
4.14 TRANSPORTATION

4.14.1 INTRODUCTION

This section analyzes the potential effects of the Housing Element Update (Update) with respect to transportation. Topics addressed in this chapter include the environmental setting, circulation and mobility systems, regulatory framework, thresholds of significance, methodology, and mitigation measures related to transportation impacts.

As discussed in the Initial Study (see Appendix A), the Safety Element Update would not result in any adverse impacts related to transportation and were, therefore, scoped out of this EIR¹. The analysis of Vehicle Miles Traveled (VMT) was prepared pursuant to LADOT's Transportation Assessment Guidelines (July 2020) which establish the guidelines and methodology for assessing transportation impacts for projects based on the updated CEQA guidelines from the State of California that require transportation impacts be evaluated based on VMT rather than level of service (LOS) or any other measure of a project's effect on automobile delay.

4.14.2 ENVIRONMENTAL SETTING

Circulation System

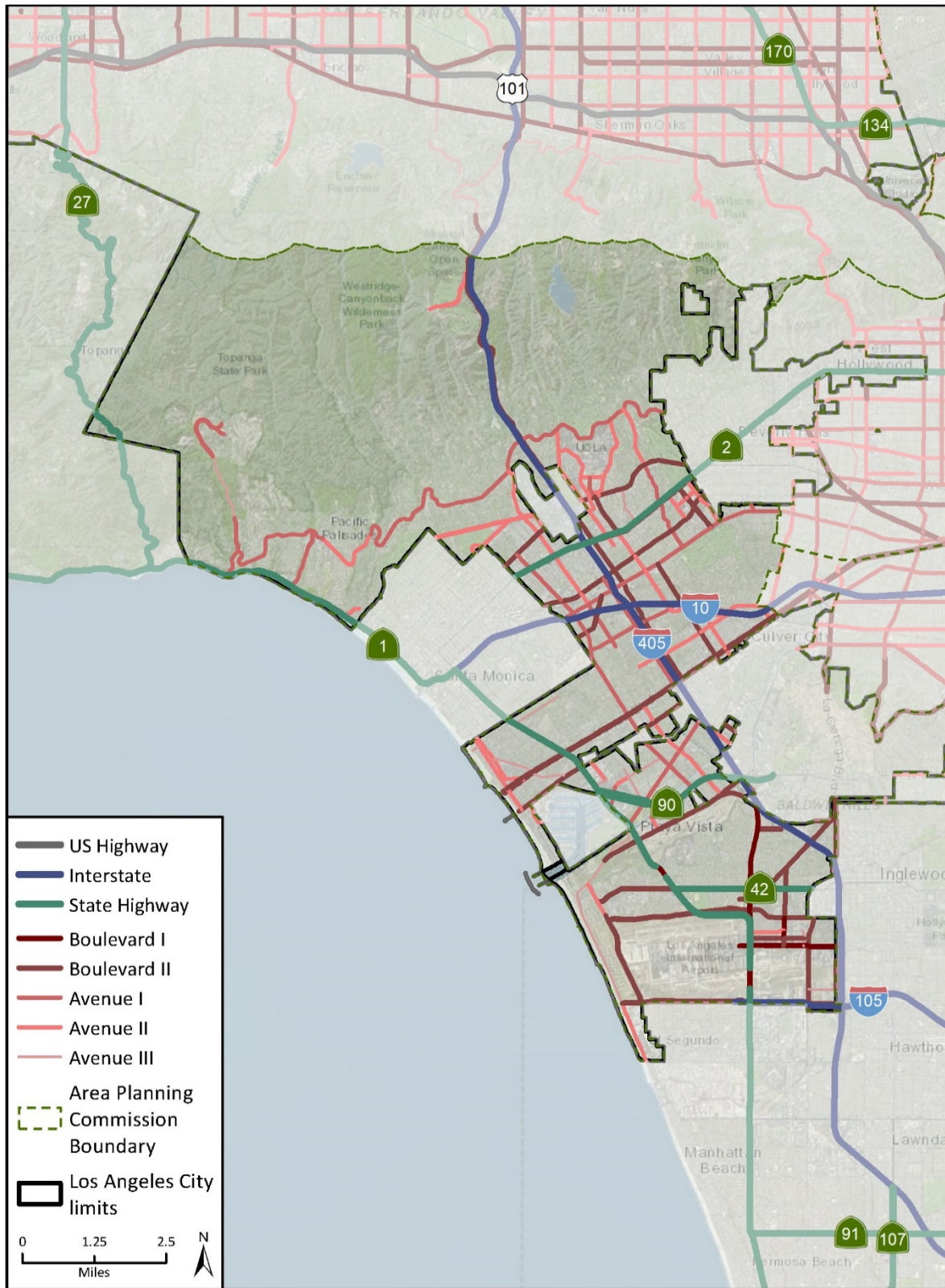
Overview

The study area is defined by the boundaries of the City of Los Angeles (City), which encompasses 467 square miles. The City is highly urbanized and is served by a circulation system that facilitates travel by multiple modes, including walking, bicycling, public transit, and motor vehicles, and includes an extensive network of freeways, highways, local streets, and bicycle facilities. The City of Los Angeles General Plan Transportation Element, also called Mobility Plan 2035, discussed in greater depth in the Regulatory Setting section, contains definitions, goals and objectives, and regulatory requirements for a variety of roadway classifications that make up the City's roadway system.

¹ Los Angeles Department of City Planning and Rincon Consultants, Inc. "Los Angeles Citywide Housing Element 2021-2029 Update Initial Study", 2021. p. 119.

Regional Access

The roadway network in the City includes seven freeways that traverse the 181 miles of the City and connect the City to its outer regions. They include Interstate 5, 10, 105, 110, 210, 405, and US Highway 101. The City also includes 11 state highways (SR) including 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. Existing freeways, state highways, and arterial streets are presented in Figure 4.14-1a through Figure 4.14-1g.

Figure 4.14-1a Existing Freeways, State Highways, and Arterials (Page 1 of 7)

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Existing Freeways and Arterials - West Los Angeles Area

Figure 4.14.1b Existing Freeways, State Highways, and Arterials (Page 2 of 7)

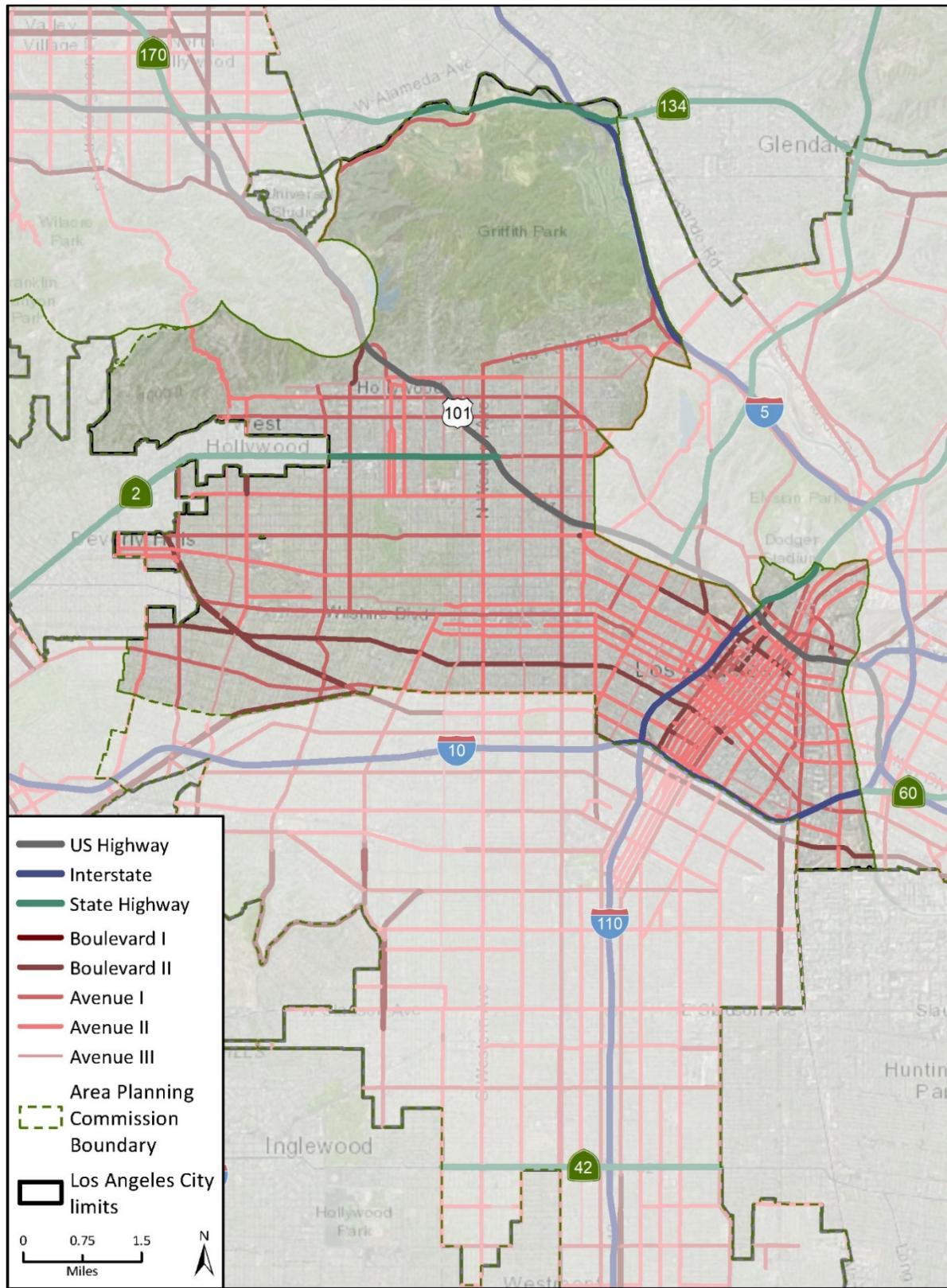


Figure 4.14.1c Existing Freeways, State Highways, and Arterials (Page 3 of 7)

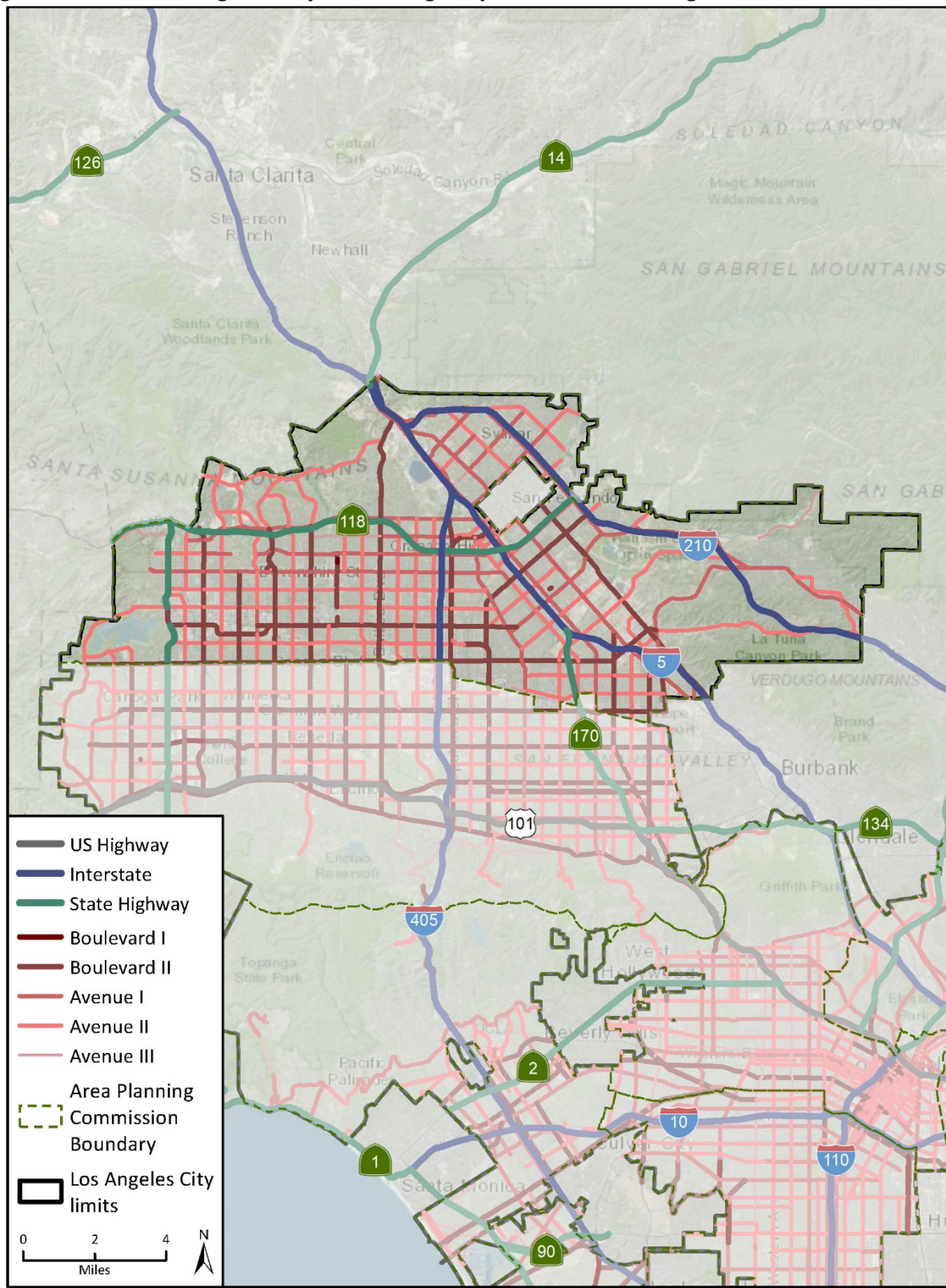


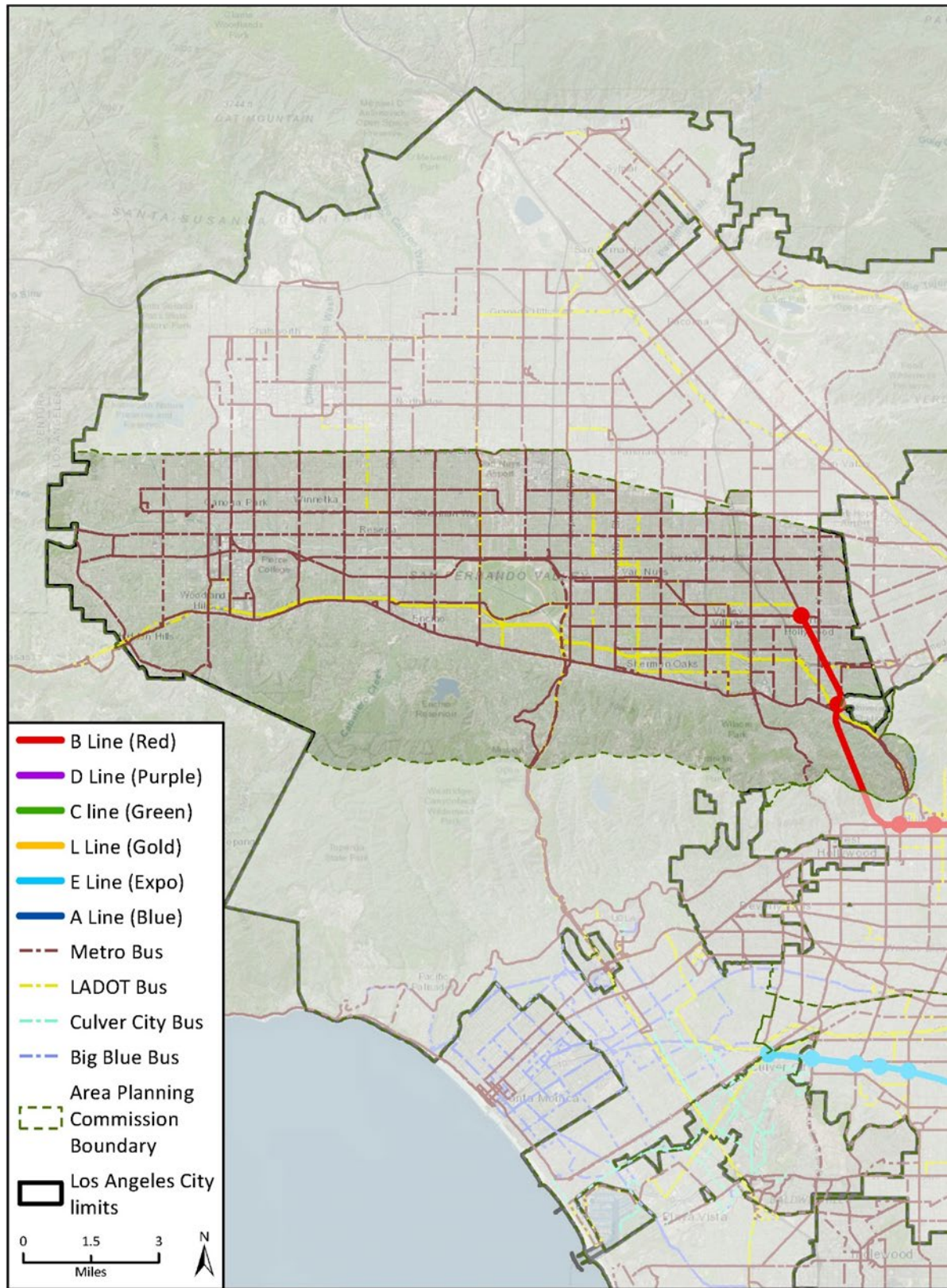
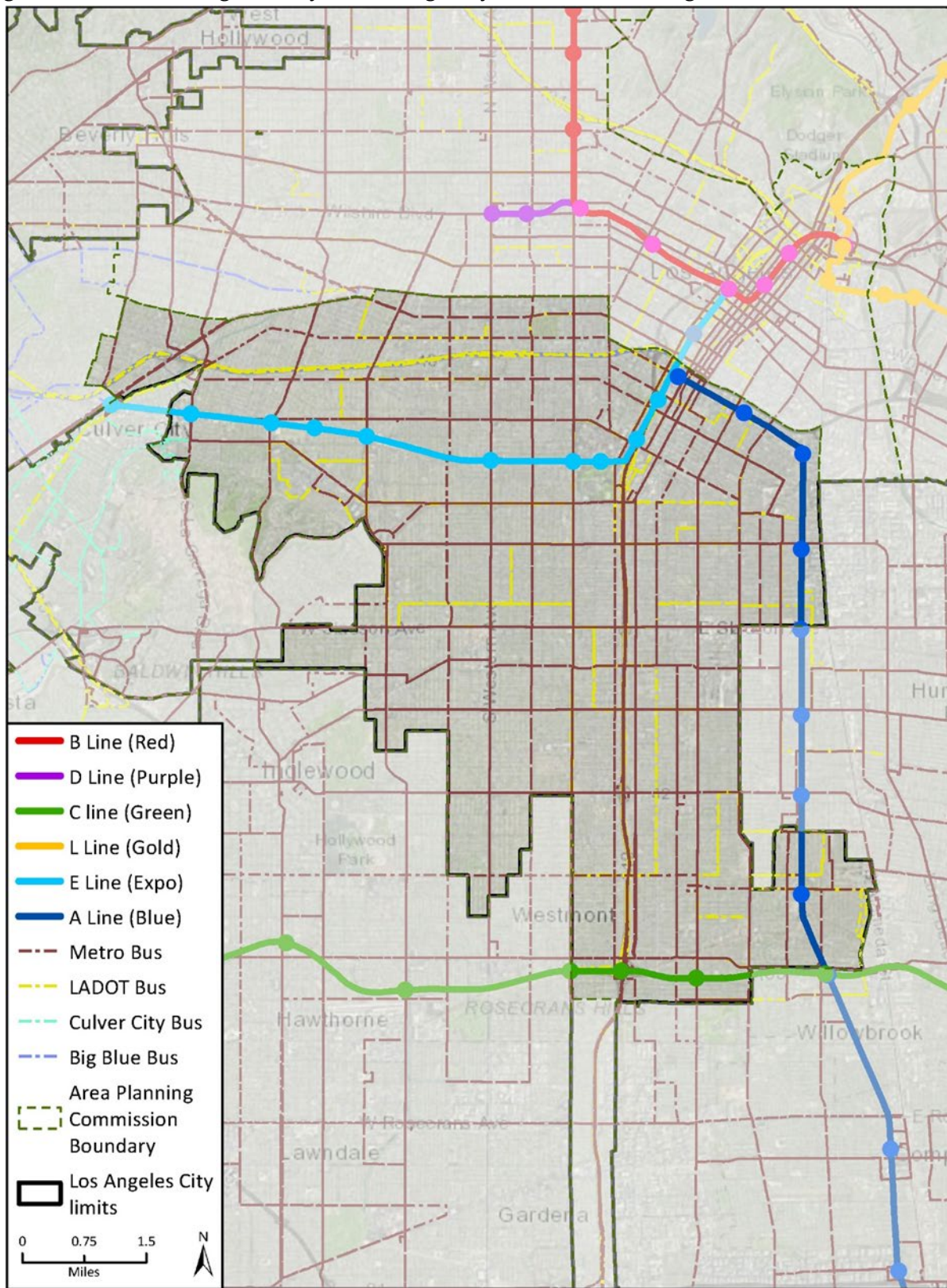
Figure 4.14.1d Existing Freeways, State Highways, and Arterials (Page 4 of 7)

Figure 4.14.1e Existing Freeways, State Highways, and Arterials (Page 5 of 7)



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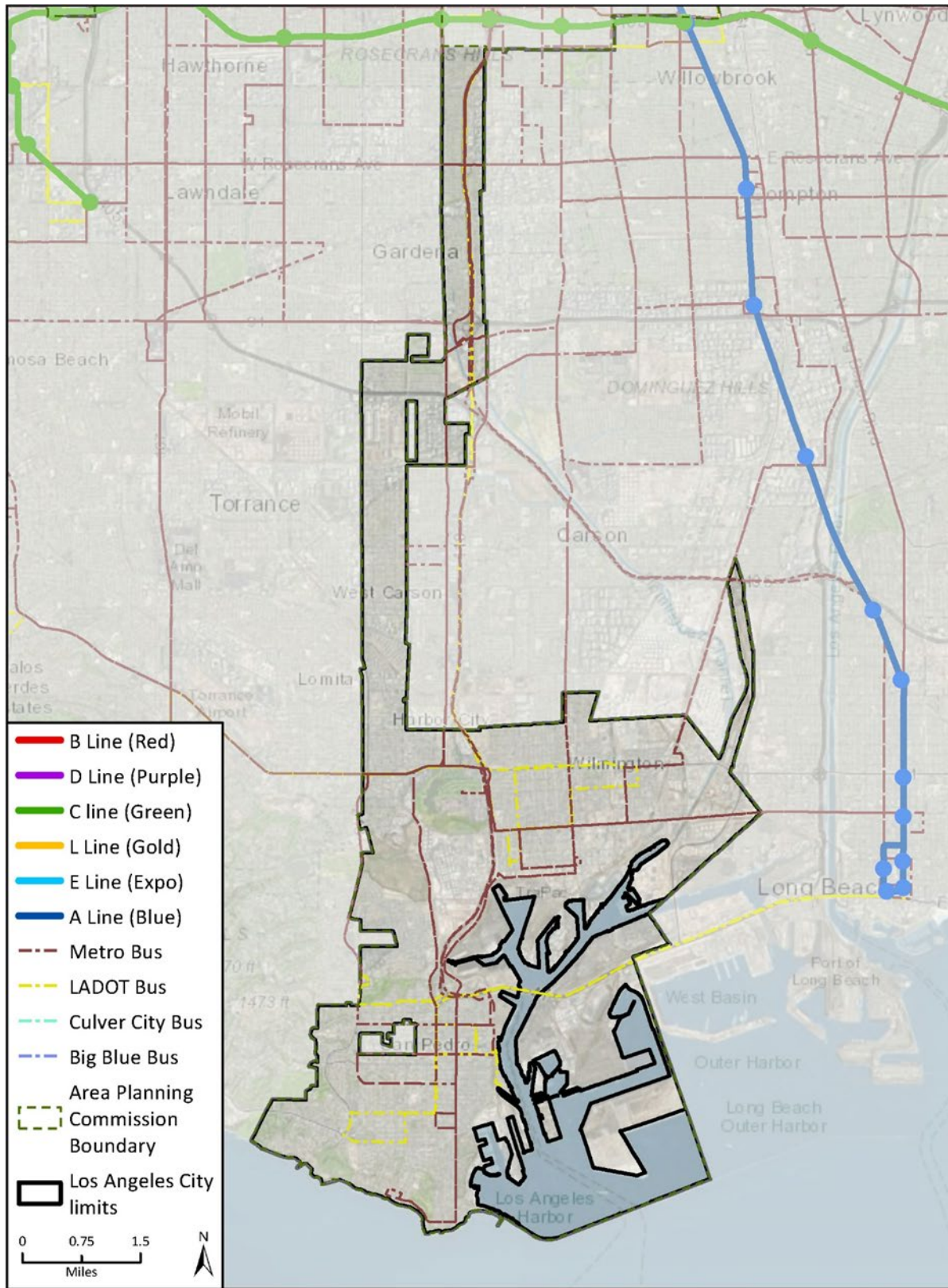
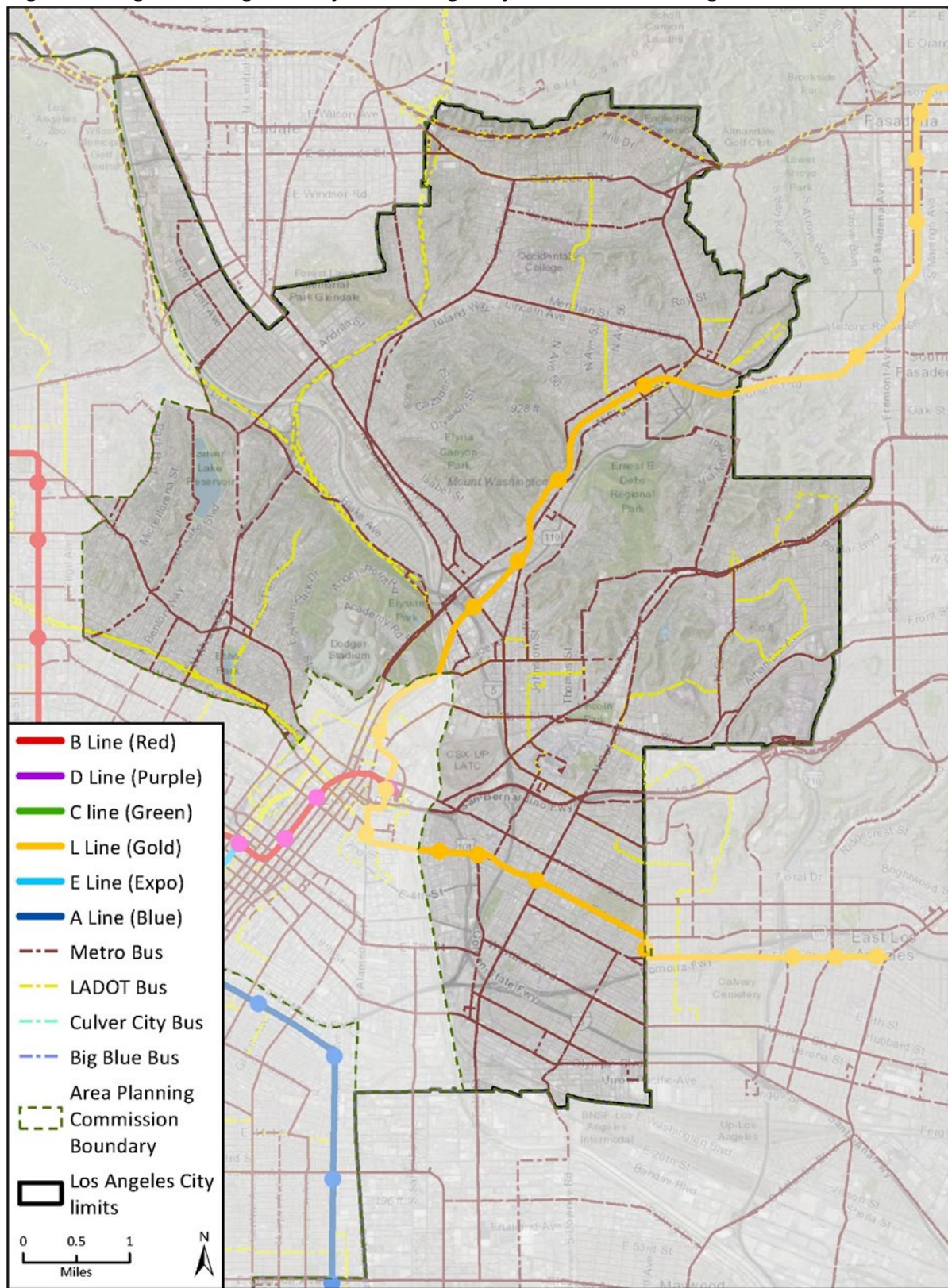
Figure 4.14.1f Existing Freeways, State Highways, and Arterials (Page 6 of 7)

