	–	–	–	18.7%	14.7%	17.4%
4. East Los Angeles	–	–	–	42.9%	29.7%	38.0%
5. West Los Angeles	–	–	–	68.0%	59.3%	64.4%
6. South Los Angeles	–	–	–	37.5%	32.6%	35.8%
7. Harbor	–	–	–	52.5%	31.5%	43.5%
City of Los Angeles	–	–	–	**34.0%**	**28.2%**	**31.9%**

SOURCE: Metro, 2013 and City of Los Angeles Travel Demand Model, 2013.

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.

Under Existing conditions, there are over 1,117,000 daily transit boardings in the City of Los Angeles; nearly half of these boardings occur in the Central APC. Under Future No Project conditions, boardings increase about 14 percent overall to nearly 1.3 million daily boardings; the Central APC continues to contribute the highest number of boardings, with over 40 percent of the citywide total.

Future With Project conditions increase the total number of transit boardings in the City by more than 50 percent compared with Existing conditions and by nearly 32 percent compared with Future No Project conditions, to nearly 1.7 million daily boardings. Both the Central and South Los Angeles APCs add over 100,000 daily boardings each between the Existing conditions and Project conditions; in total over 560,000 new boardings occur. The Central APC continues to contribute the largest number of boardings, with nearly 40 percent of the citywide total. The South Los Angeles APC adds the most new boardings, increasing from nearly 260,000 to nearly 450,000 daily boardings. The West Los Angeles APC experiences the greatest relative increase in transit ridership compared with Existing conditions, adding nearly 55,000 trips for an increase of over 150 percent between Existing and Future With Project conditions.

Vehicle Trips. **Table 4.1-27** summarizes changes in vehicle trips among the Existing, Future No Project, and Future With Project scenarios by APC and for the City as a whole. The table includes all vehicle trips that originate in the City of Los Angeles, are destined for the City, or both, but excludes trips that both start and end outside the City.

Under Existing conditions, there are over 9.1 million daily vehicle trips in the City of Los Angeles; nearly 23 percent of these vehicle trips begin or end in the Central APC.

Under Future No Project conditions, vehicle trips increase over 8 percent overall to nearly 9.9 million daily vehicle trips, reflecting increases in the number of residents and economic activity in the City; the Central APC continues to contribute the highest number of vehicle trips, with nearly 23 percent of the citywide total.

Future With Project conditions reduce the total number of vehicle trips 2.2 percent from Future No Project conditions to approximately 9.7 million, which is a reduction of 219,000 trips every day. The forecast increase over Existing conditions is 5.7 percent. The South Los Angeles APC experiences the greatest increase in vehicle trips with an 8 percent increase relative to Existing conditions, though this change represents a 2.9 percent decrease relative to Future No Project conditions. The same socio-demographic increases that apply to the Future No Project conditions also apply to the Project conditions, resulting in an increase in the number of vehicle trips over Existing conditions; however, the MP 2035 improvements to transit, walk, and bicycle modes shift travelers from vehicles to those modes, reducing the number of vehicle trips under Project conditions relative to Future No Project conditions.

Vehicle Miles Traveled. **Table 4.1-28** summarizes changes in vehicle miles traveled among the Existing, Future No Project, and Future With Project scenarios on surface streets by APC and for the City as a whole, as well as for mainline freeway segments citywide. The table includes all vehicle miles traveled on roadways in the City of Los Angeles.

Under Existing conditions, motorists travel over 75 million vehicle miles on roadways within the City of Los Angeles on an average weekday. Nearly one third of these vehicle miles are traveled during the four-hour PM Peak Period between 3:00 and 7:00 p.m. Although they comprise only 181 miles (2 percent) of the nearly 7,500 miles of roadways in the City of Los Angeles, freeways account for over half of all daily vehicle miles traveled within the City.

TABLE 4.1-27: VEHICLE TRIPS WITH ORIGINS AND/OR DESTINATIONS IN THE CITY OF LOS ANGELES

Area Planning Commission	Vehicle Trips			Percent Change		
	Peak Period (7-Hour)	Off Peak Period (17-Hour)	Daily	Peak Period (7-Hour)	Off Peak Period (17-Hour)	Daily
EXISTING						
1. North Valley	843,600	646,000	1,489,600	–	–	–
2. South Valley	1,057,800	819,300	1,877,100	–	–	–
3. Central	1,150,200	914,600	2,064,800	–	–	–
4. East Los Angeles	449,200	333,900	783,100	–	–	–
5. West Los Angeles	770,800	624,600	1,395,400	–	–	–
6. South Los Angeles	639,500	483,400	1,122,900	–	–	–
7. Harbor	238,800	180,400	419,200	–	–	–
City of Los Angeles	**5,149,900**	**4,002,200**	**9,152,200**	**–**	**–**	**–**
FUTURE NO PROJECT						
				Comparison to Existing		
1. North Valley	916,900	710,400	1,627,300	8.7%	10.0%	9.2%
2. South Valley	1,124,600	898,600	2,023,200	6.3%	9.7%	7.8%
3. Central	1,248,400	1,016,300	2,264,700	8.5%	11.1%	9.7%
4. East Los Angeles	478,400	364,200	842,600	6.5%	9.1%	7.6%
5. West Los Angeles	800,000	652,700	1,452,700	3.8%	4.5%	4.1%
6. South Los Angeles	704,200	544,200	1,248,400	10.1%	12.6%	11.2%
7. Harbor	246,100	190,700	436,800	3.1%	5.7%	4.2%
City of Los Angeles	**5,518,600**	**4,377,100**	**9,895,800**	**7.2%**	**9.4%**	**8.1%**
FUTURE WITH PROJECT						
				Comparison to Existing		
1. North Valley	897,000	702,800	1,599,800	6.3%	8.8%	7.4%
2. South Valley	1,098,500	888,300	1,986,800	3.8%	8.4%	5.8%
3. Central	1,194,000	990,600	2,184,600	3.8%	8.3%	5.8%
4. East Los Angeles	464,700	358,000	822,700	3.5%	7.2%	5.1%
5. West Los Angeles	771,700	669,700	1,441,400	0.1%	7.2%	3.3%
6. South Los Angeles	678,800	533,700	1,212,500	6.1%	10.4%	8.0%
7. Harbor	240,000	189,000	429,000	0.5%	4.8%	2.3%
City of Los Angeles	**5,344,700**	**4,332,100**	**9,676,800**	**3.8%**	**8.2%**	**5.7%**
				Comparison to Future No Project		
1. North Valley	–	–	–	-2.2%	-1.1%	-1.7%
2. South Valley	–	–	–	-2.3%	-1.1%	-1.8%
3. Central	–	–	–	-4.4%	-2.5%	-3.5%
4. East Los Angeles	–	–	–	-2.9%	-1.7%	-2.4%
5. West Los Angeles	–	–	–	-3.5%	2.6%	-0.8%
6. South Los Angeles	–	–	–	-3.6%	-1.9%	-2.9%
7. Harbor	–	–	–	-2.5%	-0.9%	-1.8%
City of Los Angeles	–	–	–	**-3.2%**	**-1.0%**	**-2.2%**

SOURCE: City of Los Angeles Travel Demand Model, 2013.

