

3.1. AIR QUALITY

The California Health and Safety Code defines air pollution as any discharge, release, or other propagation into the atmosphere, and includes, but is not limited to, smoke, charred paper, dust, soot, grime, carbon, fumes, gases, odors, particulate matter, acids, or any combination thereof. Sources of air pollution can be classified as stationary sources (e.g., industrial processes, generators), mobile sources (e.g., automobiles, trucks) or area sources (e.g., residential water heaters).

Criteria air pollutants are pollutants for which the federal and state governments have established ambient air quality standards to protect public health. The federal and state standards have been set at concentrations designed to prevent environmental exposures that would be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Criteria air pollutants that are regulated by the federal and state governments include carbon monoxide (CO), ozone (O₃), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter ten microns or less in diameter (PM₁₀), fine particulate matter 2.5 microns or less in diameter (PM_{2.5}) and lead (Pb). These pollutants are discussed below; also provided are descriptions of ultrafine particulate matter (ultrafine PM), diesel particulate matter (diesel PM) and toxic air contaminants (TACs) as pollutants of air quality concern for which air quality standards have not been specifically established.

CO is a colorless and odorless gas formed by the incomplete combustion of fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas such as the project location, automobile exhaust accounts for the majority of CO emissions. CO is a non-reactive air pollutant that dissipates relatively quickly, so ambient CO concentrations generally follows the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions; primarily wind speed, topography and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, a typical situation at dusk in urban areas between November and February. The highest levels of CO typically occur during the colder months of the year when inversion conditions are more frequent. In terms of human health, CO competes with oxygen—often replacing it in the blood—thus reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can be dizziness, fatigue and impairment of central nervous system functions.

O₃ is a colorless gas that is formed in the atmosphere when reactive organic gases (ROG)—which include volatile organic compounds (VOC) and nitrogen oxides (NO_x)—react in the presence of ultraviolet sunlight. O₃ is not a primary pollutant directly emitted to the atmosphere; it is a secondary pollutant formed by complex interactions involving two or more chemical compounds. Emissions of ROG and NO_x that drive atmospheric O₃ formation are primarily attributed to automobile exhaust and industrial sources. Meteorology and terrain play major roles in O₃ formation. Ideal conditions occur during summer and early autumn, on days with low wind speeds or stagnant air, warm temperatures, and clear skies.

Automobile travel serves as the greatest source of ozone-producing gases. Short-term exposure (lasting for a few hours) to O₃ at levels typically observed in Southern California can result in breathing pattern changes, restricted breathing, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes.

NO₂, like O₃, is formed in the atmosphere through a chemical reaction between nitric oxide (NO) and atmospheric oxygen. NO and NO₂ are collectively referred to as NO_x and are major contributors to O₃ formation. NO₂ also contributes to the formation of PM₁₀ (discussed below). High concentrations of NO₂ can cause breathing difficulties and result in a brownish-red cast to the atmosphere with reduced visibility. There is some indication of a relationship between NO₂ and chronic pulmonary fibrosis. Some increase of bronchitis in children (2 and 3 years old) has also been observed at concentrations below 0.3 parts per million (ppm).

Particulate matter (PM) comprises very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids and metals. Particulate matter also forms when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. PM₁₀ and PM_{2.5} represent fractions of particulate matter classified by particle size. Inhalable particulate matter, or PM₁₀, is about 1/7 the thickness of a human hair. Major sources of PM₁₀ include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood burning stoves and fireplaces; dust from construction, landfills and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions. Fine particulate matter, or PM_{2.5}, is roughly 1/28 the diameter of a human hair. PM_{2.5} results from fuel combustion (e.g., motor vehicles, power generation and industrial facilities), residential fireplaces and wood stoves. In addition, PM_{2.5} can be formed in the atmosphere from gases such as SO₂, NO_x and VOC.

Fine particulate matter, such as PM₁₀ and PM_{2.5}, pose greater risks to human health than large particulate matter. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. PM₁₀ and PM_{2.5} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances, such as lead, sulfates and nitrates can cause lung damage directly. These substances can be absorbed into the blood stream and cause damage throughout the body. These substances can transport absorbed gases, such as chlorides or ammonium, into the lungs and cause injury. Whereas PM₁₀ tends to collect in the upper portion of the respiratory system, PM_{2.5} is so tiny that it can penetrate deeper into the lungs and damage lung tissues. Suspended particulates also damage and discolor surfaces on which they settle, as well as produce haze and reduce regional visibility.

SO₂ is a colorless, pungent gas that forms primarily through the combustion of sulfur-containing fossil fuels. Main sources of SO₂ emissions are coal and oil used in power plants and industries. Generally, the highest levels of SO₂ are found near large industrial complexes. In recent years, atmospheric SO₂ concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO₂ and limits on the sulfur

content of fuels. SO₂ is an irritant gas that attacks the throat and lungs. It can cause acute respiratory symptoms and diminished ventilator function in children. SO₂ can also yellow plant leaves and erode iron and steel. Sulfur oxides (SO_x) refer to any of several compounds of sulfur and oxygen, the most important of which is SO₂.

Pb in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline combustion, the manufacture of batteries, paint, ink, ceramics, and ammunition, and secondary lead smelting facilities. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phase-out of leaded gasoline reduced the overall prevalence of airborne lead by nearly 95 percent. With the phase-out of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities have become emission sources of greater concern. Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient performance, psychomotor performance, reaction time and growth.

Ultrafine PM emissions form during engine combustion and in the atmosphere immediately after leaving exhaust pipes as emitted gases. Ultrafine PM emissions then condense and rapidly dilute and cool. Internal combustion engines have been identified as significant sources of ultrafine PM. A significant proportion of diesel emission particles have diameters smaller than 100 nanometer (nm) or 0.1 micrometer (µm). Particles emitted from gasoline-powered engines are generally less than 80 nm (0.08 µm) in diameter. Particles from CNG fueled engines are smaller than from diesel emissions, with majority between 20 nm and 60 nm (0.02 µm – 0.06 µm). In laboratory toxicity studies, a greater inflammatory and oxidative stress response has been elicited from ultrafine particles compared to larger particles at comparable mass doses. Oxidative stress is a term to describe cell, tissue or organ damage caused by reactive oxygen species. After inhalation, ultrafine particles may penetrate rapidly into lung tissue; and some portions may be translocated to other organs of the body. Additionally, ultrafine particles have been found to penetrate cells and subcellular organelles. In cell cultures exposed to ambient particles, ultrafine particles have been found in mitochondria where they induced structural damage.

TACs are generally defined as those contaminants that are known or suspected to cause serious health problems but do not have a corresponding ambient air quality standard. These air pollutants may increase a person's risk of developing cancer and/or other serious health effects; however, the emission of a toxic chemical does not automatically create a health hazard. Other factors such as the concentration of the chemical and its toxicity, meteorological conditions at the time of release, and the terrain all influence whether the emissions could be hazardous to human health. TACs are emitted by a variety of industrial processes such as petroleum refining, electric utility and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust.

TACs can exist as PM₁₀ and PM_{2.5} or as vapors (gases), and include metals, other particles, gases absorbed by particles, and certain vapors from fuels and other sources.

Diesel exhaust is composed of two phases, gas and particle, both of which contribute to human health risk upon exposure. The gas phase is composed of many of the urban hazardous air pollutants, such as acetaldehyde, acrolein, benzene, 1,3-butadiene, formaldehyde and polycyclic aromatic hydrocarbons. The particle phase is also composed of many different types of particles by size or composition. Fine and ultrafine diesel particulates are of the greatest health concern and may be composed of elemental carbon with adsorbed compounds such as organic compounds, sulfate, nitrate, metals and other trace elements. Diesel exhaust is emitted from a broad range of diesel engines; the on-road diesel engines of trucks, buses and cars, and the off-road diesel engines that include locomotives, marine vessels and heavy duty equipment. Although diesel PM is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil and whether an emission control system is present.

Diesel exhaust causes health effects from both short-term (acute) exposures and long-term (chronic) exposures. The nature and severity of health effects depends upon several factors including the dose and duration of exposure. Individuals also react differently to different levels of exposure. There is limited information on exposure to diesel PM specifically but there is substantial evidence to indicate that inhalation exposure to diesel exhaust causes acute and chronic health effects. Acute exposure to diesel exhaust may cause irritation to the eyes, nose, throat and lungs, some neurological effects such as lightheadedness. Acute exposure may also elicit a cough or nausea as well as exacerbate asthma. Chronic inhalation exposure to diesel PM in experimental animal studies has shown a range of dose-dependent lung inflammation and cellular changes in the lung and immunological effects. Based upon human and laboratory studies, there is considerable evidence that diesel exhaust is a likely carcinogen. Human epidemiological studies demonstrate an association between diesel exhaust exposure and increased lung cancer rates in occupational settings (USEPA, 2015a).

3.1.1. Regulatory Framework

3.1.1.1. Federal

The Federal Clean Air Act (CAA) governs air quality at the national level and the United States Environmental Protection Agency (USEPA) is responsible for enforcing the regulations provided in the CAA. Under the CAA, the USEPA is authorized to establish National Ambient Air Quality Standard (NAAQS) that set protective limits on concentrations of air pollutants in the atmosphere. Enforcement of the NAAQS is required under the 1977 CAA and subsequent amendments. The USEPA regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain types of locomotives. The USEPA has jurisdiction over emission sources outside state waters (e.g., beyond the outer continental shelf) and establishes various emission standards, including those for vehicles sold in states other than California.

As required by the CAA, a NAAQS has been established for seven criteria air pollutants: CO, NO₂, O₃, PM_{2.5}, PM₁₀, SO₂, and Pb. The CAA grants the USEPA authority to designate areas as attainment, nonattainment, or maintenance (previously nonattainment and currently attainment) for each criteria pollutant based on whether the NAAQS have been achieved on a regional scale. The federal standards are summarized in Table 3.1.1. The USEPA has classified the Los Angeles County portion of the South Coast Air Basin (Basin) as a nonattainment area for O₃, PM_{2.5} and Pb and a maintenance area for PM₁₀, CO and NO₂.

Table 3.1.1 State and National Criteria Pollutant Ambient Air Quality Standards and Attainment Status for the South Coast Air Basin

Pollutant	Averaging Period	California		Federal	
		Standards	Attainment Status	Standards	Attainment Status
Ozone (O ₃)	1-hour	0.09 ppm (180 µg/m ³)	Nonattainment	--	--
	8-hour	0.070 ppm (137 µg/m ³)	Nonattainment	0.070 ppm (137 µg/m ³)	Nonattainment
Respirable Particulate Matter (PM ₁₀)	24-hour	50 µg/m ³	Nonattainment	150 µg/m ³	Maintenance
	Annual Arithmetic Mean	20 µg/m ³	Nonattainment	--	--
Fine Particulate Matter (PM _{2.5})	24-hour	--	--	35 µg/m ³	Nonattainment
	Annual Arithmetic Mean	12 µg/m ³	Nonattainment	12.0 µg/m ³	Nonattainment
Carbon Monoxide (CO)	1-hour	20 ppm (23 mg/m ³)	Attainment	35 ppm (40 mg/m ³)	Maintenance
	8-hour	9.0 ppm (10 mg/m ³)	Attainment	9 ppm (10 mg/m ³)	Maintenance
Nitrogen Dioxide (NO ₂)	1-hour	0.18 ppm (339 µg/m ³)	Attainment	100 ppb (188 µg/m ³)	Maintenance
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	Attainment	53 ppb (100 µg/m ³)	Maintenance
Sulfur Dioxide (SO ₂)	1-hour	0.25 ppm (655 µg/m ³)	Attainment	75 ppb (196 µg/m ³)	Attainment
	24-hour	0.04 ppm (105 µg/m ³)	Attainment	--	--
Lead (Pb)	30-day average	1.5 µg/m ³	Attainment	--	--
	Calendar Quarter	--	--	0.15 µg/m ³	Nonattainment

Source: USEPA, 2015b; CARB, 2015, 2016a.

Controlling air toxic emissions became a national priority with the passage of the CAA Amendments of 1990, whereby Congress mandated that the USEPA regulate 188 air toxics, also known as hazardous air pollutants. The USEPA has assessed this expansive list in their latest rule on the Control of Hazardous Air Pollutants from Mobile Sources (USEPA, 2007)

and identified a group of 93 compounds emitted from mobile sources that are listed in their Integrated Risk Information System (IRIS). In addition, USEPA classified seven compounds with significant contributions from mobile sources that are among the national- and regional-scale cancer risk drivers identified in the 1999 National Air Toxics Assessment as hazardous air pollutants of concern. These include acrolein, benzene, 1,3-butadiene, diesel particulate matter plus diesel exhaust organic gases (diesel PM), formaldehyde, naphthalene and polycyclic organic matter.

3.1.1.2. State

In addition to being subject to the requirements of CAA, air quality in California is also governed by more stringent regulations under the California Clean Air Act (CCAA). In California, the CCAA is administered by the California Air Resources Board (CARB) at the state level and by the air quality management districts and air pollution control districts at the regional and local levels. The CARB, which became part of the California Environmental Protection Agency (Cal/EPA) in 1991, is responsible for meeting the state requirements of the CAA, administering the CCAA, and establishing the California Ambient Air Quality Standards (CAAQS). The CCAA, as amended in 1992, requires all air districts in the state to endeavor to achieve and maintain the CAAQS. The CAAQS are generally more stringent than the corresponding federal standards and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride and visibility-reducing particles. The CARB regulates mobile air pollution sources, such as motor vehicles. The CARB is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. The state standards are summarized in Table 3.1.1.

The CCAA requires CARB to designate areas within California as either attainment or nonattainment for each criteria pollutant based on whether the CAAQS have been achieved. Under the CCAA, areas are designated as nonattainment for a pollutant if air quality data shows that a state standard for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events are not considered violations of a state standard and are not used as a basis for designating areas as nonattainment. Under the CCAA, the Los Angeles County portion of the Basin is designated as a nonattainment area for O₃, PM_{2.5} and PM₁₀.

The CARB's statewide comprehensive air toxics program was established in the early 1980s. The Toxic Air Contaminant Identification and Control Act created California's program to reduce exposure to air toxics. Under the Toxic Air Contaminant Identification and Control Act, the CARB is required to prioritize the identification and control of air toxics emissions. In selecting substances for review, the CARB must consider criteria relating to the risk of harm to public health, such as amount or potential amount of emissions, manner of and exposure to usage of the substance in California, persistence in the atmosphere, and ambient concentrations in the community. The Toxic Air Contaminant Identification and Control Act also requires CARB to use available information gathered from the Air Toxics Hot Spots Information and Assessment Act to include in the prioritization of compounds.

The CARB classified particulate emissions from diesel-fueled engines (diesel PM) as TACs in August 1998. Following the identification process, the CARB was required by law to determine if there was a need for further control, which led to the risk management phase of the program. For the risk management phase, CARB formed the Diesel Advisory Committee to assist in the development of a risk management guidance document and a risk reduction plan. With the assistance of the Advisory Committee and its subcommittees, CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles and the Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines. The Diesel Advisory Committee approved these documents on September 28, 2000, paving the way for the next step in the regulatory process: the control measure phase. During the control measure phase, specific Statewide regulations designed to further reduce diesel PM emissions from diesel-fueled engines and vehicles have and continue to be evaluated and developed. The goal of each regulation is to make diesel engines as clean as possible by establishing state-of-the-art technology requirements or emission standards to reduce diesel PM emissions (CARB, 2000).

3.1.1.3. Regional

South Coast Air Quality Management District (SCAQMD)

The SCAQMD was created to coordinate air quality planning efforts throughout Southern California. The SCAQMD is the agency principally responsible for comprehensive air pollution control in the region. Specifically, the SCAQMD is responsible for monitoring air quality, as well as planning, implementing and enforcing programs designed to attain and maintain state and federal ambient air quality standards. Programs that were developed include air quality rules and regulations that regulate stationary sources, area sources, point sources and certain mobile source emissions. The SCAQMD is also responsible for establishing stationary source permitting requirements and for ensuring that new, modified or relocated stationary sources do not create net emission increases.

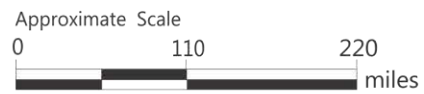
The SCAQMD monitors air quality within the project area. The SCAQMD has jurisdiction over an area of 10,743 square miles, consisting of the Basin and the Riverside County portion of the Salton Sea Air Basin and Mojave Desert Air Basin. The Basin is a subregion of the SCAQMD's jurisdiction and covers an area of 6,745 square miles, including all of Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino Counties. The Basin is bounded by the Pacific Ocean to the west; the San Gabriel, San Bernardino and San Jacinto Mountains to the north and east; and the San Diego County line to the south. Figure 3.1.1 shows the geographic extent of the Basin highlighted, as well as the other Air Basins throughout California (SCAQMD, 2016).

Figure 3.1.1 California Air Basins – South Coast Air Basin



LEGEND

- South Coast Air Basin
- Other California Air Basins



Source: CARB, 2016b.

The Air Quality Management Plan (AQMP) is the management plan for continued progression toward clean air and compliance with state and federal requirements. It includes a comprehensive strategy aimed at controlling pollution from all sources, including stationary sources, on- and off-road mobile sources and area sources. The AQMP proposes attainment demonstration of the PM_{2.5} standard by 2014 in the Basin through adoption of all feasible measures. Attainment has not been demonstrated at this time and will be addressed in the next AQMP. The AQMP also incorporates current scientific information and meteorological air quality models. It also updates the federally approved 8-hour O₃ control plan with new commitments for short-term NO_x and VOC reductions (SCAQMD, 2012).

The SCAQMD has a long and successful history of reducing air toxics and criteria emissions in the Basin. SCAQMD has an extensive control program, including traditional and innovative rules and policies. These policies can be viewed in the SCAQMD's Air Toxics Control Plan for the Next Ten Years (2000). To date, the most comprehensive study on air toxics in the Basin is the Multiple Air Toxics Exposure Study IV (MATES-IV), conducted by the SCAQMD. The monitoring program measured more than 30 air pollutants, including both gases and particulates. The monitoring study was accompanied by a computer modeling study in which the SCAQMD estimated the risk of cancer from breathing toxic air pollution throughout the region based on emissions and weather data. MATES-IV found that the cancer risk in the region from carcinogenic air pollutants ranges from about 320 to 480 in a million. About 90 percent of the risk is attributed to emissions associated with mobile sources, with the remainder attributed to toxics emitted from stationary sources, which include large industrial operations, such as refineries and metal processing facilities, as well as smaller businesses such as gas stations and chrome plating. The results indicate that diesel PM is the major contributor to air toxics risk, accounting on average for about 68 percent of the total risk.

The SCAQMD has established various rules to manage air quality in the Basin, including Rules 402 and 403. Rule 402 (Nuisance) states that a person should not emit air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause injury or damage to business or property. Rule 403 (Fugitive Dust) controls fugitive dust through various requirements including, but not limited to, applying water in sufficient quantities to prevent the generation of visible dust plumes, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit a construction site, and maintaining effective cover over exposed areas.

Southern California Association of Governments (SCAG)

While Southern California is a leader in reducing emissions and ambient levels of air pollutants are improving, the SCAG region continues to have the worst air quality in the nation. The SCAG region encompasses six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura) and 191 cities in an area covering more than 38,000 square miles. On April 7, 2016, SCAG adopted the 2016-2040 Regional Transportation

Plan/Sustainable Communities Strategy (RTP/SCS), which includes, policies that promote actions to help the region confront congestion and mobility issues and consequently improve air quality (SCAG, 2016). The 2016-2040 RTP/SCS charts a course for closely integrating land use and transportation planning including in areas labeled as High Quality Transit Areas. High Quality Transit Areas reflect areas with rail transit service or bus service where lines have peak headways of less than 15 minutes. It outlines \$556.5 billion in transportation system investments through 2040. The 2016-2040 RTP/SCS was prepared through a collaborative, continuous and comprehensive process by SCAG, and it serves as an update to SCAG's 2012-2035 RTP/SCS. Major themes in the 2016-2040 RTP/SCS that are relevant to the project include integrating strategies for land use and transportation, striving for sustainability, protecting and preserving the existing transportation infrastructure, increasing capacity through improved system management and giving people more transportation choices.