Figure 4.14.1g Existing Freeways, State Highways, and Arterials (Page 7 of 7)



Local Roadway Network

The City contains over 7,500 miles of public streets that accommodate motorized vehicles, including private motorized vehicles, taxis, freight vehicles, and transit vehicles. Pedestrian and bicyclist travel are also important components of the local roadway network. A majority of roadways in the City are aligned on a grid system. Mobility Plan 2035 re-designated streets from the 1999 Transportation Element to reflect new arterial types (five compared to three) to more accurately reflect the range of street dimensions that exist today and acknowledge that there are many arterial streets that are, and should remain, narrower than their current designation would permit. Below is a brief description of the types of facilities in the City based on the City's Mobility Plan 2035 and Complete Streets Design Guide.²

- **Boulevard I (Major Highway Class I).** Class I Boulevards are generally defined as having three to four lanes in each direction along with a median turn lane. The width of a Class I Boulevard is usually 100 feet, with a typical sidewalk width of 18 feet and a target operating speed of 35 miles per hour (mph).
- **Boulevard II (Major Highway Class II).** Class II Boulevards are generally defined as having two to three lanes in each direction along with a median turn lane. The width of a Class II Boulevard is usually 80 feet, with a typical sidewalk width of 15 feet and a target operating speed of 35 mph.
- **Avenue I (Secondary Highway).** Class I Avenues typically have one to two lanes in each direction, a roadway width of 70 feet, a sidewalk width of 15 feet and a target operating speed of 35 mph. An Avenue I typically includes streets with a high amount of retail uses and local destinations.
- **Avenue II (Secondary Highway).** Avenue II streets usually have one to two lanes in each direction, with a typical roadway width of 56 feet, a typical sidewalk width of 15 feet and a target operating speed of 30 mph. Such streets are typically located in parts of the City with dense active uses, and a lively pedestrian environment.
- **Avenue III (Secondary Highway).** Avenue III streets are defined to have one to two lanes in each direction, with a roadway width of 46 feet, a sidewalk width of 15 feet, and a target operating speed of 25 mph. This classification was developed to maintain roadway width in older, more historic parts of the City.
- **Collector Street.** Collector Streets generally have one travel lane in each direction, with a roadway width of 40 feet and a sidewalk width of 13 feet. The target operating speed for Collector Streets is 25 mph. Such streets are typically intended for vehicle trips that start or end in the immediate vicinity of the street.

² Complete Streets Design Guide. Adopted August 11, 2015. Available: https://losangeles2b.files.wordpress.com/2015/05/2015_csdg_web-4-22.pdf.

- **Industrial Collector Street.** Industrial Collector Streets vary from normal collector streets in that larger curb returns are incorporated to allow for the wider turning radii of trucks.
- **Local Street Standard.** Local Street Standard roadways typically have one lane in each direction, and are designed to have a 36-foot width, 12-foot sidewalks, and a target operating speed of 20 mph. Such streets are not designed for through traffic; rather, their focus is to allow access to and from destination points. Unrestricted parking is typically available on both sides of the street.
- **Local Street Limited.** Local Street Limited roadways typically have one lane in each direction, and are designed to have a 30-foot width, 10-foot sidewalks, and a target operating speed of 15 mph.
- **Industrial Local Street.** Although similar to the normal local streets, Industrial Local Streets differ primarily in width for the purpose of providing adequate space for trucks to maneuver. The typical roadway width for an Industrial Local Street is 44 feet, with 10-foot sidewalks and a target operating speed of 20 mph.
- **Pedestrian Walkway.** Pedestrian Walkways are designed for pedestrian use but are also appropriate for slow-moving bicyclists. Pedestrian Walkways have a width of 10 to 25 feet.
- **Shared Street.** Shared Streets provide a slow-speed environment where cars, bike, pedestrians, and scooters can comfortably utilize the street. Shared Streets have a minimum width of 20 feet with 5-foot buffer zones and a target operating speed of 5 mph.
- **Access Roadway.** Access Roadways are designed to have a width of 20 feet and are limited to private streets only that access no more than four dwelling units and are a maximum of 300 feet in length.
- **One-Way Service Road – Adjoining Arterial Street.** One-Way Service Roads typically have a width of 12 to 18 feet with a 3-foot curb separation from arterial streets.
- **Bi-Directional Service Road – Adjoining Arterial Streets.** Bi-Directional Service Roads typically have a width of 20 to 28 feet with a 3-foot curb separation from arterial streets.
- **Hillside Collector Street.** Hillside Collector Streets vary from normal collector streets in that sidewalks have a width of 5 feet and the target operating speed is 15mph. On-street parking is provided on both sides of the street.
- **Hillside Local Street.** Hillside Local Streets vary from normal local streets in that sidewalks have a width of 4 feet and the target operating speed is 15 mph. On-street parking is provided on both sides of the street.
- **Hillside Street Standard.** Hillside Street Standard roadways typically have one lane in each direction and are designed to have a 28-foot width, 4-foot sidewalks, and a target operating speed of 10 mph. On-street parking is provided on one side of the street.

- **Hillside Street Limited.** Hillside Street Limited roadways typically have one lane in each direction and are designed to have a 20-foot width, 3-foot sidewalks, and a target operating speed of 10 mph. On-street parking is provided on one side of the street.
- **Modified Streets.** Many streets are identified under a specific roadway classification, but with a modification generally due to available width on smaller, historic streets. In these cases, typical number of lanes and traffic volumes are similar to the non-modified versions, but lane widths or available parking may be diminished.
- **Signalized Intersections and Traffic Control Devices.** The City of Los Angeles' Automated Traffic Surveillance and Control (ATSAC) system is a computer-based traffic signal control system that monitors traffic conditions and system performance to allow ATSAC operations to manage signal timing to improve traffic flow conditions. This system allows monitoring and control of the signal from a central Traffic Operations Center at City Hall. The importance of linking to the ATSAC system is the ability to coordinate the signals in relationship with other signals along a travel corridor. Signal coordination minimizes delay due to stops and enhances vehicle flow. Studies by LADOT and independent third parties have shown that the ATSAC system reduces congestion and increases average travel speeds³. The Adaptive Traffic Control System (ATCS) is an enhancement to ATSAC and provides fully traffic-adaptive signal control based on real-time traffic conditions. In addition, LADOT staff can manually adjust traffic signals remotely from the department's command center to respond to accidents, weather, special events, and other emergencies. All signalized intersections in the HE Update project area are currently operating under the City's ATSAC system and ATCS control.

Additionally, Mobility Plan 2035 identifies a layered network of corridors prioritizing bicycle, pedestrian, transit, and vehicle infrastructure improvements. These networks are defined as follows:

- The Transit-Enhanced Network (TEN) is the network of arterial streets prioritized to improve existing and future bus service for transit riders.
- The Neighborhood-Enhanced Network (NEN) is a selection of streets that provide comfortable and safe routes for localized travel of slower-moving modes such as walking, bicycling, or other slow speed motorized means of travel.
- The Bicycle-Enhanced Network (BEN) is a network of streets to receive treatments that prioritize bicyclists. Tier 1 Protected Bicycle Lanes are bicycle facilities that are separated from vehicular traffic. Tier 2 and Tier 3 Bicycle Lanes are facilities on roadways with striped separation. Tier 2 Bicycle Lanes are those more likely to be built by 2035.

³ Los Angeles Signal Synchronization Fact Sheet. LADOT. February 14, 2016. Accessed July 27, 2017: http://ladot.lacity.org/sites/g/files/wph266/f/LADOT%20ATSAC%20%26%20Signals%20_%20Fact%20Sheet%202-14-2016.pdf

- The Vehicle-Enhanced Network (VEN) identifies streets that prioritize vehicular movement and offer safe, consistent travel speeds and reliable travel times.
- The Pedestrian-Enhanced Districts (PEDs) identify where pedestrian improvements on arterial streets could be prioritized to provide better walking connections to and from the major destinations within communities.
- The Goods Movement Network is built upon Metro's Countywide Strategic Truck Arterial Network and identifies roadways where goods movement improvements can alleviate congestions, improve mobility, remove traffic safety hazards, and promote economic health.

Existing arterial streets (Boulevards and Avenues) are illustrated in Figure 4.14-1 along with freeways and state highways.

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 Los Angeles Department of Transportation (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.⁴ Within the City of Los Angeles, fire prevention and suppression and emergency medical services are provided by the LAFD. Public protection service and law enforcement are provided by LAPD. New development projects in the City may increase the demand for fire protection and emergency medical services, and the LAFD evaluates new project impacts on a project-by-project basis. Consideration is given to project size and components, required fire-flow, response time and distance for engine and truck companies, fire hydrant sizing and placement standards, access, and potential to use or store hazardous materials.⁵ The adequacy of emergency service may be influenced by factors such as staffing levels, emergency response times, and technology improvements, management strategies, and mutual aid agreements. Every year, LAFD assesses its resources and reallocates them based on demand and need citywide. The provision of new fire stations varies as a function of not only the geographic distribution of physical stations but also due to the availability of fire trucks, ambulances, and other equipment as well as access to reciprocal agreements with neighboring jurisdictions. The City

⁴ Training Bulletin: Traffic Signal Preemption System for Emergency Vehicles, Los Angeles Fire Department, Bulletin No. 133, October, 2008.

⁵ *Thresholds Guide*, K.2.2

requires that development plans be submitted to the City for review and approval to ensure that new development has adequate access, including driveway access and turning radius in compliance with existing City regulations.⁶

Public Transit

The primary origin/destination for transit in downtown Los Angeles and the city at large is Los Angeles Union Station. Located in the Central City North Community Plan, Union Station was built in 1939 to serve as a terminal for local railroads. Today, it serves as a major transportation hub for the region, with Metro, Metrolink, and Amtrak train service, as well as bus service from multiple operators.

Transit service is provided by multiple transit operators, including Metro Rail, Rapid buses, Express buses, Local buses, LADOT Commuter Express buses, Downtown Area Short Hop (DASH) buses, and other local operators, with networks connecting communities within and outside the City of Los Angeles. Figure 4.14-2a through Figure 4.14-2g illustrate existing transit routes for Metro Rail, Metro Bus, LADOT, Culver City Bus, and Big Blue Bus.

Below are brief descriptions of the transit operators that provide service within the City:

Metro

Metro is the primary transit operator in Los Angeles County, providing bus, light rail, and subway services as described below.

- **Rail & Bus Rapid Transit:** There are two Metro heavy rail lines (Red and Purple), four Metro light rail lines (Blue, Green, Gold, Expo) and two bus rapid transit (BRT) lines (Orange and Silver) operating in exclusive rights-of-way. Headways for Metro rail and bus rapid transit lines as typically as frequent as 15 minutes or less. Bicycles are allowed in designated areas on Metro trains at no extra charge.
- **Rapid, Express & Local Bus Lines:** Metro also operates approximately 180 bus routes in mixed traffic, with services varying considerably in speed, frequency and capacity. Headways for Metro Rapid buses are typically 10 minutes during peak hours, and 20 minutes during off-peak times. Metro Express buses operate during peak hours only. All buses are equipped with two bicycle racks at the front of the bus, and bicyclists may 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.

⁶ LAMC Section 12.21.A.5 “Design of Parking Facilities”.

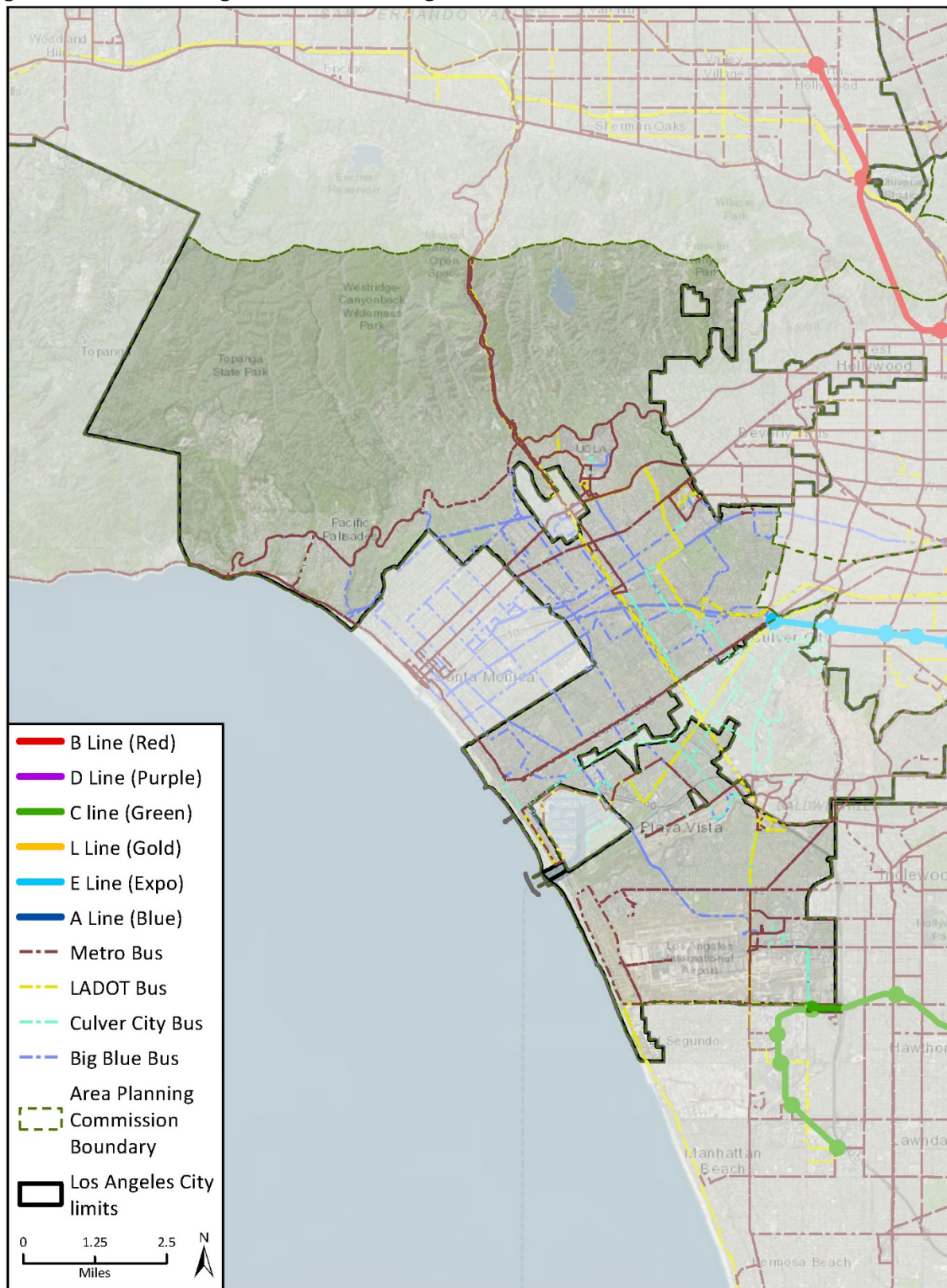
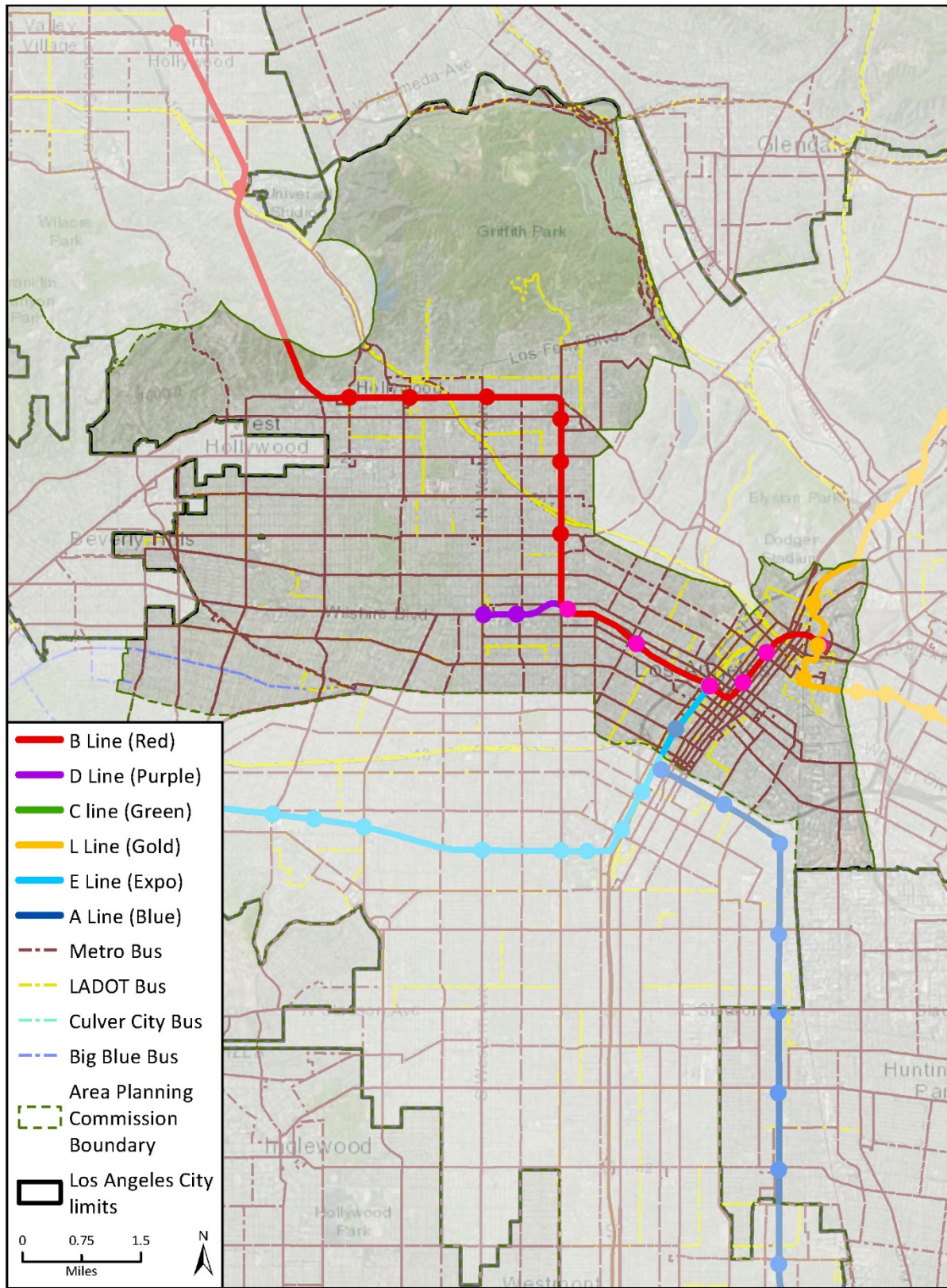
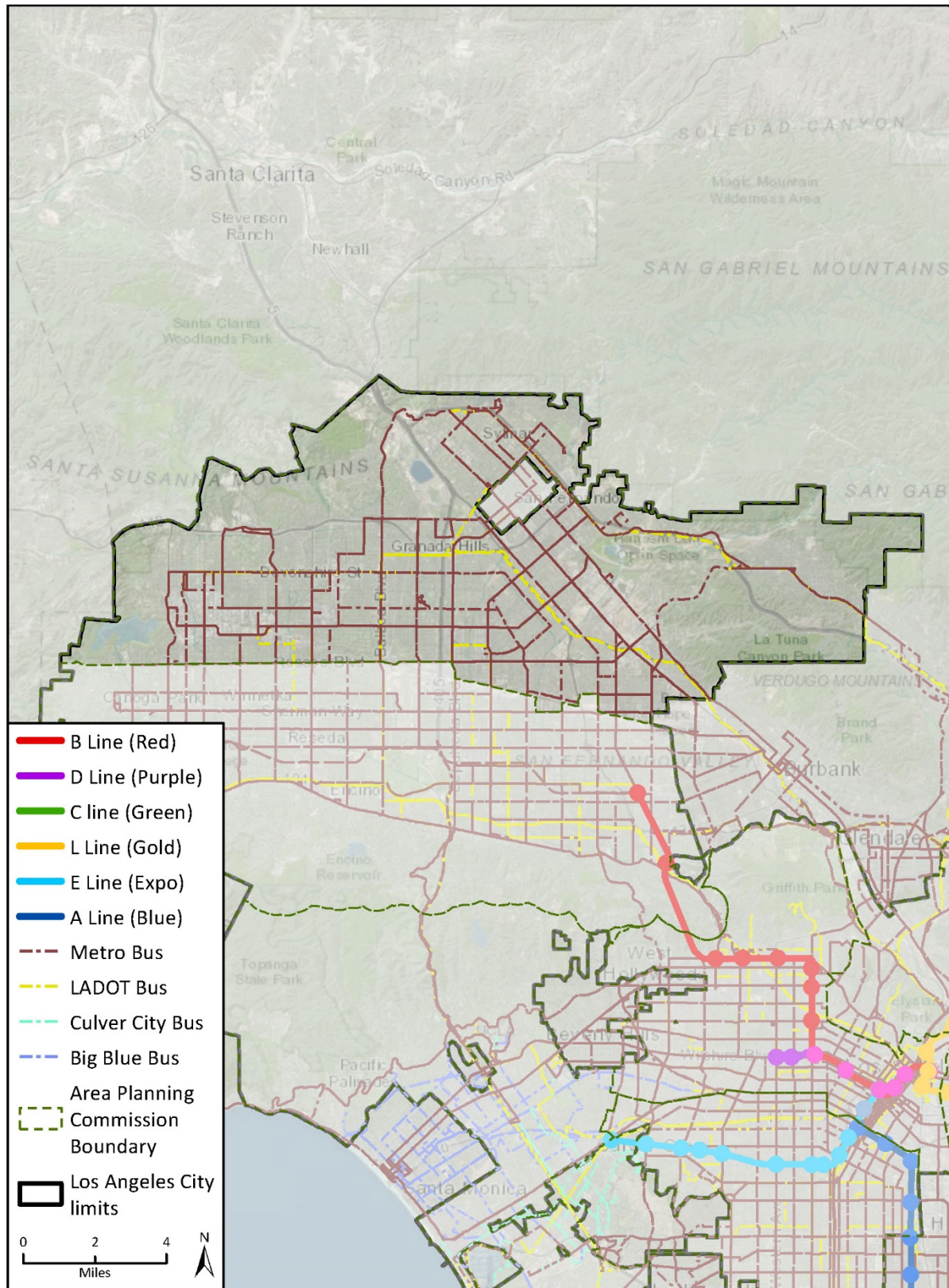
Figure 4.14-2a Existing Transit Routes (Page 1 of 7)

Figure 4.14-2b Existing Transit Routes (Page 2 of 7)



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Existing Transit - Central Area

Figure 4.14-2c Existing Transit Routes (Page 3 of 7)

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Existing Transit - North Valley APC

Figure 4.14-2d Existing Transit Routes (Page 4 of 7)