TABLE 4.1-28: VEHICLE MILES TRAVELED IN THE CITY OF LOS ANGELES

Area Planning Commission	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						
1. North Valley	3,740,800	2,308,300	6,049,100	–	–	–
2. South Valley	4,083,400	2,682,800	6,766,200	–	–	–
3. Central	3,993,500	2,496,000	6,489,500	–	–	–
4. East Los Angeles	1,864,800	1,058,700	2,923,500	–	–	–
5. West Los Angeles	3,182,200	2,305,700	5,487,900	–	–	–
6. South Los Angeles	3,639,000	2,049,800	5,688,800	–	–	–
7. Harbor	1,196,600	807,300	2,003,900	–	–	–
Surface Streets	**21,700,300**	**13,708,600**	**35,408,900**	–	–	–
Freeways (Mainline)	**19,978,600**	**19,878,800**	**39,857,400**	–	–	–
Total, City of Los Angeles	**41,678,900**	**33,587,400**	**75,266,300**	**–**	**–**	**–**
FUTURE NO PROJECT						
				Comparison to Existing		
1. North Valley	4,080,300	2,614,400	6,694,700	9.1%	13.3%	10.7%
2. South Valley	4,341,900	2,930,200	7,272,100	6.3%	9.2%	7.5%
3. Central	4,247,200	2,712,000	6,959,200	6.4%	8.7%	7.2%
4. East Los Angeles	2,008,700	1,162,300	3,171,000	7.7%	9.8%	8.5%
5. West Los Angeles	3,436,200	2,486,000	5,922,200	8.0%	7.8%	7.9%
6. South Los Angeles	3,958,800	2,292,100	6,250,900	8.8%	11.8%	9.9%
7. Harbor	1,287,700	905,900	2,193,600	7.6%	12.2%	9.5%
Surface Streets	*23,360,800*	*15,102,900*	*38,463,700*	*7.7%*	*10.2%*	*8.6%*
Freeways (Mainline)	*21,643,500*	*22,520,500*	*44,164,000*	*8.3%*	*13.3%*	*10.8%*
Total, City of Los Angeles	**45,004,300**	**37,623,400**	**82,627,700**	**8.0%**	**12.0%**	**9.8%**
FUTURE WITH PROJECT						
				Comparison to Existing		
1. North Valley	3,708,700	2,474,200	6,182,900	-0.9%	7.2%	2.2%
2. South Valley	4,126,300	2,906,700	7,033,000	1.1%	8.3%	3.9%
3. Central	3,664,500	2,537,800	6,202,300	-8.2%	1.7%	-4.4%
4. East Los Angeles	1,635,600	1,062,100	2,697,700	-12.3%	0.3%	-7.7%
5. West Los Angeles	3,137,500	2,557,600	5,695,100	-1.4%	10.9%	3.8%
6. South Los Angeles	3,399,000	2,157,900	5,556,900	-6.6%	5.3%	-2.3%
7. Harbor	1,088,800	826,100	1,914,900	-9.0%	2.3%	-4.4%
Surface Streets	*20,760,300*	*14,522,500*	*35,282,800*	*-4.3%*	*5.9%*	*-0.4%*
Freeways (Mainline)	*22,306,100*	*23,296,100*	*45,602,200*	*11.6%*	*17.2%*	*14.4%*
Total, City of Los Angeles	**43,066,300**	**37,818,700**	**80,885,000**	**3.3%**	**12.6%**	**7.5%**
				Comparison to Future No Project		
1. North Valley	–	–	–	-9.1%	-5.4%	-7.6%
2. South Valley	–	–	–	-5.0%	-0.8%	-3.3%
3. Central	–	–	–	-13.7%	-6.4%	-10.9%
4. East Los Angeles	–	–	–	-18.6%	-8.6%	-14.9%
5. West Los Angeles	–	–	–	-8.7%	2.9%	-3.8%
6. South Los Angeles	–	–	–	-14.1%	-5.9%	-11.1%
7. Harbor	–	–	–	-15.4%	-8.8%	-12.7%
Surface Streets	–	–	–	*-11.1%*	*-3.8%*	*-8.3%*
Freeways (Mainline)	–	–	–	*3.1%*	*3.4%*	*3.3%*
Total, City of Los Angeles	**–**	**–**	**–**	**-4.3%**	**0.5%**	**-2.1%**

SOURCE: City of Los Angeles Travel Demand Model, 2013.

Under Future No Project conditions, daily VMT increases to 82.6 million, 10 percent above Existing Base levels. The increase occurs disproportionately on Freeways, where VMT increases by 10.8 percent, compared with surface streets, where VMT increases by 8.6 percent.

Future With Project conditions reduce daily VMT to 80.9 million, which is approximately 1.7 million fewer miles traveled every day than Future No Project conditions. Future With Project daily VMT is forecast to be 7.5 percent greater than Existing levels, and 2.1 percent lower than Future No Project levels. VMT on surface streets is 0.4 percent lower than Existing conditions, while freeway VMT exceeds Existing conditions by 14.4 percent. Relative to Future No Project conditions, freeway VMT increases by 3.3 percent, while surface street VMT decreases by 8.3 percent.

To isolate the effects of the project action from land use changes that could vary between the Future No Project and Future Project scenarios, the same socioeconomic increases that apply to the Future No Project conditions also apply to the 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 to those modes, reducing the level of VMT under Project conditions relative to Future No Project conditions. It is possible that additional land use related strategies to reduce VMT may also be in place by 2035 and that land use patterns may change in response to the project action, and these changes could further reduce forecast VMT outcomes. Freeway VMT increases while surface street VMT decreases, likely because reductions in capacity on some BEN and TEN surface streets divert some arterial through-trips to the freeways.

Table 4.1-29 summarizes changes in vehicle miles traveled on a per-capita basis by dividing total vehicle miles traveled on roadways in the City of Los Angeles by the total number of people in the City, including both residents and workers.

Under Existing conditions, motorists in the City of Los Angeles travel a daily average of 13.0 miles per capita on Los Angeles roadways. Under Future No Project conditions, daily VMT per capita increases to 13.3 miles, 2.1 percent above Existing Base levels. Future With Project conditions reduce daily VMT per capita to 13.0 miles, comparable to Existing levels and 2.1 percent lower than Future No Project levels.