3.1.1.4. Local

City of Los Angeles General Plan Air Quality Element

The principal objective of the Air Quality Element of the General Plan is to aid the region in attaining the state and federal ambient air quality standards while continuing economic growth and improvement in the quality of life afforded to City residents (City of Los Angeles, 1992). The Air Quality Element also documents how the City will implement local programs contained in the General Plan. Goals, objectives, and policies of the Air Quality Element applicable to the proposed project are listed in Table 3.1.2.

Los Angeles County Metropolitan Transportation Authority (Metro)

Metro recently implemented several policies and plans aimed at improving system-wide sustainability and minimizing detrimental air quality and climate change impacts from operations and new projects, collectively overseen by the Countywide Sustainability Planning Program (Metro, 2012(a)). These plans and policies constitute the framework for the Metro Climate Action and Adaptation Plan (Metro, 2012(b)), which is Metro's foundation for its Sustainability Implementation Plan (Metro, 2012(c)). Strategies for achieving the objectives set forth in the Metro Climate Action and Adaptation Plan were analyzed in the Metro Energy and Resource Report (Metro, 2014). The Metro policies and plans that most directly apply to reducing emissions of air pollutants that would result from implementation of the proposed project include the Construction Demolition Debris Recycling and Reuse Policy (Metro, 2007), Environmental Policy (Metro, 2009), and the Green Construction Policy (Metro, 2011), all of which are incorporated into the Metro Countywide Sustainability Planning Policy and Implementation Plan.

Metro published its Construction and Demolition Debris Recycling and Reuse Policy (GEN 51) to encourage responsible practices that will enhance reliance on recyclable and recycled products and reduce environmental impacts from waste disposal in landfills. The policy dictates that Metro must give preference to recyclable and recycled products in the selection of construction materials to the maximum extent feasible during design and construction of

proposed projects, as well as mandating that Metro shall not use any landfill or recycling facility that does not present and maintain acceptable documentation indicating their legitimacy for disposal or diversion purposes. Construction debris or wastes that cannot be recycled or reused on site shall be manifested, transported, and disposed to the most appropriate facility. Metro shall ensure that any material used in the design or construction of all structures would not adversely affect the performance, safety or the environment of the transportation system.

Metro's Environmental Policy was prepared to provide guidance in identifying potential environmental impacts generated by: development activities and developing mitigation measures to address those impacts; operating and maintaining Metro vehicles and facilities to minimize negative impacts on the environment; reducing consumption of natural resources; and reducing and/or diverting the amount of solid waste going to landfills. Metro is committed to planning and constructing projects and operating and maintaining facilities and vehicles in a manner that will protect human health and the environment. Strategies outlined in the Environmental Policy to reduce air quality impacts include, but are not limited to: compliance with all environmental, federal, state, and local laws and regulations; restoration of the environment by providing mitigation, corrective action, and monitoring to ensure that environmental commitments are implemented; avoidance of environmental degradation by minimizing releases to air, water, and land; prevention of pollution and conservation of resources by reducing waste and reusing materials; and ensuring that the planning, design, construction and operation of facilities and services consider environmental protection and sustainable features.

Metro adopted the Green Construction Policy in 2011 to reduce environmental impacts from construction activities associated with Metro projects. The policy provides requirements for identifying and mitigating air emission impacts on human health, the environment, and the climate of on-road and off-road construction equipment and generators used in construction and development activities; implementing appropriate Best Management Practices (BMPs) to complement equipment mitigations; and implementing strategies to ensure compliance with applicable rules and regulations. The Green Construction Policy included requirements for off-road construction equipment to meet Tier 4 off-road emission standards where feasible or be outfitted with Best Available Control Technology (BACT) devices certified by CARB; on-road heavy-duty diesel trucks or equipment with a gross vehicle weight rating of 19,500 pounds or greater to comply with USEPA 2007 on-road emission standards for PM and NO_x; and for the utilization of grid-based electric power at any construction site where feasible. BMPs in the Green Construction policy include, but are not limited to: maintaining equipment according to manufacturer's specifications; restricting idling of construction equipment and on-road heavy-duty trucks to a maximum of five minutes when not in use; use of diesel particulate traps or BACT as feasible; configuration of haul routes to conform to local requirements to minimize traversing through congested streets, near sensitive receptor areas, and during peak traffic periods; and limiting traffic speeds on unpaved roads to less than 15 miles per hour .

3.1.2. Existing Setting

3.1.2.1. Air Pollution Climatology

The project site is located within the Los Angeles County portion of the Basin. The Basin is in an area of high air pollution potential due to its climate and topography. The general region lies in the semi-permanent high pressure zone of the eastern Pacific, resulting in a mild climate tempered by cool sea breezes with light average wind speeds. The Basin experiences warm summers, mild winters, infrequent rainfall, light winds and moderate humidity. This usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or easterly Santa Ana winds. The Basin is a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean to the west and high San Gabriel, San Bernardino and San Jacinto Mountains around the rest of its perimeter. The mountains and hills within the area contribute to the variation of rainfall, temperature and winds throughout the region.

Table 3.1.2 City of Los Angeles General Plan Air Quality Goals, Objectives, and Policies

Goal/Objective/Policy	Goal/Objective/Policy Description
Goal 1	Good air quality and mobility in an environment of continued population growth and healthy economic structure.
Objective 1.3	It is the objective of the City of Los Angeles to reduce particulate air pollutants emanating from unpaved areas, parking lots and construction sites.
Policy 1.3.1	Minimize particulate matter emissions from construction sites.
Goal 2	Less reliance on single-occupant vehicles with fewer commute and non-work trips.
Objective 2.1	It is the objective of the City of Los Angeles to reduce work trips as a step towards attaining trip reduction objectives necessary to achieve regional air quality goals.
Policy 2.1.1	Utilize compressed work weeks and flex time, telecommuting, carpooling, vanpooling, public transit, and improve walking/bicycling related facilities in order to reduce Vehicle Trips and Vehicle Miles Traveled (VMT) as an employer and encourage the private sector to do the same to reduce work trips and traffic congestion.
Goal 3	Efficient management of transportation facilities and system infrastructure using cost-effective system management and innovative demand-management techniques.
Objective 3.2	It is the objective of the City of Los Angeles to reduce vehicular traffic during peak periods.
Policy 3.2.1	Manage traffic congestion during peak periods.
Goal 4	Minimal impact of existing land use patterns and future land use development on air quality by addressing the relationship between land use, transportation, and air quality.
Objective 4.1	It is the objective of the City of Los Angeles to include the regional attainment of ambient air quality standards as a primary consideration in land use planning.
Policy 4.1.1	Coordinate with all appropriate regional agencies the implementation of strategies for the integration of land use, transportation, and air quality policies.
Objective 4.2	It is the objective of the City of Los Angeles to reduce vehicle trips and VMT associated with land use patterns.
Policy 4.2.2	Improve accessibility for the City's residents to places of employment, shopping centers and other establishments.
Policy 4.2.3	Ensure that new development is compatible with pedestrians, bicycles, transit, and alternative fuel vehicles.

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

Source: City of Los Angeles, 1992.

The Basin experiences frequent temperature inversions. Temperature typically decreases with height. However, under inversion conditions, temperature increases as altitude increases, thereby preventing air close to the ground from mixing with the air above it. As a result, air pollutants are trapped near the ground. During the summer, air quality problems are created due to the interaction between the ocean surface and the lower layer of the atmosphere. This interaction creates a moist marine layer. An upper layer of warm air mass forms over the cool marine layer, preventing air pollutants from dispersing upward. Additionally, hydrocarbons and NO₂ react under strong sunlight, creating smog. Light, daytime winds, predominantly from the west, further aggravate the condition by driving air pollutants inland, toward the mountains.

During the fall and winter, air quality problems are created due to CO and NO₂ emissions. CO concentrations are generally worse in the morning and late evening. In the morning, CO levels are relatively high due to cold temperatures and the large number of cars traveling. High CO levels during the late evenings are a result of stagnant atmospheric conditions trapping CO in the area. Since CO emissions are produced almost entirely from automobiles, the highest CO concentrations in the Basin are associated with heavy traffic. NO₂ concentrations are also generally higher during fall and winter days.

3.1.2.2. Local Climate

The mountains and hills within the Basin contribute to the variation of rainfall, temperature, and winds throughout the region. The closest wind monitoring station to the project site is located adjacent to the LAX runways. The address is listed as, at 1 World Way in the City of Los Angeles. Within the project site and its vicinity, the average wind speed, as recorded at the LAX Wind Monitoring Station (the nearest monitoring station), is approximately 7.8 miles per hour, with calm winds occurring approximately six percent of the time. Wind in the vicinity of the project site predominately blows from the southwest (SCAQMD, 2016). The annual average temperature recorded near LAX is 63.0°F (Western Regional Climate Center, 2008). The average winter temperature is 56.2°F and the average summer temperature is 69.9°F. Total precipitation averages approximately 13.0 inches annually. Precipitation occurs mostly during the winter and relatively infrequently during the summer. Precipitation averages 8.5 inches during the winter, 2.5 inches during the spring, 2.0 inches during the fall, and less than one inch during the summer (Western Regional Climate Center, 2008).

3.1.2.3. Air Monitoring Data

The SCAQMD monitors air quality conditions at 38 locations throughout the Basin. The closest station to the proposed project is the Los Angeles – Westchester Parkway Station located at 7201 West Westchester Parkway. The station monitors ambient air quality for O₃,

CO, NO₂ PM₁₀ and SO₂. Ambient air quality data for PM_{2.5} was obtained from the North Long Beach Station located at 3648 North Long Beach Boulevard. Pb data is not available at the Los Angeles - Westchester Parkway or North Long Beach Stations. The CARB has not published 2015 data, and CO data is not available for the years 2013 and 2014. Existing criteria pollutant concentrations at these stations are shown in Table 3.1.3. NO₂, PM₁₀, CO and SO₂ standards were not exceeded during the three-year period between 2012 and 2014. The eight-hour state and national standard for O₃ and the one-hour state standard for O₃ were exceeded during this three-year period. The 24-hour federal standard for PM_{2.5} was exceeded each year during this period (CARB, 2016(b)).

Table 3.1.3 Ambient Air Quality Data

Pollutant	Pollutant Concentration & Standards	2012	2013	2014
Ozone (O ₃)	Maximum 1-hour Concentration (ppm)	0.106	0.105	0.114
	Days > 0.09 ppm (state 1-hour standard)	1	1	1
	Maximum 8-hour Concentration (ppm)	0.075	0.082	0.080
	Days > 0.070 ppm (state 8-hour standard)	1	1	3
	Days > 0.075 ppm (national 8-hour standard)	0	1	6
Carbon Monoxide (CO)	Maximum 8-hour concentration (ppm)	1.51	n/a	n/a
	Days > 9.0 ppm (state 8-hour standard)	0	n/a	n/a
	Days > 9 ppm (national 8-hour standard)	0	n/a	n/a
Nitrogen Dioxide (NO ₂)	Maximum 1-hour Concentration (ppm)	0.077	0.077	0.087
	Days > 0.18 ppm (state 1-hour standard)	0	0	0
	Days > 0.100 ppm (national 1-hour standard)	0	0	0
Respirable Particulate Matter (PM ₁₀)	Maximum 24-hour concentration (µg/m ³)	30.0	37.0	45.0
	Days > 50 µg/m ³ (state 24-hour standard)	21	21	22
	Days > 150 µg/m ³ (national 24-hour standard)	0	0	0
Fine Particulate Matter (PM _{2.5})	Maximum 24-hour concentration (µg/m ³)	58.6	51.7	51.5
	Exceed state standard (12 µg/m ³)	Yes	Yes	Yes
	Days > 35 µg/m ³ (national 24-hr standard)	4	2	2
Sulfur Dioxide (SO ₂)	Maximum 24-hour Concentration (ppm)	0.002	0.002	n/a
	Days > 0.04 ppm (state 24-hour standard)	0	0	n/a

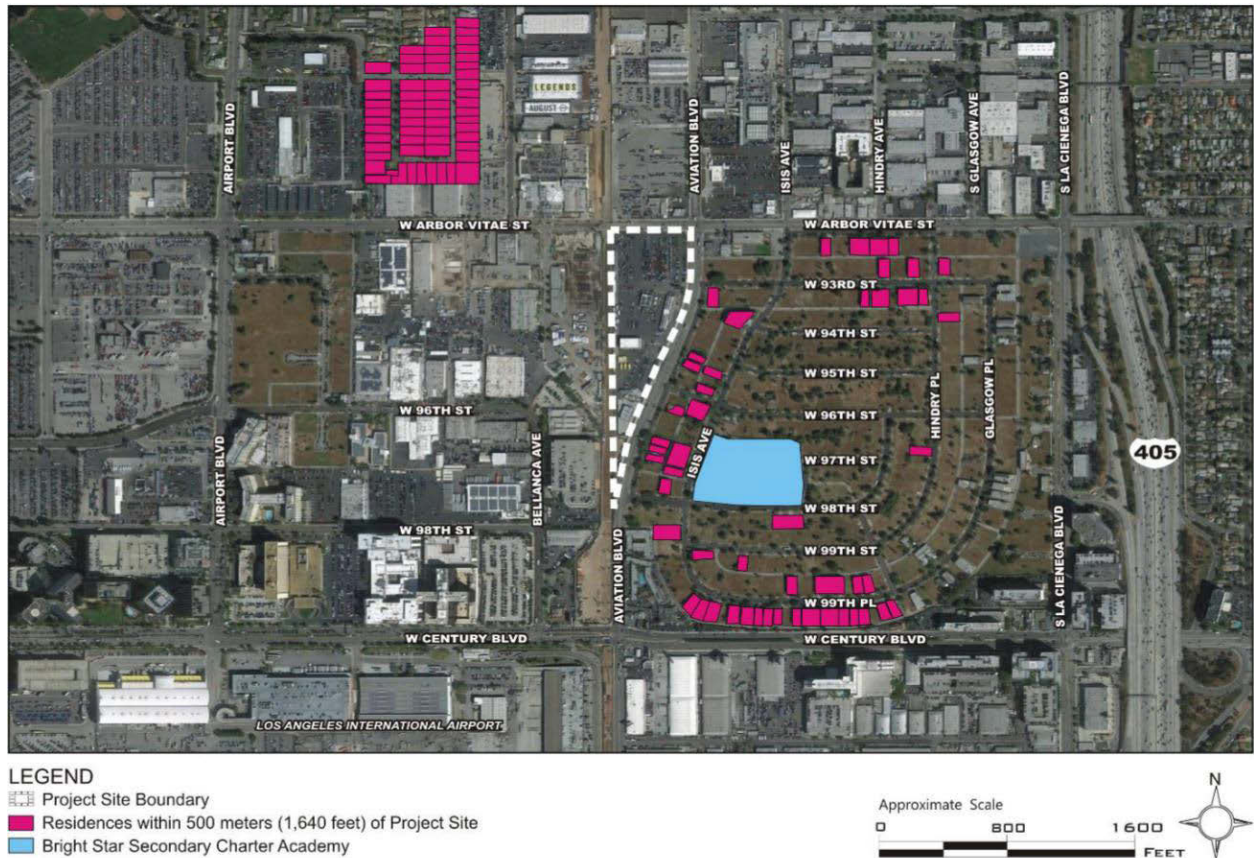
Source: CARB, 2016b.

3.1.2.4. Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. CARB has identified the following groups who are most likely to be affected by air pollution: children less than 14 years of age, the elderly over 65 years of age, athletes and people with cardiovascular and chronic respiratory diseases. According to the SCAQMD, sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers and retirement homes.

The SCAQMD assesses the potential for localized impacts at a maximum distance of 500 meters or 1,640 feet. Sensitive receptors within this distance of the project site are shown in Figure 3.1.2, and include residences and the Bright Star Secondary Charter Academy. These land uses represent the nearest sensitive receptors to the site with the potential to be impacted by air emissions. Additional sensitive receptors are located further from the project site in the surrounding community and would be less impacted by air emissions than the above sensitive receptors.

Figure 3.1.2 Sensitive Receptor Locations



Source: Terry A. Hayes Associates Inc., 2016; LAWA, 2015.

3.1.3. Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines, the proposed project would have a significant impact related to air quality if it would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;

- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations; and/or
- Create objectionable odors affecting a substantial number of people.

Because of the SCAQMD’s regulatory role in the Basin, the significance criteria and analysis methodologies in the SCAQMD’s CEQA Air Quality Handbook are used in evaluating project impacts. Regional significance thresholds are shown in Table 3.1.4.

Table 3.1.4 Regional Emission Thresholds

Criteria Pollutant	Construction (Pounds Per Day)	Operations (Pounds Per Day)
Volatile Organic Compounds (VOC)	75	55
Nitrogen Oxides (NO _x)	100	55
Carbon Monoxide (CO)	550	550
Sulfur Oxides (SO _x)	150	150
Respirable Particulates (PM ₁₀)	150	150
Fine Particulates (PM _{2.5})	55	55

Source: SCAQMD, 1993.

In addition to regional significance thresholds, SCAQMD has developed specific CEQA localized significance thresholds (LSTs). According to the SCAQMD, localized emissions at project sites would result in a significant air quality impact if air pollutant concentrations exceed the following threshold values:

- Localized concentrations of CO exceed the one-hour standard of 20 ppm or the eight-hour standard of 9.0 ppm;
- Localized concentrations of NO₂ exceed the one-hour standard of 0.18 ppm; and/or
- Localized concentrations of PM_{2.5} or PM₁₀ exceed 10.4 µg/m³.

The LST values were derived to prevent violations of these localized concentrations. The SCAQMD divides its jurisdiction into 38 Source Receptor Areas (SRA), with location-specific LST values based on the regional air quality within the SRA, the size of the project site, and the proximity of sensitive receptors. The project site is located in SRA 3, Southwest Coastal LA County, with existing residential sensitive receptors approximately 130 feet from the boundary of the project site. The LSTs are designed for project sites that are five acres or less. The project site is 9.53 acres and is larger than projects generally analyzed using the LST methodology. Comparing the maximum daily emissions from on-site sources associated with construction of the proposed project to the LST values for a 5-acre site represents a conservative approach to screening out the possibility of localized air pollutant concentrations exceeding the applicable thresholds. Based on the SCAQMD guidance methodology, the proposed project would not result in a significant localized air quality impact if maximum

daily emissions from on-site sources remain below 197 pounds per day NO_x, 1,796 pounds per day CO, 15 pounds per day PM₁₀, and eight pounds per day PM_{2.5} (SCAQMD, 2009).

Additionally, the SCAQMD has stated that a proposed project would generate significant emissions of TACs that exceed a Maximum Incremental Cancer Risk of 10 in one million, a Cancer Burden of 0.5 excess cancer cases, or a Chronic or Acute Hazard Index of 1.0 (SCAQMD, 2015). No specific threshold has been established for assessing potential impacts from odors.

3.1.4. Impact Analysis and Mitigation Measures

This section assesses potential impacts associated with the proposed project and, if necessary, identifies mitigation measures to eliminate or reduce impacts. The methodology implemented in this assessment consists of evaluating whether the proposed project would have significant air quality impacts according to the above-stated thresholds. Impacts are primarily assessed by considering the air pollutant emissions in the context of the regulatory framework as well as the environmental setting described above.