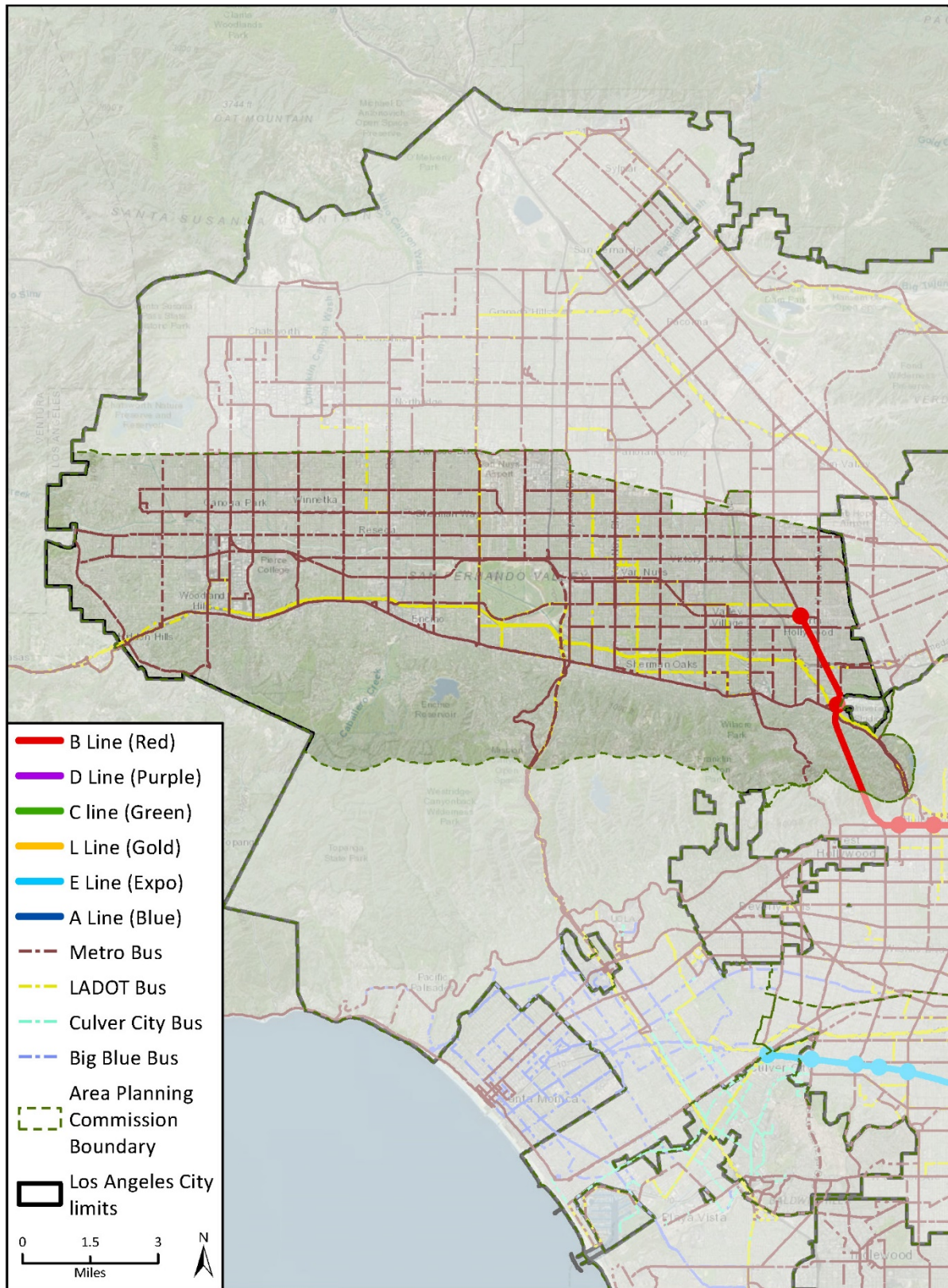
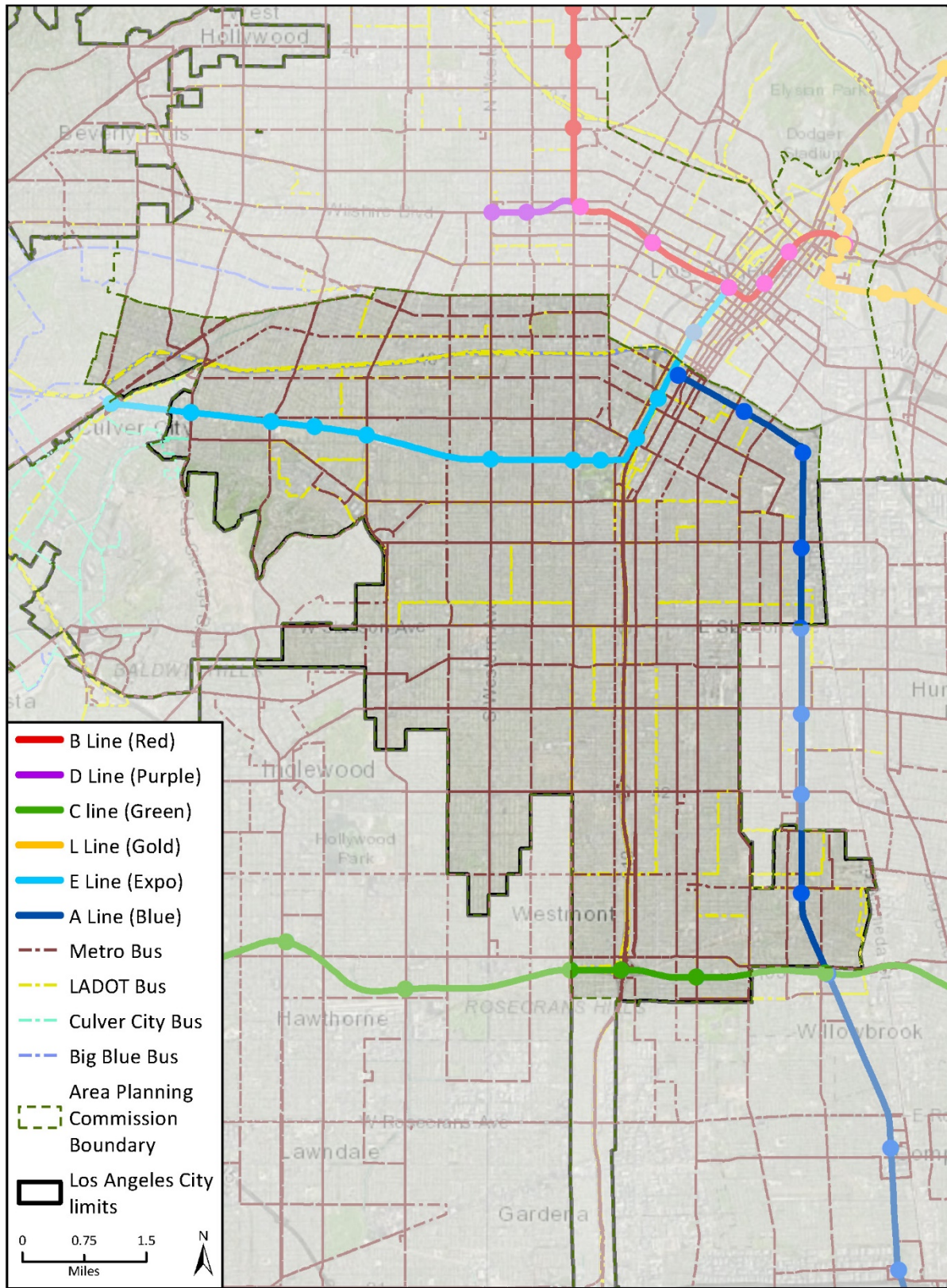


Figure 4.14-2e Existing Transit Routes (Page 5 of 7)



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Existing Transit - South Los Angeles Area

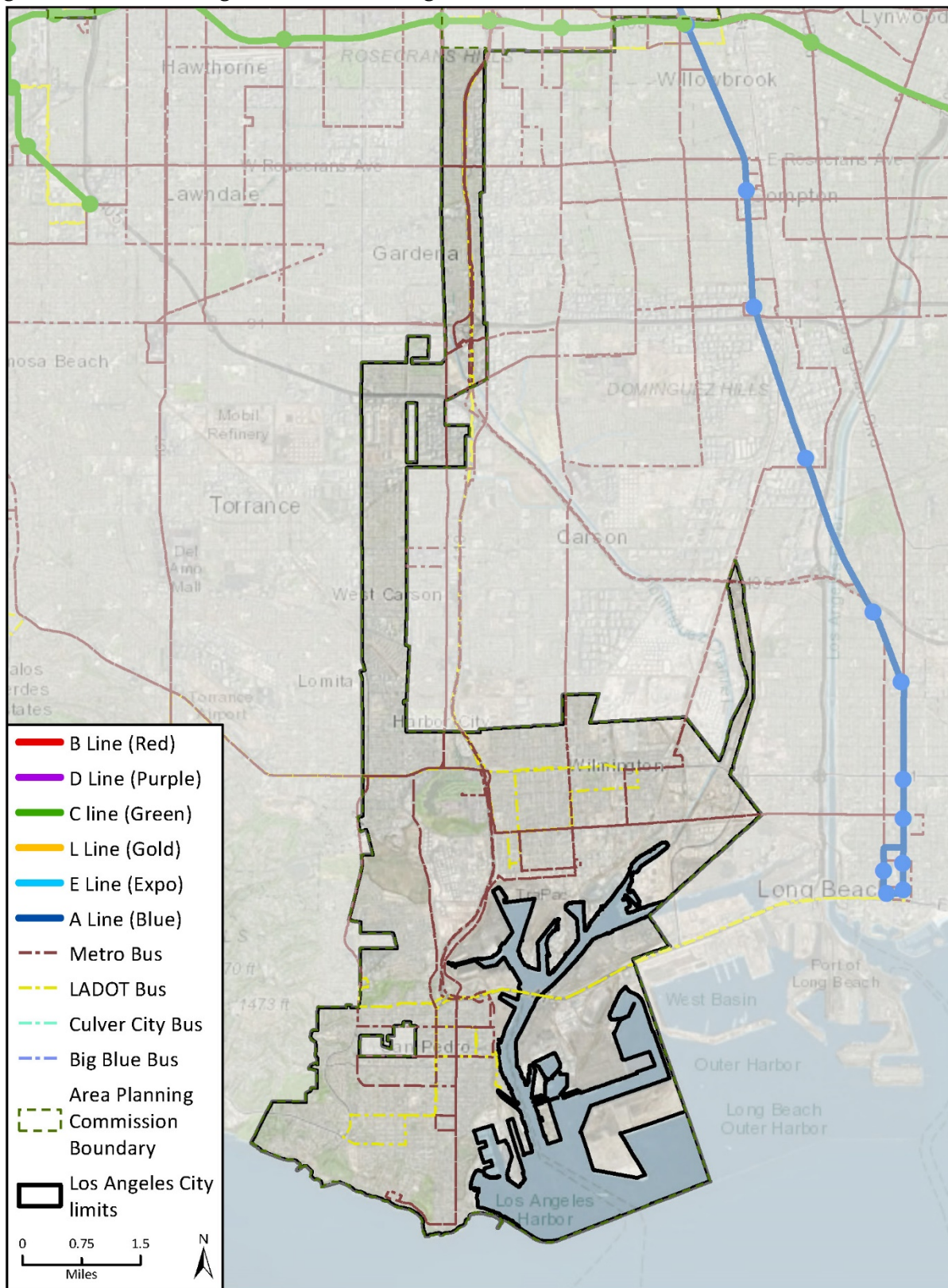
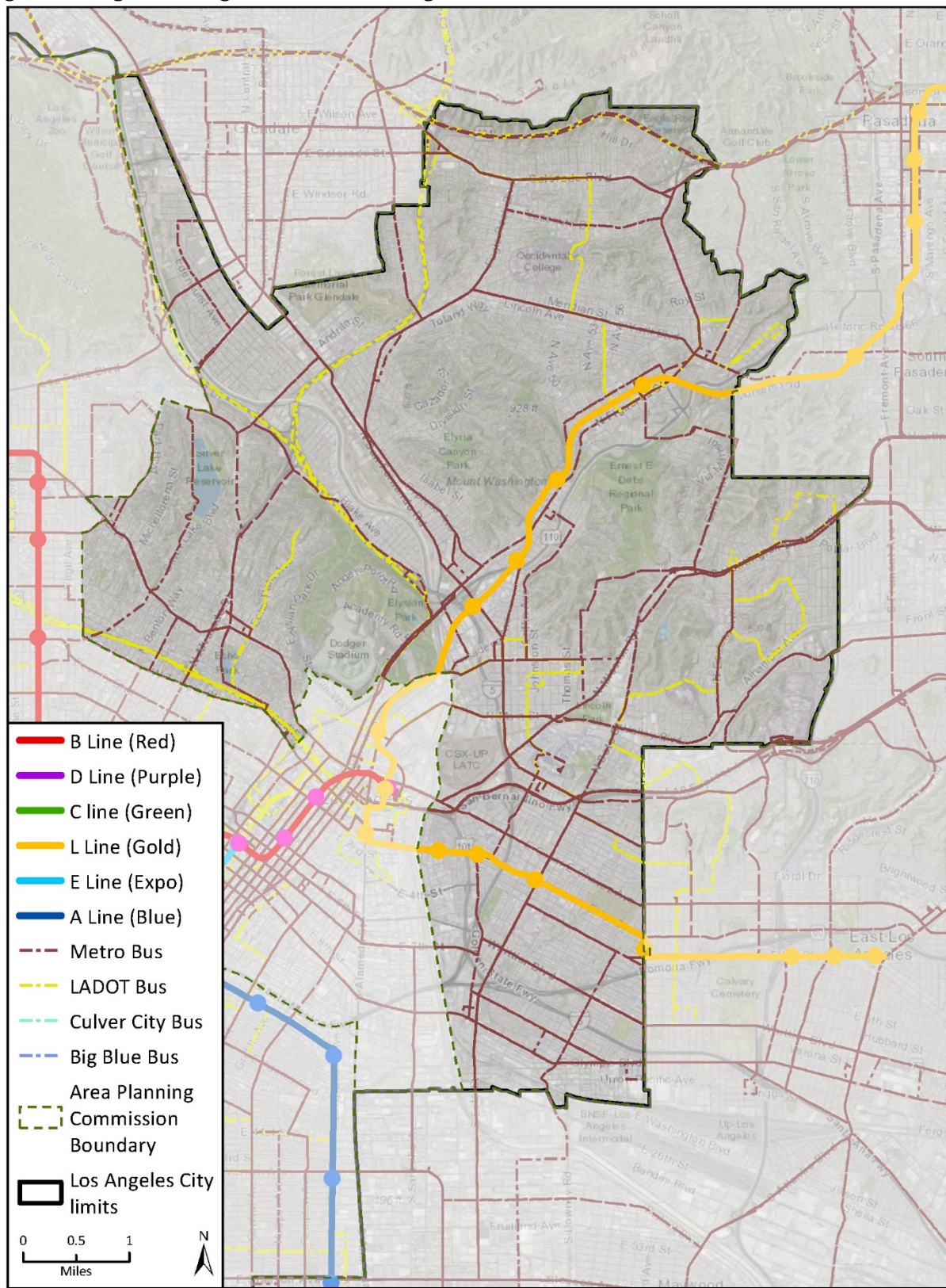
Figure 4.14-2f Existing Transit Routes (Page 6 of 7)

Figure 4.14-2g Existing Transit Routes (Page 7 of 7)



LADOT

LADOT provides local Downtown Area Short Hop (DASH) buses and Commuter Express bus services in the City of Los Angeles. DASH operates 32 community circulator routes covering Downtown Los Angeles and many outlying communities within the City. DASH buses provide local access in addition to first/last-mile connections to and from Metro Rail stations. Headways for DASH buses vary between 5-20 minutes depending on the selected route. 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. Most Commuter Express routes operate during the peak hours only in the peak direction. All LADOT buses are equipped with three bicycle racks at the front of the bus, and bicyclists may 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.

Metrolink

Metrolink operates on seven routes across a six-counties, including Los Angeles, Orange, Riverside, San Bernardino, Ventura, and a portion of northern San Diego County. Each Metrolink train accommodates three bicycles on the lower level at no extra charge. To accommodate more bicycles on select trains, “bike cars” (identified with yellow decals on the side of the train) have been added to hold up to nine bikes on the lower level. All Metrolink lines operate during the peak hours only in the peak direction. The following Metrolink services operate within and through the City:

- Antelope Valley Line
- Inland Empire – Orange County Line
- Orange County Line
- Riverside Line
- San Bernardino Line
- Ventura County Line
- 91/Perris Valley Line

Amtrak – Pacific Surfliner

Amtrak is a nationwide rail network, serving more than 500 destinations in 46 states, the District of Columbia and three Canadian provinces. The Pacific Surfliner, which operates within and through the Project Area, connects San Luis Obispo and San Diego through Los Angeles and Santa Barbara. This line offers 11 daily round-trip services between San Diego and Los Angeles, and five between Santa Barbara

and San Diego. Each Amtrak train can accommodate six bicycles per train and must be stored in designated racks. Passengers are recommended to make reservations for bicycle racks at no extra cost.

LAX FlyAway – Union Station

The LAX FlyAway buses offer daily, regularly scheduled roundtrips between each terminal at LAX and six locations (Hollywood, Long Beach, Orange Line, Union Station, Van Nuys, and Westwood). FlyAway buses provide services every 30 – 60 minutes. Bicycle racks are not provided on these buses. In downtown Los Angeles, Flyaway buses depart from Union Station at the Patsaouras Transit Plaza on the east side of the facility.

Other Transit Operators

There are several other transit operators with routes throughout the City: Antelope Valley Transit Authority, Culver City Bus, Foothill Transit, Gardena GTrans, Greyhound Buses, Montebello Bus Lines, Orange County Transit Authority Express, Santa Clarita Transit Commuter Express, Santa Monica Big Blue Bus, and Torrance Transit.

Bicycle Network and Pedestrian Facilities

The City's existing bicycle network consists of approximately 650 lane miles of on- and off-street facilities including approximately 65 miles of Class I bikeways (bicycle paths), 15 miles of Class IV separated bikeways (bicycle tracks), 450 miles of Class II bikeways (bicycle lanes), more than 125 miles of Class III bikeways (bicycle routes and bicycle friendly streets). Bicycle facilities are defined as off-street bicycle paths (Class I), on-street signed and striped bicycle lanes (Class II), on-street signed bicycle routes (Class III), and protected bicycle lanes or cycle tracks (Class IV). Existing bicycle facilities are presented in Figure 4.14-3a through Figure 4.14-3g.

The design features of the various types of bicycle facilities are summarized below.

- **Bicycle Path:** A paved pathway separated from motorized vehicular traffic by an open space or barrier and either within the highway rights-of-way or within an independent alignment. Bicycle paths may be used by bicyclists, skaters, wheelchairs users, joggers, and other non-motorized users. Caltrans refers to this facility as Class I Bikeway, which “provides a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flow of motorists minimized.”
- **Buffered Bike Lanes:** Buffered bicycle lanes provide on-street right-of-way in the form of a painted buffer that directs motorists to travel away from the bike lane and provides room for bicyclists to pass

another bicyclist without entering the adjacent motor vehicle travel lane. A buffered bicycle lane is considered a Class II bikeway.

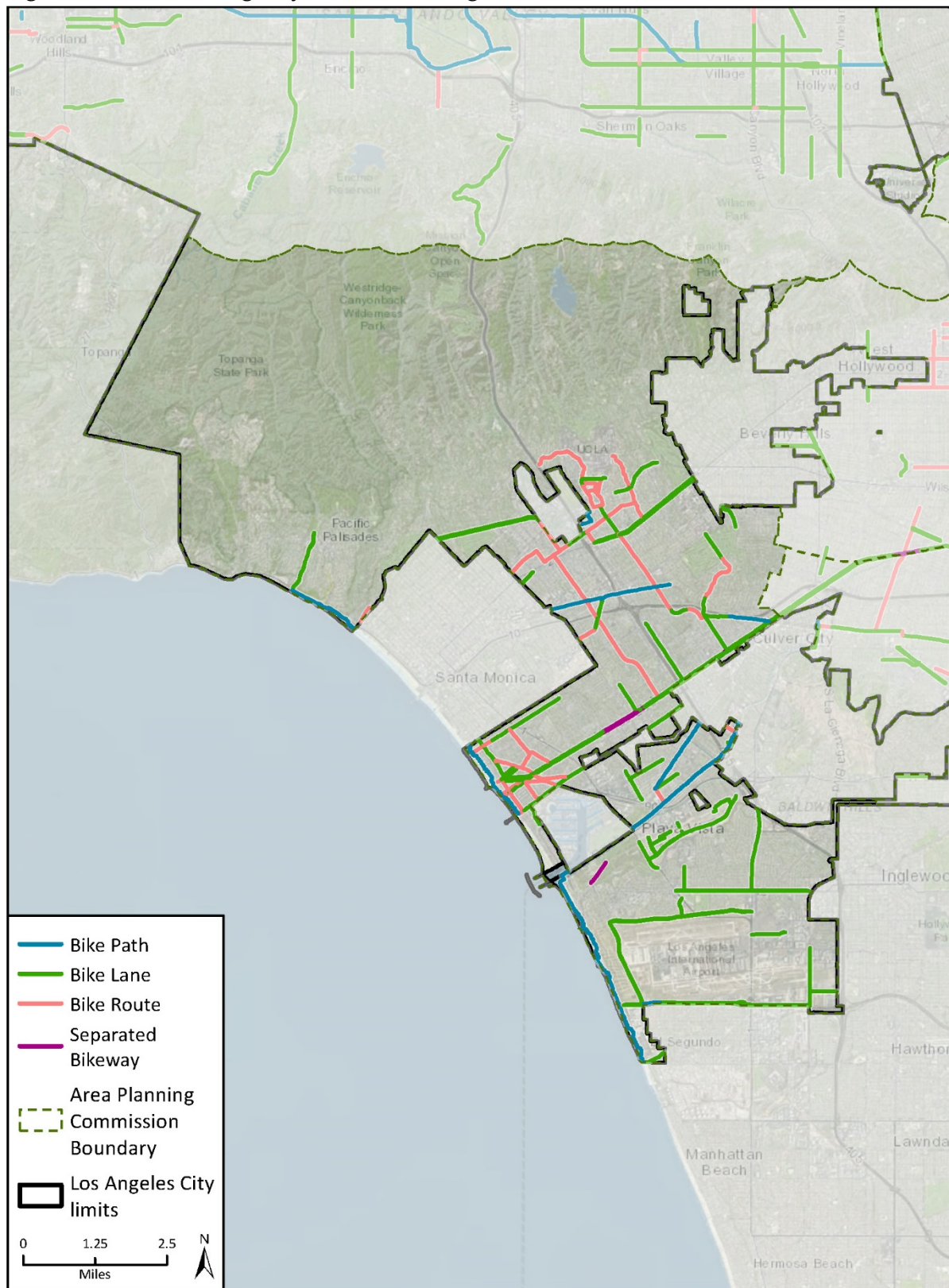
- **Bicycle Lane:** A striped lane for 1-way bicycle travel on a street or highway. Caltrans refers to this facility as a Class II bikeway.
- **Bicycle Route:** is a shared roadway specifically identified for use by bicyclists, providing a superior route based on traffic volumes and speeds, street width, directness, and/or cross-street priority, denoted by signs only. Caltrans refers to this facility as a Class III Bikeway.
- **Protected Bicycle Lane (Cycle Track):** A bicycle lane that provides further protection from other travel lanes with a physical roadway intervention. This is considered a Class IV Bikeway.

Pursuant to the California Vehicle Code, bicycles are allowed on any street within the local street system. Pursuant to Los Angeles City Code, bicycles are also allowed on the sidewalk (LAMC 56.15). Bicyclists can bring their bikes on board transit in designated areas on Metro trains and on most Metro and LADOT buses on bicycle racks at the front of the bus at no extra cost. Metrolink and Amtrak also allow bicycles on board.

There are approximately 40,000 intersections in the City, of which 4,300 are signalized and approximately 22,000 contain marked crosswalks. Conditions vary widely in terms of sidewalk condition, pavement marking visibility, and obstructions in the sidewalk realm. An estimated 42% of the City's 10,750 miles of sidewalks are in disrepair.⁷ In April 2015, the City of Los Angeles agreed to spend \$1.3 billion over the next 30 years to fix sidewalks throughout the City, and produce two reports per year to document its progress in repairing substandard sidewalks.

- Pedestrian travel in the City varies based on the circulation network in any given area. Areas that have pedestrian-oriented uses fronting the sidewalk offer a pedestrian-friendly atmosphere whereas other areas characterized by long blocks fronting surface parking lots and industrial land uses offer little pedestrian amenities. In general, sidewalks range from 10 to 12 feet wide. 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. 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.

⁷ "A citizens sidewalk brigade for L.A." Los Angeles Times, September 11, 2012.

Figure 4.14-3a Existing Bicycle Facilities (Page 1 of 7)

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Existing Bikeways - West Los Angeles APC

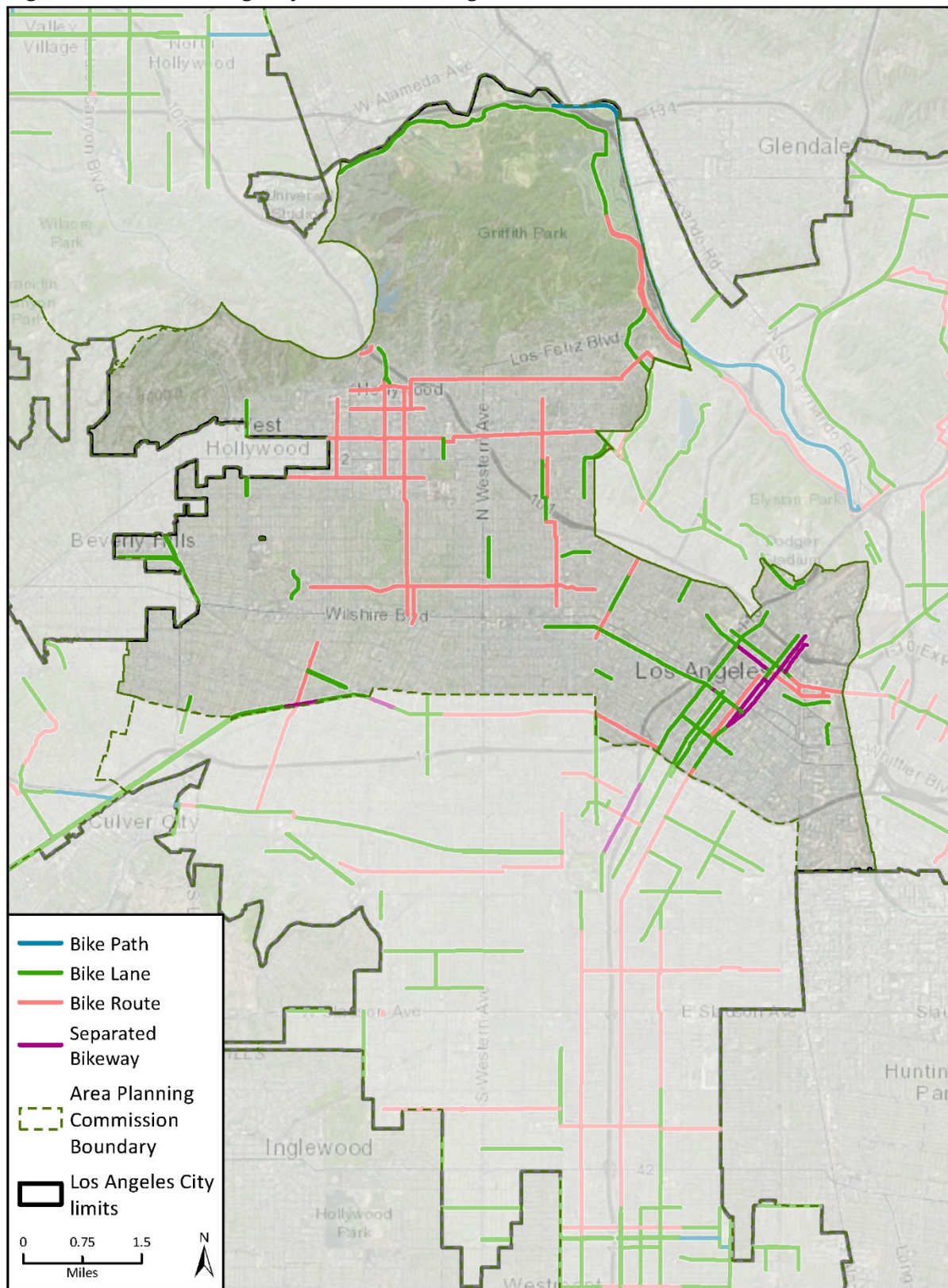
Figure 4.14-3b Existing Bicycle Facilities (Page 2 of 7)

Figure 4.14-3c Existing Bicycle Facilities (Page 3 of 7)