Table 4.1-30 provides additional detail on vehicle miles traveled on freeway mainline segments within the City of Los Angeles. Interstates 405, 5, and 110 and US-101 remain the most-traveled freeways in the City. Collectively, the four freeways account for over 29 million vehicle miles traveled, nearly two thirds of all freeway vehicle miles traveled within the City and more than one third of total vehicle miles traveled within the City under the Future With Project conditions. Freeway VMT increases by 14.4 percent relative to Existing conditions. Interstate 405 experiences the largest absolute increase in VMT over Existing conditions, with an increase of 1.5 million VMT (18 percent), while Interstate 5 experiences the largest relative increase with 1.4 million new VMT (23 percent) compared with Existing conditions. Relative to Future No Project conditions, freeway VMT increases by 3.3 percent overall, including a 2.5 percent decrease in VMT on State Route 2. Freeway VMT increases slightly under Project conditions compared with Future No Project conditions likely because reductions in capacity on some BEN and TEN surface streets divert some arterial, and non-local, through-trips to the freeways.

Table 4.1-31 provides information on vehicle miles traveled in jurisdictions adjacent to the City of Los Angeles. Vehicle miles traveled on roadways within one mile of the City border are presented for Existing conditions, Future No Project, and Future With Project conditions. Vehicle miles traveled increases by 10.1 percent overall from Existing conditions to Future No Project conditions. Long Beach and San Fernando experience the largest relative increases of 28.9 percent and 25.3 percent, respectively. VMT declines slightly on nearby roadways in Commerce, Beverly Hills, and Ventura County.

TABLE 4.1-29: VEHICLE MILES TRAVELED PER CAPITA (EMPLOYMENT PLUS POPULATION) IN THE CITY OF LOS ANGELES

	Vehicle Miles Traveled			Percent Change		
Area Planning ommission	**Peak Period (7-Hour)**	**Off Peak Period (17-Hour)**	**Daily**	**Peak Period (7-Hour)**	**Off Peak Period (17-Hour)**	**Daily**
EXISTING CONDITIONS						
1. North Valley	4.0	2.4	6.4	–	–	–
2. South Valley	3.7	2.4	6.1	–	–	–
3. Central	3.1	1.9	5.0	–	–	–
4. East Los Angeles	3.4	1.9	5.3	–	–	–
5. West Los Angeles	4.3	3.1	7.4	–	–	–
6. South Los Angeles	4.1	2.3	6.5	–	–	–
7. Harbor	4.2	2.9	7.1	–	–	–
Surface Streets	*3.7*	*2.4*	*6.1*	–	–	–
Freeways (Mainline)	*3.4*	*3.4*	*6.9*	–	–	–
Total, City of Los Angeles	**7.2**	**5.8**	**13.0**	**–**	**–**	**–**
FUTURE NO PROJECT						
				Comparison to Existing		
1. North Valley	4.1	2.6	6.7	2.8%	6.8%	4.3%
2. South Valley	3.6	2.4	6.0	-2.3%	0.4%	-1.2%
3. Central	3.0	1.9	5.0	-1.6%	0.5%	-0.8%
4. East Los Angeles	3.5	2.0	5.5	2.9%	4.8%	3.6%
5. West Los Angeles	4.2	3.0	7.2	-2.8%	-2.9%	-2.8%
6. South Los Angeles	4.2	2.4	6.6	0.8%	3.6%	1.8%
7. Harbor	4.6	3.2	7.8	8.0%	12.7%	9.9%
Surface Streets	*3.7*	*2.4*	*6.2*	*0.1%*	*2.5%*	*1.0%*
Freeways (Mainline)	*3.5*	*3.6*	*7.1*	*0.7%*	*5.4%*	*3.0%*
Total, City of Los Angeles	**7.2**	**6.0**	**13.3**	**0.4%**	**4.2%**	**2.1%**
FUTURE WITH PROJECT						
				Comparison to Existing		
1. North Valley	3.7	2.5	6.2	-6.5%	1.0%	-3.7%
2. South Valley	3.4	2.4	5.8	-7.2%	-0.5%	-4.5%
3. Central	2.6	1.8	4.4	-15.1%	-5.9%	-11.6%
4. East Los Angeles	2.8	1.8	4.7	-16.3%	-4.2%	-11.9%
5. West Los Angeles	3.8	3.1	6.9	-11.2%	-0.1%	-6.6%
6. South Los Angeles	3.6	2.3	5.8	-13.5%	-2.5%	-9.5%
7. Harbor	3.9	2.9	6.8	-8.6%	2.7%	-4.1%
Surface Streets	*3.3*	*2.3*	*5.7*	*-11.0%*	*-1.5%*	*-7.3%*
Freeways (Mainline)	*3.6*	*3.7*	*7.3*	*3.8%*	*9.0%*	*6.4%*
Total, City of Los Angeles	**6.9**	**6.1**	**13.0**	**-3.9%**	**4.7%**	**-0.1%**
				Comparison to Future No Project		
1. North Valley	–	–	–	-9.1%	-5.4%	-7.6%
2. South Valley	–	–	–	-5.0%	-0.8%	-3.3%
3. Central	–	–	–	-13.7%	-6.4%	-10.9%
4. East Los Angeles	–	–	–	-18.6%	-8.6%	-14.9%
5. West Los Angeles	–	–	–	-8.7%	2.9%	-3.8%
6. South Los Angeles	–	–	–	-14.1%	-5.9%	-11.1%
7. Harbor	–	–	–	-15.4%	-8.8%	-12.7%
Surface Streets	–	–	–	*-11.1%*	*-3.8%*	*-8.3%*
Freeways (Mainline)	–	–	–	*3.1%*	*3.4%*	*3.3%*
Total, City of Los Angeles	**–**	**–**	**–**	**-4.3%**	**0.5%**	**-2.1%**

SOURCE: City of Los Angeles Travel Demand Model, 2013.