Impact 3.1.1 Would the proposed project conflict with or obstruct implementation of the applicable air quality plan?

Impact Analysis

The SCAQMD is responsible for monitoring air quality in the Basin and developing the AQMP to achieve sufficient reductions in regional air pollutant emissions to reach attainment of the NAAQS and the CAAQS. The most recent iteration of the AQMP for the Basin was prepared in 2012, and was based on the 2012-2035 RTP/SCS (SCAQMD, 2013). The 2012 AQMP outlines a comprehensive control strategy that meets the requirement for expeditious progress toward attainment with the 24-hour PM_{2.5} NAAQS, and also includes specific measures to further implement the ozone strategy in the 2007 AQMP to assist in attaining the federal eight-hour ozone standard. The 2012 AQMP included components related to both stationary and mobile sources. Stationary source control measures included application of available cleaner technologies, best management practices, incentive programs, and development and implementation of zero- and near-zero technologies and control methods. Mobile source control measures include accelerated penetration of zero- and near-zero emission vehicles and early retirement of older vehicles, as well as research and development of advanced control technologies from various sources. The measures were considered and evaluated based on feasibility and cost-effectiveness.

The 2012 AQMP utilizes emissions forecasting to demonstrate attainment of the PM_{2.5} and eight-hour ozone NAAQS. The emissions forecasting is based on projected population and employment growth within the SCAG region, as presented in the 2012-2035 RTP/SCS, which was the most recent iteration of the RTP/SCS upon publication of the 2012 AQMP. Projects that are considered to be consistent with the AQMP would not interfere with attainment because the associated growth is included in the 2012-2035 RTP/SCS projections utilized in the formulation of the 2012 AQMP. Therefore, projects, uses, and activities that are

consistent with the applicable assumptions used in the development of the AQMP would not jeopardize attainment of the air quality levels identified in the AQMP.

The proposed project would comply with all SCAQMD rules and regulations that are in effect at the time of development; Metro is not requesting any exemptions from the currently adopted or proposed rules. The proposed project is also consistent with the SCAG population and employment projections applicable to the area. The proposed project does not contain a residential component and would not introduce population growth to the region. Operation of the proposed project would result in minimal employment growth through the creation of small retail spaces; a majority of the project site would be dedicated to the plaza and platform areas. The proposed project was included in the 2012-2035 RTP/SCS and would be consistent with the assumptions upon which the 2012 AQMP was devised. Thus, the proposed project would not conflict with or obstruct its implementation.

Additionally, the proposed project is being developed to connect LAX to the regional transit system. The AMC transportation center would consolidate bus transit services in the LAX area and provide pedestrian and bicycle access to new modes of transportation. Given the high volume of daily vehicular trips to and from LAX and the absence of a convenient transit connection, the goal of the proposed project is to increase transit ridership and provide a reliable and convenient transit option to and from LAX. This regional connectivity to the transit network would be consistent with regional and local air quality reduction goals to increase transit ridership. Therefore, the proposed project would result in a less-than-significant impact related to conflicting with or obstructing implementation of local air quality plans.

Mitigation Measures

This impact would be less than significant and does not require mitigation measures.

Impact 3.1.2 Would the proposed project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Impact Analysis

As shown in Table 3.1.4, the SCAQMD has established regional emission thresholds for short-term construction activities and long-term operational conditions of a project. Additionally, the SCAQMD derived LST values for maximum daily emissions from on-site sources to prevent the occurrence of air pollutant concentrations exceeding ambient air quality standards in close proximity to the project site during construction activities. The impact analysis is presented for construction and operations individually.

Construction

Construction of the proposed project is anticipated to take approximately 36 months beginning in mid-2020 and completing mid-2023. All construction activities would adhere to applicable measures outlined in the SCAQMD Rules 402 (Nuisance) and 403 (Fugitive Dust).

Activities that would occur on the project site prior to construction of the proposed project would include demolition of existing structures, utility relocation, site clearing, excavation and grading.

Demolition and removal of approximately 38,280 square feet of existing structures would occur prior to clearing and excavating the site. Export of demolished debris would require approximately five trucks per day hauling material off-site to a disposal facility.

During the site clearing phase, approximately 306,460 square feet of asphalt and concrete pavement would be removed from the project site. Export of the pavement debris would generate a total of 337 truck loads, or approximately 17 outbound trucks per day during the site clearing phase.

During the grading activities, the proposed project would require excavation of approximately 31,000 cubic yards of soil, of which approximately 15,500 cubic yards of soil would be exported. The remaining excavated volume would be compacted and used as fill for the project site. Soil export would require a maximum of approximately 20 outbound trucks per day hauling material to an off-site disposal facility.

The proposed project would be constructed in approximately six phases following demolition of existing structures, site clearance, grading activities, and project construction. A detailed description of the phased construction can be found in Chapter 2.0 Project Description. Construction of the facilities and paving of the project site would last for approximately 32 months of the 36-month construction duration once demolition, clearing and grading activities are completed. Emissions were calculated for each phase of construction based on the schedule provided.

Emissions of air pollutants that would result from construction of the proposed project were quantified using the California Emission Estimator Model (CalEEMod, Version 2013.2.2), which is the software recommended by the CARB for calculating emissions from land use development. CalEEMod estimates maximum daily and annual total emissions of air pollutants during construction activities using the number and types of equipment required for each activity, the daily usage rates for the equipment, the number of workers traveling to and from the project site, architectural coatings, and the daily material import and export trips for vendors and haul trucks. Metro has a Green Construction Policy, which includes Tier 4 emission standards for off-road diesel-powered construction equipment greater than 50 horsepower and restricting idling to a maximum of five minutes. As a conservative approach, Tier 4 emission standards were not assumed in the emissions modeling. Detailed information describing the equipment inventory and construction vehicle trips can be found in the CalEEMod emissions modeling files.

The CalEEMod software was used to estimate maximum daily air pollutant emissions that would result from each phase of proposed project construction. Table 3.1.5 presents the results of emissions modeling. Table 3.1.5 also provides a comparison to the applicable daily emission thresholds of significance, which were devised to prevent air quality standard violations. Within the jurisdiction of the SCAQMD, a project would not have a significant impact on the environment if maximum daily emissions do not exceed the threshold values presented in Table 3.1.4. In addition to the regional emissions assessment which includes all on-site and off-site sources during each construction activity, Table 3.1.5 also presents a conservative localized emissions assessment of all the same pollutants except VOCs and SO_x that compares the maximum emissions from on-site sources during each phase to the applicable LST threshold for a 5-acre site within SRA 3, Southwest Coastal LA County.

Table 3.1.5 Maximum Daily Construction Emissions

Construction Activity	VOC (lb/day)	NO _x (lb/day)	CO (lb/day)	SO _x (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)
Demolition						
<i>Maximum On-site Emissions</i>	3	31	30	<1	2	1
<i>Maximum Off-site Emissions</i>	<1	2	2	<1	<1	<1
Total Demolition Emissions	3	32	32	<1	2	1
Site Preparation						
<i>Maximum On-site Emissions</i>	4	39	33	<1	9	6
<i>Maximum Off-site Emissions</i>	<1	7	8	<1	1	<1
Total Site Preparation Emissions	4	46	41	<1	10	6
Excavation & Grading						
<i>Maximum On-site Emissions</i>	4	45	39	<1	7	4
<i>Maximum Off-site Emissions</i>	<1	8	9	<1	1	<1
Total Excavation & Grading Emissions	5	53	48	<1	8	5
Building Envelope (BE), Paving & Architectural Coatings (AC)						
<i>Maximum On-site Emissions</i>	58	31	33	<1	2	2
<i>Maximum Off-site Emissions</i>	1	4	14	<1	2	<1
Total BE, Paving & AC Emissions	59	36	47	<1	4	2
Regional Emissions Analysis						
Maximum Daily Regional Emissions	59	53	48	<1	10	6
SCAQMD Regional Threshold	75	100	550	150	150	55
<i>Exceed Threshold?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
Localized Emissions Analysis						
Maximum Daily On-site Emissions		45	39		9	6
SCAQMD LST (5-acre, SRA 3, 25-m rec.)	--	197	1,796	--	15	8
<i>Exceed Threshold?</i>		<i>No</i>	<i>No</i>		<i>No</i>	<i>No</i>

Source: Terry A. Hayes Associates Inc., 2016.

The results of emissions modeling presented in Table 3.1.5 demonstrate that maximum daily emissions would be below the applicable SCAQMD thresholds for both regional and localized

emissions. Therefore, the proposed project would result in a less-than-significant impact related to violating an air quality standard.

Operations

Air pollutant emissions associated with long-term operation of the proposed project were quantified for both stationary (building envelope and utilities) sources and mobile (CNG buses and passenger vehicles) sources. Operational air pollutant emissions from the proposed project were quantified and analyzed in comparison to the applicable thresholds of significance, as well as the existing and future without project conditions.

Stationary source emissions associated with long term operation of the proposed project were calculated using CalEEMod. CalEEMod generates estimates of stationary source emissions from area and energy source types based on the location of the designated land use and size of the project. Operational emissions from energy sources associated with the proposed project were calculated based on a facility size of 262,550 square feet, which would result in approximately 10,000,000 kilowatt-hours (kWh) of electricity use annually, approximately 120,000 therms (12,000,000,000 BTU) of natural gas use annually, approximately 58,000,000 gallons of water use annually, and production of approximately 12,000,000 gallons of wastewater and 325 tons of solid waste annually (IEG, 2016). These values were incorporated into the operational emissions assessment for the proposed project. The building is ultimately intended to meet LEED Silver certification. However, the proposed project is only in the conceptual phase and utility estimates are based on standard construction without LEED strategies.

Mobile sources emissions associated with operation of the proposed project include exhaust and break and tire wear emissions from changes in bus route VMT to and from the new station location, regional changes in highway VMT resulting from transit improvements and reconfiguration of local circulation patterns, and vehicle trips to the pick-up and drop-off area along Aviation Boulevard. Operational mobile source emissions were quantified for three scenarios based on the transportation analyses prepared for the proposed project (Fehr & Peers, 2016): existing conditions, future without project conditions (2035) and future with project conditions (2035).

Table 3.1.6 presents the regional daily VMT for the three scenarios evaluated, categorized by the mode of transportation and the type of trip. Under the future without project condition, the AMC transit station would not be implemented and the existing rental car facilities, CNG fueling station and towing storage yard would remain occupying the project site. Bus VMT would decrease from the existing to future without project condition due to the future relocation of the existing bus facility from Lot C at LAX to the Aviation/Century station.

As shown in Table 3.1.6, changes in bus routes under the proposed project would reduce daily CNG bus VMT by 524 compared to the existing conditions. Relative to the future without project condition, the proposed project would result in 287 more daily CNG bus VMT. Analysis from the traffic study determined that passenger pick-ups and drop-offs would

generate 92 daily trips resulting in 1,546 daily passenger vehicle VMT, which are shown under the proposed project forecast. Implementation of the proposed project would produce a total increase of 4,148 daily passenger vehicle VMT compared to the future without project condition, of which 1,546 would be attributed to passenger pick-up and drop-off and 2,602 would result from people switching from using bus service to driving their personal vehicle to the LAX area. Refer to Section 3.6 Transportation and Traffic for a detailed discussion of VMT.

Table 3.1.6 Operational Daily Vehicle Miles Traveled

Type of Trip	Existing Conditions (Miles) ^{1, 2}	Future Without Project (Miles)	Future With Project (Miles)
CNG Transit Buses			
Regional CNG Buses to LAX Area	15,769	14,958	15,245
Passenger Vehicles			
Regional Highway Passenger Vehicles	395,080,499	559,601,676	559,604,278
Pickup/Drop-off Passenger Vehicles	0	0	1,546
Tow Facility	500	500	0
<i>Passenger Vehicle Subtotal</i>	<i>395,080,999</i>	<i>559,602,176</i>	<i>559,605,824</i>
Grand Total VMT	395,096,768	559,616,634	559,621,069
1. There is a CNG station located approximately 0.2 miles north of the CNG station on the project site. Changes in VMT related to the CNG station would result in negligible emissions. 2. Changes in VMT associated with the rental car maintenance facility cannot be estimated as no future site has been identified at this time. By necessity, the rental car maintenance facility must be located near the customer rental facility, similar to the existing condition. Changes in VMT related to the rental car maintenance facility would result in negligible emissions.			

Source: Metro, 2016.

Mobile source emissions were quantified using EMFAC2014, the CARB-recommended model for calculating estimates of on-road mobile source emissions. EMFAC2014 provides emissions factors for various vehicle types in grams per mile. EMFAC2014 vehicle categories selected for the analysis included urban buses fueled by natural gas (CNG buses) and light-duty autos and trucks (passenger vehicles). Emissions were calculated by multiplying the emissions factor for the appropriate vehicle type by the VMT. The mobile source emissions were totaled and added to the stationary source emissions to characterize impacts from the entirety of the proposed project. Emissions associated with energy use in train deceleration and acceleration were excluded from this analysis as they are expected to be negligible.

Table 3.1.7 presents the results of operational air pollutant emissions modeling for the proposed project and shows a comparison to the emissions from land uses currently on the project site under existing conditions. The comparison does not represent the incremental impact of the project on air quality; it simply discloses the emissions that would result from operations on the project site in the future with project condition and the existing conditions. The CARB prepares its emissions factors for mobile sources under the assumption that fuel efficiency and combustion standards will become more stringent over time. The more stringent emissions regulations would result in a substantial decrease in the emissions from mobile sources from existing conditions to 2035. However, emissions from tire and break wear would result in increased particulate emissions as these emissions are not directly

controlled by fuel standards. For this reason, the existing mobile source emissions are much lower than those shown in 2035—except for PM₁₀ and PM_{2.5}—even though the VMT increases over these years.

Table 3.1.7 Daily Operational Emissions – Future With Project Compared to Existing Conditions

Future With Project	VOC (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)
Stationary						
Area	5	<1	<1	<1	<1	<1
Energy	<1	3	3	<1	<1	<1
<i>Stationary Subtotal</i>	<i>6</i>	<i>3</i>	<i>3</i>	<i><1</i>	<i><1</i>	<i><1</i>
Mobile						
Passenger Vehicles	5,499	27,316	289,599	2,321	56,206	22,817
Buses	3	61	116	<1	29	12
<i>Mobile Subtotal</i>	<i>5,499</i>	<i>27,316</i>	<i>289,599</i>	<i>2,321</i>	<i>56,235</i>	<i>22,829</i>
Total Daily Emissions	5,508	27,380	289,718	2,321	56,236	22,830
Existing						
Stationary						
Area	<1	<1	<1	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
<i>Stationary Subtotal</i>	<i><1</i>	<i><1</i>	<i><1</i>	<i><1</i>	<i><1</i>	<i><1</i>
Mobile						
Passenger Vehicles	25,846	100,474	842,307	3,025	40,583	16,945
Buses	15	317	341	<1	30	13
	<1	2	1	<1	<1	<1
<i>Mobile Subtotal</i>	<i>25,861</i>	<i>100,793</i>	<i>842,649</i>	<i>3,025</i>	<i>40,613</i>	<i>16,958</i>
Total Daily Emissions	25,862	100,793	842,650	3,025	40,614	16,959
Net Emissions						
Net Regional Emissions	-20,354	-73,413	-552,932	-704	15,622	5,871

Source: Terry A. Hayes Associates Inc., 2016.

Table 3.1.8 presents the results of operational air pollutant emissions modeling. In order to most accurately characterize the impacts associated with implementation of the proposed project, Table 3.1.8 also presents the net daily air pollutant emissions that would result from the proposed project relative to the future without project condition. These values represent the change in air pollutant emissions resulting from implementation of the proposed project, as a majority of the calculated air pollutant emissions are regional in nature and not attributed to sources on the project site. The net daily emissions displayed in Table 3.1.8 represent the difference in daily air pollutant emissions that would be generated by the proposed project on a localized and regional level in the future setting. A majority of air pollutant emissions originate from regional passenger vehicle VMT, which was modeled for the entirety of the

SCAG region in the transportation impacts analyses. Implementation of the proposed project would not result in net operational emissions that exceed any applicable SCAQMD mass daily threshold. Therefore, the operational emissions associated with implementation of the proposed project would result in a less-than-significant impact related to violating an air quality standard.

Table 3.1.8 Daily Operational Emissions - Future With Project Compared to Future Without Project Conditions

Future With Project	VOC (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)
Stationary						
Area	5	<1	<1	<1	<1	<1
Energy	<1	3	3	<1	<1	<1
<i>Stationary Subtotal</i>	<i>6</i>	<i>3</i>	<i>3</i>	<i><1</i>	<i><1</i>	<i><1</i>
Mobile						
Passenger Vehicles	5,499	27,316	289,599	2,321	56,206	22,817
Buses	3	61	116	0	29	12
<i>Mobile Subtotal</i>	<i>5,502</i>	<i>27,377</i>	<i>289,715</i>	<i>2,321</i>	<i>56,235</i>	<i>22,829</i>
Total Daily Emissions	5,508	27,380	289,718	2,321	56,236	22,830
Future Without Project	VOC (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)
Stationary						
Area	<1	<1	<1	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
<i>Stationary Subtotal</i>	<i><1</i>	<i><1</i>	<i><1</i>	<i><1</i>	<i><1</i>	<i><1</i>
Mobile						
Passenger Vehicles	5,499	27,316	289,597	2,321	56,206	22,817
Buses	3	60	114	0	28	12
Tow Trucks	<1	<1	<1	<1	<1	<1
<i>Mobile Subtotal</i>	<i>5,502</i>	<i>27,376</i>	<i>289,711</i>	<i>2,321</i>	<i>56,234</i>	<i>22,829</i>
Total Daily Emissions	5,502	27,376	289,711	2,321	56,235	22,830
2035 Net Emissions	VOC (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)
Net Daily Emissions	6	4	7	<1	1	<1
SCAQMD Regional Threshold	55	55	550	150	150	55
<i>Exceed Threshold?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

Source: Terry A. Hayes Associates Inc., 2016.

Impact 3.1.3 Would the proposed project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Impact Analysis

Refer to Chapter 5, Cumulative Impacts for a discussion of cumulative emissions.

Mitigation Measures

Refer to Chapter 5, Cumulative Impacts.

Impact 3.1.4 Would the proposed project expose sensitive receptors to substantial pollutant concentrations?

Impact Analysis

The SCAQMD devised its LST methodology to support local governments in making land use decisions and prevent the exposure of sensitive receptors to substantial pollutant concentrations. The LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and were developed based on the ambient concentrations of that pollutant for each SRA and distance to the nearest sensitive receptor. Therefore, localized emissions of NO_x, CO, PM₁₀ and PM_{2.5} from on-site sources that do not exceed any regionally-specific LST value would not result in a violation of any air quality standard and would not expose sensitive receptors to substantial pollutant concentrations.

Construction of the proposed project would generate localized emissions of air pollutants through the use of heavy duty diesel equipment on the project site. Table 3.1.5 presents the result of localized emissions modeling during construction of the proposed project. Although the project site is approximately 9.5 acres, Table 3.1.5 conservatively compares the maximum daily on-site emissions that would be generated by construction of the proposed project to the LST values for a five-acre site in SRA 3, Southwest Coastal LA County. Localized emissions of NO_x, CO, PM₁₀, and PM_{2.5} from on-site sources during construction of the proposed project would not exceed the applicable LST values for a 5-acre project. Therefore, construction of the proposed project would not expose sensitive receptors to substantial pollutant concentrations.