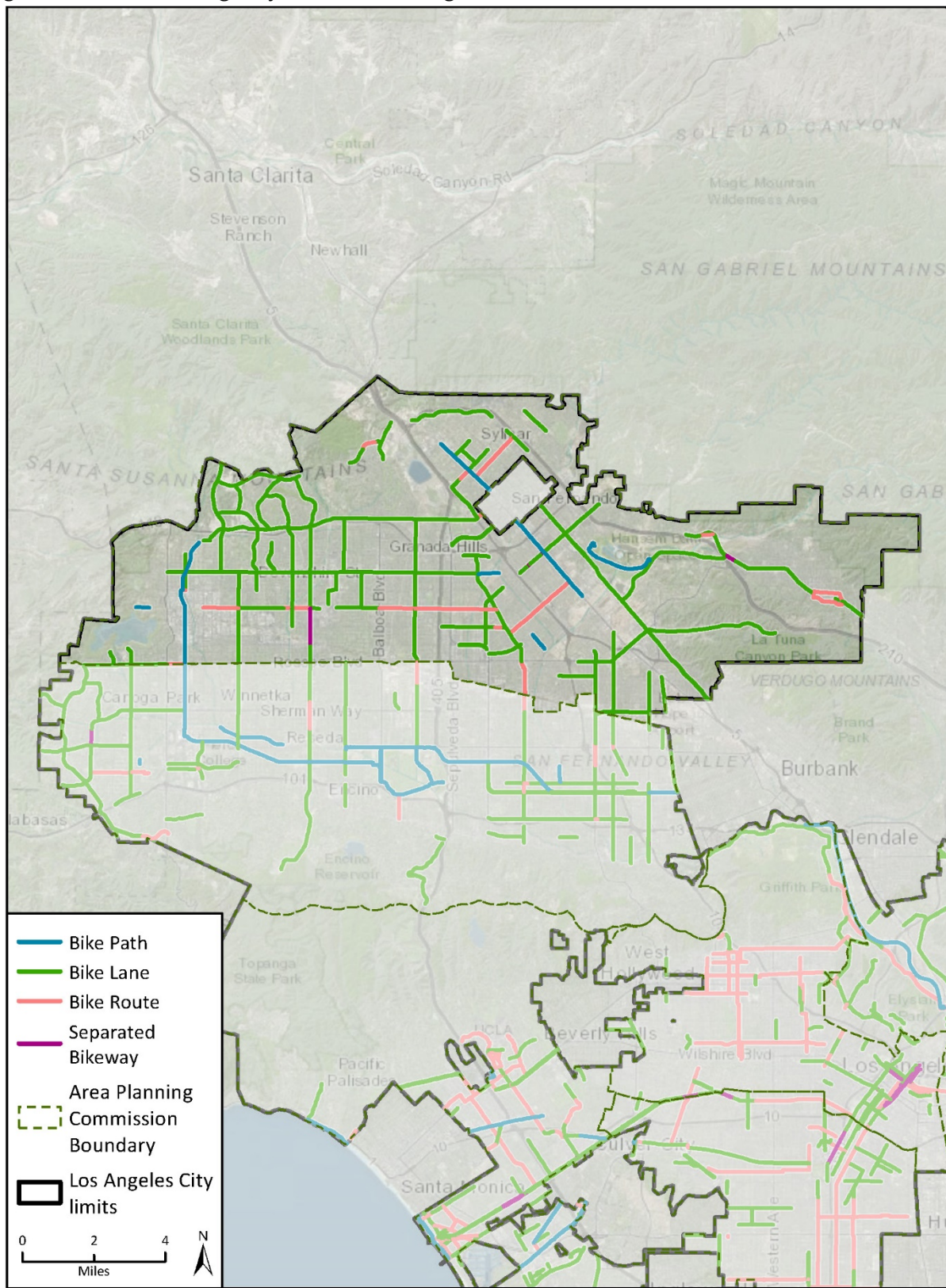


Figure 4.14-3d Existing Bicycle Facilities (Page 4 of 7)

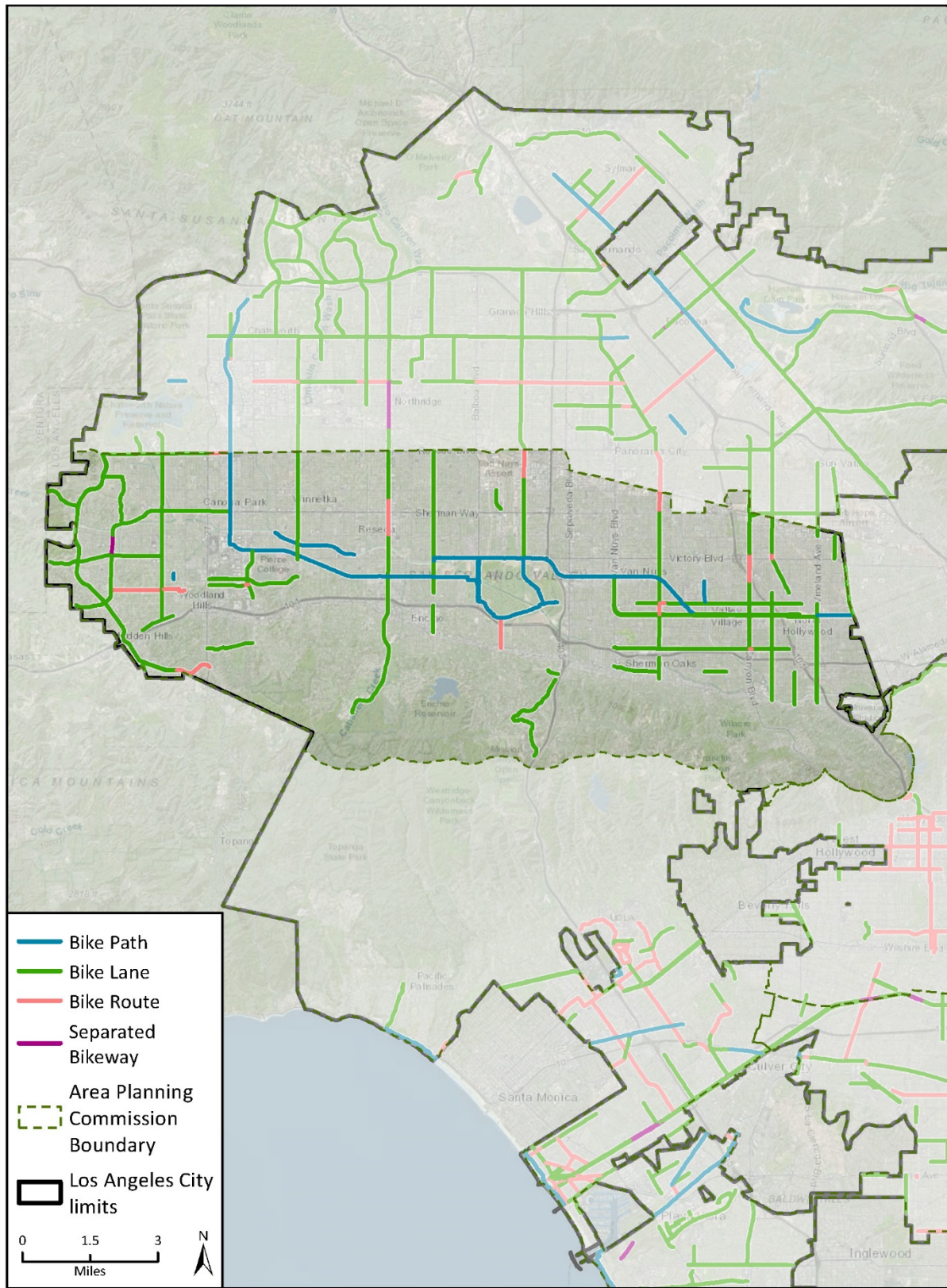
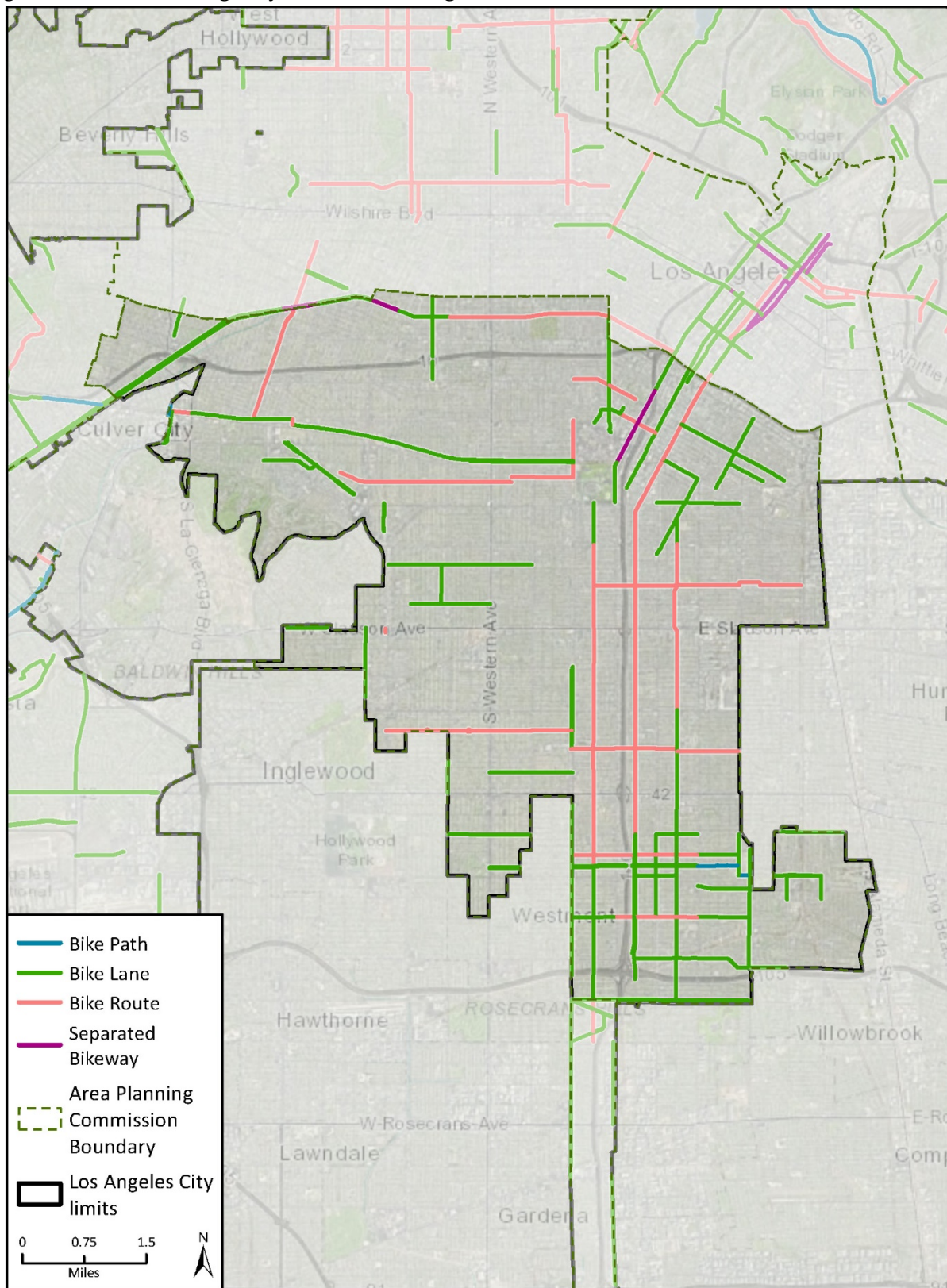


Figure 4.14-3e Existing Bicycle Facilities (Page 5 of 7)



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Existing bikeways - South Los Angeles Area

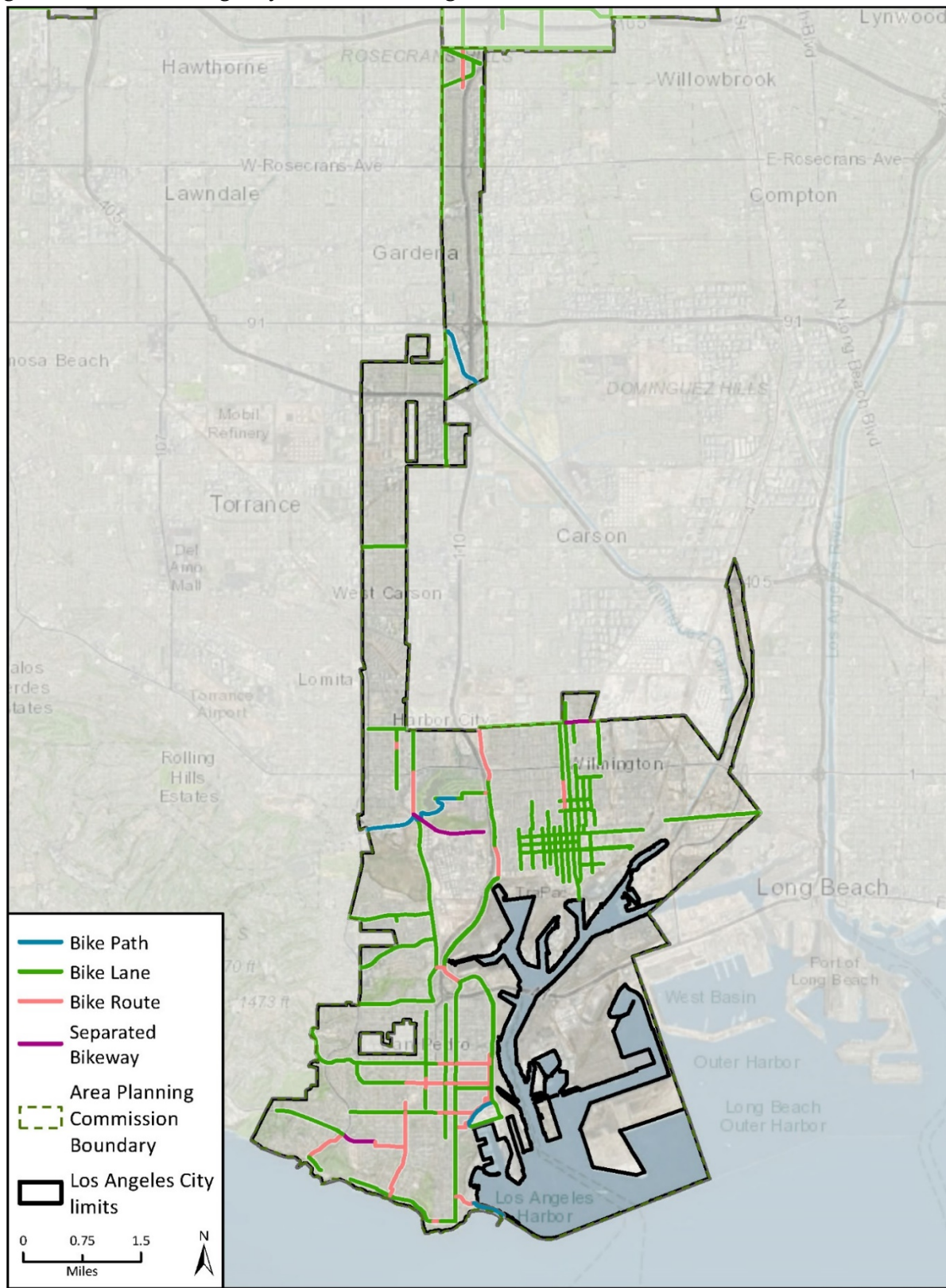
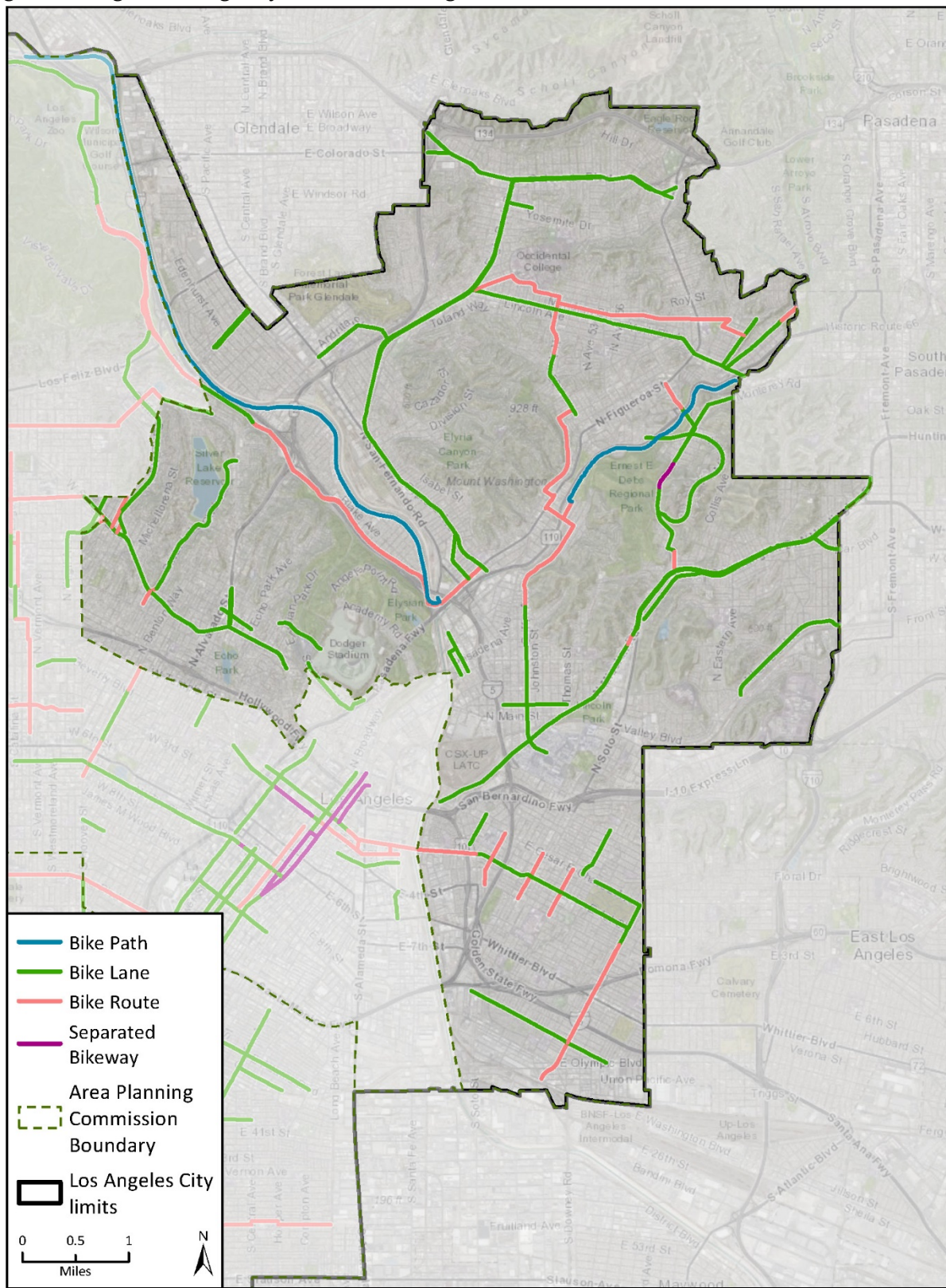
Figure 4.14-3f Existing Bicycle Facilities (Page 6 of 7)

Figure 4.14-3g Existing Bicycle Facilities (Page 7 of 7)



4.14.3 EXISTING CONDITIONS

This section presents existing traffic conditions in terms of vehicle trips and VMT, as required by CEQA, as well as mode split. VMT is a measure of how many miles are being driven within a defined area. Given the proposed Project's focus on housing, only household trips, including trips to work and other destinations, were evaluated. Trips that neither begin nor end at a residential location were excluded from analysis. The household VMT estimated by the City's Travel Demand Forecasting (TDF) model was categorized according to the origin and destination of each trip. Internal-to-internal (II) trips remain within the City of Los Angeles. Internal-to-external (IX) trips originate within the Project Area and terminate at an outside destination. External-to-internal (XI) trips originate outside the Project Area and terminate within it. The VMT calculation accounts for all household internal (II) trips and trips that begin or end (IX or XI) within the City of Los Angeles, as these trips are generated by or attracted to land uses within the Housing Element Update plan area.

VMT is reported as Daily Household VMT per Service Population. The Daily Household VMT per Capita is the home-based production VMT divided by the number of people living within the city or Area Planning Commission (APC). The reported VMT results include only personal vehicles and not truck VMT.

An alternative method for measuring VMT is known as the "boundary method", which accounts for all VMT strictly within the border of a defined area. This method would include VMT for trips passing through, but not originating in or destined for, the Project Area. Although a valid method for measuring VMT, it less effectively measures the regional travel effects of city land uses, and includes travel that passes through the city, which is unrelated to city land uses. This method was not used to calculate VMT for the purposes of this report.

Mode Split

The City of Los Angeles' Travel Demand Forecasting Model estimates the mode split of existing (2021) peak period trips. It is estimated that 79% of peak period person trips are made by automobile, 5% by transit, 14% by walking, and 2% by bicycle. Table 4.14-1 provides this information below.

Table 4.14-1 City of Los Angeles Peak Period Mode Split

	Mode Split (%)				
	Drive Alone	Share Ride	All Auto Trips	Transit/Walk/Bike	Total
Los Angeles Citywide	34%	45%	79%	21%	100%

Vehicle Trips

On a typical weekday, travelers take over 5 million home-based trips by automobile that either start from, end at, or both start from and end at a residential location within the City of Los Angeles. 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 4.14-2 provides this information below.

Table 4.14-2 City of Los Angeles Home-Based Vehicle Trips

	Capita	Home-based Vehicle Trips (VT)	
		VT	VT/Capita
Los Angeles Citywide	4,072,357	5,453,203	1.3

Vehicle Miles Traveled

Motorists drive nearly 36 million vehicle miles during home-based trips 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. Table 4-14-3 below provides this information.

Table 4-14-3 City of Los Angeles Home-Based Vehicle Miles Traveled

	Capita	Home-based VMT	
		VMT	VMT/Capita
Los Angeles Citywide	4,072,357	35,971,891	8.8

Transit Ridership

Weekday ridership data reported by Metro, LADOT, Big Blue Bus, and Culver City Bus in 2016 indicate almost 2.18 million daily boardings at transit stops within the City of Los Angeles. Table 4.14-4 presents this information below.

Table 4.14-4 City of Los Angeles Transit Boardings

	Daily Boardings - Weekday
Los Angeles Citywide	1,079,869
Source: Big Blue Bus, Culver City Bus, LADOT, Metro, 2016.	

4.14.4 REGULATORY FRAMEWORK

There are several plans, regulations, and programs that include policies, requirements, and guidelines regarding transportation at the federal, state, regional, and City of Los Angeles levels. As described below, these plans, guidelines, and laws include:

- Americans with Disabilities Act of 1990
- Complete Streets Act
- Assembly Bill 32 and Senate Bill 375
- California Vehicle Code
- Senate Bill 743
- CEQA Guidelines Section 15064.3
- Congestion Management Program
- Southern California Association of Governments 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy
- City of Los Angeles Mobility Plan 2035
- Los Angeles Municipal Code
- LADOT Transportation Assessment Guidelines
- LADOT Manual of Policies and Procedures Section 321
- Vision Zero
- Citywide Design Guidelines

Federal

Americans with Disabilities Act (ADA) of 1990

Titles I, II, III, and V of the ADA have been codified in Title 42 of the United States Code, beginning at Section 12101. Title III prohibits discrimination based on 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 through 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 travel way, 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), which administers transportation programming for the State, unveiled a revised version of Deputy Directive 64 (DD-64-R1 October 2008), 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.

Assembly Bill 32 (AB 32) and Senate Bill 375 (SB 375)

With the passage of AB 32, the Global Warming Solutions Act of 2006, the State of California committed itself to reducing statewide greenhouse gas (GHG) emissions to 1990 levels by 2020. The California Air Resources Board (California ARB) is coordinating the response to comply with AB 32.

On December 11, 2008, California ARB adopted its Scoping Plan for AB 32. This scoping plan included the approval of SB 375 as the means for achieving regional transportation-related GHG targets. SB 375 provides guidance on how curbing emissions from cars and light trucks can help the state comply with AB 32.

There are five major components to SB 375. First, regional GHG emissions targets: California ARB's Regional Targets Advisory Committee guides the adoption of targets to be met by 2020 and 2035 for each Metropolitan Planning Organization (MPO) in the state. These targets, which MPOs may propose themselves, are updated every eight years in conjunction with the revision schedule of housing and transportation elements.

Second, MPOs are required to prepare a Sustainable Communities Strategy (SCS) that provides a plan for meeting regional targets. The SCS and the Regional Transportation Plan (RTP) must be consistent with each other, including action items and financing decisions. If the SCS does not meet the regional target, the MPO must produce an Alternative Planning Strategy that details an alternative plan to meet the target.

Third, SB 375 requires that regional housing elements and transportation plans be synchronized on 8-year schedules. In addition, Regional Housing Needs Assessment (RHNA) allocation numbers must conform to

the SCS. If local jurisdictions are required to rezone land as a result of changes in the housing element, rezoning must take place within three years.

Fourth, SB 375 provides CEQA streamlining incentives for preferred development types. Certain residential or mixed-use projects qualify if they conform to the SCS. Transit-oriented developments (TODs) also qualify if they (1) are at least 50% residential, (2) meet density requirements, and (3) are within 0.5 mile of a transit stop. The degree of CEQA streamlining is based on the degree of compliance with these development preferences.

Finally, MPOs must use transportation and air emissions modeling techniques consistent with guidelines prepared by the California Transportation Commission (CTC). Regional Transportation Planning Agencies, cities, and counties are encouraged, but not required, to use travel demand models consistent with the CTC guidelines.

California Vehicle Code (CVC)

The CVC provides requirements for ensuring emergency vehicle access regardless of traffic conditions. Sections 21806(a)(1), 21806(a)(2), and 21806(c) define how motorists and pedestrians are required to yield the right-of-way to emergency vehicles.

Senate Bill (SB) 743

On September 27, 2013, Governor Jerry Brown signed Senate Bill (SB) 743, which went into effect in January 2014. SB 743 directed the Governor's 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 LOS. This started a process that changes transportation impact analysis under CEQA. These changes include elimination of auto delay, LOS, and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts for land use projects and plans in California. Additionally, as discussed further below, as part of SB 743, parking impacts for particular types of development projects in areas well served by transit are not considered significant impacts on the environment. 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 January 20, 2016, OPR released the Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA, which was an update to Updating Transportation Impacts Analysis in

the CEQA Guidelines, Preliminary Discussion Draft of Updates to the CEQA Guidelines Implementing Senate Bill 743, which had been released August 6, 2014. Of particular relevance was the updated text of the proposed new CEQA Guidelines Section 15064.3 that relates to the determination of the significance of transportation impacts, alternatives, and mitigation measures. Specifically, CEQA Guidelines Section 15064.3, which is discussed further below, establishes VMT as the most appropriate measure of transportation impacts. In November 2018, the California Natural Resources Agency finalized the updates to the CEQA Guidelines and the updated guidelines became effective on December 28, 2018.