TABLE 4.1-30: VEHICLE MILES TRAVELED ON FREEWAY MAINLINE SEGMENTS IN THE CITY OF LOS ANGELES

	Vehicle Miles Traveled			Percent Change		
Area Planning Commission	Peak Period (7-Hour)	Off Peak Period (17-Hour)	Daily	Peak Period (7-Hour)	Off Peak Period (17-Hour)	Daily
EXISTING CONDITIONS						
I-5	2,881,000	2,943,700	5,824,700	–	–	–
I-10	1,797,900	1,922,000	3,719,900	–	–	–
US-101	2,951,900	3,079,900	6,031,800	–	–	–
I-105	872,900	953,000	1,825,900	–	–	–
I-110	2,562,600	2,510,100	5,072,700	–	–	–
I-210	1,190,000	945,200	2,135,200	–	–	–
I-405	4,057,900	4,390,100	8,448,000	–	–	–
SR-2	374,400	287,100	661,500	–	–	–
SR-60	224,200	207,300	431,500	–	–	–
SR-118	1,190,200	1,000,800	2,191,000	–	–	–
SR-134	1,243,100	1,075,200	2,318,300	–	–	–
SR-170	503,600	449,600	953,200	–	–	–
SR-47,103	129,100	114,400	243,500	–	–	–
TOTAL	**19,978,600**	**19,878,800**	**39,857,400**	**–**	**–**	**–**
FUTURE NO PROJECT (COMPARISON TO EXISTING)						
				Comparison to Existing		
I-5	3,367,400	3,578,300	6,945,700	16.9%	21.6%	19.2%
I-10	1,901,600	2,111,100	4,012,700	5.8%	9.8%	7.9%
US-101	3,062,900	3,339,600	6,402,500	3.8%	8.4%	6.1%
I-105	928,800	1,015,400	1,944,200	6.4%	6.5%	6.5%
I-110	2,672,800	2,704,500	5,377,300	4.3%	7.7%	6.0%
I-210	1,238,300	1,224,100	2,462,400	4.1%	29.5%	15.3%
I-405	4,503,400	5,094,000	9,597,400	11.0%	16.0%	13.6%
SR-2	373,600	286,200	659,800	-0.2%	-0.3%	-0.3%
SR-60	233,100	219,200	452,300	4.0%	5.7%	4.8%
SR-118	1,362,400	1,154,500	2,516,900	14.5%	15.4%	14.9%
SR-134	1,332,800	1,173,600	2,506,400	7.2%	9.2%	8.1%
SR-170	515,300	486,700	1,002,000	2.3%	8.3%	5.1%
SR-47,103	150,800	133,600	284,400	16.8%	16.8%	16.8%
TOTAL	**21,643,500**	**22,520,500**	**44,164,000**	**8.3%**	**13.3%**	**10.8%**
FUTURE WITH PROJECT						
				Comparison to Existing		
I-5	3,491,200	3,693,300	7,184,500	21.2%	25.5%	23.3%
I-10	1,974,700	2,192,300	4,167,000	9.8%	14.1%	12.0%
US-101	3,162,900	3,445,500	6,608,400	7.1%	11.9%	9.6%
I-105	928,400	1,111,500	2,039,900	6.4%	16.6%	11.7%
I-110	2,736,600	2,773,500	5,510,100	6.8%	10.5%	8.6%
I-210	1,281,500	1,238,500	2,520,000	7.7%	31.0%	18.0%
I-405	4,642,300	5,291,600	9,933,900	14.4%	20.5%	17.6%
SR-2	361,300	282,100	643,400	-3.5%	-1.7%	-2.7%
SR-60	235,800	225,500	461,300	5.2%	8.8%	6.9%
SR-118	1,427,100	1,197,400	2,624,500	19.9%	19.6%	19.8%
SR-134	1,379,900	1,209,500	2,589,400	11.0%	12.5%	11.7%
SR-170	533,500	500,600	1,034,100	5.9%	11.3%	8.5%
SR-47,103	151,000	134,600	285,600	17.0%	17.7%	17.3%
TOTAL	**22,306,200**	**23,295,900**	**45,602,100**	**11.7%**	**17.2%**	**14.4%**
FUTURE WITH PROJECT						
				Comparison to Future No Project		
I-5	–	–	–	3.7%	3.2%	3.4%
I-10	–	–	–	3.8%	3.9%	3.8%
US-101	–	–	–	3.3%	3.2%	3.2%
I-105	–	–	–	0.0%	9.5%	4.9%
I-110	–	–	–	2.4%	2.6%	2.5%
I-210	–	–	–	3.5%	1.2%	2.3%
I-405	–	–	–	3.1%	3.9%	3.5%
SR-2	–	–	–	-3.3%	-1.4%	-2.5%
SR-60	–	–	–	1.2%	2.9%	2.0%
SR-118	–	–	–	4.7%	3.7%	4.3%
SR-134	–	–	–	3.5%	3.1%	3.3%
SR-170	–	–	–	3.5%	2.9%	3.2%
SR-47,103	–	–	–	0.1%	0.7%	0.4%
TOTAL	**–**	**–**	**–**	**3.1%**	**3.4%**	**3.3%**

SOURCE: Fehr & Peers, 2014.

TABLE 4.1-31: DAILY VEHICLE MILES TRAVELED IN ADJACENT JURISDICTIONS ON ROADWAYS WITHIN 1 MILE OF THE CITY OF LOS ANGELES BORDER

	Daily Vehicle Miles Traveled			Percent Change vs. Existing		Percent Change vs. Future No Project
City or County	Existing	Future No Project	Future With Project	Future No Project	Project	Future With Project
Los Angeles County	1,988,800	2,171,800	2,202,900	9.2%	10.8%	1.4%
Ventura County	95,600	88,100	88,600	-7.8%	-7.3%	0.6%
Alhambra	163,100	164,400	163,100	0.8%	0.0%	-0.8%
Beverly Hills	629,600	620,800	624,300	-1.4%	-0.8%	0.6%
Burbank	474,300	506,800	501,200	6.9%	5.7%	-1.1%
Calabasas	5,700	6,000	6,000	5.3%	5.3%	0.0%
Carson	621,300	701,200	706,800	12.9%	13.8%	0.8%
Commerce	15,900	15,700	14,600	-1.3%	-8.2%	-7.0%
Culver City	535,600	630,800	626,500	17.8%	17.0%	-0.7%
El Segundo	190,400	213,100	209,400	11.9%	10.0%	-1.7%
Gardena	302,500	325,400	336,500	7.6%	11.2%	3.4%
Glendale	684,600	729,200	708,900	6.5%	3.5%	-2.8%
Hawthorne	90,900	95,800	95,900	5.4%	5.5%	0.1%
Huntington Park	103,700	115,200	116,200	11.1%	12.1%	0.9%
Inglewood	617,200	687,800	683,800	11.4%	10.8%	-0.6%
Long Beach	273,600	352,700	350,400	28.9%	28.1%	-0.7%
Lynwood	119,300	131,000	132,700	9.8%	11.2%	1.3%
Monterey Park	41,300	42,300	42,800	2.4%	3.6%	1.2%
Pasadena	103,200	117,400	120,800	13.8%	17.1%	2.9%
San Fernando	93,600	117,300	127,900	25.3%	36.6%	9.0%
Santa Monica	549,400	657,600	664,900	19.7%	21.0%	1.1%
South Gate	102,700	114,500	114,100	11.5%	11.1%	-0.3%
South Pasadena	216,100	228,400	225,400	5.7%	4.3%	-1.3%
Torrance	311,100	322,900	334,000	3.8%	7.4%	3.4%
Vernon	215,400	240,700	241,300	11.7%	12.0%	0.2%
West Hollywood	313,000	351,600	344,100	12.3%	9.9%	-2.1%
Total	**8,857,900**	**9,748,500**	**9,783,100**	**10.1%**	**10.4%**	**0.4%**

SOURCE: Fehr & Peers, 2014.