Localized emissions from operation of the proposed project are presented as stationary source emissions in Table 3.1.8. Localized emissions of NO_x and CO would be approximately two pounds per day (lb/day), and localized emissions of PM₁₀ and PM_{2.5} would be less than one lb/day. A vast majority of operational emissions would be associated with mobile sources traveling over a large geographic region and not locally concentrated in any specific area. Operations of the proposed project would not expose sensitive receptors to substantial pollutant concentrations. Therefore, the proposed project would result in a less-than-significant impact related to exposing sensitive receptors to substantial pollutant concentrations.

Mitigation Measures

This impact would be less than significant and does not require mitigation measures.

Impact 3.1.5 Would the proposed project create objectionable odors affecting a substantial number of people?

Impact Analysis

Construction

Equipment exhaust and architectural coatings are potential sources that may emit odors during construction activities. The proposed project would utilize super-compliant architectural coatings as designated by the SCAQMD to reduce emissions of odorous chemicals. Odors from those sources would be localized and generally confined to the immediate area surrounding the project site. Given existing auto traffic from major and minor arterials adjacent to the project site, any odor impacts from the construction phase are not anticipated to be significant. Any emissions during the construction phase that create odors for nearby sensitive receptors would be addressed by enforcement of SCAQMD Rule 402 (Nuisance), which prohibits any emissions that cause injury, detriment, nuisance or annoyance to a considerable number of people. Therefore, the proposed project would result in a less-than-significant impact related to construction creating objectionable odors affecting a substantial number of people.

Operations

Land uses and industrial operations commonly associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (SCAQMD, 1993). The proposed project would include a new multi-modal transportation center with light rail platforms, a bus plaza, and pedestrian and bicycle amenities to connect LAX to Metro's regional transit system. Any unpleasant odors from future transit operations would be subject to management under the odor complaint tracking system mandated by SCAQMD Rule 402 (Nuisance), which prevents nuisance odor conditions. As a result, the proposed project would have a minor, if any, impact with respect to odors. Therefore, the proposed project would result in a less-than-significant impact related to the creation of objectionable odors affecting a substantial number of people.

Mitigation Measures

This impact would be less than significant and does not require mitigation measures.

3.2. GREENHOUSE GAS EMISSIONS

Greenhouse gases (GHGs) refer to a group of chemical compounds that are generally believed to affect global climate conditions. The greenhouse effect is a concept in atmospheric science that describes the process by which certain atmospheric gases—GHGs—absorb energy from sunlight within the Earth’s atmosphere and prevent it from being released back into space. This mechanism is responsible for maintaining a warm, habitable environment on the planet’s surface based on the equilibrium concentrations of the gases. GHGs such as carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O) keep the average surface temperature of the Earth close to 60 degrees Fahrenheit (°F).

For each GHG, a global warming potential (GWP) has been calculated to reflect the atmospheric residence time and how strongly it absorbs energy relative to CO₂ on a per-kilogram basis. GWP is a metric that indicates the relative climate forcing of a kilogram of emissions when averaged over the period of interest both 20-year and 100-year horizons are used for the GWPs in Table 3.2.1. To account for this higher potential, emissions of other GHGs are frequently expressed in the equivalent mass of CO₂, denoted as CO₂e.

Table 3.2.1 Global Warming Potential for Selected Greenhouse Gases

Pollutant	Lifetime (Years)	Global Warming Potential (20-Year)	Global Warming Potential (100-Year)
Carbon Dioxide	100	1	1
Nitrous Oxide	121	264	265
Nitrogen Trifluoride	500	12,800	16,100
Sulfur Hexafluoride	3,200	17,500	23,500
Perfluorocarbons	3,000-50,000	5,000-8,000	7,000-11,000
Black Carbon	days to weeks	270-6,200	100-1,700
Methane	12	84	28
Hydrofluorocarbons	Uncertain	100-11,000	100-12,000

Source: CARB, 2014.

Long-term and irrevocable shifts in weather, including temperature, precipitation, and seasonal patterns are referred to as climate change. According to the Intergovernmental Panel on Climate Change (IPCC), climate change caused by GHG emissions is anticipated to result in sea-level rise, climate-related hazards, extinction of species, species migration, reduced food production, exacerbated health problems, slower economic growth, and displacement of people (IPCC, 2014). Some of the possible effects of climate change along the California Coast include:

- Sea-level rise that threatens coastal wetlands, infrastructure, and property.
- Increased storm activity, together with sea-level rise, could increase beach erosion and cliff undercutting.
- Warmer temperatures and more frequent storms due to El Niño that bring more rain instead of snow to the Sierra Nevada Mountains, reducing supply of water for summer needs.

- Decreased summer runoff and warming ocean temperatures that affect salinity, water circulation, and nutrients in the Pacific Ocean, possibly leading to complex changes in marine life.

3.2.1. Regulatory Framework

3.2.1.1. International

United States and China Climate Agreement

In November 2014, the United States and China made a joint announcement to cooperate on combating climate change and promoting clean energy. In the United States, President Barack Obama announced a new climate target: to reduce GHG emissions by 26 to 28 percent below 2005 levels by the year 2025. In China, President Xi Jinping announced a climate target to reduce peak CO₂ emissions by 2030 and to increase the renewable energy share across all sectors to 20 percent by 2030. China will need to build an additional 800 to 1,000 gigawatts of nuclear, wind, solar, and other zero emission generation capacity by 2030 to reach this target. Together, the United States and China have agreed to: expand joint clean energy research and development at the U.S.-China Clean Energy Research Center, advance major carbon capture, use and storage demonstrations, enhance cooperation on hydrofluorocarbons, launch a climate-smart/low-carbon cities initiative, promote trade in green goods, and demonstrate clean energy on the ground (White House, 2014).

United Nations Framework Convention on Climate Change

An international climate change agreement was adopted at the Paris United Nations Framework Convention on Climate Change in December 2015. The last two climate conferences in Warsaw (2013) and Lima (2014) decided that countries were to submit their proposed emissions reduction targets for the 2015 conference as “intended nationally determined contributions” prior to the Paris conference. The European Union has committed to an economy-wide, domestic GHG reduction target of 40 percent below 1990 levels by 2030. The United States has set its intended nationally determined contribution to reduce its GHG emissions by 26 to 28 percent below its 2005 level in 2025 and to make best efforts to reduce its emissions by 28 percent. These targets are set with the goal of limiting global temperature rise to well below 2 degrees Celsius and getting to the 80 percent emission reduction by 2050.

3.2.1.2. Federal

United States Supreme Court

The United States Supreme Court ruled in *Massachusetts v. Environmental Protection Agency*, 127 S.Ct. 1438, that CO₂ and other GHGs are pollutants under the Federal Clean Air

Act, which the USEPA must regulate if it determines they pose an endangerment to public health or welfare. On December 7, 2009, the USEPA made two distinct findings: 1) that the current and projected concentrations of the six key GHGs (CO₂, CH₄, N₂O,

hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride) in the atmosphere threaten the public health and welfare of current and future generations; and 2) that the combined emissions of these GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution which threatens public health and welfare.

Fuel Efficiency Standards

On May 19, 2009, the federal government announced a new National Fuel Efficiency Policy aimed at increasing fuel economy and reducing GHG pollution. The new National Fuel Efficiency Policy is expected to increase fuel economy by more than 5 percent by requiring a fleet-wide average of 35.5 miles per gallon (mpg) by 2016 starting with model years 2012 (Executive Office of the President, 2009). In 2012, the federal government announced new fuel efficiency standards for cars and light-duty trucks by model year 2025. This expands on the previous policy to further increase fuel economy to 54.5 mpg and reduce GHG emissions by 6 million metric tons (Executive Office of the President, 2012).

Climate Action Plan

On June 25, 2013, President Barack Obama issued a Climate Action Plan (Executive Office of the President, 2013). The three main goals are to cut carbon pollution, prepare the United States for the impacts of climate change, and lead international efforts to combat global climate change and prepare for its impacts. President Obama plans to cut carbon pollution by directing the USEPA to complete carbon pollution standards in the power sector. This will reduce emissions from power plants and encourage renewable energy development. Other strategies to combat climate change are increasing energy efficiency, stricter vehicle and fuel standards, preserving forests to absorb CO₂, reducing energy waste, combating short-lived climate pollutants, mobilizing climate finance and leading international negotiations on climate change.

American Public Transportation Association (APTA)

The APTA prepared a report in 2009 titled Recommended Practice for Quantifying Greenhouse Gas Emissions from Transit. The report provides guidance to transit agencies for quantifying GHG emissions, including both emissions generated by transit and the potential reduction of emissions through efficiency and displacement by laying out a standard methodology for transit agencies to report their greenhouse gas emissions in a transparent, consistent and cost-effective manner. The document was designed to ensure that agencies can provide an accurate public record of their emissions; and was intended to help agencies comply with future state and federal legal requirements and potentially gain credit for their early actions to reduce emissions (APTA, 2009).

Federal Transit Administration (FTA)

The FTA has implemented a Climate Change Adaptation Initiative program to investigate potential strategies for reducing climate impacts from transit. The program conducted seven climate adaptation pilot studies to increase knowledge of how transit agencies can adapt to

climate change, advance the state of the practice in adapting transit assets and operations to the impacts of climate change, and build strategic partnerships between transit agencies and climate adaptation experts. The approach of the pilot projects involved identification of climate hazards and potential climatic events, characterization of risks on transit projects and operations, development of initial adaptation strategies and linking strategies to organizational structures. Metro was selected as one of the pilot study transit systems, and a report was prepared to analyze climate adaptation opportunities, entitled LACMTA Climate Change Adaptation Pilot Project Report (FTA, 2015).

3.2.1.3. State

California has adopted a variety of statewide legislation to address various aspects of climate change and GHG emissions. Much of this legislation is not directed at citizens or jurisdictions specifically; rather, it establishes a broad framework for the state's long-term GHG reduction and climate change adaptation program. The governor has also issued several executive orders related to the state's evolving climate change policy. Below is a summary of GHG legislation applicable to the proposed project.

Assembly Bill 32 (AB 32)

AB 32 requires the CARB to develop and enforce regulations for the reporting and verification of statewide GHG emissions, and directs the CARB to set a GHG emission limit—based on 1990 levels—to be achieved by 2020. The bill set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner. On December 11, 2008, the CARB adopted the AB 32 Scoping Plan, which sets forth the framework for facilitating the state's goal of reducing GHG emissions to 1990 levels by 2020. The First Update of the AB 32 Scoping Plan was adopted on May 22, 2014. At this writing, CARB is drafting the next update of the Scoping Plan. The Second Update is expected to include strategies to meet a 2030 GHG reduction goal of 40 percent below 1990 levels (the goal set out in Executive Order (EO) B-30-15, described below). Neither AB 32 nor the updated AB 32 Scoping Plan establishes regulations implementing the Legislature's statewide goals for reducing GHGs at the project level.

The AB 32 Scoping Plan outlines a series of technologically feasible and cost-effective measures to reduce statewide GHG emissions, including expanding energy efficiency programs, increasing electricity production from renewable resources (at least 33 percent of the statewide electricity mix), increasing automobile efficiency, implementing the Low-Carbon Fuel Standard, and developing a cap-and-trade program. Multiple AB 32 Scoping Plan measures address GHG emissions from transportation fuels and energy. Together, the elements of the AB 32 Scoping Plan will ensure that overall statewide emissions will be decreased to the extent necessary to achieve AB 32's emissions reduction goals.

Assembly Bill 1493 (AB 1493)

AB 1493 makes amendments to the Clean Car Standards (Chapter 200, Statutes of 2002), also known as the "Pavley" regulations which require reductions in GHG emissions in new passenger vehicles from 2009 through 2016. These amendments are part of California's

commitment toward a nation-wide program to reduce new passenger vehicle GHGs from 2012 through 2016. The Clean Car Standards required CARB to develop and adopt standards for vehicle manufacturers to reduce GHG emissions coming from passenger vehicles and light-duty trucks at a “maximum feasible and cost effective reduction” by January 1, 2005. Pavley I took effect for model years starting in 2009 to 2016; and Pavley II, which is now referred to as “Low Emission Vehicle (LEV) III GHG,” will cover 2017 to 2025. Fleet average emission standards would reach 22 percent reduction by 2012 and 30 percent by 2016.

In January 2012, CARB adopted the Advanced Clean Cars program to extend AB 1493 through model years 2017 to 2025. This program will promote all types of clean fuel technologies such as plug-in hybrids, battery electric vehicles, compressed natural gas vehicles, and hydrogen powered vehicles while reducing smog and saving consumers’ money in fuel costs. Fuel savings may be up to 25 percent by 2025.

Senate Bill 375 (SB 375)

SB 375 was enacted to reduce GHG emissions from automobiles and light trucks through integrated transportation, land use, housing and environmental planning. Under the law, Metropolitan Planning Organizations are tasked with incorporating Sustainable Communities Strategies (SCS) as an element in Regional Transportation Plans (RTP). The SCS documents are intended to:

- Identify the general location of uses, residential densities, and building intensities within the region;
- Identify areas within the region sufficient to house all the population of the region, including all economic segments of the population, over the course of the planning period of the RTP taking into account net migration into the region, population growth, household formation and employment growth;
- Identify areas within the region sufficient to house an eight-year projection of the regional housing need for the region;
- Identify a transportation network to service the transportation needs of the region;
- Gather and consider the best practically available scientific information regarding resource areas and farmland in the region;
- Consider the state housing goals;
- Set forth a forecasted development pattern for the region, which, when integrated with the transportation network, and other transportation measures and policies, will reduce the GHG emissions from automobiles and light trucks to achieve, if there is a feasible way to do so, the GHG emission reduction targets approved by the state board; and
- Allow the RTP to comply with the CAA.

State Cap-and-Trade Program

This program creates a market-based system with an overall emissions limit for affected sectors, including electric utilities, large industrial facilities and distributors of transportation, natural gas and other fuels.

Senate Bills 1078/107/X 1-2

SBs 1078 and 107, California's Renewables Portfolio Standard, obligated investor-owned energy service providers and Community Choice Aggregations to procure an additional 1 percent of retail sales per year from eligible renewable sources until 20 percent was reached (by 2010). The California Public Utilities Commission (CPUC) and California Energy Commission (CEC) are jointly responsible for implementing the program. SB X 1-2, called the California Renewable Energy Resources Act, obligates all California electricity providers to obtain at least 33 percent of their energy from renewable resources by 2020.

Executive Order S-01-07 (EO S-01-07)

EO S-01-07 established a Low-Carbon Fuel Standard and directed the Secretary of the Cal/EPA to develop and propose protocols for measuring the life-cycle carbon intensity of transportation fuels.

Executive Order S-3-05 (EO S-3-05)

EO S-3-05 established state GHG emission targets of 1990 levels by 2020 (the same as AB 32, enacted later and discussed below) and 80 percent below 1990 levels by 2050. It calls for the Secretary of the Cal/EPA to be responsible for the coordination of state agencies and progress reporting. In response to the EO, the Secretary of the Cal/EPA created the Climate Action Team (CAT). California's CAT originated as a coordinating council organized by the Secretary of the Cal/EPA.

Executive Order B-30-15 (EO B-30-15)

EO B-30-15 established a mid-term goal for 2030 of reducing GHG emissions by 40 percent below 1990 levels and required CARB to update its current AB 32 Scoping Plan to identify the measures to meet the 2030 target. The EO supports EO S-3-05, described above, but is currently binding only on state agencies.

California Green Building Standards Code

In January 2010, the California Building Standards Commission adopted the statewide mandatory Green Building Standards Code (CALGreen) Part 11 of Title 24, California Code of Regulations. The Code was updated in 2015 to require additional energy savings. CALGreen applies to the planning, design, operation, construction, use and occupancy of every newly constructed building or structure.

California Environmental Quality Act (CEQA) and Senate Bill 97 (SB 97)

By enacting SB 97 in 2007, California's lawmakers expressly recognized the need to analyze GHG emissions as a part of the CEQA process. SB 97 required the Office of Planning and Research (OPR) to develop, and the Natural Resources Agency to adopt, amendments to the CEQA Guidelines addressing the analysis and mitigation of GHG emissions. Those CEQA Guidelines amendments clarified several points, including the following (CEQA and Climate Change):

- Lead agencies must analyze the GHG emissions of proposed projects, and must reach a conclusion regarding the significance of those emissions (CEQA Guidelines Section 15064.4).
- When a project's GHG emissions may be significant, lead agencies must consider a range of potential mitigation measures to reduce those emissions (CEQA Guidelines Section 15126.4(c)).
- Lead agencies must analyze potentially significant impacts associated with placing projects in hazardous locations, including locations potentially affected by climate change (CEQA Guidelines Section 15126.2(a)).
- Lead agencies may significantly streamline the analysis of GHG on a project level by using a programmatic GHG emissions reduction plan meeting certain criteria (CEQA Guidelines Section 15183.5(b)).
- CEQA mandates analysis of a proposed project's potential energy use (including transportation-related energy), sources of energy supply, and ways to reduce energy demand, including through the use of efficient transportation alternatives (CEQA Guidelines, Appendix F).

Also related to SB 97, CEQA Section 21097 states that failure to analyze the effects of GHG emissions otherwise required to be reduced pursuant to regulations adopted by the CARB in an environmental impact report for either a transportation project funded under the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006 or a project funded under the Disaster Preparedness and Flood Prevention Bond Act of 2006 does not create a cause of action for a violation of CEQA.

Senate Bill 743 (SB 743)

SB 743 encourages land use and transportation planning decisions and investments that reduce vehicle miles traveled that contribute to GHG emissions, as required by AB 32. SB 743 requires the OPR to develop revisions to the CEQA Guidelines establishing criteria for determining the significance of transportation impacts of projects within transit priority areas that promote the reduction of GHG emissions, the development of multi-modal transportation networks, and a diversity of land uses. It also allows OPR to develop alternative metrics outside of transit priority areas.

California Air Pollution Control Officers Association (CAPCOA)

CAPCOA is a non-profit association of the air pollution control officers from all 35 local air quality agencies throughout California. CAPCOA promotes unity and efficiency in state air quality issues and strives to encourage consistency in methods and practices of air pollution control. In 2008, CAPCOA published the *CEQA and Climate Change White Paper (2008)*. This paper is intended to serve as a resource for reviewing GHG emissions from projects under CEQA. It considers the application of thresholds and offers approaches toward determining whether GHG emissions are significant. The paper also evaluates tools and methodologies for estimating impacts, and summarizes mitigation measures.

3.2.1.4. Regional

Southern California Association of Governments (SCAG)

SCAG is the Metropolitan Planning Organization for the six-county region that includes Los Angeles, Orange, Riverside, Ventura, San Bernardino and Imperial counties. SCAG adopted the 2016-2040 RTP/SCS on April 7, 2016, and it includes a strong commitment to reduce emissions from transportation sources to comply with SB 375. SB 375 requires CARB to develop regional CO₂ emission reduction targets (exclusive of Pavley emissions that are counted separately), compared to 2005 emissions, for cars and light trucks for 2020 and 2035 for each Metropolitan Planning Organization. The 2016-2040 RTP/SCS charts a course for closely integrating land use and transportation planning including in areas labeled as High Quality Transit Areas. High Quality Transit Areas reflect areas with rail transit service or bus service where lines have peak headways of less than 15 minutes. It outlines \$556.5 billion in transportation system investments through 2040. The 2016-2040 RTP/SCS was prepared through a collaborative, continuous and comprehensive process by SCAG and it serves as an update to the 2012-2035 RTP/SCS. Major themes in the 2016-2040 RTP/SCS that are relevant to the proposed project include integrating strategies for land use and transportation, striving for sustainability, protecting and preserving the existing transportation infrastructure, increasing capacity through improved system management, and giving people more transportation choice. Importantly, the 2016-2040 RTP/SCS states that the region will meet or exceed the SB 375 per capita targets, lowering regional per capita GHG emissions (below 2005 levels) by eight percent by 2020 and 18 percent by 2035. The 2016-2040 RTP/SCS also states that regional 2040 per capita emissions would be reduced by 22 percent, although CARB has not established a 2040 per capita emissions target.