Based on these changes, on July 30, 2019, the City of Los Angeles City Council adopted the CEQA Transportation Analysis Update, which sets forth the revised thresholds of significance for evaluating transportation impacts as well as screening and evaluation criteria for determining impacts. The CEQA Transportation Analysis Update establishes VMT as the City's formal method of evaluating a project's transportation impacts. In conjunction with this update, LADOT adopted its Transportation Assessment Guidelines (adopted in July 2019 and updated in July 2020), which defines the methodology for analyzing a project's transportation impacts in accordance with SB 743.

CEQA Guidelines Section 15064.3

As discussed above, recent changes to CEQA include the adoption of Section 15064.3, Determining the Significance of Transportation Impacts. CEQA Guidelines Section 15064.3 establishes VMT as the most appropriate measure of transportation impacts. Generally, land use projects within 0.5 miles of either an existing major transit stop⁸ or a stop along an existing high quality transit corridor⁹ should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact. A lead agency has discretion to choose the most appropriate methodology to evaluate VMT, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may also use models to estimate VMT, and may revise those estimates to reflect professional judgment based on substantial evidence. As discussed further below, LADOT developed City of Los Angeles VMT Calculator Version 1.3 (May 2020) (VMT Calculator) to estimate project-specific daily household VMT per capita and daily work VMT per employee for developments within City limits. The methodology for determining VMT based on the VMT Calculator is consistent with CEQA Guidelines Section 15064.3 and the Transportation Assessment Guidelines.

⁸ "Major transit stop" is defined in Public Resources Code Section 21064.3 as a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

⁹ "High-quality transit corridors" are defined in Public Resources Code Section 21155 as a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.

Regional

Southern California Association of Governments 2020-2045 Regional Transportation Plan / Sustainable Communities Strategy

In compliance with SB 375, on September 3, 2020, the Southern California Association of Governments (SCAG) Regional Council adopted the Connect SoCal 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (2020-2045 RTP/SCS), a long-range visioning plan that incorporates land use and transportation strategies to increase mobility options and achieve a more sustainable growth pattern while meeting greenhouse gas reduction targets set by the California Air Resources Board (CARB). The 2020-2045 RTP/SCS contains baseline socioeconomic projections that are used as the basis for SCAG's transportation planning, as well as the provision of services by the six-county region of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. SCAG policies are directed towards the development of regional land use patterns that contribute to reductions in vehicle miles and improvements to the transportation system.

The 2020-2045 RTP/SCS builds on the long-range vision of SCAG's prior 2016-2040 RTP/SCS to balance future mobility and housing needs with economic, environmental and public health goals. A substantial concentration and share of growth is directed to Priority Growth Areas (PGAs), which include high quality transit areas (HQTAs), Transit Priority Areas (TPAs), job centers, Neighborhood Mobility Areas (NMAs) and Livable Corridors. These areas account for four percent of SCAG's total land area but the majority of directed growth. HQTAs are corridor-focused PGAs within one half mile of an existing or planned fixed guideway transit stop or a bus transit corridor where buses pick up passengers at a frequency of every 15 minutes (or less) during peak commuting hours. TPAs are PGAs that are within a half mile of a major transit stop that is existing or planned. Job centers are defined as areas with significant higher employment density than surrounding areas which capture density peaks and locally significant job centers throughout all six counties in the region. NMAs are PGAs with robust residential to non-residential land use connections, high roadway intersection densities, and low-to-moderate traffic speeds. Livable Corridors are arterial roadways where local jurisdictions may plan for a combination of the following elements: high-quality bus frequency; higher density residential and employment at key intersections; and increased active transportation through dedicated bikeways.

The 2020-2045 RTP/SCS' "Core Vision" prioritizes the maintenance and management of the region's transportation network, expanding mobility choices by co-locating housing, jobs, and transit, and increasing investment in transit and complete streets. Strategies to achieve the "Core Vision" include but are not limited to: Smart Cities and Job Centers, Housing Supportive Infrastructure, Go Zones, and Shared Mobility. Connect SoCal intends to create benefits for the SCAG region by achieving regional goals for

sustainability, transportation equity, improved public health and safety, and enhancement of the regions' overall quality of life. These benefits include but are not limited to a five percent reduction in VMT per capita, nine percent reduction in vehicle hours traveled, and a two percent increase in work-related transit trips.

Local

City of Los Angeles Mobility Plan 2035

In August 2015, the City Council adopted Mobility Plan 2035 (Mobility Plan), which serves as the City's General Plan circulation element. The City Council has adopted several amendments to the Mobility Plan since its initial adoption, including the most recent amendment on September 7, 2016¹⁰. The Mobility Plan incorporates "complete streets" principles and lays the policy foundation for how the City's residents interact with their streets. The Mobility Plan includes five main goals that define the City's high-level mobility priorities:

- (1) Safety First;
- (2) World Class Infrastructure;
- (3) Access for All Angelenos;
- (4) Collaboration, Communication, and Informed Choices; and
- (5) Clean Environments and Healthy Communities.

Each of the goals contains objectives and policies to support the achievement of those goals.

Street classifications are designated in the Mobility Plan, and may be amended by a Community Plan, and are intended to create a balance between traffic flow and other important street functions, including transit routes and stops, pedestrian environments, bicycle routes, building design and site access, etc. The Complete Streets Design Guide, which was adopted by the City Council alongside the Mobility Plan, defines the street classifications as follows:

- Arterial Streets: Major streets that serve through traffic and provide access to major commercial activity centers. Arterials are divided into two categories:

¹⁰ Los Angeles Department of City Planning, Mobility Plan 2035: An Element of the General Plan, approved by City Planning Commission on June 23, 2016 and adopted by City Council on September 7, 2016.

- Boulevards represent the widest streets that typically provide regional access to major destinations and include two further categories, Boulevard I and Boulevard II.
- Avenues pass through both residential and commercial areas and include three further categories, Avenue I, Avenue II, and Avenue III.
- Collector Streets: Generally located in residential neighborhoods and provide access to and from arterial streets for local traffic and are not intended for cut-through traffic.
- Local Streets: Intended to accommodate lower volumes of vehicle traffic and provide parking on both sides of the street.
 - Continuous local streets that connect to other streets at both ends, and/or
 - Non-Continuous local streets that lead to a dead-end.

The Mobility Plan also identifies enhanced networks of major and neighborhood streets that facilitate multi-modal mobility within the citywide transportation system. This layered approach to complete streets selects a subset of the City's streets to prioritize travel for specific transportation modes. In all, there are four enhanced networks: the Bicycle Enhanced Network, Transit Enhanced Network, Vehicle Enhanced Network, and Neighborhood Enhanced Network. In addition to these networks, many areas that could benefit from additional pedestrian features are identified as Pedestrian Enhanced Districts.

Los Angeles Municipal Code

With regard to construction traffic, Los Angeles Municipal Code (LAMC) Section 41.40 limits construction activities to the hours from 7:00 a.m. to 9:00 p.m. on weekdays and from 8:00 a.m. to 6:00 p.m. on Saturdays and national holidays. No construction is permitted on Sundays.

LAMC Section 12.37 sets forth requirements for street dedications and improvements for new development projects. Specifically, LAMC Section 12.37 states that no building or structure shall be erected or enlarged on any property, and no building permit shall be issued therefore, on any R3 or less restrictive zone, or in any lot in the RD1.5, RD2, or R3 Zones, if the lot abuts a major or secondary highway or collector street unless one-half of the street adjacent to the subject property has been dedicated and improved to the full width to meet the standards for a highway or collector street as provided in the LAMC.

With regard to on-site bicycle parking, LAMC Section 12.21 A.16 sets forth requirements for long-term and short-term bicycle parking for residential and commercial buildings. Where there is a combination of uses on a lot, the number of bicycle parking spaces required shall be the sum of the requirements of the various uses. LAMC Section 12.21 A.16 also includes facility requirements, design standards and siting requirements for bicycle parking.

LAMC Section 12.26 J provides for Transportation Demand Management (TDM) and Trip Reduction Measures that are applicable to the construction of new non-residential gross floor area. Different TDM requirements are provided for developments in excess of 25,000 square feet of gross floor area, 50,000 square feet of gross floor area, and 100,000 square feet of gross floor area. The TDM requirements set forth therein vary depending upon the maximum non-residential gross floor area described above, and include measures such as the provision of a bulletin board, display case, or kiosk with transit information and carpool/vanpool parking spaces.

LADOT Transportation Assessment Guidelines

As discussed above, on July 30, 2019, LADOT updated its Transportation Impact Study Guidelines, travel demand model and transportation impact thresholds based on vehicle miles traveled, pursuant to State CEQA Guidelines Section 15064.3, of the 2019 CEQA Updates that implement SB 743. The City established the Transportation Assessment Guidelines (TAG) that includes both CEQA thresholds (and screening criteria) and non-CEQA thresholds (and screening criteria). LADOT most recently updated the TAG in July 2020. The CEQA thresholds provide the methodology for analyzing the Appendix G transportation thresholds, including providing the City's adopted VMT thresholds. The non-CEQA thresholds provide a method to analyze projects for purposes of entitlement review and making necessary findings to ensure the project is consistent with adopted plans and policies including Mobility Plan 2035. Specifically, the TAG is intended to effectuate a review process that advances the City's vision of developing a safe, accessible, well-maintained, and well-connected multimodal transportation network. The TAG have been developed to identify land use development and transportation projects that may impact the transportation system; to ensure proposed land use development projects achieve site access design requirements and on-site circulation best practices; to define whether off-site improvements are needed; and to provide step-by-step guidance for assessing impacts and preparing Transportation Assessment Studies¹¹.

LADOT Manual of Policies and Procedures Section 321

LADOT Manual of Policies and Procedures (MPP) Section 321 provides the basic criteria for the review of driveway design. As discussed in MPP Section 321, the basic principle of driveway location planning is to minimize potential conflicts between users of the parking facility and users of the abutting street system, including the safety of pedestrians.

¹¹ Los Angeles Department of Transportation (LADOT) Transportation Assessment Guidelines. https://ladot.lacity.org/sites/default/files/documents/2020-transportation-assessment-guidelines_final_2020.07.27_0.pdf. Accessed [30th June 2021].

Vision Zero

The Vision Zero Los Angeles program, implemented by LADOT, represents a citywide effort to eliminate traffic deaths in the City by 2025. Vision Zero has two goals: a 20-percent reduction in traffic deaths by 2017 and zero traffic deaths by 2025. In order to achieve these goals, LADOT has identified a network of streets, called the High Injury Network, which has a higher incidence of severe and fatal collisions. The High Injury Network, which was last updated in 2018, represents 6 percent of the City's street miles but accounts for approximately two thirds (64 percent) of all fatalities and serious injury collisions involving people walking and biking.

Citywide Design Guidelines

The Citywide Design Guidelines serve to implement the Framework Element's urban design principles and are intended to be used by City of Los Angeles Department of City Planning staff, developers, architects, engineers, and community members in evaluating project applications, along with relevant policies from the Framework Element and Community Plans. The Citywide Design Guidelines were updated in October 2019 and include guidelines pertaining to pedestrian-first design which serves to reduce VMT.

4.14.5 ENVIRONMENTAL IMPACTS

This section explains the metrics used to measure the impacts of the Housing Element Update to VMT. The metrics used are from the proposed CEQA Guidelines from the California State Office of Planning and Research (OPR) from December 2018.

History

Senate Bill 743 directed OPR to "prepare, develop, and transmit to the Secretary of the Natural Resources Agency for certification and adoption proposed revisions to the guidelines adopted pursuant to Section 21083 establishing criteria for determining the significance of transportation impacts of projects within transit priority areas... Upon certification of the guidelines by the Secretary of the Natural Resources Agency pursuant to this section, automobile delay, as described solely by LOS or similar measures of vehicular capacity or traffic congestion within a transit priority area, shall not support a finding of significance pursuant to this division...".¹²

On January 20, 2016, OPR updated the CEQA Guidelines "Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA," the evaluation of vehicle miles traveled

¹² SB 743, 2013-2014 CA State Cong. § 386 (2013)

(VMT) was recognized as “generally the most appropriate measure of transportation impacts.” OPR also states that lead agencies may tailor their analysis to include other measures.

On November 2017, OPR proposed a new section, 15064.3, to help determine the significance of transportation impacts. This section was updated July 2, 2018 and finalized on December 28, 2018 with criteria for analyzing transportation impacts and is seen below in the section Thresholds of Significance. Its purpose is to describe specific elements for considering the transportation impacts of a given project given the use of VMT as the primary measurement.

Per the guidance from OPR, “a lead agency may elect to be governed by the provisions of this section immediately. Beginning on July 1, 2020, the provisions of this section shall apply statewide” (CNRA 2018). In order to comply with the guidelines understood to become the standard in our state, this EIR evaluates vehicle trips and VMT consistent with the intent of SB 743.

Performance Metrics

The current metrics shift the focus from level of service (LOS) to vehicle trips (VT) and vehicle miles traveled (VMT). These are defined as follows, with methodology specifics outlined in the following *Methodology* section:

- **Vehicle Trips (VT).** VT are defined as the number of trips undertaken in an automobile, such as in single occupancy vehicles, private automobiles, and vehicles that contain two or more travelers, such as carpools, taxis, or ride-share vehicles. A reduction in VT over time can be used as an indicator of reduced reliance on the automobile as well as an indicator of more travel by carpools.
- **Vehicle Miles Traveled (VMT).** VMT is a measurement of miles traveled (e.g., private automobiles, trucks and buses) by all land uses (e.g., residential, retail, office) in the City of Los Angeles. To compare scenarios, VMT per service population is used. A reduction in VMT overall and in VMT per service population can be used as an indicator of reduced reliance on vehicular travel, primarily by private automobiles.
- **Service Population.** Service Population is the sum of population and employment. It is used in this study to represent both residents and employees. Some VMT metrics focus on VMT per capita and VMT per employee as separate markers of these indications; however, VMT per service population showcases the effects of all vehicular movement in an area. It includes not only trips that are attracted and produced by home and work trips, but those that fit in neither category (i.e. school to grocery store) as well as truck trips. It is therefore more representative of the effect of users and trips on the roadways in this CPA.

Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines, the Housing Element Update would have a significant impact related to transportation if it would:

- **Threshold 4.14-1:** Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities.
- **Threshold 4.14-2:** Conflict or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b).
- **Threshold 4.14-3:** Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- **Threshold 4.14-4:** Result in inadequate emergency access.

In regard to Threshold 4.14-2, the text of CEQA Guidelines Section 15064.3, Subdivision (b) provides in part:

- ***Land Use Projects.*** Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.
- ***Transportation Projects.*** Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis as provided in Section 15152.
- ***Qualitative Analysis.*** If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.
- ***Methodology.*** A lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita,

per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revisions to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section.

The Housing Element Update would have an impact related to transportation if it would result in VMT per service population that exceeded an applicable threshold of significance. OPR recommends that a per capita or per employee VMT that is fifteen percent below that of existing development regionally may be a reasonable threshold. However, the "region" identified for the City of Los Angeles is the six-county SCAG region, which is very large and not representative of the City of Los Angeles. Holding the City to that as a threshold would not accurately disclose a relevant change in VMT outputs to that of the City, as the City is significantly lower than the region's VMT already. Additionally, the use of per capita and per employee is not as representative of all travel in the area as per service population. As "CEQA generally defers to lead agencies on the choice of methodology to analyze impacts" (OPR 2018), to analyze significant impacts under Threshold 4.14-2, the City of Los Angeles is choosing to use the following as part of a two-pronged threshold provided in the from the LADOT Transportation Assessment Guidelines identified for land use plans:

- The Proposed Project would result in average total VMT per service population in the plan horizon year that exceeds 15% below the regional average total VMT per service population from the most recent regional metric available.
- The Proposed Project would result in average total VMT per service population in the plan horizon year that exceeds the average total VMT per service population for the "project area" for the baseline year.

Methodology

The transportation analysis for Housing Element Update has been developed through a process that includes the use of the City of Los Angeles Travel Demand Forecasting (TDF) Model for the analysis of the 2021 baseline year and the future 2029 scenario, as well as the use of the SCAG TDF Model for the analysis of the 2016 SCAG RTP/SCS to represent the region. This Methodology section describes the procedures used to assess impacts on the transportation system. It includes an overall discussion of methodology and assumptions, followed by a discussion of how the Housing Element Update is expected to perform in comparison to the thresholds described above.

VMT Methodology

In order to determine whether the socio-economic and transportation network included in the City of Los Angeles would result in an impact (as outlined previously in the *Environmental Impacts* section), VMT calculated for 2021 Baseline and 2016 SCAG Region is compared to the 2029 scenario. This is calculated using the following outputs from the City of Los Angeles and SCAG TDF Models.

Vehicle Trips (VT)

Vehicle Trips are defined as the number of trips undertaken in an automobile or a truck, such as in single-occupancy private automobiles, vehicles that contain two or more travelers, such as carpools, taxis, or ride-share vehicles, and trucks including light truck, medium truck, and heavy truck. While the total number of vehicle trips is expected to increase as growth occurs in the region, a reduction in vehicle trips per service population over time can be used as an indicator of reduced reliance on the automobile as well as an indicator of more travel by walk, bike, take transit, carpools, etc. A reduction in the number of vehicle trips per service population also helps meet the State's goal of reducing GHG emissions, as mandated by AB 32 and SB 375. An increase in the number of daily vehicle trips per service population would be an undesirable outcome of the Housing Element Update but would not constitute a significant impact.

Vehicle trips are calculated from outputs of the City of Los Angeles TDF model and SCAG TDF model. With estimated population relevant to each model's year, household and employment values input into each model Traffic Analysis Zone (TAZ), the models develop a vehicle trip calculation for the City of Los Angeles and SCAG Region. A Traffic Analysis Zone is a spatial unit that includes socioeconomic data such as population, households, and employees of a particular region.

Vehicle Miles Traveled (VMT)

VMT is a measurement of miles traveled (e.g., private automobiles, trucks and buses) generated by all land uses (e.g., residential, retail, office). While the total VMT is expected to increase as growth occurs in the City and in the region, a reduction in VMT per service population over time can be used as an indicator of reduced reliance on the automobile. Reducing VMT helps meet the State's goals of reducing GHG emissions, as mandated by AB 32 and SB 375. Any increase in the total number of VMT per service population would be an undesirable outcome of the Housing Element Update, and would constitute an impact. VMT was forecasted with the City of Los Angeles TDF model.

For this analysis, VMT is reported as Total Daily VMT per Service Population. The Total Daily VMT per Service Population is the total VMT divided by the number of people living or working within the City of Los Angeles. This VMT is generated by both City residents and employees working within City limits.

The reported VMT results include both personal vehicles and truck VMT. The VMT calculation accounts for internal trip ends and trips that begin or end within the City of Los Angeles, as these trips are generated by or attracted to land uses within the City. The travel behavior effects of land use changes in the City can be understood by measuring the VMT of trips originating in and/or destined for the City and comparing them to the 2021 Baseline and 2021 SCAG Region outputs.

VMT is calculated by multiplying the vehicle trip length by the number of trips estimated through the City of Los Angeles TDF model. VMT takes in consideration population, household, and employment values, as well as travel patterns of origins and destinations, including all of these inputs in the City of Los Angeles and SCAG TDF models, which makes them sensitive to each land use and network scenario tested.

Travel Demand Model Development

The City of Los Angeles TDF Model provides the ability to evaluate the transportation system, use performance indicators for land use and transportation alternatives, provide information on regional pass-through traffic versus locally generated trips, and graphically display these results. The model considers forecast growth in City of Los Angeles and surrounding areas, including special generators, such as airports and universities, and is sensitive to emerging land use trends through improved sensitivity to built environment variables. The model forecasts AM and PM peak period and daily vehicle and transit flows on the transportation network in the City. In essence, the travel demand model serves as a tool to implement, manage, and monitor the City of Los Angeles' transportation plans, projects, and programs.

The potential impacts associated with implementation of the Housing Element Update are evaluated using the City of Los Angeles' TDF Model. The City of Los Angeles Travel Demand Forecasting Model utilizes the TransCAD Version 7.0 R4 Build 12410 modeling software. The model has a future horizon year of 2040 and was designed to produce daily and AM and PM peak hour vehicle and transit flows on roadways within the City based on comprehensive land use and socioeconomic data (SED) and uses a conventional 4-step process of trip generation, trip distribution, modal split and assignment. For modeling purposes, the Los Angeles model area is divided into 4,192 Transportation Analysis Zones (TAZs), each with corresponding SED and connections to the roadway and transit networks.

The City of Los Angeles TDF Model was used to generate the 2021 Baseline and 2029 Housing Element Update plan data for the transportation impact analysis. The City of Los Angeles TDF Model's base year is 2016; therefore, the socioeconomic inputs and transportation network within the TDF were updated to represent the 2021 Baseline scenario and the 2029 with Housing Element scenario. To develop the 2021 Baseline scenario, based on the original 2016 base year model, model-wide socioeconomic data and related matrices were interpolated to 2021. Transportation networks were also updated to reflect transportation

projects completed by 2021, according to the SCAG 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy. To develop the 2029 with Housing Element Scenario, based on the original 2040 future year model (i.e., without the development resulting from the 2029 Housing Element Update), model-wide socioeconomic data and related matrices were interpolated to 2029. Transportation networks were also updated to reflect only those transportation projects expected to be completed by 2029 according to the SCAG 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy by removing transportation projects with an expected completion year after 2029.

The RTP/SCS TDF Model, developed by SCAG, was used to generate the 2021 SCAG Region scenario. The 2021 SCAG Region scenario VMT results were interpolated from the off-the-self SCAG base and future year models.

Regulatory Compliance Measures

The City has established regulatory requirements (regulatory compliance measures or RCMs) to minimize the impacts of construction on transportation within the City. Among those, any future housing development accommodated under the Housing Element Update would be required to comply with the following RCM, as applicable:

- **RCM-TRAF-1 (Major Transit and Transportation Construction Impact Area):** As applicable, development is required to comply with Chapter VI, Section 62.250 of the LAMC, which established permitted requirements for projects that intend to perform activity or work in the streets (including sidewalks within the Major Transit and Transportation Construction Impact Area. Major Transit and Transportation Construction Impact Areas include the following:
 - Area E: The area bounded clockwise by North Hill Street, Bernard Street, North Broadway, North Spring Street, Los Angeles River (west bank), and the 101 Freeway.
 - Area F: The area bounded clockwise by North Figueroa Street, Marmion Way, Monte Vista Street, Avenue 61, Piedmont Avenue, Figueroa Street, Pasadena Avenue, North San Fernando Road, and the following street segments: Avenue 50 from Malta Street to Monte Vista Street, Avenue 52 from Figueroa Street to Echo Street, Avenue 54 from Ash Street to Monte Vista Street, Avenue 54 from Figueroa Street to Longfellow Street, Avenue 57 from Figueroa Street to Media Drive, Avenue 60 from Figueroa Street to Echo Street, and Avenue 61 from Terrace Drive to Monte Vista Street.
 - Area G: The area bounded clockwise by Cesar E. Chavez Avenue, North Indiana Street, East 3rd Place, East 4th Street, Alameda Street, East 1st Street, North Hope Street, and North Grand Avenue.
 - Area H: The area bounded clockwise by Victory Boulevard, De Soto Avenue, Vanowen Street, Corbin Avenue, Victory Boulevard, Fulton Avenue, Oxnard Street, Coldwater Canyon Avenue,

Burbank Boulevard, Vineland Avenue, Magnolia Boulevard, Woodman Avenue, Burbank Boulevard, Balboa Boulevard, Oxnard Street, Topham Street, Victory Boulevard, De Soto Avenue, Oxnard Street, and Variel Avenue.

- Area I: The area bounded clockwise by Wilshire Boulevard, Bundy Drive, San Vicente Boulevard, Federal Avenue, Ohio Avenue, Veteran Avenue, Wilshire Boulevard to City Limit, Santa Monica Boulevard, Century Park East, West Pico Boulevard, Centinela Avenue, West Olympic Boulevard, and Centinela Avenue.

Impact Analysis

The purpose of the transportation analysis is to identify potential transportation system deficiencies resulting from vehicle trips generated the changes in housing distribution around the City resulting from build-out of the housing development accommodated under the Housing Element, and to identify feasible mitigation measures, if necessary. The Housing Element Update is a medium-term plan that will be implemented over a number of years in conjunction with already approved development projects, and regional growth and transportation projects outlined in the 2016-2040 RTP/SCS. The Housing Element Update is represented by the 2029 Housing Element Update scenario and is compared to 2021 Baseline and 2021 SCAG Region scenarios in order to show the potential impacts of the plan.

The City of Los Angeles Travel Demand Forecasting Model is consistent with the 2016-2040 SCAG RTP/SCS model and includes all reasonably foreseeable development and regional transportation improvements through the year 2040 in the City of Los Angeles as well as the adjacent cities, such as West Hollywood, Burbank and Glendale. Thus, the City of Los Angeles TDF includes the regional growth forecast for both inside and outside of the City for the purpose of analyzing 2029 Housing Element Update conditions.

The analysis tools used to forecast future travel patterns are long-range models of travel demand. Long-range travel demand models primarily focus on forecasting auto use, with limited sensitivity to other modes of travel such as transit, bicycling, and walking. This is consistent with the traffic forecasting methods used by most cities and is consistent with the state of the transportation and traffic engineering practice. Recently, new travel behavior trends have emerged that traditional travel demand models are not designed to accommodate. Transportation and traffic experts continue to evaluate the anticipated longevity of these trends and the impact they may have on travel behavior in the future. Factors that affect long-term trends in travel behavior include recessionary effects on employment, changes in younger generations' interest in driving and vehicle ownership, baby boomer retirement choices and their continued participation in the workforce, increasing preference across generations for urban living, fuel prices, increased availability of on-demand delivery of goods and services, and greater travel options through autonomous vehicles and shared use mobility (e.g., Lyft, Uber, bikeshare programs). Additionally, it is

likely that some of the recent travel behavior changes associated with the Covid-19 pandemic, including increased telework, increased levels of bicycling and walking, and decreased transit ridership, may either take years to return to baseline conditions or may become permanent.

The transportation analysis approach used in this EIR applies established traffic forecasting tools that have been empirically proven and previously accepted under CEQA. However, these may prove to be conservative if some of the recent trends in travel persist. It is not clear what direction the trends will take at this point. VMT per capita has been generally dropping since around 2004 but increased for many decades prior. If the trends toward higher levels of walking, bicycling, and transit use exceed what is forecast in the EIR, this could result in fewer driving-related impacts than the plan conservatively accounts for in the EIR. It is possible, however, that innovations in autonomous and driverless vehicles, transportation network companies (e.g., Lyft and Uber), and same-day delivery will increase future VMT per capita. A variety of factors contribute to VMT, and transportation technologies along with demographic trends will influence future travel behavior. It would be speculative to make assumptions about how these new technologies and changes in transportation may affect travel behavior long-term; therefore, the methodologies and travel forecasts applied in this analysis rely on the state-of-the-practice at this time as previously accepted under CEQA.