Relative to Future No Project conditions, Project conditions represent a 0.4 percent increase in vehicle miles traveled on nearby roadways in all neighboring jurisdictions. The overall increase in vehicle miles traveled on roadways within 1-mile of the City's border is likely due to reductions in capacity on some BEN and TEN surface streets in Los Angeles that divert some trips to adjacent roadways in adjacent jurisdictions.

Vehicle Hours Traveled. **Table 4.1-32** summarizes changes in vehicle hours traveled on freeway mainline segments within the City of Los Angeles among the Existing, Future No Project, and Future with Project conditions. Motorists spend the most vehicle hours traveling on Interstates 405, 5, and 110 and US-101.

Under Future No Project conditions, daily VHT increases to 1.8 million, 14.2 percent above Existing levels. With the Future Project conditions daily VHT increases to 2.0 million, representing a 27 percent increase above Existing Base levels. Freeway vehicle hours traveled increases under Project conditions compared with Future No Project conditions may be associated with reductions in capacity on some BEN and TEN surface streets that divert some arterial through-trips to the freeways.

TABLE 4.1-32: VEHICLE HOURS TRAVELED ON FREEWAY MAINLINE SEGMENTS IN THE CITY OF LOS ANGELES

	Vehicle Hours Traveled			Percent Change		
Area Planning Commission	Peak Period (7-Hour)	Off Peak Period (17-Hour)	Daily	Peak Period (7-Hour)	Off Peak Period (17-Hour)	Daily
EXISTING CONDITIONS						
I-5	165,700	86,800	252,500	–	–	–
I-10	99,100	55,200	154,300	–	–	–
US-101	173,200	96,600	269,800	–	–	–
I-105	35,600	23,600	59,200	–	–	–
I-110	125,200	70,500	195,700	–	–	–
I-210	37,600	18,100	55,700	–	–	–
I-405	235,600	137,500	373,100	–	–	–
SR-2	16,000	6,000	22,000	–	–	–
SR-60	10,200	5,600	15,800	–	–	–
SR-118	33,700	19,800	53,500	–	–	–
SR-134	52,600	26,300	78,900	–	–	–
SR-170	19,400	11,600	31,000	–	–	–
SR-47,103	4,200	3,100	7,300	–	–	–
TOTAL	**1,008,200**	**560,600**	**1,568,800**	**–**	**–**	**–**
FUTURE NO PROJECT (COMPARISON TO EXISTING)						
				Comparison to Existing		
I-5	228,500	114,200	342,700	37.9%	31.6%	35.7%
I-10	106,500	60,800	167,300	7.5%	10.1%	8.4%
US-101	187,300	106,300	293,600	8.1%	10.0%	8.8%
I-105	38,900	25,000	63,900	9.3%	5.9%	7.9%
I-110	130,500	76,200	206,700	4.2%	8.1%	5.6%
I-210	42,400	24,900	67,300	12.8%	37.6%	20.8%
I-405	263,100	157,600	420,700	11.7%	14.6%	12.8%
SR-2	14,100	5,900	20,000	-11.9%	-1.7%	-9.1%
SR-60	10,200	5,800	16,000	0.0%	3.6%	1.3%
SR-118	41,700	23,700	65,400	23.7%	19.7%	22.2%
SR-134	60,000	29,300	89,300	14.1%	11.4%	13.2%
SR-170	18,600	12,000	30,600	-4.1%	3.4%	-1.3%
SR-47,103	5,000	3,700	8,700	19.0%	19.4%	19.2%
TOTAL	**1,146,800**	**645,300**	**1,792,100**	**13.7%**	**15.1%**	**14.2%**
FUTURE WITH PROJECT						
				Comparison to Existing		
I-5	283,700	123,200	406,900	71.2%	41.9%	61.1%
I-10	124,300	65,400	189,700	25.4%	18.5%	22.9%
US-101	210,200	112,600	322,800	21.4%	16.6%	19.6%
I-105	39,200	28,400	67,600	10.1%	20.3%	14.2%
I-110	145,600	80,300	225,900	16.3%	13.9%	15.4%
I-210	46,800	25,200	72,000	24.5%	39.2%	29.3%
I-405	294,600	167,800	462,400	25.0%	22.0%	23.9%
SR-2	13,000	5,800	18,800	-18.8%	-3.3%	-14.5%
SR-60	10,800	6,100	16,900	5.9%	8.9%	7.0%
SR-118	46,200	24,800	71,000	37.1%	25.3%	32.7%
SR-134	66,400	30,800	97,200	26.2%	17.1%	23.2%
SR-170	20,100	12,500	32,600	3.6%	7.8%	5.2%
SR-47,103	5,000	3,600	8,600	19.0%	16.1%	17.8%
TOTAL	**1,306,200**	**686,200**	**1,992,400**	**29.6%**	**22.4%**	**27.0%**
				Comparison to Future No Project		
I-5				24.2%	7.9%	18.7%
I-10				16.7%	7.6%	13.4%
US-101				12.2%	5.9%	9.9%
I-105				0.8%	13.6%	5.8%
I-110				11.6%	5.4%	9.3%
I-210				10.4%	1.2%	7.0%
I-405				12.0%	6.5%	9.9%
SR-2				-7.8%	-1.7%	-6.0%
SR-60				5.9%	5.2%	5.6%
SR-118				10.8%	4.6%	8.6%
SR-134				10.7%	5.1%	8.8%
SR-170				8.1%	4.2%	6.5%
SR-47,103				0.0%	-2.7%	-1.1%
TOTAL				**13.9%**	**6.3%**	**11.2%**

SOURCE: Fehr & Peers, 2014.

The model-estimated changes in vehicle hours traveled are 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

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.

Accessibility Metrics and Network Coverage. **Tables 4.1-33**, **4.1-34**, and **4.1-35** provide detail on the Population and Employment Accessibility metrics, calculated with quarter-mile and one-mile buffers, as a percentage of total City of Los Angeles 2035 population and employment, as well as the Network Coverage of each enhanced network and treatment type in miles. Network coverage is reported in terms of the highest level of coverage provided and coverage is not double-counted. For example, an area covered by the Future No Project network and the Moderate network will be counted under the Moderate category; hence, the area reported in the Future No Project category tends to decrease under Future With Project conditions, under which new, higher-level facilities have been added. **Figures 4.1-4** through **4.1-6** provide an overview of the quarter-mile buffer areas included in the Population and Employment Accessibility metrics.