South Coast Air Quality Management District (SCAQMD)

SCAQMD adopted a “Policy on Global Warming and Stratospheric Ozone Depletion” on April 6, 1990. The policy commits the SCAQMD to consider global impacts in rulemaking and in drafting revisions to the AQMP. In March 1992, the SCAQMD Governing Board reaffirmed this policy and adopted amendments to the policy.

SCAQMD released draft guidance regarding interim CEQA GHG significance thresholds. In its October 2008 document, the SCAQMD proposed the use of a percent emission reduction target (e.g., 30 percent) to determine significance for commercial/residential projects that emit greater than 3,000 metric tons per year. On December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold for stationary source/industrial projects where the SCAQMD is the lead agency. However, SCAQMD has yet to adopt a GHG significance threshold for land use development or transportation projects and has formed a GHG CEQA Significance Threshold Working Group to further evaluate potential GHG significance thresholds.

The GHG CEQA Significance Threshold Working Group is tasked with providing guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. Members of the working group included government agencies implementing CEQA and representatives from various stakeholder groups that will provide input to the SCAQMD staff on developing CEQA GHG significance thresholds. The working group discussed multiple methodologies for determining project significance. These methodologies included categorical exemptions, consistency with regional GHG budgets in approved plans, a numerical threshold, performance standards, and emissions offsets (SCAQMD, 2008). The GHG CEQA Significance Threshold Working Group has not convened since 2008.

3.2.1.5. Local

Los Angeles County Metropolitan Transportation Authority (Metro)

Metro's Countywide Sustainability Planning Program provides leadership for the implementation of a regional transit system that increases mobility, fosters walkable and livable communities, and minimizes greenhouse gas emissions and environmental impacts (Metro, 2012 (a)). The Countywide Planning Policy is a tool for defining long-term, desired sustainability outcomes in order to facilitate greater coordination and collaboration across transportation modes, planning disciplines and government agencies. The Policy aims to fully integrate sustainability into Metro's planning functions, complement and provide a framework for building upon federal, state, regional and local sustainability policies/plans, and foster collaboration and inspire partnerships that will lead to more sustainable communities.

Metro's Climate Action and Adaptation Plan establishes a framework to reduce GHG emissions and prepare for the impacts of climate change (Metro, 2012 (b)). The first section of the Plan addresses the need to mitigate climate change by reducing GHG emissions. It provides an accounting of Metro's current and forecast emissions, as well as a discussion of actions that Metro can take to further reduce emissions from private vehicles. The bulk of this section presents a framework for reducing emissions from Metro's internal operations. The second section identifies Metro services and assets that are likely to be affected by climate impacts. Several adaptation strategies are presented that could address these vulnerabilities. A third section provides next steps for both the mitigation and the adaptation components of the Plan. Refer to the Plan for a detailed discussion of GHG emission reduction strategies and adaptation strategies.

Metro's Energy Conservation and Management Plan (ECMP) is a strategic blueprint to guide energy use in a sustainable, cost-effective, and efficient manner. The ECMP complements Metro's Energy and Sustainability Policy, focusing on electricity for rail vehicle propulsion, electricity for rail and bus facility purposes, natural gas for rail and bus facility purposes, and the application of renewable energy (e.g., solar and wind). The ECMP addresses energy needs and plans to meet increasing ridership through system expansion and new facility construction. It identifies opportunities to reduce energy consumption and realize cost savings through the implementation of low cost operational initiatives and cost effective capital retrofits. The ECMP also evaluates and recommends an optimal organizational structure and approach for the focused and effective implementation of an agency-wide ECMP. Finally, the ECMP provides a set of implementation strategies for implementing the plan.

Metro has adopted a Green Construction Policy committing to less polluting construction equipment and vehicles and implementing best practices to reduce harmful diesel emissions on all Metro construction projects performed on Metro properties and rights-of-way. Best practices include Tier 4 emission standards for off-road diesel-powered construction equipment greater than 50 horsepower and restricting idling to a maximum of five minutes.

Additionally, in 2015 Metro released a Resiliency Indicator Framework report to help prioritize and evaluate climate adaptation implementation priorities to ensure infrastructure resilience and maintain a good state of repair. The report outlines metrics referred to as resiliency indicators that facilitate the process of continual improvement and help prioritize actions for Metro's planning, construction, and operational activities. The intent is that the indicators will contribute to the understanding of the progress of Metro's climate management efforts over time and allow the agency to gauge the effectiveness of specific strategies (Metro, 2015). Indicators pertaining to technical and organizational components of Metro's operations were identified and evaluated in the report.

City of Los Angeles

The City of Los Angeles has issued guidance promoting green building to reduce GHG emissions. The goal of the Green LA Action Plan (GreenLA) is to reduce GHG emissions 35 percent below 1990 levels by 2030 (City of Los Angeles, 2007). The Plan identifies objectives and actions designed to make the City a leader in confronting global climate change. The measures would reduce emissions directly from municipal facilities and operations, and create a framework to address City-wide GHG emissions. GreenLA lists various focus areas in which to implement GHG reduction strategies. Focus areas include energy, water, transportation, land use, waste, port, airport, and ensuring that changes to the local climate are incorporated into planning and building decisions.

In order to provide detailed information on action items discussed in the GreenLA, the City published an implementation document titled ClimateLA. ClimateLA presents the existing GHG inventory for the City, includes enforceable GHG reduction requirements, provides mechanisms to monitor and evaluate progress, and includes mechanisms that allow the plan to be revised in order to meet targets. By 2030, the plan aims to reduce GHG emissions by 35 percent from 1990 levels which were estimated to be approximately 54.1 million metric tons. Thus, the City

will need to lower annual GHG emissions to approximately 35.1 million metric tons per year by 2030. To achieve these reductions the City has developed strategies that focus on energy, water use, transportation, land use, waste, open space and greening, and economic factors.

In addition to the GreenLA, Mayor Eric Garcetti released L.A.'s first-ever Sustainable City pLAN (pLAN) on April 8, 2015. The pLAN is a roadmap to achieving short-term results, and sets a path to strengthen and transform the City in future decades. Recognizing the risks posed by climate change, Mayor Garcetti set time-bound outcomes on climate action, most notably to reduce GHG emissions by 45 percent by 2025, 60 percent by 2035, and 80 percent by 2050, all against a 1990 baseline. Through the completion and verification of the GHG inventory update, the City concluded that:

- The City accounted for approximately 36.2 million metric tons of CO₂e in 1990;
- The City's most recent inventory shows that emissions fell to 29 million metric tons of CO₂e in 2013; and
- Los Angeles's emissions are 20 percent below the 1990 baseline as of 2013, putting Los Angeles nearly halfway to the 2025 pLAN reduction target of 45 percent. In addition, the 20 percent reduction exceeds the 15 percent statewide goal listed in the First Update to the AB 32 Scoping Plan.

County of Los Angeles

The County of Los Angeles has published a Community Climate Action Plan (CCAP). The purpose of the CCAP is to mitigate and avoid GHG emissions associated with community activities in unincorporated Los Angeles County. The project site is located in the City of Los Angeles and the CCAP is not relevant to the proposed project.

3.2.2. Existing Setting

California is the 15th largest emitter of GHG on the planet, representing about two percent of the worldwide emissions. Table 3.2.2 shows the California GHG emissions inventory rounded to the nearest whole number for the years 2004 to 2013. The transportation sector – largely the cars and trucks that move people and goods – is the largest contributor to GHG emissions followed by electrical power.

Table 3.2.2 California Greenhouse Gas Emissions Inventory

Sector	CO ₂ e Emissions (Million Metric Tons)									
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Transportation	187	189	189	189	178	171	170	168	167	169
Electric Power	115	108	105	114	120	101	90	88	95	90
Commercial and Residential	44	42	43	43	43	44	45	45	43	44
Industrial	98	96	94	91	91	89	92	92	93	93
Recycling and Waste	8	8	8	8	8	8	8	9	9	9
High Global Warming Potential	10	10	11	12	13	14	15	17	18	19
Agriculture	34	35	36	36	36	35	35	36	36	36
Emissions Total	496	488	486	493	489	462	455	455	461	460

Source: CARB, 2015.

In 2012 and 2013, total GHG and per capita emissions increased. This increase was driven primarily by strong economic growth in the state, the unexpected closure of the San Onofre Nuclear Generating Station, and drought conditions that limited in-state hydropower. California's gross emissions of GHG decreased from 496 million metric tons of CO₂e in 2004 to 455 million metric tons in 2011 and then increased to 460 million metric tons in 2013. During the same period, California's population grew by about 8.7 percent from 35.3 to 38.3 million people. As a result, California's per capita GHG emissions decreased from 2004 to 2011, but has started to increase incrementally as the economy has improved after the Great Recession (which generally is considered to have lasted from 2007 to 2009). Emissions from sectors other than electricity remained relatively constant from 2011.

SCAG estimated regional transportation GHG emissions in the 2016-2040 RTP/SCS for a 2012 emissions scenario. The SCAG regional transportation total was estimated to be 243,152 tons per day of CO₂. Los Angeles County, the largest county in the SCAG region, represented 120,929 tons per day of transportation emissions, or 50 percent of the regional transportation total.

3.2.3. Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines, the proposed project would have a significant impact related to greenhouse gas emissions and climate change if it would:

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

The SCAQMD has yet to adopt a GHG significance threshold for transportation or land use development projects, although it has adopted significance thresholds for industrial-type projects for which it is the lead agency. However, those industrial thresholds are not relevant to the project.

On November 30, 2015, the California Supreme Court issued an opinion on GHG significance thresholds for CEQA in the case *Center for Biological Diversity et al. vs. California Department of Fish and Wildlife*. The following discussion is paraphrased from that case, which assessed the use of GHG significance thresholds.

The Court stated that California air pollution control officials and air quality districts have made several proposals for numerical thresholds. Multiple agencies' efforts at framing GHG significance issues have not yet coalesced into any widely accepted set of numerical significance thresholds, but have produced a certain level of consensus on the value of AB 32 consistency as a criterion. Neither AB 32 nor the AB 32 Scoping Plan set out a mandate or method for CEQA analysis of GHG emissions from a proposed project. A 2007 CEQA amendment, however, required the preparation, adoption and periodic update of guidelines for mitigation of GHG impacts. The resulting direction was that a lead agency should attempt to describe, calculate or estimate the amount of GHG the project will emit, but recognizes that agencies have discretion

in how to do so. It goes on to provide that when assessing the significance of GHG emissions, the agency should consider these factors among others: (1) the extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting; (2) whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of GHG emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the proposed project.

The Court also acknowledged that the scope of global climate change and the fact that GHGs, once released into the atmosphere, are not contained in the local area of their emission means that the impacts to be evaluated are global rather than local. For many air pollutants, the significance of their environmental impact may depend greatly on where they are emitted; for GHG, it does not.

Meeting statewide reduction goals does not preclude all new development. Rather, the Scoping Plan, the state's roadmap for meeting AB 32's target, assumes continued growth and depends on increased efficiency and conservation in land use and transportation from all Californians. To the extent a project incorporates efficiency and conservation measures sufficient to contribute its portion of the overall GHG reductions necessary for the entire state, one can reasonably argue that a project's impact is not cumulatively considerable, because it would be helping to solve the cumulative problem of greenhouse gas emissions as envisioned by California law. Given the reality of growth, some GHG emissions from new development is inevitable. The critical CEQA question is the cumulative significance of a project's GHG emissions, and from a climate change point of view it does not matter where in the state those emissions are produced. Under these circumstances, evaluating the significance of GHG emissions by their effect on the state's efforts to meet its long-term goals is a reasonable threshold.

Using consistency with AB 32's statewide goal for GHG reduction, rather than a numerical threshold, as a significance criterion is also consistent with the broad guidance provided by Section 15064.4 of the CEQA Guidelines. Section 15064.4 was drafted to reflect that there is no iron-clad definition of significance. Section 15064.4 was not intended to restrict agency discretion in choosing a method for assessing GHG emissions, but rather to assist lead agencies in investigating and disclosing all that they reasonably can regarding a project's GHG emissions impacts.

While the Supreme Court held that establishing a significance criterion based on consistency with AB 32's reduction goals was appropriate, the court found that there was no substantial evidence supporting the conclusion of the EIR at issue in that case that the proposed project would be consistent with AB 32's reduction goals. As background, AB 32 requires statewide GHG emissions to return to 1990 levels by 2020. In the AB 32 Scoping Plan, CARB determined that meeting this statewide GHG reduction goal would require a 29 percent reduction in

statewide emissions from a business-as-usual approach (i.e., an approach with no conservation or regulatory efforts beyond what was in place when the forecast was made). Based on this, the EIR had concluded the project would not result in a significant climate change impact because the project was designed to reduce GHG emissions by 31 percent over a business-as-usual approach. The Supreme Court found that there was no substantial evidence that the *project-level* reduction of 31 percent in comparison to business as usual is consistent with AB 32's *statewide* goal of a 29 percent reduction from business as usual. The court reasoned that the Scoping Plan nowhere related its statewide level of reduction efforts to the percentage of reduction that would or should be required from individual projects, and nothing in the administrative record indicated that the required percentage reduction from business as usual is the same for an individual project as for the entire state population and economy. The court suggested, however, that an appropriate threshold could assess whether a project would comply with regulatory programs designed to reduce emissions from particular activities.

3.2.4. Impact Analysis and Mitigation Measures

This section assesses potential impacts associated with the proposed project and, if necessary, identifies mitigation measures to eliminate or reduce impacts. The methodology implemented in this assessment consists of evaluating whether the proposed project would have significant GHG impacts according to the above-stated thresholds.

Impact 3.2.1 Would the proposed project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment? For the purposes of this analysis, the proposed project would not have a significant impact on climate change if it is consistent with applicable plans, policies and regulations adopted for the purpose of reducing the emissions of GHGs.

Impact Analysis

The proposed project would generate GHG emissions during both construction and long term operation of the facilities. Sources of temporary GHG emissions associated with construction include off-road heavy duty equipment and on-road motor vehicle travel to and from the project site. In addition to short-term impacts, long-term operation of the proposed project would generate GHG emissions from energy consumption and utility services of the building structures, changes in local bus routes and traffic circulation and additional vehicle trips utilizing the passenger pick-up and drop-off service.

Short-Term Construction GHG Emissions

Construction activity would commence in mid-2020 and occur over 36 months. Construction would involve demolition of existing structures, utilities relocation, clearing and grading the project site, and installation of the light rail platforms, a bus hub, and pedestrian and bicycle amenities. GHG emissions were quantified for each phase using CalEEMod based on the estimated number and types of heavy duty equipment that would be utilized, the commute of workers to and from the project site and the transport of materials to and from the project site. Detailed information describing the construction activities and equipment inventories can be found in Section 3.1 Air Quality.

GHG emissions are cumulative in nature and are not considered in the context of short-term environmental impacts. Furthermore, the complex nature of atmospheric chemistry responsible for climate change makes it impossible to determine the incremental impact of a single project with regards to GHG emissions, and consequently GHG emissions are considered from a long-term regional perspective. Therefore, in accordance with SCAQMD recommendations (SCAQMD, 2008) for analyzing GHG emissions from a single project, GHG emissions that would be generated by construction of the proposed project were amortized over a 30-year operational period. Construction activity would generate approximately 2,143 metric tons of CO₂ equivalents (MTCO_{2e}) over 30 years or approximately 71 MTCO_{2e} annually.

Long-Term Operational GHG Emissions

After construction is completed, the proposed project would generate emissions of GHGs through direct and indirect sources. Operational GHG emissions associated with the proposed project would be generated through electricity demand and utilities (indirect as the sources are part of other entities) of the new facilities, changes in local bus routes and vehicle trips by passengers and LAX employees creating additional VMT (direct) and the private vehicle activity at the new pick-up and drop-off along Aviation Boulevard (direct). The operational GHG emissions can generally be divided into stationary (facility) sources and mobile (vehicular) sources.

Stationary sources of GHG emissions associated with operation of the proposed project would include electricity and natural gas use, water use and wastewater generation and solid waste disposal. The proposed building area is approximately 262,550 square feet and would require approximately 10,000,000 kilowatt-hours (kWh) of electricity and approximately 120,000 therms (12,000,000,000 BTU) of natural gas annually. Emissions from electricity and natural gas use were quantified based on results of the California Commercial End-Use Survey published by the California Energy Commission (CEC, 2006). Additionally, the proposed project would utilize approximately 58,000,000 gallons of water per year and generate 12,000,000 gallons of wastewater to the sewer system. Water distribution emissions were calculated using the methodologies provided in the CEC report Refining Estimates of Water-Related Energy Use in California (CEC, 2006). Finally, estimates of solid waste generation from the proposed project were approximately 325 tons per year, and emissions from the landfill disposal of this waste were also quantified.

Mobile sources of GHG emissions associated with the proposed project include exhaust emissions from changes in bus route VMT to and from the new station location, regional changes in highway VMT from transit improvements, and vehicle trips dropping off passengers at the pick-up and drop-off area along Aviation Boulevard. Operational mobile source emissions were quantified for three scenarios based on the transportation analyses (Fehr & Peers, 2016): existing conditions, future without project conditions, and future with project conditions.

Table 3.2.3 presents the regional daily VMT for the three scenarios evaluated. Analysis from the traffic study determined that passenger pick-ups and drop-offs would generate 92 daily

trips resulting in 1,546 daily passenger vehicle VMT, which are shown under the 2035 Proposed Project forecast. Bus VMT would decrease from the existing to the 2035 No Project condition due to the redistribution of bus trips to serve the Aviation/Century station.

Table 3.2.3 Operational Daily Vehicle Miles Traveled

Type of Trip	Existing Conditions (Miles) ^{1, 2}	Future Without Project (Miles)	Future With Project (Miles)
Regional CNG Buses to LAX Area	15,769	14,958	15,245
Regional Highway Passenger Vehicles to LAX Area	395,080,499	559,601,676	559,604,278 ³
Pick-up and Drop-off Passenger Vehicles	0	0	1,546
Tow Facility	500	500	0
Total	395,096,768	559,617,134	559,621,069

1. There is a CNG station located approximately 0.2 miles north of the CNG station on the project site. Changes in VMT related to the CNG station would result in negligible emissions.
2. Changes in VMT associated with the rental car maintenance facility cannot be estimated as no future site has been identified at this time. By necessity, the rental car maintenance facility must be located near the customer rental facility, similar to the existing condition. Changes in VMT related to the rental car maintenance facility would result in negligible emissions.
3. The increase in daily VMT is associated with the redistribution of bus service in the project area.

Source: Metro, 2016.

As shown in Table 3.2.3, changes in bus routes under the proposed project would reduce daily CNG bus VMT by 524 miles compared to the existing conditions. Relative to the 2035 No Project condition, the 2035 Proposed Project would result in 287 more daily CNG bus VMT. Refer to Section 3.6 Transportation and Traffic for a detailed discussion of CNG bus VMT.

In the 2035 forecasted scenarios, implementation of the proposed project would produce an increase of 4,148 daily passenger vehicle VMT compared to the 2035 No Project condition, of which 1,546 miles would be attributed to passenger pickup and drop-off and 2,602 miles would result from people switching from using bus service to driving their personal vehicle to the LAX area (captured in the “Regional Highway Passenger Vehicles to LAX Area” in Table 3.2.3). Refer to Section 3.6 Transportation and Traffic for a detailed discussion of regional passenger vehicle VMT.