Housing Element Update Mobility Network

Mobility Plan 2035 (MP 2035) is the Mobility Element of the City of Los Angeles' General Plan. MP 2035 provides the framework for future community plan updates, which take a closer look at the transportation system in specific areas of the City and recommend more detailed implementation strategies to be realized by 2035. The MP 2035 reflects policies and programs that lay the foundation for safe, accessible, and enjoyable streets for pedestrians, bicyclists, transit users, and vehicles throughout the City of Los Angeles. MP 2035 was adopted by the City in August 2015 and updated in 2016. It is compliant with the 2008 Complete Streets Act (AB 1358), which mandates that the circulation element of a City's General Plan be modified to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan. No mobility improvements are envisioned as part of the Housing Element Update, and no mobility elements beyond those already envisioned for the future were included in the 2029 Housing Element Update scenario in the City of Los Angeles TDF model.

4.14.6 IMPACT ANALYSIS

Threshold 4.14-1	Would the Housing Element Update conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?
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Impact 4.14-1	The Housing Element Update would not conflict with any applicable program, plan, ordinance, or policy relevant to the transportation system, nor would it limit or preclude the City's ability to implement programs and policies in furtherance of climate or equity goals. Implementation of the Housing Element Update supports and furthers both state and local transportation-related climate and congestion goals. By identifying capacity to meet both the City's existing unmet and future housing need, fewer employees who work in the City will need to search beyond the City's boundaries for affordable housing, reducing commute lengths. By encouraging development on infill sites or redevelopment of existing parcels with greater density in high-resource areas around the City already served by public transit, the City will improve residential transit access and possibly increase transit mode share, as well as facilitate the completion of household errands on foot or bike, rather than in a car, all of which would reduce VMT, greenhouse gas emissions, and traffic congestion leading to travel delays. Although it is unlikely based on existing requirements and necessary project review by LADOT, individual housing development projects may have impacts to circulation system during construction based on unique site or project attributes. Mitigation measures 4.14-1 to prepare a construction management plan should avoid these impacts to the circulation system. Therefore, the impact would be <i>less than significant with mitigation</i>.
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Impact Analysis

Goals of the Housing Element Update which are relevant to the transportation system include:

- **Goal 1:** A City where housing production results in an ample supply of housing to create more equitable and affordable options that meet existing and projected needs.
- **Goal 3:** A City in which housing helps to create healthy, livable, sustainable, and resilient communities that improve the lives of all Angelenos.

As discussed in the Initial Study, the Housing Element Update helps fulfill existing City of Los Angeles General Plan Framework strategies to encourage growth in higher-intensity commercial and mixed-use districts, centers, and boulevards, and in proximity to transit. The geographic distribution of the identified housing capacity will be consistent with recent build activity and in areas of the City that are currently zoned for multi-family and commercial development, along commercial corridors and in proximity to public transportation. A large portion of the anticipated housing capacity is expected to be located within Transit Oriented Communities Areas, which are defined as the half-mile radius around a Major Transit Stop. Based on the estimated capacity of 266,647 units, and the total target capacity of 486,379 units, the Housing Element finds a need for a Rezoning Program for the creation of 220,000 additional units of capacity. The Rezoning Program, which would need to be completed by 2024, will likely be accomplished through updates to the City's Community Plans (Land Use Element), an update to the City's Density Bonus program, targeted zone changes, updates to specific plans and overlays, or other zoning ordinances. These programs would likely identify opportunities for rezoning or development incentives in areas that are located in a Transit Priority Area, near major job centers, neighborhood services and amenities, and particularly in higher resource areas shown in Figure 3-5 to provide the most equitable distribution of housing opportunities. These programs may also consider rezoning or development incentives in existing lower density residential zones to create opportunities for missing middle housing typologies (up to low-medium residential density) in these areas. The outcome of full build-out of the RHNA under the Housing Element Update would be an increased level of development of infill sites and/or intensification of existing residential parcels, with a majority of the development occurring in locations within the City where neighborhood services are plentiful and multimodal transportation options, including public transit and active modes, are most competitive with driving. This will provide more opportunity for residents to choose housing close to their places of employment, shortening their work trips and perhaps even resulting in a shift in commute mode, and to complete more household-serving trips within their own neighborhoods, whether in a very short trip in a car or on foot or bike. Finally, any rezoning under the rezoning program will need to be found consistent with the General Plan, including the Mobility Plan 2035, pursuant to Charter Section 556 and 558 and pursuant to State Planning and Zoning laws.

The types of housing units anticipated under the 2029 Housing Element Update would generally fall into five categories of development projects – multi-family residential development; single-family residential development; accessory dwelling units (ADU); mixed use development; and conversion and/or rehabilitation of existing nonresidential, residential and mixed-use structures to be used for housing. The majority of all housing types are unlikely to result in a significant transportation impact if located on infill sites or in urbanized areas, as described above. As shown in Tables 4-1 and 4-2, only 10 projects out of the 54 case studies had significant and unavoidable impacts related to transportation. Of those, all were in large multi-family developments on infill sites and had significant and unavoidable

impacts related to operational impacts to congestion thresholds (LOS) under the City's pre-VMT thresholds of significance. None of the projects had significant and unavoidable impacts related to conflicts with programs, plans, ordinances, or policies. Several projects (as discussed below) had less than significant impacts after mitigation to reduce construction-related impacts to the circulation system. Further discussion of the potential for specific housing types to create a significant impact follows.

- Multi-family residential:** Multi-family residential projects may range in size from small apartment buildings with 2-10 units to larger apartment buildings and high-rise structures with hundreds of units. Large multi-family development projects would likely occur in the High and Highest Resource Tracts as well as other areas of the City that permit multifamily residential use such as areas near transit and jobs, provide the housing necessary to better balance the distribution of jobs and housing, and further many of the policy aims discussed in the regulatory section above regarding reducing VMT, and facilitating multimodal and zero emission travel. As listed in Table 4-2, the 6220 Yucca Street Mixed-Use Project, which is located in the dense neighborhood of Hollywood and plans to provide 210 residential units in a mixed-use setting, did not conflict with any reviewed programs, plans, ordinances, or policies and its impact was determined to be less than significant. For example, as it related to the local Community Plan, "The Project would be consistent with the objectives of the Hollywood Community Plan as the Project would contribute to the development of Hollywood as a major center of population, employment, and retail services... In line with these objectives, the Project would increase housing and jobs in proximity to the Metro Red Line, other regional Metro bus lines, and LADOT DASH lines¹³."
- Single-family residential:** Single-family residential projects may range in size and scale from smaller single-family homes to larger single-family homes, and from small-lot subdivisions to multi-property single-family subdivisions. Smaller single-family developments would generally occur in residential or undeveloped areas throughout the City and would not result in significant impacts. The TAG does not require transportation assessments for development projects generating fewer than 250 vehicle trips per day. The Institute of Transportation Engineers (ITE) *Trip Generation, 10th Edition*, the industry standard for developing trip generation estimates, estimates that single-family dwelling units generate fewer than 10 daily vehicle trips (9.44). Therefore, generally single-family residential projects would be screened from completing any transportation analysis and would not foreseeably conflict with transportation related plans, program, policy or ordinances. Larger single-family home projects or projects built in undeveloped areas or with unusual site conditions may have potential impacts related to construction impacts.

¹³ City of Los Angeles, 2020. "6220 West Yucca Street Mixed Use Project." <https://planning.lacity.org/eir/6220Yucca/deir/Draft%20EIR%20Sections/I.%20Introduction.pdf> Accessed 2nd July 2021.

The Hidden Creek Estates project planned to develop 188 single-family homes in an undeveloped area of the City near Porter Ranch. The EIR found potential impacts related to construction activities:

Project construction may result in temporary lane closures along Browns Canyon Road between De Soto and the project site in order to transport construction equipment on- and off-site. Construction equipment would remain on site until each specific piece of equipment is no longer needed. Truck traffic and lane closures could potentially disrupt traffic flow along adjoining streets. As a result, significant impacts could occur prior to incorporation of mitigation. However, with implementation of MM-TRAF-1, which requires the preparation of a Construction Traffic Management Plan, the impacts would be reduced to a less than significant level. (Hidden Creek RDEIR at IV.M-12)

The Hidden Creek RDEIR found with imposition of the following mitigation measure, impacts would be less than significant:

MM-TRAF-1 Prior to the issuance of demolition permits, the project applicant shall require a Construction Traffic Management Plan to be prepared and submitted to LADOT for review and approval and this plan shall be implemented by the construction contractor during project construction.

- **ADUs:** ADUs include attached ADUs created through a building addition or conversion of existing floor area and detached ADUs of various scales. ADUs are most likely to occur within existing or proposed residential developments and would not result in significant impacts. The TAG does not require transportation assessments for development projects generating fewer than 250 vehicle trips per day. The Institute of Transportation Engineers (ITE) Trip Generation, 10th Edition, the industry standard for developing trip generation estimates, estimates that single-family dwelling units, to which an ADU is most similar, generate fewer than 10 daily vehicle trips (9.44). ADU projects would not foreseeably conflict with transportation related plans, policies, programs, or ordinances.
- **Mixed use development:** Mixed use development could range in size and scale from neighborhood commercial mixed use with smaller nonresidential uses, to high-rise mixed-use with larger nonresidential uses. Similar to multi-family residential and large single-family residential developments, mixed use developments would likely occur in the High and Highest Resource Tracts as well as other areas of the City that permit multifamily residential use such as areas near transit and jobs. Larger mixed-use development projects would generally be located in urban areas and on infill sites. As listed in Table 4-2, the 6220 Yucca Street Mixed-Use Project, which is located in the dense neighborhood of Hollywood and plans to provide 210 residential units in a mixed-use setting, did not conflict with any reviewed programs, plans, ordinances, or policies and its impact was determined to be less than significant. For example, as it related to the local Community Plan, “The Project would be consistent with the objectives of the Hollywood Community Plan as the Project would contribute to

the development of Hollywood as a major center of population, employment, and retail services... In line with these objectives, the Project would increase housing and jobs in proximity to the Metro Red Line, other regional Metro bus lines, and LADOT DASH lines¹⁴."

The Soul Project located in the Wilshire Community Plan area proposed a 222,944 square foot mixed use tower with 256 residential units and 2,507 square feet of office floor area and maximum height of 341 feet. The SCEA found potential impacts from construction:

Construction activities are expected to be primarily contained within the Project Site boundaries. However, it is expected that construction fences may encroach into the public right-of-way (e.g., sidewalk and roadways) adjacent to the Project Site. The curb lane on Shatto Place, which provides on-street parking, could be used intermittently throughout the construction period for equipment staging, concrete pumping, etc. Temporary traffic controls would be provided to direct traffic around any closures as required in the Construction Management Plan. Travel lanes would be maintained in each direction on Shatto Place throughout the construction period, and emergency access would not be impeded. The use of the public ROW along Shatto Place and 6th Street may require temporary rerouting of pedestrian traffic as the sidewalks fronting the Project Site would be closed. The Construction Management Plan would include safety precautions and procedures for pedestrians and bicyclists including the installation of directional signage and protection barriers. There is no bus stop adjacent to the Project Site that would require any temporary relocation. Onstreet parking is allowed along Shatto Place, so construction fences could result in the temporary loss of approximately 200 linear feet of curb parking on the east side of Shatto Place. Project construction is not expected to create hazards for drivers, bicyclists, or pedestrians as long as commonly practiced safety procedures for construction are followed. Such procedures and other measures (e.g., to address temporary traffic control, lane closures, sidewalk closures, worker travel times, staging, etc.) would be incorporated into the Construction Management Plan (MM TRAF-1). The Project would implement the Construction Management Plan described below to further reduce impacts. Further, additional mitigation measures are provided below to reduce potential construction related traffic and safety impacts that may affect the Young Oak Kim Academy.

The SCEA identified the following mitigation measures to reduce construction impacts to less than significant:

MM TRAF-1: The Applicant shall prepare a detailed Construction Management Plan that shall include, but not be limited to, the following elements, as appropriate:

¹⁴ City of Los Angeles, 2020. "6220 West Yucca Street Mixed Use Project." <https://planning.lacity.org/eir/6220Yucca/deir/Draft%20EIR%20Sections/I.%20Introduction.pdf> Accessed 2nd July 2021.

- *Requiring workers and construction trucks to generally travel outside of the peak hours;*
- *Prohibition of construction worker parking on nearby residential streets;*
- *Temporary traffic control during all construction activities encroaching on public rights-of-way to improve traffic flow and safety on public roadways; Scheduling of construction activities to reduce the effect on traffic flow on surrounding arterial streets;*
- *Safety precautions for pedestrians and bicyclists through such measures as alternate routing and protection barriers as appropriate;*
- *Scheduling of construction-related deliveries so as to generally occur outside the commuter peak hours; and*
- *Installation of appropriate traffic signs around the Project Site to ensure pedestrian, bicycle, and vehicle safety*

MM TRAF-2: There shall be no staging or parking of construction vehicles, including vehicles to transport workers on any of the streets adjacent to the school.

MM TRAF-3: LADBS shall assign specific haul route hours of operation based upon Young Oak Kim Academy's hours of operation.

MM TRAF-4: Haul route scheduling shall be sequenced to minimize conflicts with pedestrians, school buses and cars at the arrival and dismissal times of the school day. Haul route trucks shall not be routed past the school during periods when school is in session especially when students are arriving or departing from the campus.

MM TRAF-5: The Applicant shall plan construction and construction staging as to maintain pedestrian access on adjacent sidewalks throughout all construction phases. This requires the applicant to maintain adequate and safe pedestrian protection, including physical separation (including utilization of barriers such as K-Rails or scaffolding, etc) from work space and vehicular traffic and overhead protection, due to sidewalk closure or blockage, at all times. Temporary pedestrian facilities shall be adjacent to the Project Site and provide safe, accessible routes that replicate as nearly as practical the most desirable characteristics of the existing facility. Covered walkways shall be provided where pedestrians are exposed to potential injury from falling objects. Applicant shall keep sidewalk open during construction until only when it is absolutely required to close or block sidewalk for construction staging. Sidewalk shall be reopened as soon as reasonably feasible taking construction and construction staging into account.

Similarly, with the College Station Project, a project to construct 770 dwelling units with 51,390 square feet of retail, restaurant and other commercial uses in the Arts District area of Downtown, the EIR

identified a construction management plan as a mitigation measure to reduce potential construction impacts to circulation to less than significant level:

Construction traffic during the grading/excavation phase of Project construction could result in temporary impacts at two intersections in the study area, Broadway and College Street (No. 20) and Avenue 18 and Broadway/Spring Street (No. 27), although Intersection No. 27 is expected to be improved as part of the Sixth Street Viaduct Widening project by the time Project construction commences. Project construction could also create temporary access, transit, and parking impacts. The following mitigation measure would reduce these temporary Project construction impacts to less than significant levels.

MM-TRAF-1 (Construction Management Plan): A detailed Construction Management Plan, including street closure information, detour plans, haul routes, and staging plans shall be prepared and submitted to the City for review and approval. The Construction Management Plan will formalize how construction would be carried out and identify specific actions that would be required to reduce effects on the surrounding community. The Construction Management Plan shall be based on the nature and timing of the specific construction activities and other projects in the vicinity of the Project Site, and shall include the following elements:

- *Prohibition of construction worker parking on any adjacent residential streets*
- *Encouragement of carpool/vanpool of workers*
- *Prohibitions on construction-related vehicles parking on surrounding public streets*
- *Prohibitions on construction equipment or material deliveries within the public right-of-way*
- *Provisions for temporary traffic control during all construction activities adjacent to public right-of-way to improve traffic flow on public roadways (e.g., flag men)*
- *Scheduling of construction activities to reduce the effect on peak hour traffic flow on surrounding arterial streets*
- *Rerouting of construction trucks to reduce travel on congested streets with poor LOS intersections*
- *Provisions of safety precautions for pedestrians and bicyclists through alternate routing and protection barriers*
- *Provisions to accommodate the staging and storage of equipment Scheduling of construction-related deliveries to reduce travel during commuter peak hours*
- *Obtain truck haul route approval from the City prior to issuance of any permit for the Project, which is requested to run north from the Project Site along N. Spring Street, where it would be able to access I-5 southbound and I-10 eastbound as set forth in the Project's tract map application, per the City's Mobility Plan 2035 (College Station DEIR at p. 4.13-50 to 51)*

- **Conversion and/or rehabilitation:** Existing non-residential, residential, and mixed use structures could be converted or rehabilitated for new residential uses. The conversion or rehabilitation of existing properties would not involve new construction but may result in full-time residents in structures that were previously not occupied by residents. Converted or rehabilitated structures could contain any of the previously discussed housing typologies (with the exception of ADUs) and would be only as likely or unlikely to create significant impacts to transportation as the housing typology developed within them.

Based on the above, the large majority of housing development accommodated by the Housing Element Update would generally not conflict with any applicable program, plan, ordinance, or policy relevant to the transportation system, nor would it limit or preclude the City's ability to implement programs and policies in furtherance of climate or equity goals. However, larger projects or projects with unique site conditions or project attributes may have impacts from construction to the circulation system. Therefore, impacts are *potentially significant*.

Mitigation Measures

4.14-1 (Construction Management Plan)

Any discretionary project that LADOT determines will have potential impacts to the circulation system even with application of existing regulatory compliance measures, shall prepare a detailed Construction Management Plan (CMP), including street closure information, detour plans, haul routes, and staging plans shall be prepared and submitted to LADOT for review and approval. The Construction Management Plan will formalize how construction would be carried out and identify specific actions that would be required to reduce effects on the surrounding community. The Construction Management Plan shall be based on the nature and timing of the specific construction activities and other projects in the vicinity of the Project Site, and shall include those elements required by LADOT for the project, which may include but are not limited to the following:

- Providing for temporary traffic control during all construction activities adjacent to public right of way to improve traffic flow on public roadways (e.g., flag men)
- Prohibition of construction worker parking on any adjacent residential streets
- Encouragement of carpool/vanpool of workers
- Prohibitions on construction-related vehicles parking on surrounding public streets
- Prohibitions on construction equipment or material deliveries within the public right-of-way
- Accommodation of all equipment on site as feasible

- Provisions for temporary traffic control during all construction activities adjacent to public right-of-way to improve traffic flow on public roadways (e.g., flag men)
- Scheduling of construction activities, including deliveries, to reduce the effect on peak hour traffic flow on surrounding arterial streets
- Rerouting of construction trucks to reduce travel on congested streets to the extent feasible
- Provisions of safety precautions for pedestrians and bicyclists through alternate routing and protection barriers and signage
- Provisions to accommodate the staging and storage of equipment
- Scheduling of construction-related deliveries to reduce travel during commuter peak hours
- Obtain necessary permits for any truck hauling from the City prior to issuance of any permit for the project.
- Noticing and coordination with any nearby schools that may be affected by construction activities, including deliveries, hauling and other construction transportation, to ensure safety of school children.
- Ensuring all feasible safety measures are taken to accommodate safe travel of pedestrian, bicyclists, and other users of the sidewalks around the construction site, including but not limited through the following measures:
 - Construction staging as to maintain pedestrian access on adjacent sidewalks throughout all construction phases.
 - Maintaining adequate and safe pedestrian protection, including physical separation (including utilization of barriers such as K-Rails or scaffolding, etc.) from work space and vehicular traffic and overhead protection, due to sidewalk closure or blockage, at all times.
 - Providing temporary pedestrian facilities adjacent to the Project Site and provide safe, accessible routes that replicate as nearly as practical the most desirable characteristics of the existing facility.
 - Covered walkways shall be provided where pedestrians are exposed to potential injury from falling objects.
 - Keeping sidewalk open during construction until only when it is absolutely required to close or block sidewalk for construction staging.
 - Reopening the sidewalk as soon as reasonably feasible taking construction and construction staging into account.

Significance after Mitigation

With implementation of the mitigation measures and existing regulations and project review by LADOT, impacts would be *less than significant*.

Threshold 4.14-2	Would the Housing Element Update conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?
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Impact 4.14-2 The Housing Element Update would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). The VMT results from the 2029 Housing Element Plan fulfill the dual requirements of being both 15% below the regional average VMT and not exceeding the baseline project area VMT.

While individual housing development projects accommodated by the Housing Element Update may exceed the development project specific threshold, it would not result in impacts from the Housing Element Update. While it is uncommon, there may be instances where some housing projects have impacts based on the project location and unique project characteristics. Housing development projects that exceed the project threshold may use mitigation measure MM 4.14-2 to prepare a TDM plan to reduce impacts to below the City's project thresholds to extent feasible. But they may still have significant impacts. However, at the plan level build out of the RHNA under the Housing Element Update is not anticipated to increase VMT. Therefore, the impact would be *less than significant*.

Impact Analysis

The Housing Element Update would have an impact if its VMT exceeds either of the following:

- The Housing Element Plan results in average VMT per service population for the 2029 City of Los Angeles Housing Element Plan exceeds 15% below the regional average total VMT per service population from 2021 SCAG Region.
- The Housing Element Plan results in average total VMT per service population for the 2029 City of Los Angeles Housing Element Plan that exceeds the average total VMT per service population from the 2021 Baseline.

Table 4.14-5 shows vehicle trips and VMT for the 2021 SCAG Region conditions and 2029 Housing Element Update conditions, and Table 4.14-6 shows vehicle trips and VMT for the 2021 Baseline conditions and 2029 Housing Element Update conditions. As shown in Table 4.14-5, full build-out of the 2029 Housing Element

Update would result in a 34% decrease in VMT compared to 2021 SCAG Region conditions, and does not exceed the 15% below the regional average total VMT per service population threshold. As shown in Table 4.14-6, full build-out of the 2029 Housing Element Update would result in a 2% decrease in service population VMT compared to 2021 citywide Baseline conditions and does not exceed the average total VMT per service population threshold. Therefore, the Housing Element Update impact related to VMT is *less than significant*.

Table 4.14-5 Future Total Vehicle Miles Traveled (VMT) Compared to SCAG Region

Metric	2021 SCAG Region Conditions	2029 City of LA with Housing Element	Percent Difference
Total Daily VT	81,981,938	18,418,177	N/A*
Total Daily VT per Service Population	3	2.9	-3%
Total Daily VMT	919,653,837	138,345,651	N/A*
Total Daily VMT per Service Population	33.1	22.0	-34%
* Notes: Comparison here is not applicable as the conditions represented come from different geographic areas, the SCAG region and the City of Los Angeles respectively			

Table 4.14-6 Future Total Vehicle Miles Traveled (VMT) Compared to Citywide Baseline

Metric	2021 Los Angeles Model Citywide	2029 City of LA with Housing Element	Percent Difference
Total Daily VT	17,547,267	18,418,177	
Total Daily VT per Service Population	2.9	2.9	0%
Total Daily VMT	133,113,557	138,345,651	
Total Daily VMT per Service Population	22.4	22.0	-2%

The types of housing units anticipated under the Housing Element Update would generally fall into five categories of development projects – multi-family residential development; single-family residential development; accessory dwelling units (ADU); mixed use development; and conversion and/or rehabilitation of existing nonresidential, residential and mixed-use structures to be used for housing. The potential to impact transportation would vary according to project housing unit type. The City of Los Angeles has established plan-level thresholds, which have been applied to the evaluation of the 2029 Housing Element Update. Individual projects will be assessed in accordance with LADOT Transportation Assessment Guidelines thresholds for development projects. At a plan level, the 2029 Housing Element Update does not result in a significant impact to VMT. At the individual project level, utilizing a different evaluation methodology and with different thresholds, some projects may result in impacts to VMT. For the most part, however, development of new housing in existing neighborhoods where services already exist, as envisioned by the 2029 Housing Element Update, results in a reduction to VMT. For example, a multi-family development developed in a dense urban environment with multiple

land uses and access to transit may reduce vehicle trip lengths as there are options for people to undertake their trips more locally, rather than needing to travel outside their neighborhood to meet their needs.

According to the first annual report from LADOT to the City Council on the VMT threshold (Council File No. 14-1169, dated September 16, 2020), only three projects had significant and unavoidable impacts under the VMT threshold in the time period from August 2019 to July 2020, whereas, in the year prior to adoption of VMT thresholds, there were 11 projects with significant and unavoidable impacts related to LOS impacts. Similarly, as it relates to projects which required mitigation, 28 projects required mitigation for transportation impacts to LOS in the year prior to adoption of VMT thresholds, whereas in the first year the VMT threshold was in place, only 23 projects required mitigation. VMT mitigation measures generally include:

- Unbundled parking
- Carshare or carpooling
- Bike parking
- Bicycle Network Improvements
- Bikeshare programs
- Pedestrian network improvements
- Provide transit passes
- Facilitate telework with dedicated spaces or technology
- First-last mile shuttles
- TDM promotion and marketing

An example of a housing development project that was shown to have significant and unavoidable impacts under the City's project-based VMT thresholds is the Violet project (not discussed in Table 4-2). The Violet project, located on an almost 100,000 square foot site in the Arts District of the Downtown area, proposed a 36-story residential tower with 347 new live-work units and approximately 22,000 square feet of commercial floor area. The EIR found the following in regard to VMT impacts:

The VMT Calculator was used to evaluate Project VMT and compare it to the VMT impact criteria. The VMT Calculator was set up with the Project's four land uses and their respective sizes as the primary input. Based on the Project's proposed land uses and location, the following assumptions were identified in the VMT Calculator:

- *Total Population: 782*
- *Total Employees: 837*
- *APC: Central*
- *TBZ: Suburban Center*
- *Maximum VMT Reduction: 20 percent*

Using these assumptions, the Project is estimated to result in 5,318 daily vehicle trips and a total daily VMT of 37,176, resulting in a daily household VMT per capita of 9.3 and a daily work VMT per employee of 9.1, which exceed the thresholds for the Central APC of 6.0 and 7.6, respectively. Thus, the Project is projected to have a significant impact on both household and work VMT as estimated by the VMT calculator. Since the restaurant component of the Project is less than 50,000 square feet, it is considered to be a small-scale and local-serving retail use under the TAG screening criteria. The restaurant space is intended to serve primarily Project residents and office workers. Accordingly, per the TAG, VMT impacts from this portion of the Project would be less than significant.

The EIR identified the following mitigations:

Mitigation Measure TR-MM-1: The Project shall prepare a TDM program. TDM program elements could include measures such as unbundled parking although the exact measures will be determined when the plan is prepared. The City of Los Angeles requires that the TDM plan be prepared during construction, with the final TDM plan approved by LADOT prior to the City's issuance of the certificate of occupancy for the Project. Implementation of the TDM plan occurs after building occupancy. TDM strategies applicable for the residential component:

Unbundled Parking—Unbundling parking typically separates the cost of purchasing or renting parking spaces from the cost of purchasing or renting a dwelling unit. Saving money on a dwelling unit by forgoing a parking space acts as an incentive that minimizes auto ownership. Similarly, paying for parking (by purchasing or leasing a space) acts as a disincentive that discourages auto ownership and trip-making.

TDM strategies applicable for the office component:

Required Commute Trip Reduction Program—This strategy involves the development of an employee-focused travel behavior change program that targets individual attitudes, goals, and travel behaviors, educating participants on the impacts of their travel choices and the opportunities to alter their habits. The program typically includes elements such as a coordinated ride-sharing or carpooling program, vanpool program, alternative work

schedule program, preferential carpool parking, guaranteed ride home service, and a program coordinator. The program requires the development of metrics to evaluate success, program monitoring, and regular reporting.