The tables compare Future With Project against Future No Project conditions. Since some bicycle and transit facilities will be completed between the time of Existing conditions and that of Future No Project Conditions, Future No Project accessibility to the TEN and BEN is expected to be generally higher than Existing accessibility to the TEN and BEN. As a result, the relative increases in accessibility to the TEN and BEN between Existing conditions and Future with Project conditions are expected to be generally larger than those shown in the table.

TABLE 4.1-33: BICYCLE ENHANCED NETWORK ACCESSIBILITY AND NETWORK COVERAGE

Measure		Facility Type	Future No Project		Future With Project	
			Count	% of Total City	Count	% of Total City
Quarter-Mile	Population	Future No Project /a/	408,600	10%	165,555	4%
		Neighborhood Streets	0	0.0%	85,195	2%
		Moderate	0	0.0%	1,361,688	32%
		Comprehensive	0	0.0%	1,189,003	28%
		TOTAL	**408,600**	**10%**	**2,801,441**	**65%**
		TOTAL CITY POPULATION	***4,305,600***	**100.0%**	***4,305,600***	**100.0%**
	Employment	Future No Project /a/	210,700	11%	60,673	3%
		Neighborhood Streets	0	0.0%	27,074	1%
		Moderate	0	0.0%	597,863	32%
		Comprehensive	0	0.0%	647,213	34%
		TOTAL	**210,700**	**11%**	**1,332,823**	**71%**
		TOTAL CITY EMPLOYMENT	***1,887,800***	**100.0%**	***1,887,800***	**100.0%**
One Mile	Population	Future No Project /a/	2,120,900	49%	12,281	<1%
		Neighborhood Streets	0	0.0%	322	<1%
		Moderate	0	0.0%	732,748	17%
		Comprehensive	0	0.0%	3,391,205	79%
		TOTAL	**2,120,900**	**49%**	**4,136,556**	**96%**
		TOTAL CITY POPULATION	***4,305,600***	**100.0%**	***4,305,600***	**100.0%**
	Employment	Future No Project /a/	1,058,500	56%	5,523	<1%
		Neighborhood Streets	0	0.0%	32	<1%
		Moderate	0	0.0%	335,764	18%
		Comprehensive	0	0.0%	1,498,852	79%
		TOTAL	**1,058,500**	**56%**	**1,840,171**	**97%**
		TOTAL CITY EMPLOYMENT	***1,887,800***	**100.0%**	***1,887,800***	**100.0%**

/a/ Future No Project includes all bicycle paths and protected bicycle lanes expected to be completed by year 2035 without the implementation of MP 2035. Under Future with Project conditions, many areas covered by the Future No Project network gain access to a higher-level network; therefore, the reduction in percent of population or employment with access to the Future No Project network is offset by an increase in the percent with access to a higher-level network.
SOURCE: Fehr & Peers, 2015.

TABLE 4.1-34: TRANSIT ENHANCED NETWORK ACCESSIBILITY AND NETWORK COVERAGE

Measure		Facility Type	Future No Project		Future With Project	
			Count	% of Total City	Count	% of Total City
Quarter-Mile	Population	Future No Project /a/	509,300	12%	187,953	4%
		Moderate	0	0.0%	415,141	10%
		Moderate Plus	0	0.0%	583,239	14%
		Comprehensive	0	0.0%	661,008	15%
		TOTAL	**509,300**	**12%**	**1,847,341**	**43%**
		TOTAL CITY POPULATION	***4,305,600***	**100.0%**	***4,305,600***	**100.0%**
	Employment	Future No Project /a/	463,500	25%	120,777	6%
		Moderate	0	0.0%	154,011	8%
		Moderate Plus	0	0.0%	261,467	14%
		Comprehensive	0	0.0%	463,375	25%
		TOTAL	**463,500**	**25%**	**999,630**	**53%**
		TOTAL CITY EMPLOYMENT	***1,887,800***	**100.0%**	***1,887,800***	**100.0%**
One Mile	Population	Future No Project /a/	2,378,700	55%	222,617	5%
		Moderate	0	0.0%	331,801	8%
		Moderate Plus	0	0.0%	878,579	20%
		Comprehensive	0	0.0%	2,086,467	48%
		TOTAL	**2,378,700**	**55%**	**3,519,464**	**82%**
		TOTAL CITY POPULATION	**4,305,600**	**100.0%**	**4,305,600**	**100.0%**
	Employment	Future No Project /a/	1,241,400	66%	120,952	6%
		Moderate	0	0.0%	100,769	5%
		Moderate Plus	0	0.0%	370,266	20%
		Comprehensive	0	0.0%	1,015,632	54%
		TOTAL	**1,241,400**	**66%**	**1,607,619**	**85%**
		TOTAL CITY EMPLOYMENT	***1,887,800***	**100.0%**	***1,887,800***	**100.0%**

SOURCE: Fehr & Peers, 2015.
/a/ Future No Project includes existing and funded rail, Metrolink, and fixed bus guideway facilities expected to be completed by year 2035 without the implementation of MP 2035. Under Future with Project conditions, many areas covered by the Future No Project network gain access to a higher-level network; therefore, the reduction in percent of population or employment with access to the Future No Project network is offset by an increase in the percent with access to a higher-level network.

TABLE 4.1-35: VEHICLE ENHANCED NETWORK ACCESSIBILITY AND NETWORK COVERAGE

Measure		Facility Type	Future No Project		Future With Project	
			Count	% of Total City	Count	% of Total City
Quarter-Mile	Population	Future No Project /a/	391,422	9.1%	373,850	8.7%
		Moderate	0	0.0%	288,934	6.7%
		Comprehensive	0	0.0%	14,667	0.3%
		TOTAL	**391,422**	**9.1%**	**677,451**	**15.7%**
		TOTAL CITY POPULATION	***4,305,600***	**100.0%**	***4,305,600***	**100.0%**
	Employment	Future No Project /a/	228,184	12.1%	207,807	11.0%
		Moderate	0	0.0%	194,915	10.3%
		Comprehensive	0	0.0%	3,268	0.2%
		TOTAL	**228,184**	**12.1%**	**405,990**	**21.5%**
		TOTAL CITY EMPLOYMENT	***1,887,800***	**100.0%**	***1,887,800***	**100.0%**
One Mile	Population	Future No Project /a/	2,240,137	52.0%	1,513,410	35.1%
		Moderate	0	0.0%	1,490,563	34.6%
		Comprehensive	0	0.0%	64,798	1.5%
		TOTAL	**2,240,137**	**52.0%**	**3,068,771**	**71.3%**
		TOTAL CITY POPULATION	***4,305,600***	**100.0%**	***4,305,600***	**100.0%**
	Employment	Future No Project /a/	1,044,874	55.3%	595,962	31.6%
		Moderate	0	0.0%	868,182	46.0%
		Comprehensive	0	0.0%	16,498	0.9%
		TOTAL	**1,044,874**	**55.3%**	**1,480,642**	**78.4%**
		TOTAL CITY EMPLOYMENT	***1,887,800***	**100.0%**	***1,887,800***	**100.0%**

SOURCE: Fehr & Peers, 2015.
/a/ Future No Project consists of the freeway network within the City of Los Angeles. Under Future with Project conditions, some areas covered by the Future No Project network gain access to a higher-level network; therefore, the reduction in percent of population or employment with access to the Future No Project network is offset by an increase in the percent with access to a higher-level network.