Mobile source GHG emissions were quantified using EMFAC2014, the CARB-recommended model for calculating estimates of on-road mobile source emissions. EMFAC2014 provides GHG emissions factors for various vehicle types in grams per mile. EMFAC2014 vehicle categories selected for the analysis included urban buses fueled by natural gas (CNG buses) and light-duty autos and trucks (passenger vehicles). GHG emissions were calculated by multiplying the emissions factor for the appropriate vehicle type by the VMT. The mobile (vehicular) source emissions were totaled and added to the stationary (facility) source emissions to characterize GHG impacts from the entirety of the proposed project.

Existing Sources of GHG emissions associated with the existing land uses include electricity, natural gas use, water use, wastewater generation, solid waste disposal, and employee vehicle trips. The project site is currently occupied by a rental car service center and towing service. The rental car facility uses approximately 8,576 gallons of water per day, and generates approximately 546 gallons of wastewater and 56 pounds of solid waste per day. The towing service uses approximately 613 gallons of water per day, and generates approximately

39 gallons of wastewater and 4 pounds of solid waste per day. Operational emissions from existing land uses were estimated using CalEEMod, as these emissions would be displaced by the proposed project.

Table 3.2.4 presents the results of operational emissions modeling for the existing condition, the future without project condition, and the proposed project. The emissions from stationary and mobile sources are shown and combined under each scenario. The stationary emissions are split by source type, and the mobile source emissions are split by trip type. Also displayed is the difference between the future without project condition and future with project, which represents the change in VMT that would result from implementation of the proposed project. The amortized construction emissions were added to the proposed project.

Table 3.2.4 Annual Greenhouse Gas Emissions

Source	Existing (MTCO _{2e} /year)	Future Without Project (MTCO _{2e} /year)	Future With Project (MTCO _{2e} /year)
Stationary (Facility)			
Area	<1	<1	<1
Energy	102	102	6,225
Waste	5	5	148
Water	26	26	493
Stationary Subtotal	133	133	6,866
Mobile (Vehicular)			
Passenger Vehicles	50,534,908	38,516,865	38,517,144
Buses	9,223	7,866	8,017
Tow Trucks	109	111	0
Mobile Subtotal	50,544,240	38,524,842	38,525,161
Construction			
30-Year Amortized	-	-	71
Total GHG Emissions	50,544,373	38,524,975	38,532,098

Source: Terry A. Hayes Associates Inc., 2016.

The existing condition includes approximately 50,544,373 MTCO_{2e} per year. The future without project condition would result in approximately 38,524,975 MTCO_{2e} per year. Stationary source, public transit, and passenger vehicle emissions under the future with project would generate 38,532,098 MTCO_{2e} per year. Implementation of the proposed project results in a decrease of 12,012,275 MTCO_{2e} per year relative to the existing condition and an increase of approximately 7,123 MTCO_{2e} per year relative to the future without project condition. Improvements in fuel standards and phase-out of older automobiles are responsible for the decreases observed in the future scenarios relative to the existing condition.

GHG emissions have been quantified for public disclosure. As discussed above under Thresholds of Significance, evaluating the significance of GHG emissions by their effect on the state's efforts to meet its long-term goals is a reasonable threshold.

Plan and Policy Consistency

Relevant GHG reduction plans, policies, and regulations adopted by Metro include the Countywide Sustainability Planning Program, the Climate Action and Adaptation Plan, the ECMP, and the Green Construction Policy. The Countywide Sustainability Planning Program includes policies designed to minimize environmental impacts from the design, construction, operation and maintenance of Metro’s facilities and operations. Table 3.2.5 shows that the proposed project would be consistent with applicable Metro Countywide planning policies.

Table 3.2.5 Project Consistency with the Countywide Sustainability Planning Program

Policy Topic	Universal Policy (UP)	Project Consistency
RTP/SCS Implementation	<p>UP I: Promote regional compliance with state climate change law by supporting SCAG’s efforts to implement the regionally-adopted, land-use and transportation vision in the RTP/SCS, and encourage local jurisdictions to adopt supportive local policies (Metro does not have jurisdiction over land-use, but can advance regionally adopted land-use strategies through incentive programs, like transit-orientated development planning grants, and supportive transportation investments).</p>	<p>Consistent. The proposed project is included in the 2016-2040 RTP/SCS. In addition, the proposed project would improve the ability of people at existing and future transit-orientated development to access LAX using the regional transit system.</p>
RTP/SCS Implementation	<p>UP II: Draw from the recommendations included in the RTP/SCS to implement appropriate transportation mitigation measures for all projects.</p>	<p>Not Applicable. No transportation impacts have been identified for the proposed project (refer to Section 3.6 of the RTP/SCS and Section 3.6 Transportation and Traffic, of this Draft EIR).</p>
Green Design	<p>UP III: Implement and encourage local incorporation of green design techniques that minimize the environmental impact of transportation projects and/or support local urban greening; consider requiring green design techniques as a condition of funding when these techniques can be implemented with little to no additional cost to project sponsors (i.e., native landscaping).</p>	<p>Consistent. The proposed project has several defined mandatory goals for sustainability, specifically focused on achieving a Leadership in Energy and Environmental Design (LEED) Silver minimum rating. The sustainability strategy would include a comprehensive overview of site stormwater and landscape strategies to reduce runoff and improve water quality that drains into the Ballona Creek watershed and the Pacific Ocean. The landscape would also assist in reducing urban heat island effects through the use of high albedo materials, which would improve the local microclimate and pedestrian comfort. The design would focus on reductions in potable water demand for the building and landscape, as well as reductions in wastewater (e.g., increased use of recycled water and wastewater reductions).</p>

Policy Topic	Universal Policy (UP)	Project Consistency
Vehicle Technology	UP IV: Facilitate the early adoption of zero and near-zero emission vehicles (fleet services, transit vehicles, clean trucks, passenger vehicles) and promote supportive regional and local policies.	Not Applicable. The proposed project has no nexus to the purchase of zero and near-zero emission vehicles. However, Metro generally uses clean natural gas vehicles.
Local Access	UP VI: Encourage and support land use policies and transportation projects that seek to reduce trip lengths by reconnecting the street grid, increasing the mix of land-uses, providing mid-block crossings, incorporating neighborhood traffic calming, reducing set-backs, and breaking up superblocks in new or (re)development projects, among other strategies.	Consistent. The proposed project would add crosswalks across Aviation Boulevard creating easier accessibility to the project site from the east and providing mid-block crossings.
Performance Measurement	UP VII: Pursue alternatives and/or supplements to the use of level of service and delay metrics that prioritize mobility for the single occupancy automobile, for project evaluation and encourage regional and local agencies to consider a broader range of metrics to assess multi-modal impacts.	Not Applicable. No transportation impacts have been identified for the proposed project (refer to Section 3.6 Transportation and Traffic).
System Productivity	UP VII: Encourage through regional planning, funding policies, infrastructure investments, and promotion of supportive local policies (including parking management policies, road pricing, first/last mile investments, transit preferential treatments, and other demand management and systems management policies/projects) strategies that seek to optimize transit service by increasing its competitiveness with automobiles.	Consistent. The proposed project would improve the ability of people to access LAX without using passenger vehicles by providing a light rail station and bus transit facility in close proximity to LAX.
System Productivity	UP VII: Incorporate traffic operations system elements into all new highway projects to effectively operate the regions freeway system and coordinate with local transportation management systems. This may include installing equipment along freeways to monitor and manage traffic flows through detection, surveillance, communication, and control equipment, such as loop detectors, closed-caption television cameras, message signs, and ramp meters and/ or promoting highway corridor level operational improvements such as integrated corridor management, congestion pricing, decision support systems, traveler information services, etc.	Not Applicable. The proposed project has no nexus to highway improvements.

Policy Topic	Universal Policy (UP)	Project Consistency
System Productivity	UP VII: Support through policy and project development greater utilization of transportation systems management tools that combine traffic engineering measures and traffic operation controls to better manage congestion on surface streets, optimize person throughput, and promote safe and efficient travel for all users of the roadway.	Consistent. The proposed project would provide two access driveways on Aviation Boulevard to prevent backup and reduce congestion. Additionally, the bus plaza would include articulation and landscape features to avoid conflicts between pedestrians and bus circulation.
Complete Streets	UP VII: Consistent with state law, explore opportunities through policy and project development to increase access for all users by making streets more “complete” and promote complete streets at the local level through partnerships and incentive programs.	Not Applicable. Since the City of Los Angeles is responsible for designating bicycle lanes and maintaining streets, the project applicant does not have the authority to change street designations or create incentive programs to improve the local roadways.
Transit-Orientated Development	UP VIII: Pursue opportunities to realize appropriately-scaled, transit-oriented development in rail and bus corridors as part of corridor studies, project development, incentive programs, and the promotion of supportive local policies (transit-oriented development ordinances, land use and zoning changes, General Plan updates, etc).	Consistent. The proposed project would create a light rail station and bus transportation center and improve the ability of people to access LAX using the transit system. While the project would connect multiple modes of transportation, the site is currently zoned for and surrounded by industrial uses and therefore, would not be appropriate to include residential uses, which are typically found in transit-oriented development.
Virtual Access	UP IX: Leverage project development to facilitate the early adoption of emerging technologies that complement or even replace conventional travel modes through virtual access, and promote supportive regional and local policies (telecommute programs).	Not Applicable. The proposed project does not include a residential or commercial land use that would be supported by virtual access policies, such as telecommute programs.

Source: Metro, 2016.

The Metro Climate Action and Adaptation Plan (Metro, 2012) provides a baseline 2010 GHG emissions inventory for the Metro system and outline strategies for achieving GHG emissions reductions in future operations. This plan identifies 11 strategies to reduce GHG emissions throughout the Metro system from 2012 to 2020, and then analyzes each for cost-effectiveness and feasibility of implementation. Table 3.2.6 shows that the proposed project would be consistent with applicable Metro Countywide planning policies. The Climate Action and Adaptation Plan also includes a discussion of climate adaptation designed to identify some of the most important Metro services and assets that are likely to be affected by climate impacts. The discussion generally focuses on sea level rise and flooding. Figure 15 of the Climate Action and Adaptation Plan shows that the project site is not located within 100-year flood inundation areas identified as locations at risk to sea level rise and flooding.

Table 3.2.6 Project Consistency with the Climate Action and Adaptation Plan

Policy Topic	Strategy	Project Consistency
Building Energy	Facility Lighting Upgrades	Consistent. The proposed project has several defined mandatory goals for sustainability, specifically focused on achieving a LEED Silver rating, at a minimum. The sustainability strategy would include a comprehensive overview energy savings, including lights.
Building Energy	Expand Use of Renewable Energy	Consistent. The proposed project has several defined mandatory goals for sustainability, specifically focused on achieving a LEED Silver rating, at a minimum. The sustainability strategy would include a comprehensive overview energy savings, including possible solar opportunities.
Building Energy	Retrofit Lighting in Red Line Tunnel	Not Applicable. This strategy only relates to the Red Line.
Water Use	Municipal Recycled Water for Bus Washing	Not Applicable. The proposed project does not include a bus wash.
Water Use	Extension of Bus Wash On-Site Water Reclamation	Not Applicable. The proposed project does not include a bus wash.
Water Use	Low Water Sanitary Fixtures	Consistent The proposed project has several defined mandatory goals for sustainability, specifically focused on achieving a LEED Silver rating, at a minimum. The sustainability strategy would include a comprehensive overview water savings, including low-flow fixtures.
Vehicle Technology	On-board Storage of Regenerative Braking Energy	Not Applicable. The proposed project has no nexus related to the purchase of new buses that would use regenerative braking.
Vehicle Technology	Wayside Energy Storage Substations	Not Applicable. Metro is still assessing the potential for using wayside energy storage substations.
Vehicle Technology	Mobile Air Conditioning Replacement	Not Applicable. The proposed project has no nexus related to replacing fleetwide air conditioning units.
Vehicle Technology	Gasoline-Electric Hybrid Buses	Not Applicable. The proposed project has no nexus related to the purchase of new buses.
Vehicle Technology	Biomethane in CNG Buses	Not Applicable. The proposed project has no nexus related to the purchase of new buses.

Source: Metro, 2016.

The ECMP is a strategic blueprint to guide energy use in a sustainable, cost-effective, and efficient manner. The proposed project has several defined mandatory goals for sustainability, specifically focused on achieving a LEED Silver minimum rating and compliance with the California Green Building Code. The sustainability strategy includes a comprehensive overview of site stormwater and landscape strategies to reduce runoff and improve water quality that drains into the Ballona Creek watershed and the Pacific Ocean. The landscape would also assist in reducing urban heat island effects through the use of high albedo materials, which would improve the local microclimate and pedestrian comfort. The design would focus on reductions in potable water demand for the building and landscape, as

well as reductions in wastewater (e.g., increased use of recycled water and wastewater reductions).

As part of future phases of design, an energy model can be developed to test alternative design strategies for the building envelope and mechanical systems to identify opportunities for energy demand reductions and to set overall energy performance criteria. This would be benchmarked against the LEED Energy and Atmosphere credit baseline and the 2016 California Building Code's Title 24 Energy Standard. The following measures, many of which overlap with LEED credit requirements, are project requirements to demonstrate compliance with the California Green Building Code:

- Site Stormwater Best Management Practices
- Light Pollution Reduction
- Hardscape Alternatives (Heat Island Effect Reduction)
- Solar Ready Building
- Wastewater Reduction by 20 Percent Minimum
- Outdoor Water Use Reduction and Metering
- Recycling and Reuse of Excavated Soil and Land-clearing debris
- Recycling Facilities
- Indoor Air Quality during Construction
- Environmental Tobacco Smoke Control
- Refrigerant Piping Accessibility

Construction of the proposed project would be conducted in accordance with Metro's Green Construction Policy. The Green Construction Policy contains requirements for construction equipment specification and other practices to implement while construction activities are ongoing. The following control strategies are required for all Metro projects to minimize construction emissions:

- Construction equipment shall incorporate, where feasible, emissions-reducing technology such as hybrid drives and specific fuel economy standards.
- Idling shall be restricted to a maximum of 5 minutes, except as provided in the exceptions to the applicable CARB regulations regarding idling.
- Equipment Engine Specifications: All off-road diesel-powered construction equipment greater than 50 hp shall meet Tier-4 off-road emission standards at a minimum. In addition, if not already supplied with a factor-equipped diesel particulate filter, all construction equipment shall be outfitted with Best Available Control Technology (BACT) devices certified by CARB. Any emissions control device used by the Contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.
- Use of diesel particulate traps or BACT, as feasible.
- Maintain equipment according to manufacturer's specifications.

- Where applicable and feasible, work with local jurisdictions to improve traffic flow by signal synchronization.
- If feasible and as allowed by local jurisdictions, configure construction parking to minimize traffic interference.
- Enforce truck parking restrictions, where applicable.
- Schedule construction activities that affect traffic flow on the arterial system to off-peak hours to the extent practicable.
- Use electric power in lieu of diesel power where available.

By incorporating the aforementioned control strategies, construction of the proposed project will adhere to the objectives of the Green Construction Policy.

Regarding state and regional GHG reduction plans, the AB 32 Scoping Plan outlines a series of technologically feasible and cost-effective measures to reduce statewide GHG emissions, including expanding energy efficiency programs, increasing electricity production from renewable resources (at least 33 percent of the statewide electricity mix), and increasing automobile efficiency, implementing the Low-Carbon Fuel Standard, and developing a cap-and-trade program. These measures are designed to be implemented by state agencies. The proposed project would not interfere with implementation of the AB 32 measures.

The California legislature passed SB 375 to connect regional transportation planning to land use decisions made at a local level. SB 375 requires the metropolitan planning organizations to prepare an SCS in their regional transportation plans to achieve the per capita GHG reduction targets. For the SCAG region, the SCS is contained in the 2016-2040 RTP/SCS. The 2016-2040 RTP/SCS focuses the majority of new housing and job growth in high-quality transit areas and other opportunity areas on existing main streets, in downtowns, and commercial corridors, resulting in an improved jobs-housing balance and more opportunity for transit-oriented development. In addition, SB 743, adopted on September 27, 2013, encourages land use and transportation planning decisions and investments that reduce vehicle miles traveled that contribute to GHG emissions, as required by AB 32. The project would provide increased regional transit opportunities and would not interfere with SCAG's ability to implement the regional strategies outlined in the 2016-2040 RTP/SCS. The proposed project is included in the list of projects for the 2016-2040 RTP/SCS and would not interfere with SCAG's ability to implement the regional strategies outlined in the 2016-2040 RTP/SCS.

The proposed project would incorporate strategies to reduce energy demand and GHG emissions through promotion of alternative energy vehicle use, minimizing building electricity consumption, and decreasing water use and wastewater effluent. The proposed project is consistent with the Metro, regional, and state GHG reduction policies. Therefore, the proposed project would result in a less-than-significant impact related to GHG emissions and consistency with GHG reduction plans.

Mitigation Measures

This impact would be less than significant and does not require mitigation measures.

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3.3. HAZARDS AND HAZARDOUS MATERIALS

This section provides an overview of hazards and hazardous materials and evaluates the construction and operational impacts associated with the proposed project. The term “hazardous material” can have varying definitions for different regulatory programs. For the purpose of the following analysis, the term “hazardous materials” refers to both hazardous materials and hazardous waste. The California Health and Safety Code Section 25501 (m) defines hazardous materials as follows:

“Hazardous material means any material that because of its quantity, concentrations, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. Hazardous materials include but are not limited to hazardous substances, hazardous waste, and any material which a handler or the administering agency has a reasonable basis for believing would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or environment.”

3.3.1. Regulatory Framework

3.3.1.1. Federal

U.S. Environmental Protection Agency (USEPA)

The USEPA’s mission is to protect human health and the environment. The USEPA takes action to reduce risks associated with exposure to chemicals in commerce, indoor and outdoor environments, and products and food. The USEPA continues to oversee the introduction and use of pesticides, improve the Integrated Risk Information System (IRIS) program, reduce radon risks, identify and address children’s health risks in schools and homes, and improve chemical management practices. Oversight of chemical storage and manufacturing in coordination with their interagency partners remains a key focus of the USEPA, as well as efforts to reduce urban air toxics (USEPA, 2015).

Federal Aviation Administration (FAA)

The FAA has established an advisory circular regarding safety concerns associated with the construction of high-rise buildings since such buildings may present a hazard to aircraft operations (FAA, 2014). This requirement is for buildings with a height of 200 feet above ground level (AGL) or more. Title 14, Part 77 of the CFR, Safe, Efficient Use, and Perseveration of navigable Airspace, establishes minimum standards to ensure air safety by regulating the construction or alteration of buildings or structures that may affect airport operations (CFR, 2016(b)). In addition, all airports include a RPZ, which is a two-dimensional trapezoidal area centered along the extended runway centerline. The RPZ function is to enhance the protection of people and property on the ground.

The FAA does not have jurisdiction to approve a proposed project; rather, the FAA provides a written finding to the project applicant that the project represents one of three options: (1) not a problem with respect to air navigation; (2) is an obstruction, but not a hazard to air navigation; or (3) is a hazard to air navigation. This finding is advisory to the applicant and to local zoning jurisdictions. In addition, the FAA will review the proposed project to be certain that it does not create: (1) electromagnetic interference with air navigation facilities; (2) lighting effects; or (3) smoke that would interfere with aircraft in flight.