TDM strategies applicable for both the office and residential components:

Promotions and Marketing—This strategy involves the use of marketing and promotional tools to educate and inform travelers about site-specific transportation options and the effects of their travel choices. This strategy includes passive educational and promotional materials, such as posters, info boards, or a website with information that a traveler could choose to read at their own leisure. It can also include more active promotional strategies such as gamification.

With mitigation measures, the EIR concluded impacts would still be significant and unavoidable from the housing component:

With implementation of Mitigation Measure TR-MM-1, the estimated total daily vehicle trips are projected to be reduced to 4,926 and the estimated total daily VMT reduced to 34,480. The daily work VMT per employee is estimated to be reduced by 18 percent to 7.5, which would no longer be a significant impact under the City's criteria. The daily household VMT per capita is projected to be reduced to 7.7, which is a reduction of 17 percent from the unmitigated value of 9.3 but would still constitute a significant impact under the City's criteria. Therefore, impacts would be significant and unavoidable.

However, as shown, even with some individual housing development projects exceeding VMT project thresholds, the Housing Element Update would not exceed the City's threshold of significance. Therefore, impacts are *less than significant*.

Mitigation Measures

The following mitigation measure may be used by discretionary projects that show potentially significant impacts to VMT:

4.14-2 Transportation Demand Management Program

The Project shall prepare a TDM program to reduce VMT impacts below the City's project threshold to the extent feasible. TDM program elements could include measures such as unbundled parking although the exact measures will be determined when the plan is prepared. The City of Los Angeles requires that the TDM plan be prepared during construction, with the final TDM plan approved by LADOT prior to the City's issuance of the certificate of occupancy for the Project. Implementation of

the TDM plan occurs after building occupancy. TDM measures shall include but not be limited to the following examples:

TDM strategies applicable for the residential component:

Unbundled Parking—Unbundling parking typically separates the cost of purchasing or renting parking spaces from the cost of purchasing or renting a dwelling unit. Saving money on a dwelling unit by forgoing a parking space acts as an incentive that minimizes auto ownership. Similarly, paying for parking (by purchasing or leasing a space) acts as a disincentive that discourages auto ownership and trip-making.

TDM strategies applicable if the project includes an office component:

Required Commute Trip Reduction Program—This strategy involves the development of an employee-focused travel behavior change program that targets individual attitudes, goals, and travel behaviors, educating participants on the impacts of their travel choices and the opportunities to alter their habits. The program typically includes elements such as a coordinated ride-sharing or carpooling program, vanpool program, alternative work schedule program, preferential carpool parking, guaranteed ride home service, and a program coordinator. The program requires the development of metrics to evaluate success, program monitoring, and regular reporting.

TDM strategies applicable for both the office and residential components:

Promotions and Marketing—This strategy involves the use of marketing and promotional tools to educate and inform travelers about site-specific transportation options and the effects of their travel choices. This strategy includes passive educational and promotional materials, such as posters, info boards, or a website with information that a traveler could choose to read at their own leisure. It can also include more active promotional strategies such as gamification.

Significance After Mitigation

Even with the above mitigation measures, some projects, like the Violet Project, will not be able to reduce VMT to less than significant level. However, even with some housing development projects accommodated by the Housing Element Update having significant impacts, as discussed above, the Housing Element Update has a *less than significant impact* to VMT under the City's thresholds of significance.

Threshold 4.14-3	Would development accommodated by the Housing Element Update substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
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Impact 4.14-3 All housing developments accommodated by the Housing Element Update would be reviewed by the appropriate City staff to ensure consistency with all applicable City design standards, including standards on driveway number, location, and design, sight lines, and roadway modifications. The majority of projects would not be likely to have impacts related to hazards to geometric designs or incompatible uses. However, larger projects or projects with unique site conditions or attributes may result in potential impacts from construction activities. With mitigation measures to require a construction management plan, impact would be expected to ensure the development does not result in increased hazards due to a geometric design feature or incompatible use during construction. Build out of the RHNA may contributed to queuing on off-ramps that lead to unsafe speed differentials. Although it is anticipated that LADOT and Caltrans would identify impacts during project review and provide mitigation without specific information, impacts may occur. The impact related to construction is *less than significant with mitigation*. Impacts related to highway safety as a result of design features or incompatible uses would be *significant and unavoidable*.

Impact Analysis

Construction Related Impacts

Any development proposal would be reviewed by the City for consistency with all City regulations, standards, and policies, including as they result to geometric design features, including the number and placement of driveways, lines of sight, and any necessary roadway modifications. It is assumed that any projects developed as a result of the Housing Element Update would be designed to meet all City standards such that they do not result in geometric design hazards.

The types of housing units anticipated under the 2029 Housing Element Update would generally fall into five categories of development projects – multi-family residential development; single-family residential development; accessory dwelling units (ADU); mixed use development; and conversion and/or rehabilitation of existing nonresidential, residential and mixed-use structures to be used for housing. As stated above, all housing types would be reviewed by the City prior to development to ensure consistency with all City regulations, standards, and policies regarding design and access. None of the 54

case studies in Table 4-2 had significant unavoidable impacts related to this impact. Impacts are generally found to be less than significant based on existing regulatory requirements and City review. As discussed below, some case study environmental clearances identified mitigation measures to address potential construction impacts, similar to impacts identified in Impact 4.14-1, above. Further discussion of the potential for specific housing types to create a significant impact follows.

- Multi-family residential:** Multi-family residential projects may range in size from small apartment buildings with 2-10 units to larger apartment buildings and high-rise structures with hundreds of units. Large multi-family development projects would be required to abide by City standards regarding the provision, location, and design of driveways, loading areas, pedestrian and bicycle access, and curbspace management, and any plans developed would be reviewed by City staff carefully to ensure consistency prior to approval. As listed in Table 4-2, the 6220 Yucca Street Mixed-Use Project, which is located in the dense neighborhood of Hollywood and plans to provide 210 residential units in a mixed-use setting, did not substantially increase hazards due to a geometric design feature. As stated in the impact analysis for that project, “The Project’s proposed uses would be consistent and compatible with the current urban uses surrounding the Project Site. No sharp curves or new intersections would be created as part of the Project... All three driveways... would be designed per LADOT standards and would obtain LADOT approval... The Project access locations would be designed to City standards so as to provide adequate sight distance, sidewalks, crosswalks, and movement controls that would meet the City’s requirements to protect pedestrian and bicyclist safety¹⁵.”

The 8548, 8552, and 8554 N. Glenoaks Boulevard project proposed a 54-unit multifamily residential apartment building in the Sun Valley – La Tuna Canyon community plan area. The MND found the following potential impacts:

A significant impact would occur if the proposed Project would substantially increase an existing hazardous design feature or introduce incompatible uses to the existing traffic pattern. The proposed Project operations will include one, two-way vehicular access driveway on N. Glenoaks Boulevard. Driveway design, as well as internal circulation and parking will be required to be designed in accordance with LADOT standards. These requirements will be addressed during the permitting process, as part of regulatory compliance implemented by DOT. During construction, including haul truck activities, the proposed Project may result in potentially significant impacts to pedestrians and passenger vehicles traveling proximate to the construction site or proposed haul routes. As a part of Regulatory Compliance Measures applicable to the proposed project, haul

¹⁵ City of Los Angeles, 2020. “6220 West Yucca Street Mixed Use Project.” <https://planning.lacity.org/eir/6220Yucca/deir/Draft%20EIR%20Sections/I.%20Introduction.pdf> Accessed 2nd July 2021.

route activities will require a permit from the Board of Building and Safety Commissioners, which will include conditions, as necessary from the Department of Transportation, to address the traffic effects of proposed hauling, and manage haul trips in response to congestion. LADBS also staggers haul route schedules so that they do not occur simultaneously. However, based on the applicant's haul route application materials, proposed haul route activities would pass by Vinedale Elementary School located 10150 La Tuna Canyon Rd, and impacts may result due to construction-related activities near these areas. However, in conjunction with all applicable Regulatory Compliance Measures (RCM) and the following required mitigation, potential impacts would be reduced to less than significant levels ...The MND identified several mitigation measures, including contacting the school to coordinate haul routes, haul route scheduling, and haul truck staging and signage, and pedestrian safety measures around the construction site. A review of the measures required as shown below demonstrates that they are consistent with the City's existing regulatory scheme for haul routes and construction safety requirements:

XIV-40 Public Services (Construction Activity Near Schools)

- *The developer and contractors shall maintain ongoing contact with administrator of Vinedale Elementary School. The administrative offices shall be contacted when demolition, grading and construction activity begin on the project site so that students and their parents will know when such activities are to occur. The developer shall obtain school walk and bus routes to the schools from either the administrators or from the LAUSD's Transportation Branch (323)342-1400 and guarantee that safe and convenient pedestrian and bus routes to the school be maintained.*
- *The developer shall install appropriate traffic signs around the site to ensure pedestrian and vehicle safety.*
- *There shall be no staging, idling, or parking of construction or haul truck vehicles, including vehicles to transport workers, on any of the streets adjacent to the school.*

XIV-50 Public Services (Schools affected by Haul Route)

- *LADBS shall assign specific haul route hours of operation based upon Vinedale Elementary School hours of operation.*
- *Haul route scheduling shall be sequenced to minimize conflicts with pedestrians, school buses and cars at the arrival and dismissal times of the school day. Haul route trucks shall not be routed past the school during periods when school is in session especially when students are arriving or departing from the campus.*

MMXVI-30 (Transportation - Construction)

- *The developer shall install appropriate traffic signs around the site to ensure pedestrian and vehicle safety.*

- *The applicant shall be limited to no more than two trucks at any given time within the site's staging area.*
- *There shall be no staging of hauling trucks on any streets adjacent to the project, unless specifically approved as a condition of an approved haul route.*
- *No hauling shall be done before 9 a.m. or after 3 p.m.*
- *Trucks shall be spaced so as to discourage a convoy effect.*
- *On substandard hillside streets, only one hauling truck shall be allowed on the street at any time.*
- *A minimum of two flag persons are required. One flag person is required at the entrance to the project site and one flag person at the next intersection along the haul route.*
- *Truck crossing signs are required within 300 feet of the exit of the project site in each direction.*
- *The owner or contractor shall keep the construction area sufficiently dampened to control dust caused by grading and hauling, and at all times shall provide reasonable control of dust caused by wind.*
- *Loads shall be secured by trimming and watering or may be covered to prevent the spilling or blowing of the earth material.*
- *Trucks and loads are to be cleaned at the export site to prevent blowing dirt and spilling of loose earth.*
- *A log documenting the dates of hauling and the number of trips (i.e. trucks) per day shall be available on the job site at all times.*
- *The applicant shall identify a construction manager and provide a telephone number for any inquiries or complaints from residents regarding construction activities. The telephone number shall be posted at the site readily visible to any interested party during site preparation, grading and construction.*

MM XVII-80 (Pedestrian Safety)

- *Applicant shall plan construction and construction staging as to maintain pedestrian access on adjacent sidewalks throughout all construction phases. This requires the applicant to maintain adequate and safe pedestrian protection, including physical separation (including utilization of barriers such as K-Rails or scaffolding, etc) from work space and vehicular traffic and overhead protection, due to sidewalk closure or blockage, at all times.*
- *Temporary pedestrian facilities shall be adjacent to the project site and provide safe, accessible routes that replicate as nearly as practical the most desirable characteristics of the existing facility.*
- *Covered walkways shall be provided where pedestrians are exposed to potential injury from falling objects. Applicant shall keep sidewalk open during construction until only when it is absolutely required to close or block sidewalk for construction staging. Sidewalk shall be reopened as soon as reasonably feasible taking construction and construction staging into account.*

Similarly, in the 9701-9707 North Vesper Avenue project (ENV No. 2016-4617-MND), in Table 4-2, involving the project for a 35 height, 36-unit mixed use building in the Mission Hills—Panorama City—North Hills Community Plan area, the MND identified the measure XVII-80 for Pedestrian Safety above to reduce impacts from construction to a less than significant level. (MND at 52-53) See also, 3440 Wilshire MND, in Table 4-2, which identified similar construction mitigation measures to the Glenoaks for a project near a school. (ENV 2016-3693 MND at B-242)

- **Single-family residential:** Single-family residential projects may range in size and scale from smaller single-family homes to larger single-family homes, and from small-lot subdivisions to multi-property single-family subdivisions. Smaller single-family developments would generally occur in residential or undeveloped areas throughout the City and would not result in significant impacts. The TAG does not require transportation assessments for development projects generating fewer than 250 vehicle trips per day. The Institute of Transportation Engineers (ITE) *Trip Generation, 10th Edition*, the industry standard for developing trip generation estimates, estimates that single-family dwelling units generate fewer than 10 daily vehicle trips (9.44). Therefore, single-family residential projects would generally not have foreseeable impacts related to hazardous design and incompatible uses. However, similar to analysis in Impact Section 4.14-1, a larger single family home housing development project or one with unique site conditions or attributes may have potential impacts.
- **ADUs:** ADUs include attached ADUs created through a building addition or conversion of existing floor area and detached ADUs of various scales. ADUs are most likely to occur within existing or proposed residential developments and would not result in significant impacts. The TAG does not require transportation assessments for development projects generating fewer than 250 vehicle trips per day. The Institute of Transportation Engineers (ITE) *Trip Generation, 10th Edition*, the industry standard for developing trip generation estimates, estimates that single-family dwelling units, to which an ADU is most similar, generate fewer than 10 daily vehicle trips (9.44). ADU projects would not foreseeably have impacts to hazardous design or incompatible uses.
- **Mixed use development:** Mixed use development could range in size and scale from neighborhood commercial mixed use with smaller nonresidential uses, to high-rise mixed-use with larger nonresidential uses. Similar to multi-family residential and large single-family residential developments, mixed use developments would likely occur in the High and Highest Resource Tracts as well as other areas of the City that permit multifamily residential use such as areas near transit and jobs. Larger mixed-use development projects would generally be located in urban areas and on infill sites. As listed in Table 4-2, the 6220 Yucca Street Mixed-Use Project, which is located in the dense neighborhood of Hollywood and plans to provide 210 residential units in a mixed-use setting, did not substantially increase hazards due to a geometric design feature. As stated in the impact analysis for

that project, “The Project’s proposed uses would be consistent and compatible with the current urban uses surrounding the Project Site. No sharp curves or new intersections would be created as part of the Project... All three driveways... would be designed per LADOT standards and would obtain LADOT approval... The Project access locations would be designed to City standards so as to provide adequate sight distance, sidewalks, crosswalks, and movement controls that would meet the City’s requirements to protect pedestrian and bicyclist safety¹⁶.”

The Weingart project proposes two towers for 760 restricted affordable residential units in Downtown area of the City on two sites. The SCEA found less than significant impacts:

The Project does not include development of any new roadways or intersections. Site 1 currently has a total of three driveways (one driveway on San Pedro Street and two driveways on Crocker Street), although it appears that only the northerly driveway on Crocker Street is currently used for vehicular access. Site 2 currently has a total of three driveways (two driveways on 6th Street and one driveway on Crocker Street), although it appears that only the easterly driveway on 6th Street and the Crocker Street driveway are currently used for vehicular access.

Vehicular movements into and out of the Site 1 would be provided via a single driveway on Crocker Street, while vehicular access into and out of Site 2 would be provided via a single driveway on San Pedro Street. Descriptions of the proposed project vehicular site access driveways are provided below.

Site 1 – Crocker Street Driveway: The Site 1 driveway would be located at the northeast corner of the site along Crocker Street (i.e., along the easterly property frontage). This driveway would be located in essentially the same location as an existing site driveway that is currently inactive. One inbound lane and one outbound lane would be provided at this location with gate control equipment located such that no vehicle queuing would extend back out onto the public right-of-way. This driveway is planned to accommodate full access (i.e., left-turn and right-turn ingress and egress turning movements) for motorists accessing Site 1. The Crocker Street driveway would be constructed to City design standards.

Site 2 – San Pedro Street Driveway: The Site 2 driveway would be located at approximately 118 feet south of the East 6th Street along South San Pedro Street (i.e., along the westerly property frontage). One inbound lane and one outbound lane would be provided at this location with gate control equipment located such that no vehicle queuing would extend back out onto the public right-of-way. Based on preliminary comments

¹⁶ City of Los Angeles, 2020. “6220 West Yucca Street Mixed Use Project.” <https://planning.lacity.org/eir/6220Yucca/deir/Draft%20EIR%20Sections/I.%20Introduction.pdf> Accessed 2nd July 2021.

received from LADOT staff, this driveway would be restricted to right-turn ingress and egress turning movements for motorists accessing Site 2. The driveway would be constructed to City design standards.

All ingress/egress points associated with the Project would be designed and constructed in accordance with the requirements of the LADBS, the City's Department of Public Works, and LADOT. Therefore, Project impacts related to roadway hazards would be less than significant.

The 3600 Wilshire Project in the Wilshire Community Plan Area to construct 760 residential unit building and approximately 6,300 square feet of retail identified potential impacts from construction to pedestrians:

Temporary impacts to pedestrian safety could occur during construction. The Project will comply with Mitigation Measure TRAN-MM-3 to ensure the safety of pedestrians and other vehicles in general, as the construction area could create hazards of incompatible/slow-moving construction and haul vehicles. Therefore, impacts would be reduced to less than significant.

The MND identified the following mitigation measure:

TRAN-MM-3 Safety Hazards

- *The developer shall install appropriate construction related traffic signs around the site to ensure pedestrian and vehicle safety.*
- *Applicant shall plan construction and construction staging as to maintain pedestrian access on adjacent sidewalks throughout all construction phases. This requires the applicant to maintain adequate and safe pedestrian protection, including physical separation (including utilization of barriers such as K-Rails or scaffolding) from work space and vehicular traffic, and overhead protection, due to sidewalk closure or blockage, at all times.*
- *Temporary pedestrian facilities shall be adjacent to the Project Site and provide safe, accessible routes that replicate as nearly as practical the most desirable characteristics of the existing facility.*
- *Covered walkways shall be provided where pedestrians are exposed to potential injury from falling objects.*
- *Applicant shall keep sidewalk open during construction until only when it is absolutely required to close or block sidewalk for construction and/or construction staging. Sidewalk shall be reopened as soon as reasonably feasible taking construction and construction staging into account. (3600 Wilshire Project, MND at B-236)*
- **Conversion and/or rehabilitation:** Existing nonresidential, residential, and mixed use structures could be converted or rehabilitated for new residential uses. The conversion or rehabilitation of existing properties would not involve new construction but may result in full-time residents in structures that

were previously not occupied by residents. Converted or rehabilitated structures could contain any of the previously discussed housing typologies (with the exception of ADUs) and would be only as likely or unlikely to create significant impacts to transportation as the housing typology developed within them.

As discussed above, the majority of housing development accommodated by the Housing Element Update would generally not substantially increase hazards due to geometric design features or incompatible uses. However, larger projects or projects with unique site conditions or project attributes may have impacts during construction. Therefore, impacts related to construction activities are *potentially significant*.

Freeway Impacts

As part of individual development project entitlements, the Interim Guidance for Freeway Safety Analysis released by LADOT in May 2020 requires that individual land use projects evaluate the potential for safety impacts related to freeway off ramp queuing. The specific concern relates to the possibility that the speed differential between vehicles traveling on freeway mainlines and vehicles queuing at freeway off-ramps may create the potential for collisions if drivers on the freeway mainline lack sufficient time to slow or stop once they are aware of a queuing situation. Generally speaking, it is anticipated that freeway mainline traffic would slow at times when high levels of off ramp queuing occurs and that the speed differential would be sufficiently small that mainline drivers would have sufficient warning about a queuing situation; however, it is possible that queuing at individual off ramps could occur at times when mainline traffic congestion is low, thus creating a potential safety issue. Because the Housing Element Update is programmatic in nature, it does not include specific development projects or details about the size, nature, or location of individual developments. In addition, future traffic levels and speeds at individual off ramps in and near the City cannot be predicted with any degree of certainty at this time because it is not known how conditions may change over the 8-year planning horizon and what measures the City and Caltrans may implement to address any off ramp queuing issues that arise. Therefore, any detailed analysis of potential future impacts related to off ramp queuing would be speculative. Nevertheless, queuing-related safety issues could potentially arise as build out of the RHNA occurs in the City, although it is anticipated that the City and Caltrans would address any such issues as they arise, it cannot be determined with certainty that queuing related safety issues would not occur. As such, safety impacts related to off ramp queuing as growth occurs pursuant to the Plan are *potentially significant*.

Mitigation Measures

Refer to 4.14-1 (Construction Management Plan) under Impact 4.14-1.

Significance After Mitigation

Construction Related Impacts

With implementation of the Mitigation Measure 4.14-1, impacts related to construction to hazards due to geometric design features or incompatible uses would be reduced to *less than significant with mitigation*.

Freeway Impacts

Significant and unavoidable impacts have been identified in relation to the potential for project-specific ramp queuing safety impacts as growth occurs pursuant to the Plan. Potential mitigation may include transportation demand management strategies to reduce a project's trip generation, investments to active transportation infrastructure, or transit system amenities, and/or operational changes to the ramp terminal such as lane reassignment, traffic signalization, signal phasing or timing modifications, etc. However, without specific information on where safety impacts may occur as a result of freeway off ramp queuing, it is not possible to identify appropriate mitigation measures. Therefore, no feasible mitigation can be identified for the Housing Element Update. It is anticipated that subsequent land use development projects that are seeking approval under the plan study freeway queuing and safety impacts in more detail per the Interim Guidance for Freeway Safety Analysis. Impacts related to highway safety as a result of design features or incompatible uses would be *significant and unavoidable*.

Threshold 4.14-4 Would the Housing Element Update result in inadequate emergency access?

Impact 4.14-4 All housing development accommodated by the Housing Element Update would be reviewed by the appropriate City staff to ensure consistency with all applicable City design standards. The majority of projects would not be likely to have impacts emergency access. However, larger projects or projects with unique site conditions or attributes may result in potential impacts from construction activities. With mitigation measure MM 4.14-1 to require a construction management plan, impact would be expected to ensure the development does not result in impacts to emergency access. Impacts to emergency response times related to congestion would be less than significant based on anticipated actions by LAFD to respond to new demands. The impact is *less than significant with mitigation*.

Impact Analysis

For individual development projects, this impact criterion considers whether a project would have adequate access to emergency services based on the road configuration and project design. At the plan level, this impact criterion may also consider the associated impacts to emergency access from any forecasted congestion.

Development Project Impacts

Any development proposal would be reviewed by the City for consistency with all City regulations, standards, and policies, including as they result to issues of emergency access. Rezoning and densification would largely occur within the community plan update process, allowing community plan areas to allocate the necessary public services in conjunction with expected growth in housing, such as location of emergency service stations and hospitals. Additionally, as most new housing would be located in high-resource areas served by public transit and providing a multimodal transportation network, it is possible that implementation of the Housing Element Update would result in increased transit ridership and active transportation, reducing the number of vehicles on the road and actually improving emergency access.

The types of housing units anticipated under the 2029 Housing Element Update would generally fall into five categories of development projects – multi-family residential development; single-family residential development; accessory dwelling units (ADU); mixed use development; and conversion and/or rehabilitation of existing nonresidential, residential and mixed-use structures to be used for housing. As stated above, all residential development projects, regardless of housing typology, would be reviewed by the City prior to development to ensure it would not result in inadequate emergency access. None of the 54 case studies reviewed for this EIR in Table 4-2 had significant unavoidable impacts related to emergency access. Some environmental clearances identified potential impacts from construction activities and identified mitigation measures that would reduce impacts to less than significant. Further discussion of the potential for specific housing types to create a significant impact follows.

- **Multi-family residential:** Multi-family residential projects may range in size from small apartment buildings with 2-10 units to larger apartment buildings and high-rise structures with hundreds of units. Large multi-family development projects would not be approved if they would result in inadequate levels of emergency access. As listed in Table 4-2, the 6220 Yucca Street Mixed-Use Project, which is located in the dense neighborhood of Hollywood and plans to provide 210 residential units in a mixed-use setting, did not result in inadequate emergency access. As stated in the impact analysis for that project, "... emergency access to the Project Site and surrounding area would continue to be provided on Yucca Street, Argyle Avenue, and Vista Del Mar Avenue similar to existing conditions..."

the Project is required to provide adequate emergency access including access for LAFD [City of Los Angeles Fire Department] apparatus and personnel to the Project Site in accordance with LAFD requirements... Operational impacts regarding emergency access would be less than significant¹⁷."

- **Single-family residential:** Single-family residential projects may range in size and scale from smaller single-family homes to larger single-family homes, and from small-lot subdivisions to multi-property single-family subdivisions. Smaller single-family developments would generally occur in residential or undeveloped areas throughout the City and would not result in significant impacts. The TAG does not require transportation assessments for development projects generating fewer than 250 vehicle trips per day. The Institute of Transportation Engineers (ITE) *Trip Generation, 10th Edition*, the industry standard for developing trip generation estimates, estimates that single-family dwelling units generate fewer than 10 daily vehicle trips (9.44). Therefore, single-family residential projects would not generally have impacts to emergency access. However, some larger projects or projects with unique site conditions or project attributes may have impacts.

The Hidden Creek Estates project (discussed previously) proposed a new subdivision with equestrian facilities in an unincorporated area near Porter Ranch. The project proposed to construct 188 single-family homes. The EIR found the following impacts:

Construction of the project would introduce residential and recreational uses in a primarily undeveloped and natural area. Proposed development would be located in an area historically affected by wildland fires. Therefore, as part of the project, 14 locations along Browns Canyon Road would be widened to facilitate the use of Browns Canyon Road as adequate secondary emergency access for emergency and fire protection vehicles. Road widening and improvements completed along Browns Canyon would allow emergency access vehicles traveling north to pass by other vehicles traveling south along Browns Canyon Road throughout the entire length of the roadway south of the project site. Primary emergency access to the project site would be available via the extended Mason Avenue. With implementation of the project existing emergency access to both the project site and the surrounding area would be enhanced with the construction of the proposed improvements along Browns Canyon Road; therefore, the project would not result in a significant impact on emergency access to the project site.

¹⁷ City of Los Angeles, 2020. "6220 West Yucca Street Mixed Use Project." <https://planning.lacity.org/eir/6220Yucca/deir/Draft%20EIR%20Sections/I.%20Introduction.pdf> Accessed 2nd July 2021.