Bicycle Enhanced Network and Bicycle Lane Network
1/4-Mile Coverage

FIGURE 4.1-4

Source: City of Los Angeles and Fehr & Peers, 2015.

Transit Enhanced Network
1/4-Mile Coverage

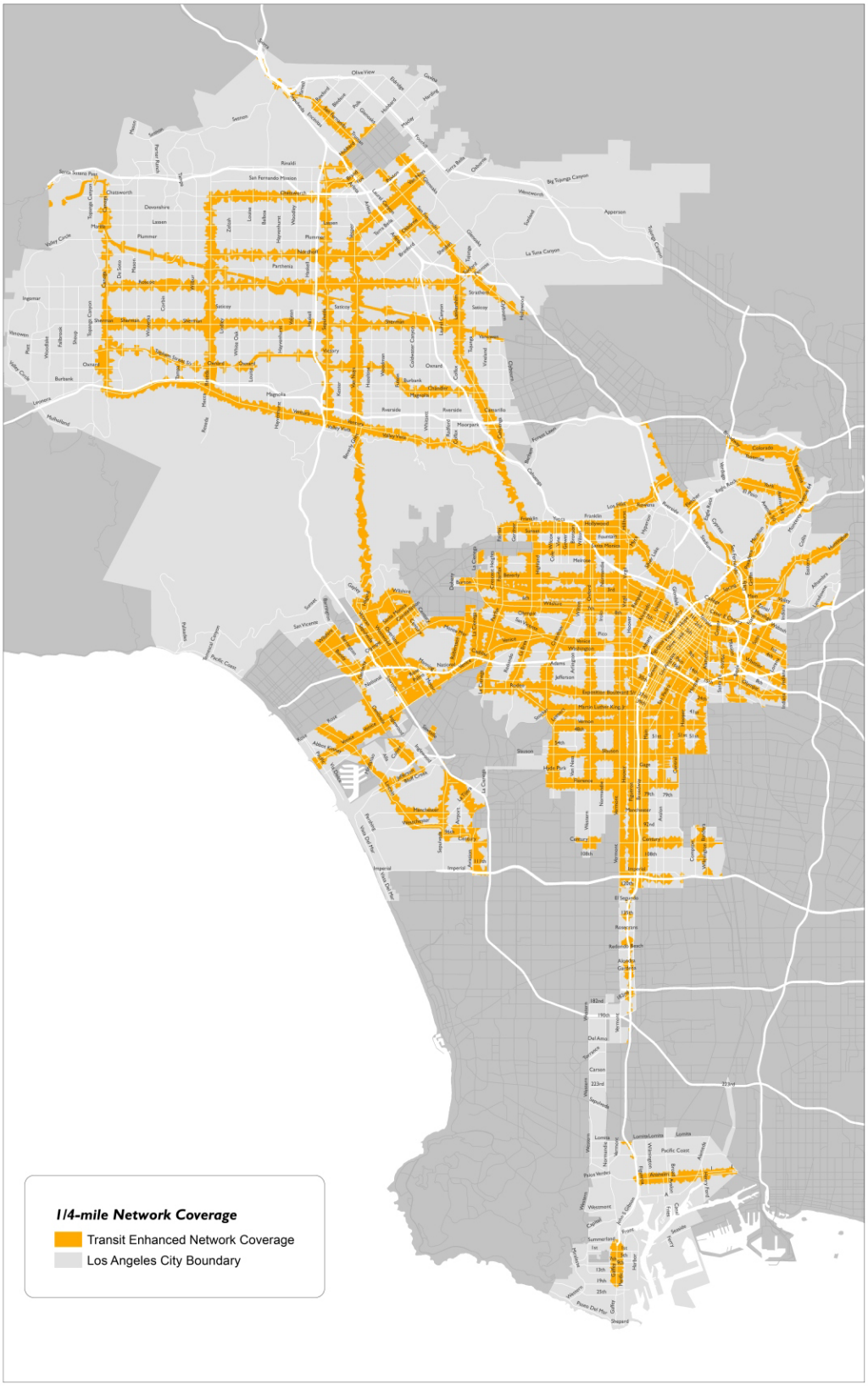

FIGURE 4.1-5

Source: City of Los Angeles and Fehr & Peers, 2015.