Additional Federal Regulations

Hazardous materials are strictly regulated by federal agencies and there are many regulations that do not directly apply to the proposed project, including:

- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also known as Superfund
- Resource Conservation and Recovery Act (RCRA)
- Toxic Substances Control Act (TSCA)
- Superfund Amendments and Reauthorization Act (SARA)
- Hazardous Materials Transportation Act
- Community Environmental Response Facilitation Act (CERFA)
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Atomic Energy Act
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)
- Emergency Planning and Community Right-to-Know Act (EPCRA)

3.3.1.2. State

Regional Water Quality Control Board (RWQCB)

The project site is currently under the regulatory authority of the RWQCB, due to site contamination, further discussed below. There are nine RWQCBs that exercise rulemaking and regulatory activities by basins. This organization is a result of the landmark Porter-Cologne Act, which combined the State Water Rights Board and the State Water Resources Control Board (SWRCB) and created the nine Regional Water Control Boards (CSWRCB, 2013(a)). Each RWQCB makes critical water quality decisions for its region, including setting standards, issuing permits (water discharge requirements), determining compliance with those requirements, and taking appropriate enforcement actions (CSWRCB, 2013(a)). The Los Angeles region is governed by the Los Angeles Regional Water Quality Control Board (LARWQCB), which has jurisdiction over Los Angeles and Ventura Counties, and small portions of Kern and Santa Barbara Counties (CSWRCB, 2013(b)).

Department of Toxic Substances Control (DTSC)

Authority for the state-wide administration and enforcement of RCRA rests with the California Environmental Protection Agency (Cal/EPA), DTSC (DTSC, 2010). While the DTSC has primary state responsibility in regulating the generation, storage and disposal of hazardous materials, DTSC may further delegate enforcement authority to local jurisdictions. In addition, the DTSC is responsible and/or provides oversight for contamination cleanup, and administers State-wide hazardous waste reduction programs. DTSC operates programs to accomplish the following: (1) deal with the aftermath of improper hazardous waste management by overseeing site cleanups; (2) prevent releases of hazardous waste by ensuring that those who generate, handle, transport, store, and dispose of wastes do so properly; and (3) evaluate soil, water, and air samples taken at sites.

The storage of hazardous materials in underground storage tanks (USTs) is regulated by Cal/EPA's SWRCB, which has delegated authority to the RWQCB and typically on the local level, to the local fire department.

Asbestos Regulations

The CCR regulates asbestos exposure for workers as defined in the Section 1502 of Title 8, including demolition or salvage of structures where asbestos is present, removal or encapsulation of materials containing asbestos, construction, alteration, repair, maintenance, or renovation of structures, substrates, or portions thereof, that contain asbestos, installation of products containing asbestos, asbestos spill/emergency cleanup, transportation, disposal, storage, containment of and housekeeping activities involving asbestos or products containing asbestos, on the site or location at which construction activities are performed and excavation which may involve exposure to asbestos as a natural constituent which is not related to asbestos mining and milling activities.

Lead Regulations

Because of its toxic properties, lead is regulated as a hazardous material. Lead is also regulated as a toxic air contaminant. State-certified contractors must perform inspection, testing, and removal (abatement) of lead-containing building materials in compliance with applicable health and safety and hazardous materials regulations.

Additional State Regulations

Hazardous materials are strictly regulated by state agencies and there are many regulations that do not directly apply to the proposed project, including:

- Hazardous Waste Source Reduction and Management Review Act
- California Health and Safety Code
- Hazardous Waste Control Act
- Unified Hazardous Waste and Hazardous Materials Management Regulatory Program
- Hazardous Materials Release Response Plans and Inventory Act

- Safe Drinking Water and Toxic Enforcement Act (Proposition 65)
- California Health and Safety Code
- Carpenter-Presley-Tanner Hazardous Substances Account Act
- Hazardous Waste Management Planning and Facility Siting (Tanner Act)
- Hazardous Materials Release Response Plan and Inventory Law of 1985 (Business Plan Act)
- California Medical Waste Management Act

3.3.1.3. Local

Certified Unified Program Agency (CUPA)

The CUPA, which has the responsibility for implementing federal and state laws and regulations pertaining to hazardous materials management, is the Environmental Health Division of the County Health Department. The Unified Program is the consolidation of six state environmental regulatory programs into one program under the authority of a CUPA. A CUPA is a local agency that has been certified by Cal/EPA to implement these programs within the local agency's jurisdiction. This program was established under the amendments to the California Health and Safety Code made by Senate Bill (SB) 1082 in 1994. The six consolidated programs are:

- Hazardous Materials Release Response Plan and Inventory
- California Accidental Release Prevention
- Hazardous Waste (including Tiered Permitting)
- Underground Storage Tanks
- Aboveground Storage Tanks (Spill Prevention Control and Countermeasures requirements)
- Uniform Fire Code Article 80 Hazardous Material Management Program and Hazardous Material Identification System

Los Angeles Fire Department (LAFD)

The LAFD monitors the storage of hazardous materials in the City for compliance with local requirements. Specifically, businesses and facilities which store more than threshold quantities of hazardous materials as defined in Chapter 6.95 of the California Health and Safety Code are required to file an Accidental Risk Prevention Program with the LAFD. This program includes information such as emergency contacts, phone numbers, facility information, chemical inventory and hazardous materials handling and storage locations. The LAFD also has delegated authority to administer and enforce federal and state laws and local ordinances for USTs. Plans for the construction/installation, modification, upgrade and removal of USTs are reviewed by LAFD Inspectors.

South Coast Air Quality Management District (SCAQMD)

The SCAQMD regulates asbestos through Rule 1403, Asbestos Emissions from Renovation/Demolition Activities. Rule 1403 regulates asbestos as a toxic material and controls the emissions of asbestos from demolition and renovation activities by specifying

agency notifications, appropriate removal procedures and handling and cleanup procedures. Rule 1403 applies to owners and operators involved in the demolition or renovation of asbestos containing structures, asbestos storage facilities, and waste disposal sites. SCAQMD also regulates VOC emissions from contaminated soil through Rule 1166, Volatile Organic Compound Emissions from Decontamination of Soil. Rule 1166 sets requirements to control the emission of VOCs from excavating, grading, handling and treating soil contaminated with VOCs as a result of leakage from storage or transfer operations, accidental spillage or other deposition.

3.3.2. Existing Setting

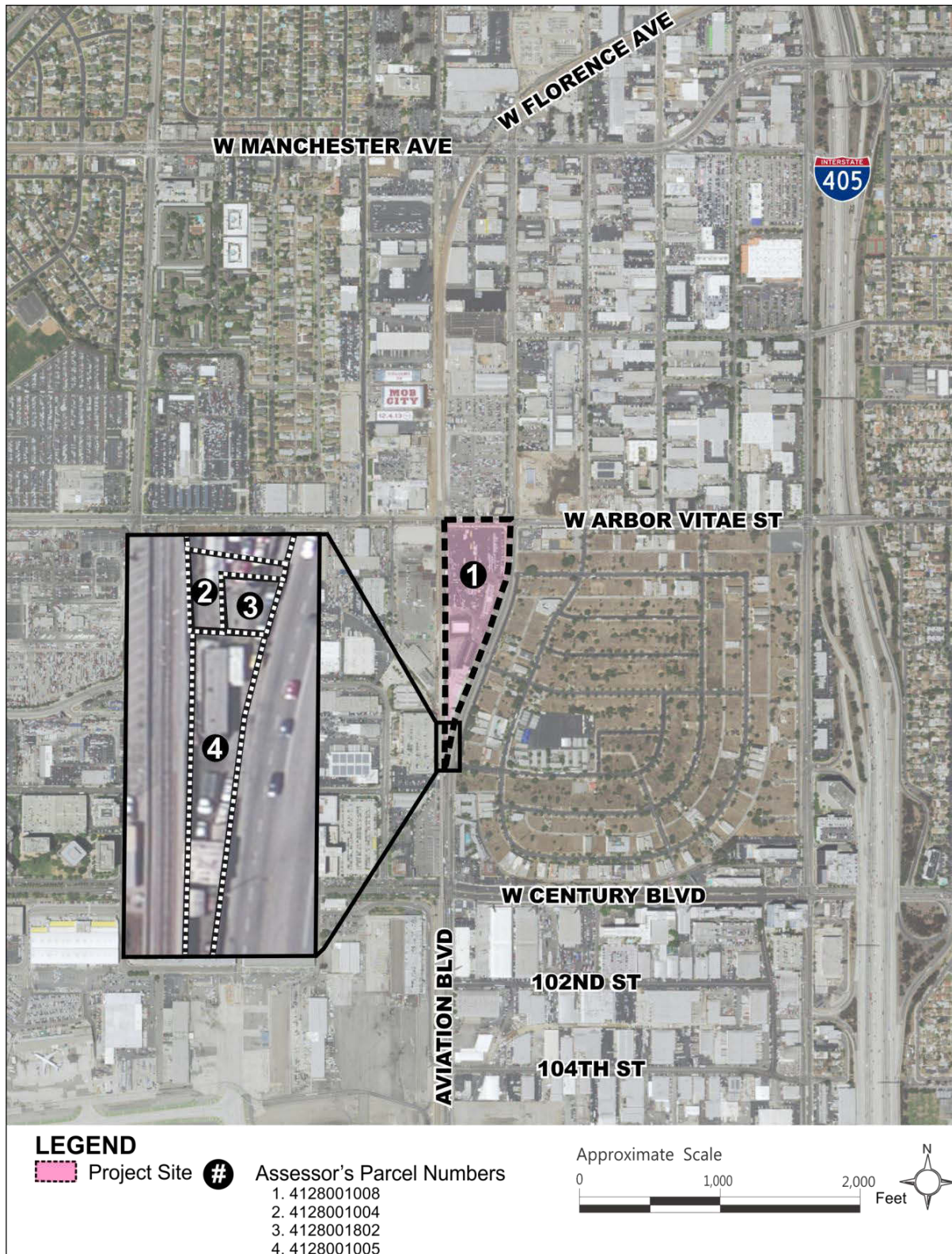
Three Phase I Environmental Site Assessments (ESAs) were prepared to assess existing hazards on the project site. A Phase I ESA was completed for the 9.49-acre portion of the project site located at 9225 and 9601 Aviation Boulevard (Los Angeles County Assessor's Parcel Number [APN] 4128-001-008). Another Phase I ESA was completed for the 2,730 square-foot portion of the project site located at 9725 Aviation Boulevard (APNs 4128-001-004 and 4128-001-005). A third Phase I ESA was completed for the 630 square-foot portion of the project site located 98th at 9723 Aviation Boulevard (APN 4128-001-802). The Phase I ESAs included site reconnaissance and review of historical and current records and regulatory databases (Metro, 2016(a, b, c)). The project site with APNs are shown in Figure 3.3.1.

The assessment of existing conditions focuses on recognized environmental conditions (RECs), controlled RECs, and historical RECs. RECs are related to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment." RECs are not intended to include *de minimis* conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

A controlled REC is a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

An historical REC is a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and land use limitations, institutional controls, or engineering controls).

Figure 3.3.1 Project Site Assessor's Parcel Number



Source: Terry A. Hayes Associates Inc., 2016.

Historic Land Uses

9225 and 9601 Aviation Boulevard. The property was historically used for agricultural purposes for the cultivation of row crops from at least 1923 until approximately 1950. Two industrial buildings located on the northern portion of this subject property were constructed circa 1952 (demolished circa 1994), while the southern portion of this subject property remained vacant. Expansions to the two buildings located on the property, including development of paved parking lots, continued from 1963 to 1989. The southern portion of the property was occupied by a service station with USTs from 1965 to 1978. The property was occupied by The Garrett Corporation (subsequently acquired by Honeywell), an aerospace manufacturing facility for turbochargers and heat exchangers used for aircraft and other vehicles, and by Signal Oil & Gas. The northern portion of the property was occupied by buildings used for manufacturing operations and included features such as solvent degreasers, clarifiers and USTs. The southern portion was used for employee parking. The buildings were demolished circa 1994 and the land was sold to Hertz in 1996. From 1996 to 2012, the subject property appeared to be occupied by car rental overflow parking, vehicle maintenance buildings, and a natural gas station.

9725 Aviation Boulevard. The property was historically used for agricultural purposes for the cultivation of row crops from at least 1923 to approximately 1950. The subject property was occupied by various tenants from the 1950s to 1980s and is currently occupied by A Fast Towing.

Southern California Gas (SoCal Gas) Pipeline Facility (No Address). The property was historically used for agricultural purposes for the cultivation of row crops from at least 1923 to approximately 1950. According to a building permit for an adjoining property dated September 6, 1960, the property was depicted as a Gas Company easement. The subject property appeared to be vacant and undeveloped until 2002, when a SoCal Gas pipeline facility was constructed.

Hazardous Materials

9225 and 9601 Aviation Boulevard. Evidence of hazardous substances or petroleum products, such as fuel dispensers, groundwater monitoring wells, and a soil vapor extraction (SVE) system, were observed during the site reconnaissance. Fifty-five-gallon drums and unidentified substance containers were observed in the vicinity of the vehicle body shop and car wash facility. Potential poly-chlorinated biphenyls (PCBs)-containing equipment, such as a pad-mounted electrical transformer, was observed on this subject property. Additionally, hydraulic lifts were observed in the automotive maintenance garage facility. The SVE system is further discussed below.

9725 Aviation Boulevard. No hazardous materials were identified at this location.

SoCal Gas Pipeline Facility (No Address). No hazardous materials were identified at this location.

Soil and Groundwater Contamination

9225 and 9601 Aviation Boulevard. Residual soil and groundwater contamination from historic uses on the subject property were documented as early as 2005, spurring several remedial actions. Investigations to determine the extent and severity of soil and groundwater contamination included the installation of numerous soil borings, soil vapor sampling points and groundwater monitoring wells at the subject property. The primary compounds of concern that were identified were VOCs—including tetrachloroethylene (PCE), trichloroethylene (TCE), and benzene, toluene, ethylene, and xylene (BTEX)—that are present in soil, groundwater and soil vapor at the subject property. The suspected primary on-site sources of VOCs in soil, groundwater and soil vapor are from previous features such as tanks, degreasers, drum storage areas and clarifiers, which were historically situated in the northern portion of the subject property. VOCs are groundwater contaminants of concern because of very large environmental releases, human toxicity and a tendency for some compounds to persist in and migrate with groundwater to potable water supply wells.

To remediate the VOC contamination on the subject property, a SVE system operated from 2005 through 2007 in the northwestern area of the subject property and an estimated 4,000 pounds of VOCs were extracted. A Soil Remedial Action Plan (RAP) was prepared for the subject property to reduce VOCs in soil. In 2014, the RWQCB issued a notice of intent to implement interim SVE in accordance with the Soil RAP. A Soil and Soil Vapor Investigation was performed for the Hertz building. A Conceptual Site Model (CSM) cross section was prepared that depicts generalized geology, hydrogeology, and concentrations of VOCs detected in soil and groundwater at the subject property. The CSM cross section and the description of potential exposure pathways were prepared to support the soil vapor investigation for the bus maintenance building and was not intended to apply to the entire subject property. The cross sections are included in the appendix to this EIR.

A groundwater assessment was performed on-site and off-site. The objective was to assess groundwater migrating onto and off the subject property and to assess vertical distribution along the eastern boundary of the subject property. Based on the groundwater assessment, the following was concluded:

- 1,1-dichloroethene (1,1-DCE) and 1,4-dioxane detected on and east of the subject property are migrating westward from other sites.
- The TCE and PCE detections in the southern portion of the subject property may be coming from other sites to the west.
- The TCE and PCE detections east of the subject property appear to be migrating from sources to the northwest; the 1,1-DCE detected appears to be migrating from sources to the west.
- The methyl tert-butyl ether (MTBE) detected west of the subject property is migrating from upgradient sites to the west. TCE and PCE were detected at concentrations higher than those historically detected in the nearest well on the subject property; therefore, it appears that TCE and PCE impact may originate from north of the subject property.

Currently, the RWQCB and DTSC are requiring coordination with responsible parties for other contaminated sites in the area to create a joint groundwater monitoring program (DTSC, 2016). The request included the subject property along with five other contaminated sites in the surrounding area. Further investigation and remedial action for the subject property will depend upon future RWQCB actions. The current status of remedial action requirements has been requested from the RWQCB caseworker. The current status of remedial action requirements and activities is unknown. Based on the historic use of the subject property, VOCs in the soil, soil vapor and groundwater at the subject property are considered RECs.

9725 Aviation Boulevard. Soils at the subject property may have been impacted by undocumented releases of petroleum hydrocarbons and various other contaminants including VOCs, semi-volatile organic compounds (SVOCs), and metals from the former Honeywell facility located adjacent to the north of the subject property. SVOCs are a group of compounds that includes some pesticides, ingredients in cleaning agents and personal care products, and additives to materials such as vinyl flooring, furniture, clothing, cookware, food packaging and electronics.

In addition, soils at the subject property adjacent to the Metro ROW may contain hazardous substances from the use of weed control, including herbicides, pesticides, and arsenic, as well as petroleum hydrocarbons, VOCs, SVOCs and metals from spills and leaks from trains transporting hazardous materials. Groundwater at the subject property may have been contaminated by VOCs from the former Honeywell facility and other vicinity sites.

SoCal Gas Pipeline Facility (No Address). Soils at the subject property may have been impacted by undocumented releases of petroleum hydrocarbons and various other contaminants including VOCs, SVOCs and metals from the former Honeywell facility located to the north of the subject property. Groundwater at the subject property may have been contaminated by VOCs from the former Honeywell facility and other vicinity sites.

Aboveground and Underground Storage Tanks

9225 and 9601 Aviation Boulevard. Aboveground Storage Tanks (ASTs) were observed adjacent to the car wash facility on the subject property. USTs were not observed on the property. However, fuel dispensers were observed adjacent to the car wash facility. USTs, clarifiers, sumps and furnace pits were historically used on the subject property in connection with the former Honeywell facility. The USTs associated with the historic use of the subject property as an aerospace manufacturing facility and gas service station were installed and potentially abandoned in-place or removed during an era when USTs were not significantly regulated. A UST connected with the former Honeywell facility was removed on April 4, 1988. One UST in connection with the former Honeywell facility was noted as abandoned in-place as of 2013. Three USTs in connection with the Signal Oil & Gas service station were removed in September 1978. The disposition of some of the UST(s) is unknown.

9725 Aviation Boulevard. No ASTs or USTs were identified at this location.

SoCal Gas Pipeline Facility (No Address). No ASTs or USTs were identified at this location.

Utilities

9225 and 9601 Aviation Boulevard. The subject property contains the following utilities: 8-inch sewer line, 10-inch gas line, two 30-inch high pressure gas lines, overhead power lines, and fiber optic lines (Metro, 2016(d)).

9725 Aviation Boulevard. The subject property contains the following utilities: 10-inch gas line, two 30-inch high pressure gas lines, overhead power lines, and fiber optic lines.

SoCal Gas Pipeline Facility (No Address). The subject property contains the following utilities: 10-inch gas line, 30-inch high pressure gas line, and a gas valve.

Asbestos and Lead-Based Paint

Asbestos-Containing Materials (ACMs) were widely utilized in buildings constructed between 1945 and 1980. Common ACMs include vinyl flooring and associated mastic, wallboard and associated joint compound, plaster, stucco, acoustic ceiling spray, ceiling tiles, heating system components and roofing materials. Commercial or industrial structures constructed between 1945 and 1980 are affected by asbestos regulations if damage occurs, or if remodeling, renovation or demolition activities disturb ACMs building.

Lead-based paints (LBP) were primarily utilized from the 1920s through 1978. It is likely that LBP is present in the buildings constructed during this time period. Structures are affected by lead-based paint regulations if damage occurs or if remodeling, renovation or demolition activities disturb LBP surfaces.

9225 and 9601 Aviation Boulevard. The current buildings were constructed between 1994 and 2013. It is not known if the buildings were constructed using ACM and LBP. Specific testing has not been completed at this stage of the environmental process. The Phase I ESA for this subject property recommended that an ACM and LBP survey be performed for the existing building structures to evaluate the potential for encountering ACM and LBP during demolition.