- **ADUs:** ADUs include attached ADUs created through a building addition or conversion of existing floor area and detached ADUs of various scales. ADUs are most likely to occur within existing or proposed residential developments and would not result in significant impacts. The TAG does not require transportation assessments for development projects generating fewer than 250 vehicle trips per day. The Institute of Transportation Engineers (ITE) *Trip Generation, 10th Edition*, the industry standard for developing trip generation estimates, estimates that single-family dwelling units, to which an ADU is most similar, generate fewer than 10 daily vehicle trips (9.44). ADU projects would not foreseeably have impacts to emergency access.
- **Mixed use development:** Mixed use development could range in size and scale from neighborhood commercial mixed use with smaller nonresidential uses, to high-rise mixed-use with larger nonresidential uses. Similar to multi-family residential and large single-family residential developments, mixed use developments would likely occur in the High and Highest Resource Tracts as well as other areas of the City that permit multifamily residential use such as areas near transit and jobs. Projects would not be approved if they would result in inadequate levels of emergency access. As listed in Table 4-2, the 6220 Yucca Street Mixed-Use Project, which is located in the dense neighborhood of Hollywood and plans to provide 210 residential units in a mixed-use setting, did not result in inadequate emergency access. As stated in the impact analysis for that project, "... emergency access to the Project Site and surrounding area would continue to be provided on Yucca Street, Argyle Avenue, and Vista Del Mar Avenue similar to existing conditions... the Project is required to provide adequate emergency access including access for LAFD [City of Los Angeles Fire Department] apparatus and personnel to the Project Site in accordance with LAFD requirements... Operational impacts regarding emergency access would be less than significant¹⁸."

The Soul Project located in the Wilshire Community Plan area proposed a 222,944 square foot mixed use tower with 256 residential units and 2,507 square feet of office floor area and maximum height of 341 feet. The SCEA found the following:

The Project Site is located in an established urban area that is well served by a roadway network. While it is expected that the majority of construction activities for the Project would be confined on-site, construction activities may temporarily affect access on portions of adjacent streets during certain periods of the day. However, through-access for drivers, including emergency personnel, along all roads would still be provided. In addition, in accordance with City of Los Angeles requirements, the Project would develop a Construction Management Plan (MM TRAF-1), to ensure that adequate emergency access is maintained during construction. Therefore, construction is not expected to result in inadequate emergency access. Long-term

¹⁸ City of Los Angeles, 2020. "6220 West Yucca Street Mixed Use Project."
<https://planning.lacity.org/eir/6220Yucca/deir/Draft%20EIR%20Sections/I.%20Introduction.pdf> Accessed 2nd July 2021.

emergency access would continue to be provided as under existing conditions. Future driveway and building configurations would comply with applicable fire code requirements for emergency evacuation, including proper emergency exits for patrons, employees, and potential residents. Project Site access and circulation plans would be subject to review and approval by the LAFD.

With the following mitigation measure impacts from construction to emergency access were found to be less than significant:

MM TRAF-1: The Applicant shall prepare a detailed Construction Management Plan that shall include, but not be limited to, the following elements, as appropriate:

- Requiring workers and construction trucks to generally travel outside of the peak hours;*
 - Prohibition of construction worker parking on nearby residential streets;*
 - Temporary traffic control during all construction activities encroaching on public rights-of-way to improve traffic flow and safety on public roadways;*
 - Scheduling of construction activities to reduce the effect on traffic flow on surrounding arterial streets;*
 - Safety precautions for pedestrians and bicyclists through such measures as alternate routing and protection barriers as appropriate;*
 - Scheduling of construction-related deliveries so as to generally occur outside the commuter peak hours;*
- and*
- Installation of appropriate traffic signs around the Project Site to ensure pedestrian, bicycle, and vehicle safety.*

The Olympic and Hill SCEA recommended the following mitigation measure to reduce potential construction impacts to emergency access to less than significant:

Mitigation Measure T-1 Compliance with LADOT Requirements: o DOT recommends that a construction work site traffic control plan be submitted to DOT for review and approval prior to the start of any construction work. The plan should show the location of any roadway or sidewalk closures, traffic detours, haul routes, hours of operation, protective devices, warning signs and access to abutting properties. DOT also recommends that construction related traffic be restricted to off-peak hours to the extent possible.

Mitigation Measure T-3 Construction Management Plan: The following will be implemented prior to construction: - As traffic lane, parking lane and/or sidewalk closures are anticipated, worksite traffic control plan(s), approved by the City of Los Angeles, should be implemented to route vehicular traffic, bicyclists, and pedestrians around any such closures. - Ensure that access will remain unobstructed for

land uses in proximity to the project site during project construction. Coordinate with the City and emergency service providers to ensure adequate access is maintained to the project site and neighboring businesses and residences.

Similarly, the Sapphire Project in the Westlake Community Plan Area which proposed 369 residential units and 22,000 square feet of ground floor retail found potential impacts from construction:

The Proposed Project is not located on or near an adopted emergency response or evacuation plan. Development of the Project Site may require temporary and/or partial street closures due to construction activities. However, any such closures would be temporary in nature and would be coordinated with the Departments of Transportation, Building and Safety, and Public Works. Mitigation measures MM K-2 through MM K-7, propose construction control measures that would minimize the Project's potential for construction impacts to less than significant levels. Furthermore, the Proposed Project would be subject to the site plan review requirements of the LAFD and the LAPD to ensure that all access roads, driveways and parking areas would remain accessible to emergency service vehicles. Therefore, the Proposed Project would not be expected to result in inadequate emergency access, and a less than significant impact would occur.

The EIR identified the following mitigation measures as reducing impacts to less than significant:

MM K-1 The Applicant shall, prior to construction, develop a Construction Traffic Control/Management Plan (the "Plan") to be approved by LADOT to minimize the effects of construction on vehicular and pedestrian circulation and assist in the orderly flow of vehicular and pedestrian circulation in the area of the Project. The Plan shall include temporary roadway striping and signage for traffic flow as necessary, as well as the identification and signage of alternative pedestrian routes in the immediate vicinity of the Project.

MM K-2 A Construction work site traffic control plan shall be submitted to LADOT for review and approval in accordance with the LAMC prior to the start of any construction work. The plans shall show the location of any roadway or sidewalk closures, traffic detours, haul routes, hours of operation, protective devices, warning signs and access to abutting properties. All construction related traffic shall be restricted to off-peak hours (i.e., between the hours of 9:00 a.m. and 4:00 p.m.).

MM K-3 The Applicant shall install traffic signs in accordance with the LAMC around the Project Site to ensure pedestrian and vehicular safety.

MM K-4 The Applicant shall plan construction and construction staging as to maintain pedestrian access on adjacent sidewalks throughout all construction phases. This requires the applicant to maintain adequate and safe pedestrian protection, including physical separation (including utilization of barriers such as K-Rails or scaffolding, etc) from work space and vehicular traffic and overhead protection, due to sidewalk closure or blockage, at all times.

MM K-5 Temporary pedestrian facilities shall be adjacent to the project site and provide safe, accessible routes that replicate as nearly as practical the most desirable characteristics of the existing facility.

MM K-6 Covered walkways shall be provided where pedestrians are exposed to potential injury from falling objects.

MM K-7 Pursuant to LAMC Section 62.45, permits shall be obtained from the Bureau of Street Services prior to the closure of any adjacent sidewalks and/or construction of protection fences or canopies within the public right-of-way. For purposes of ensuring safe pedestrian routes are maintained during construction, the following safety measures shall be adhered to:

- Applicant shall plan construction and construction staging as to maintain pedestrian access on adjacent sidewalks throughout all construction phases. This requires the applicant to maintain adequate and safe pedestrian protection, including physical separation (including utilization of barriers such as K-Rails or scaffolding, etc.) from workspace and vehicular traffic and overhead protection, due to sidewalk closure or blockage, at all times.*
- Temporary pedestrian facilities shall be adjacent to the project site and provide safe, accessible routes that replicate as nearly as practical the most desirable characteristics of the existing facility.*
- Covered walkways shall be provided where pedestrians are exposed to potential injury from falling objects.*
- Applicant shall keep sidewalk open during construction until only when it is absolutely required to close or block sidewalk for construction staging. Sidewalk shall be reopened as soon as reasonably feasible taking construction and construction staging into account.*

- **Conversion and/or rehabilitation:** Existing nonresidential, residential, and mixed use structures could be converted or rehabilitated for new residential uses. The conversion or rehabilitation of existing properties would not involve new construction but may result in full-time residents in structures that were previously not occupied by residents. Converted or rehabilitated structures could contain any of the previously discussed housing typologies (with the exception of ADUs) and would be only as likely or unlikely to create significant impacts to transportation as the housing typology developed within them.

Based upon the above, the majority of housing development projects accommodated by the Housing Element Update would not foreseeably have impacts to emergency access. However, larger projects or

projects with unique site or project attributes may have impacts at construction. Therefore, housing development projects accommodated by the Housing Element Update impacts related to emergency access are *potentially significant*.

Emergency Response Times

As discussed in Impact 4.14-2, the overall vehicle trips in the City will increase, even if per capita trips are reduced. As many of the City's roadways are congested, it is foreseeable that build out of the RHNA would result in additional congestion. For example, the Downtown Community Plan Draft EIR identified that the percentage of congested roadway segments (those operating at LOS E or F) will increase from 15% to 44% with anticipated growth from the Plan Update (Downtown CPU DEIR at 4.15-48). Similarly, the Hollywood Community Plan Update RDEIR identified that the percentage of congested roadway segments would increase from 37 to 43 percent with anticipated growth from the Plan Update. (Hollywood CPU RDEIR at 4.15-47)

While congestion would be anticipated to increase from build out of the RHNA, the impacts to emergency response times would not be anticipated to result in significant impacts to emergency access. The analysis from the Downtown Community Plan Update is found to be relevant and applicable to the issue for potential impacts to emergency response times from congestion resulting from build out of the RHNA. The Downtown Community Plan Update EIR found the following potential impact related to response times being affected by anticipated congestion:

Within the City of Los Angeles, fire prevention and suppression and emergency medical services are provided by the LAFD. Public protection service and law enforcement are provided by LAPD.

While the Downtown Plan would impact segment-level LOS as shown above, there is not a direct relationship between predicted travel delay and response times as California state law does require drivers to yield the right-of-way to emergency vehicles and even permits emergency vehicles to use opposing lane of travel, the center turn lanes, or bus-only lanes. LAFD in collaboration with LADOT has developed a Fire Preemption System (FPS), a system that automatically turns traffic lights to green for emergency vehicles traveling on designated streets in the City. (LAFD 2008a). The City of Los Angeles has over 205 miles of routes equipped with FPS. In some instances, roadway reconfigurations with the implementation of the transportation improvements as part of the enhanced network treatments could improve emergency access. For example, a roadway reconfiguration could improve emergency access where a bus-only lane or a contiguous center left-turn lane is introduced where it did not exist. Emergency vehicles are permitted to use bus-only lanes for local access to emergency destinations. People traveling by bicycle are required to pull to the side of the road to yield access to emergency providers regardless if they are traveling in a bus-only lane or in a standard travel lane. It is more likely that when in route

to an emergency incident, general traffic will be expected to merge into the bus-only lane, permitting the emergency vehicle to pass in the through lane to the left. Emergency responders also routinely use the center left-turn lanes, or even travel in opposing travel lanes if needed. Generally, multi-lane roadways allow the emergency vehicles to travel at higher speeds and permit other traffic to maneuver out of the path of the emergency vehicle.

Knowing exactly how fire and emergency service response times will be affected calls for a great deal of speculation. As explained above, it is not possible to exactly predict the Downtown Plan impacts at the street level. This is one factor as to why it is not possible to forecast response times. The other is that, as explained above, the relationship between emergency access and traffic and potential impacts associated with emergency access is complex and involves factors such as the following:

- The proximity of LAFD and LAPD (and other) facilities to those they serve.*
- The staffing and equipment at fire stations.*
- The opportunity for emergency responders to use alternative routes in an area.*
- The specific street configuration. LAFD, in cooperation with LADOT and LADCP, actively participates in the design of specific roadway changes in order to ensure adequate fire/emergency access is maintained. LAFD, in reviewing street and right-of-way projects, comments on particular street configuration designs, and will raise concerns if roadways present particular access challenges, and can recommend no changes be done at all or alternative changes be undertaken if fire and emergency access are particularly impacted.*
- As identified in the Thresholds Guide (Los Angeles 2006), on any given project review, LAFD can implement project specific mitigation requirements, such as requiring fire retardant landscaping, prohibiting construction in fire hazard areas, requiring design features that reduce fire potential and developing emergency response plans.*
- The changing demand for service is complex. For example, with increasing populations there may be more density and more construction, though new buildings are constructed in accordance with increasingly stringent building and fire codes making them safer and more resistant to fires, such as requiring fire sprinklers. The population is aging, which may increase demand for service. But it is also feasible that the population may not need additional service, as healthcare and other technologies evolve and are improved.*
- Future factors that could increase efficiencies in response, including improvements in technology and management, such as changes in deployment of equipment and staff and mutual aid agreements.*

As discussed in Section 4.13, Public Services, LAFD has a Constitutional mandate to provide fire services as, “the protection of the public safety is the first responsibility of local government.” Cal. Const. Art. XIII, Sec. 35, subd. (a)(2). LAFD “preserves life and property, promotes public safety and fosters economic growth through a commitment to prevention, preparedness, response and recovery as an all risk life safety response provider.” It is the nation’s second busiest provider of Emergency Medical Services (EMS); more than 85% of LAFD’s daily

responses are related to EMS. The types of medical response calls received range from minor cuts to trauma and heart attacks. The call volume for structure and brush fires is less frequent.

In 2015, LAFD published a Strategic Plan 2015-2017, A Safer City, that focuses on nine goals and corresponding strategic actions that would guide the LAFD for the next three years (LAFD 2015). The primary goals that are applicable to the Project include providing exceptional public safety and emergency service and implementing and capitalizing on advanced technologies. Some of the key priorities associated with these goals include:

- Improving response times by utilizing data and metrics to identify gaps in LAFD's response strategies and exploring response time improvements through dialogue, cognitive inquiry, innovation, and follow-up;*
- Delivery of emergency medical services by expanding LAFD EMS response capabilities for special events and addressing periods of high vehicle traffic; and*
- Identifying and implementing advanced technologies to support and improve performance metrics, tracking standards, data collection, analysis and reporting procedures (FireStatLA).*

The LAFD Strategic Plan also focuses on the development of an even more professional workforce, promotion of a positive work environment to address risk management issues and strengthening community relationships to improve preparedness and enhance resiliency during emergency events.

In 2018, LAFD released the new Strategic Plan 2018-2020, A Safer City 2.0, which reports that since the previous Strategic Plan was released, LAFD has hired hundreds of new firefighters, implemented the Four Bureau Reorganization, and created innovative resources such as the Advanced Provider Response Unit (APRU), the Sober Response Unit and the Fast Response Vehicle program as well as other pilot programs (LAFD 2018). The new Strategic Plan has updated goals that are more refined. The five goals are 1) Provide exceptional public safety and emergency service, 2) Embrace a healthy, safe and productive work environment, 3) Capitalize on Advanced Technology, 4) Enhance LAFD sustainability and community resiliency, and 5) Increase opportunities for personal growth and professional development. Goal 1 includes improving emergency response times, the delivery of EMS, resource deployment and readiness to respond to disasters. Goal 1 includes an objective to complete the Standards of Cover deployment analysis to determine the optimal distribution and concentration of resources and ensure a safe and effective response force for fire suppression, EMS and specialty response situations. The recommendations from the Standards of Cover are expected to be identified based on different geographic areas in the City; the Standards of Cover study was funded in the City's 2019-2020 budget and is expected to be completed within the next few years (LAFD 2019).

In the interim, LAFD has been implementing innovative resources and pilot programs especially in relation to public health. By addressing EMS related incidents with new resources, such as specialized medical units, other resources, such as fire engines and fire trucks and associated personnel, would be able to respond to other

incidents, such as fires or other emergencies. This strategy is for better resource deployment and to help reduce response times. In the Downtown Plan Area, Fire Station #4 has a Sober Response Unit, which consists of a physician's assistant or nurse practitioner working alongside a firefighter paramedic as well as a social worker. This unit can provide medical treatment in the field, such as stitches and lab work, and determine if patients can be treated in the field without being transported to a hospital, or connect patients directly to a mental health facility or sobering center (LAFD 2020).

In 2015, Planning Department staff discussed the LAFD Strategic Plan and its relationship to growth and traffic with LAFD staff in order to understand how LAFD responds to growth and changes in traffic (LAFD 2015a). LAFD advised that although increasing congestion is a factor in how they address emergency response, their ongoing planning efforts, including the LAFD Strategic Plan take into account such increases in congestion and LAFD continues to plan for and maintain public safety and emergency service as required. LAFD monitors any impact on-the-ground implementation of the Downtown Plan may have on response times and make adjustments as necessary. These adjustments may or may not include redeploying resources, adding staff or building new fire stations. In the summer of 2019, Planning Department staff met with LAFD staff on the same topic due to public comments received about congestion and emergency response (LAFD 2019a). LAFD staff indicated that there are ongoing assessments of increases in call load or types of calls throughout the City, and LAFD continuously makes resource and deployment adjustments to address these changes, such as hiring additional medical personnel, acquiring new apparatus or flex staffing of personnel during the busiest hours of the day. LAFD staff said incremental changes are currently being addressed but the pending Standards of Cover is expected to have new recommendations for the long term. The Standards would include levels of staffing of firefighters and other personnel, target response times, new facilities and apparatus needed by geography, and address a City where development is expected to become denser and taller around transit infrastructure systems.

LAFD has some adopted response times that are consistent with the response times stated in the National Fire Protection Association guidelines, including call processing, turnout for EMS and non-EMS calls, and travel. LAFD holds regular FireStat meetings to review response times throughout the City. These meetings include battalion chiefs and captains from the four Geographic Bureaus (Central, South, Valley, and West) and the Administrative Bureaus in the City, and uses the FireStat data to exercise performance management and spot trends to adjust practices, methods or identify other solutions to maintain response times. Metrics are compared between stations and even across shifts or platoons to determine if there is an issue and to continue always to work on reducing all response times to get closer to the NFPA guidelines. If response times are shown to be increasing, battalion chiefs and captains will be tasked with identifying the reason and put in place mediations to resolve the issue. For example, if it is shown that one platoon is managing a four-minute average response and another platoon at the same station in similar conditions has an average response time of four and a half minutes, the responsible officers for the station will need to determine why one platoon is doing better than another, such

as whether one platoon is taking a different route, and resolve the differences to improve the slower numbers. If the factors are external to LAFD, LAFD will coordinate with other City departments, such as LADOT or ITA to adjust street light timing, or look for completely new solutions, in order to improve response times. In general, LAFD is constantly monitoring FireStat and utilizing all available resources so that appropriate and feasible response times are being maintained.

Many members of the public focus on response times as operational measures to assess system performance (Fitch 2005) or believe that faster response times mean better patient outcome. Nationwide, the most widely referenced response time standard for advanced life support (ALS) incidents in urban settings has been for emergency responders to respond within 8 minutes and 59 seconds, when including call processing time, for 90 percent of incidents. The National Fire Protection Association 1710 Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations to the Public by Career Fire Departments is for an ALS unit to respond within 8 minutes to 90 percent of incidents, without including call processing time (Fitch, 2010). This response goal time has been commonly cited since Dr. Mickey Eisenberg published a study in 1979, which concluded that survival from cardiac arrest is maximized if the time between collapse to receiving CPR is four minutes and the time from collapse to receiving definitive care (e.g. defibrillation) is 8 minutes, which has led to a widespread goal of an 8- minute response for ALS units responding to life-threatening emergencies (Blanchard et al., 2012).

LAFD publishes average operational response times citywide and by specific fire stations online through FIRESTATLA (<http://www.lafd.org/fsla/stations-map>), and was the first fire agency in the United States to release response times to the public (Los Angeles 2019). ALS operational response times are provided for the full calendar year (January through December) starting with the year 2016; when this document was prepared in September 2019, the data available through FIRESTATLA online for 2019 was January through August. Operational response time is the time interval that starts when first contact is made (either through 911 or the fire dispatch center) and ends when the first Standard Unit arrives on-scene. A Standard Unit has the capacity or equipment to administer the full suite of lifesaving services (LAFD 2019b). Average ALS operational response times for the City and for the five stations in the Downtown Plan Area is less than the 8 minute 59 seconds standard, including call processing time. See Table 4.15-14. [Table omitted.]

From the data, the average operational response times for ALS incidents for the five fire stations in the Plan Area have generally slightly increased in recent years, but remain under the 8 minutes 59 seconds standard. Based on all of the above, it is not reasonably foreseeable that the City will not continue to stay below the 8 minutes and 59 second standard for average emergency response times in the Plan Area in consideration of the increasing congestion in the Plan Area identified above. It is reasonably foreseeable that LAFD will continue to meet its own mission statement and constitutional mandate to provide necessary fire and emergency services to the residents and visitors of the City. LAFD is currently preparing a Standards of Cover that will establish the City's response

time standard and identify the facilities, equipment and staff to maintain that response time, including in consideration of increasing congestion identified above.

Additionally, LAFD continues to develop, obtain and innovate new methods, resources and equipment to meet the needs of the City for fire and emergency response, including in the Plan Area. Based on the above, the impact of the Downtown Plan on emergency medical services and fire protection and police protection would be less than significant.

(See Downtown Community Plan DEIR at 4.15-49 to 53)

The Hollywood Community Plan Update EIR had similar findings and analysis and impact conclusion related to emergency access impacts from related to roadway congestion (see RDEIR at 4.15-52 to 60 with similar analysis).

Based upon the above analysis from the Downtown Community Plan EIR and the Hollywood Community Plan EIR, which is found applicable and relevant to the construction and operations from build out of the RHNA, impacts from the Housing Element Update to emergency response times from congestion are *less than significant*.

Impacts from construction of housing development accommodated by the Housing Element Update is *potentially significant*.

Mitigation Measures

Refer to 4.14-1 (Construction Management Plan) under Impact 4.14-1.

Significance After Mitigation

Imposition of Mitigation Measure 4.14-1 along with existing regulatory compliance measures will ensure impacts from housing development accommodated by the RHNA will be *less than significant*.

4.14.7 CUMULATIVE IMPACTS

CEQA Guidelines 15130(a) require that the cumulative effect of implementing a project be assessed to determine if the project's incremental effect together with that of other projects would be cumulatively considerable. The Housing Element Update envisions full build-out of the housing accommodated by the plan by 2029, with cumulative impacts being evaluated on full implementation. Cumulative transportation and traffic impacts consider regional population, housing and employment growth projections prepared by SCAG and found in the 2016-2040 RTP as well as growth anticipated in the City of Los Angeles. The RTP also includes a Sustainable Communities Strategy (SCS) that provides guidance on land use planning and transportation to ensure that the region meets CARB's region-specific GHG reduction goals. The RTP also includes large-scale transportation improvements to show how linking transportation and land use planning can reduce automobile trips and greenhouse gas emissions. The 2016-2040 RTP/SCS identifies transportation corridors and transit routes, High Quality Transit Areas (HQTAs), and a variety of strategies to be employed across the region.

MP 2035 and SCAG 2016-2040 RTP/SCS Consistency

In August 2015, the City of Los Angeles adopted MP 2035. MP 2035 (formerly the Transportation Element of the City's General Plan) is the transportation blueprint for the City of Los Angeles. MP 2035 identifies a number of changes to the City's circulation system, including policies, an Enhanced Complete Street System, an Action Plan, a Complete Streets Design Guide, and a revised Bicycle Plan, all of which will influence the network conditions in the City of Los Angeles.

MP 2035 provides the framework for future community plans and specific plans, which take a closer look at the transportation system in specific areas of the City and recommend more detailed implementation strategies to realize MP 2035. MP 2035 was prepared in compliance with the 2008 Complete Streets Act, which mandates that the circulation element of a city's General Plan be modified to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan.

The Housing Element Update does not propose any specific development projects. This cumulative impacts analysis evaluates the impacts of the Housing Element Update in conjunction with the MP 2035 network changes assumed to be implemented by 2029. No provision of the Housing Element Update would conflict with the goals and policies of the MP 2035 or SCAG 2020-2045 RTP/SCS. The Housing Element

Update would not have a cumulatively considerable impact related to MP 2035 or SCAG 2020-2045 RTP/SCS consistency. Cumulative impacts are *less than significant*.

CEQA Guidelines Section 15064.3, Subdivision (b) Consistency

The Housing Element Update meets the City-adopted threshold of not exceeding baseline conditions, and therefore does not create a transportation impact itself. While the Housing Element Update cannot be used to determine the impact of individual development projects or community plans, the inclusion of the regionally used future forecasts accounts for potential cumulative impacts in this analysis.

A project that falls below an efficiency-based threshold that is aligned with long-term environmental goals and relevant plans would have no cumulative impact distinct from the project impact. Accordingly, a finding of a less-than-significant impact for a project would also be a less than significant cumulative impact. Additionally, long-term VMT trends identified by both the City of Los Angeles TDF model and the SCAG TDF model indicate that VMT will go down throughout the SCAG region in the coming years and decades due to increasing population and job density, infill development, and greater active transportation and transit usage.

As noted above, the Housing Element Update is not projected to have significant impact to VMT. Given that the City of Los Angeles is already highly urbanized, and full build-out of the housing development accommodated under the Housing Element would result in increased infill development and densification, the Update is consistent with the applicable goals and objectives of the SCAG 2016-2040 RTP/SCS and Mobility Plan 2035 to locate developments in infill locations served by quality public transportation and facilitating active transportation. Therefore, the Housing Element Update's cumulative impact to VMT would be *less than significant*.

Hazards Due to a Geometric Design Feature or Incompatible Uses

The Housing Element Update does not include any elements that would promote sharp curves, dangerous intersections, or incompatible uses that could present safety hazards, and promotes policies and programs to encourage safety of users across all modes. Although the Housing Element Update describes a reasonably expected future and cannot constitute a commitment to any project-specific development, individual projects would be expected to align with existing (and any future) adopted City safety principles. However, queuing-related safety issues concerning the potential for safety impacts related to freeway off ramp queuing could potentially arise as additional development occurs throughout the City and elsewhere in the region. The specific concern relates to the possibility that the speed differential between vehicles traveling on freeway mainlines and vehicles queuing at freeway off-ramps may create the potential for collisions if drivers on the freeway mainline lack sufficient time to slow or stop once they

are aware of a queuing situation. Although it is anticipated that the City and Caltrans would address any such issues as they arise, it cannot be determined with certainty that queuing-related safety issues would not occur. Thus, cumulative impacts related to freeway off ramp queuing are considered significant and unavoidable and the accommodation of the housing allowed under the Housing Element Update may make a cumulatively considerable contribution to freeway safety impacts.

Cumulative impacts related to queuing-related safety issues are *significant and unavoidable*. All other cumulative impacts related to transportation hazards are *less than significant*.

Emergency Access

The Housing Element Update would increase traffic throughout the City of Los Angeles, which could result in potential delays for emergency vehicles. However, while the MP 2035 includes proposed roadway changes, they do not provide intersection-level detail citywide. It is feasible that some of these improvements to the network would provide benefits to emergency access as well. As noted above, the Department of City Planning staff have discussed the LAFD Strategic Plan and its relationship to growth and traffic with LAFD staff. While LAFD acknowledged the possible effects of congestion on their efforts, their ongoing planning efforts and new Strategic Plan consider increased congestion and the possible adjustments necessary. These adjustments may include redeploying resources, adding staff, or building new fire stations as deemed necessary. LAFD will continue to monitor growth in the City of Los Angeles and any impact they identify will be addressed when needed. Therefore, the Housing Element Update would not have a cumulatively considerable impacts related to emergency access. Cumulative impacts are *less than significant*.

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