LOS ANGELES MOBILITY ELEMENT

Vehicle Enhanced Network 1/4-mile Coverage

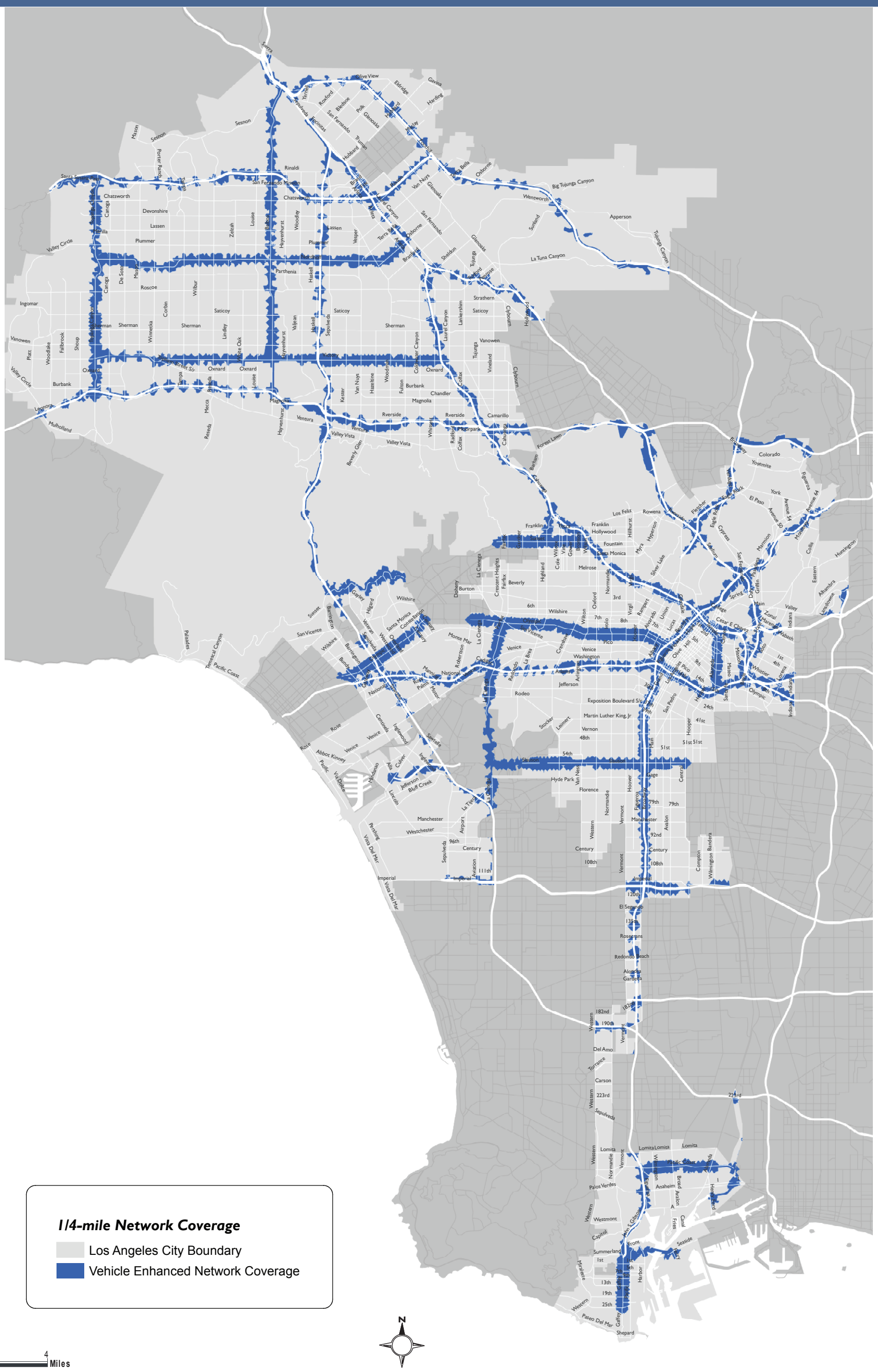

FIGURE 4.1-6

Source: Fehr & Peers, 2013.

Population and Employment accessibility to high-quality bicycle facilities within a quarter mile would increase approximately six-fold between the Future No Project and Future Project conditions. More than 70 percent of jobs and 65 percent of residents would be within one-quarter mile of a high-quality bicycle facility under Project conditions, compared to approximately 11 percent and 10 percent under Future No Project conditions. The relative increase in population and employment within one mile of a high-quality bicycle facility would be smaller than the relative increase at the quarter-mile level; nevertheless, over 95 percent of population and employment would be within one mile of a high-quality bicycle facility under Future With Project conditions.

Accessibility to high-quality transit facilities within a quarter mile would increase more than three-fold for population and would nearly double for employment between the Future No Project and Project conditions. More than 50 percent of jobs and 40 percent of residents would be within one-quarter mile of a high-quality transit facility under Project conditions, compared to approximately 25 percent and 12 percent under Future No Project conditions. The relative increase in population and employment within one mile of a high-quality transit facility would be smaller than the relative increase at the quarter-mile level; nevertheless, more than 80 percent of population and 85 percent of employment would be within one mile of a high-quality transit facility under Future With Project conditions.

Population and Employment accessibility to freeways and the VEN would increase approximately 75 percent between the Future No Project and Project conditions. The Future No Project freeway network would pass through relatively less-populated areas of the City, while the added VEN streets traverse more densely populated areas. More than 20 percent of jobs and 15 percent of residents would be within one-quarter mile of a freeway or VEN under Project conditions, compared to approximately 12 percent and 9 percent under Future No Project conditions. The relative increase in population and employment within one mile of the freeways and VEN would be smaller than the relative increase at the quarter-mile level; nevertheless, more than 70 percent of population and nearly 80 percent of employment would be within one mile of a freeway or VEN under Future With Project conditions.

OTHER METRICS DISCUSSION

As discussed above, the comparison between the Future No Project and Future With Project conditions present substantially different outcomes in 2035. While it has been noted that the metrics evaluated with the travel demand model represent a vehicle-centric approach based on historical travel behavior patterns, the Future With Project scenario delivers major changes in mode share, vehicle travel, and multimodal accessibility that are consistent with City of Los Angeles goals and objectives as described in the MP 2035. Notable highlights from the other metrics analysis include:

Mode Split

- The implementation of the BEN and TEN includes the repurposing of existing vehicular travel lanes into transit or bicycle facilities. While this may be described as a decrease in vehicular capacity, it can also be described as an increase in overall person carrying capacity.
- This increase in multimodal network capacity is forecast to result in increased active transportation and transit travel compared to Existing Base levels:
  - Bicycling +170 percent
  - Transit +56 percent
  - Walking +38 percent
- Forecast increases in transit boardings are 32 percent greater than the Future No Project, which equates to over 400,000 more transit boardings every day.

Vehicle Travel

- Future With Project forecasts indicate that even with the conversion of over 560 miles of general purpose travel lanes to BEN or TEN lanes, the proposed project would result in an overall reduction in VMT relative to the Future No Project.
- Future With Project conditions reduce the total number of vehicle trips 2.2 percent from Future No Project conditions to approximately 9.7 million, which is a reduction of 219,000 trips every day.
- Although they comprise only 181 miles of roadway network in support of the nearly 7,500 miles of surface roadways in the City of Los Angeles, freeway travel accounts for over half of all daily vehicle miles traveled within the City.
- Future With Project conditions reduce daily VMT to 80.9 million, which is approximately 1.7 million fewer miles traveled every day than Future No Project conditions.
- Relative to Future No Project conditions, freeway VMT increases by 3.3 percent, while surface street VMT decreases by 8.3 percent.
- Future With Project conditions result in a daily VMT per capita to 13.0 miles, comparable to Existing levels and 2.1 percent lower than Future No Project levels.
- Under Future No Project conditions, daily VHT on freeways increases to 1.8 million, 14.2 percent above Existing Base levels. With the Future Project conditions daily freeway VHT increases to 2.0 million, representing a 27 percent increase above Existing Base levels.

Accessibility

- More than 95 percent of the City's population and employment would be within one mile of a high-quality bicycle facility under Future With Project conditions. This serves an additional 2 million residents and 780,000 jobs relative to the Future No Project.
- 70 percent of jobs and 65 percent of residents would be within one-quarter mile of a high-quality bicycle facility under the proposed project.
- Bicyclist accessibility increases with Project conditions represent a six-fold increase over Future No Project conditions.
- More than 80 percent of the City's population and 85 percent of its employment would be within one mile of a high-quality transit facility under Future With Project conditions. This serves an additional 1.1 million residents and 370,000 jobs relative to the Future No Project.
- Accessibility to high-quality transit facilities within a quarter mile would increase more than three-fold for population and would more than double for employment between the Future No Project and Project conditions.