9725 Aviation Boulevard. The current building located on the subject property was constructed around 1950. It is not known if the building was constructed using ACM and LBP. Specific testing has not been completed at this stage of the environmental process. The Phase I ESA for this subject property recommended that an ACM and LBP survey be performed for the existing building structures to evaluate the potential for encountering ACM and LBP during demolition.

SoCal Gas Pipeline Facility (No Address). The existing pipeline structures on the subject property may contain ACM and LBP. Specific testing has not been completed at this stage of the environmental process. The Phase I ESA for the subject property recommended that an ACM and LBP survey be performed for the existing pipeline structures to evaluate the potential for encountering ACM and LBP during demolition.

Hazardous Material Database Sites

9225 and 9601 Aviation Boulevard. Searches were performed throughout federal, state, local, tribal and proprietary environmental databases to determine the environmental regulatory status of the project site, adjoining facilities, and facilities identified within the specified approximate minimum search distance of the site. Table 3.3.1 summarizes the REC sites and the databases in which each site was documented. A description of the database types may be found in the Phase I ESAs (Metro, 2016(a,b,c)). Figure 3.3.2 depicts the locations of the REC sites for the proposed project. All RECs listed in Table 3.3.1 are considered RECs for this subject property.

9725 Aviation Boulevard. All of the hazardous materials sites listed in Table 3.3.1 are also RECs for this subject property, except Map ID No. 6, due to the distance of this REC to the subject property.

SoCal Gas Pipeline Facility (No Address). All of the hazardous materials sites listed in Table 3.3.1 are also RECs for this subject property, except Map ID No. 6, due to the distance of this REC to the subject property.

3.3.3. Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact related to hazards and hazardous materials if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area;
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; and/or
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Table 3.3.1 Environmental Database Review – REC Sites

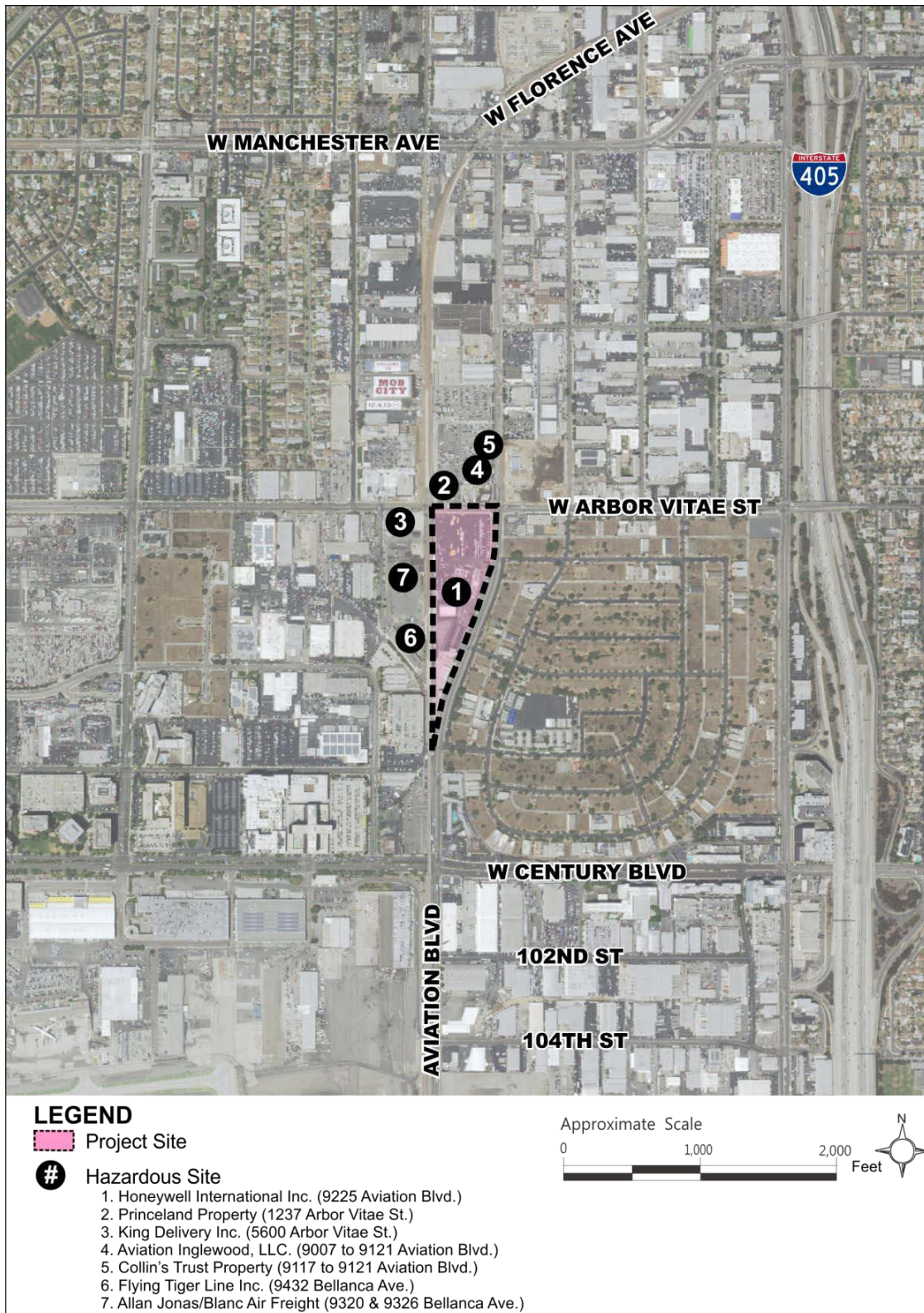
Map ID	Address	Site Name	Database Type	Discussion
1	9225 Aviation Blvd	Honey Well International Inc. (former)	NPDES, HAZNET, HIST UST, FINDS, RCRA-LQG, SWEEPS UST, FID UST, SLIC, EMI, LA County Site Mitigation	<p>The RCRA-LQG, CA HIST UST, CA FID UST, CA SWEEPS UST, EMI, NPDES and FINDS, listings pertain to operations associated with the former Honeywell (formerly Garrett Corporation) aerospace industrial facility and other former industrial tenants. The database listing of concern is the SLIC database and related LA County Site Mitigation database listing pertaining to subsurface contamination investigation, monitoring, and remedial action in relation to the former Honeywell facility.</p> <p>This site is considered a REC to the proposed project and potential impacts from the other databases are being addressed by the SLIC activities.</p>
		Hertz (current)	AST, HAZNET	<p>These listings pertain to fuel ASTs and manifested disposal of regulated wastes from the Hertz maintenance operations. These listings do not present a REC to the proposed project.</p>
2	1237 Arbor Vitae St.	Princeland Property	SLIC, LOS ANGELES CO. HMS	<p>Princeland Property was formerly used for degreasing operations, plastic extrusion and furniture distribution between the 1940s and the early 1990s. The industrial buildings were demolished in 1993 and Princeland Property has been used for rental car parking. The previous chemical use, storage and/or disposal practices at this site during former manufacturing, degreasing and spray painting operations have contaminated the underlying soil and groundwater. A SVE system has been operational at this site to address chlorinated solvent contamination. The VOCs present in groundwater beneath this site, at concentrations above their respective Maximum Contaminant Levels (MCLs) established by the California Department of Health Services, have degraded the beneficial uses of the California States groundwater resources. The subject property has been impacted from sources to the north (AMEC Foster Wheeler, 2015a). Additionally, this site was listed in the joint groundwater monitoring program as a potential source for groundwater contamination and is adjacent to the subject property (DTSC, 2016)</p> <p>Therefore, this site is considered a REC for the proposed project.</p>

Map ID	Address	Site Name	Database Type	Discussion
3	5600 Arbor Vitae St.	King Delivery Inc./BNSF HR-LA-CGEI-HB	LUST, ENF, HIST CORTESE, LA County Site Mitigation, SWEEPS UST, FID UST, HIST UST, EDR Hist Auto	<p>The site was used as a freight distribution and warehouse facility. During operation, King Delivery used one 10,000-gallon gasoline UST and one 2,000-gallon diesel fuel UST. During removal of the USTs in 1987, analytical results for confirmation soil samples indicated a release of gasoline. Subsequent investigations have indicated that the extent of petroleum hydrocarbon-impacted soil is limited to the area of the former USTs and that there is a low likelihood of a human health risk due to possible vapor intrusion. However, monitoring reports on Geotracker indicate petroleum-hydrocarbon impacted groundwater, has migrated onto the subject property. The King Delivery petroleum hydrocarbon plume is comingling with the VOC plume beneath the subject property (AMEC Foster Wheeler, 2015a).</p> <p>Therefore, this site is considered a REC for the proposed project.</p>
4	9007 to 9121 Aviation Blvd.	Aviation Inglewood, LLC (Bodycote Hinderliter/ Collins Estate)	SLIC, LUST, ENF, HIST CORTESE	<p>According to Geotracker records, the site was used as a metal treating facility on a portion of the property, located at 9117-9121 Aviation Boulevard from approximately 1954 until 1970. The site was also utilized for auto service & repair, truck delivery and air cargo services, a lumber yard, warehousing and for light manufacturing. In 1995, site structures were demolished and the entire property was leased to Alamo for storage and rental of their auto fleet. The site historically utilized five waste oil USTs which were removed in 1995. The site was reported to have had unauthorized releases of petroleum hydrocarbons and VOCs in May 1993 and May 1996 which impacted soil and groundwater underneath the site. The impacted soil was excavated and site closure for the former USTs was granted by the RWQCB on February 15, 2011, but cleanup orders for groundwater contamination underneath the site remain in effect.</p> <p>The subject property has been impacted from sources to the north (AMEC Foster Wheeler, 2015a).</p> <p>Therefore, this site is considered a REC for the proposed project.</p>
5	9117 to 9121 Aviation Blvd.	Collins Trust Property	LUST, HIST CORTESE	<p>See Map ID. No. 4 9007 to 9121 Aviation Blvd. (Aviation Inglewood) discussion above.</p>

Map ID	Address	Site Name	Database Type	Discussion
6	9432 Bellanca Ave	Flying Tiger Line Inc.	SWEEPS UST, FID UST	<p>The site was listed on UST databases. The site is not listed on Geotracker and has no pertinent information in the database listing. Based on review of LAFD UST records, the report stated there was one 6,000-gallon fuel USTs removed from the northeastern corner of the Flying Tiger Line site in 1989 under permit including leak detection soil sampling and no significant leaking was indicated (ATC, 2012). However, LAFD records indicated there was a former 6,000-gallon fuel UST on the southern side of the Flying Tiger Line site for which there is no record of removal. UTC recommended further investigation for the USTs.</p> <p>Pending further investigation for the former USTs, the Flying Tiger Line site is considered a REC for the proposed project.</p>
7	9320 & 9326 Bellanca Ave.	Allan Jonas/ Blanca Air Freight Ltd. Partner	SWEEPS UST, FID UST	<p>The site was listed on the former UST databases (CA SWEEPS UST and CA FID UST). There is no pertinent information in the database listing and these sites are not listed on Geotracker. These two properties are considered to be one parcel. Based on review of LAFD UST records, there were two 14,000-gallon fuel USTs and one 1,000-gallon UST formerly located on the eastern side of this site removed in 1988 under LAFD closure permit, including leak detection soil sampling (ATC, 2012). No significant leaking was indicated during the closure procedures. However, LAFD records indicated a former 14,000-gallon UST on the northern portion of the site was removed in 1971 without leak detection soil sampling. ATC recommended further investigation for the USTs.</p> <p>Pending further investigation for the former USTs, this site is considered a REC for the proposed project.</p>
<p>AST = Aboveground Petroleum Storage Tank Facilities; EDR Hist Auto = Environmental Data Resources; EMI = Emissions Inventory Data; ENF = Enforcement Action; FID UST = Facility Inventory Database; SLIC = State-wide Spills, Leaks, Investigations and Cleanup Cases; FINDS = Facility Index System/Facility Registry System; HAZNET = Facility and Manifest Data; HIST CORTESE = Hazardous Waste & Substance Site List; LA County Site Mitigation = Los Angeles County Site Mitigation List; Los Angeles Co. HMS = Los Angeles County Industrial Waste and Underground Storage Tank Sites; LUST = Geotracker’s Leaking Underground Fuel Tank Report; NPDES = National Pollutant Discharge Elimination System Permits Listing; RCRA-LQG = Resource Conservation and Recovery Act Large Quantity Generator; SWEEPS UST = State-wide Environmental Evaluation and Planning System UST Listing; HIST UST = Hazardous Substance Storage Container Database</p>				

Source: Metro, 2016 (a,b,c).

Figure 3.3.2 REC Sites for the Proposed Project



Source: Metro, 2016 (a,b,c); Terry A. Hayes Associates Inc., 2016.

3.3.4. Impact Analysis and Mitigation Measures

This section assesses potential impacts associated with the proposed project and, if necessary, identifies mitigation measures to eliminate or reduce impacts. The methodology implemented in this assessment consists of evaluating whether the proposed project would have significant hazards and hazardous materials impacts according to the above-stated thresholds. Impacts are primarily assessed by considering the project objectives and proposed uses in light of the regulatory setting as well as the existing and surrounding uses described above.

Impact 3.3.1 Would the proposed project create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?

Impact Analysis

Activities that would occur on the project site during construction of the proposed project would be different than those occurring under normal operating conditions in the future. The potential for significant public or environmental hazards resulting from routine transport, use or disposal of hazardous materials was evaluated individually for construction and operations based on the differences in pertinent environmental concerns.

Construction

The proposed project would require excavation of approximately 31,000 cubic yards of soil, of which approximately 15,500 cubic yards of soil would be exported. The Phase I ESAs completed for the four parcels comprising the project site state that soils at the subject property have been impacted by documented releases of VOCs and various other contaminants including petroleum hydrocarbons, SVOCs, and metals from operations associated with the former Honeywell aerospace industrial facility. Soils at the project site may contain hazardous substances from the use of weed control substances, including herbicides, pesticides, and arsenic, as well as petroleum hydrocarbons, VOCs, SVOCs, and metals from spills and leaks from trains transporting hazardous materials.

Phase II ESAs have not been prepared at the time of the Draft EIR publication. Without knowing the extent of possible contamination, construction activity would result in a significant impact related to the transport and disposal of hazardous materials. In addition, the Phase I ESAs states that the existing building structures on the subject property may contain ACM and LBP. Contaminated building materials would need to be transported and disposed at appropriate facilities to avoid hazardous conditions. Therefore, without mitigation, the proposed project would result in a significant impact related to the transport, use and disposal of hazardous materials during construction.

Operations

Operation of the proposed project would involve the occasional use, storage, and disposal of hazardous materials that could include limited quantities of vehicle fuels, oils, transmission

fluids, paints, solvents, cleaners and pesticides. No industrial uses or activities are proposed that would result in the use or discharge of unregulated hazardous materials and/or substances, or create a public hazard through transport, use, or disposal, and the proposed project would not generate large amounts of hazardous materials that would require routine transport, use, or disposal. Use and transport of hazardous materials would be regulated by the California Division of Occupational Safety and Health, the City of Los Angeles Fire Code and all other federal, state, and local regulations. All hazardous materials would be required to be contained, stored, and used in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations. Therefore, the proposed project would result in a less-than-significant impact related to the transport, use and disposal of hazardous materials during operations.

Mitigation Measures

HAZ-1 Metro shall complete a Phase II Environmental Site Assessment (ESA) at locations on the project site known to have contained hazardous substances and hazardous waste. The Phase II ESA shall include a geophysical survey that confirms the presence or absence of UST(s) and other subgrade features of environmental concern including former hydraulic lifts and clarifiers. The Phase II ESA shall identify if a Soil Management Plan (SMP) would be required.

If prescribed in the Phase II ESA, Metro shall prepare a SMP for identifying, handling, storing and disposing of suspected soils with elevated levels of volatile organic compounds (VOCs). The SMP shall comply with South Coast Air Quality Management District Rule 1166 (VOC Emissions from Decontamination of Soil). The SMP shall be prepared by the construction contractor and distributed to construction personnel. If a SMP is required, a Certified Industrial Hygienist shall certify a health and safety plan based on that SMP.

HAZ-2 Metro shall retain a Certified Asbestos Consultant to determine the presence of asbestos and asbestos-containing materials (ACMs) within buildings to be demolished. If asbestos is discovered, a Licensed Asbestos Abatement Contractor shall be retained to safely remove ACM in accordance with the 1994 Federal Occupational Exposure to Asbestos Standards and South Coast Air Quality Management District Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities). ACM removal shall be monitored by a Certified Technician.

HAZ-3 Metro shall test for lead-based paint (LBP) within buildings to be demolished. If LBP is discovered, a licensed lead-based paint/materials abatement contractor shall be retained to safely remove LBP in accordance with the U.S. Department of Housing and Urban Development Lead-Based Paint Guidelines.

Significance After Mitigation

The potential for significant impacts was identified related to the transport and disposal of contaminated soil, ACM and LBP. The transport and disposal of such materials is strictly

regulated by state, regional, and local agencies. Mitigation Measures HAZ-1 through HAZ-3 would ensure that Metro identifies hazardous contamination and prepares an SMP, an asbestos study, and a LBP study to transport and dispose of these materials in accordance with regulatory requirements. Therefore, with mitigation, the proposed project would result in a less-than-significant impact related to the transport, use and disposal of hazardous materials.

Impact 3.3.2 Would the proposed project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Impact Analysis

Activities that would occur on the project site during construction of the proposed project would be different than those occurring under normal operating conditions in the future. The potential for significant public or environmental hazards resulting from reasonably foreseeable upset or accident conditions involving the release of hazardous materials was evaluated individually for construction and operations based on the differences in pertinent environmental concerns.

Construction

Construction activities that involve substantial subsurface disturbance may present issues with regard to subterranean utilities on the project site. Construction of the proposed project will require excavation and refill of the project site, and several utilities are currently present in the project site. In particular, there are two 30-inch high pressure SoCal Gas transmission lines, a 10-inch SoCal Gas line, and an 8-inch sanitary sewer line that will need to be relocated outside of the AMC transportation center (Metro, 2016(d)). The primary concern with relocation of natural gas lines is the risk of explosion during excavation or the transport of natural gas.

Utility relocation is a common aspect of construction projects and relocation of the existing utilities would follow all codes, regulations, and standards regarding utility removal/relocation and relevant safety precautions. A utility conflict relocation study will be prepared, which will incorporate design criteria from the City of Los Angeles Department of Public Works, City of Los Angeles Bureau of Engineering's Manuals and Standards, and California Public Utilities Commission's Rules of Practice and Procedure, and Policies and Guidelines. Metro will ensure that pipeline relocation will adhere to the approach set forth in the utility conflict resolution study, and as such the risk for explosion is deemed to be low. Therefore, the proposed project would result in a less-than-significant impact related to foreseeable accidents or upsets caused by utilities line relocation.

As discussed in Subsection 3.3.2, ASTs were observed adjacent to the car wash facility. USTs were not observed on the property. However, fuel dispensers were observed adjacent to the car wash facility. USTs, clarifiers, sumps, and furnace pits were historically used on the subject property in connection with the former Honeywell facility and the disposition of some

of the UST(s) is unknown. As of 2013, at least one UST was identified as abandoned-in-place on the project site. Therefore, without mitigation, the proposed project would result in a significant impact related to USTs.

There are also existing groundwater monitoring wells located on the project site; the wells, which are under the authority of the RWQCB and monitored by the responsible party (Honeywell International Inc.), are used to monitor groundwater VOC concentrations and migration resulting from residual contamination caused by the former Honeywell facility. Well monitoring will continue until contamination has been properly assessed and remediated and a “No Further Actions” letter and “case closed” designation is obtained from the RWQCB. It is imperative that construction activities be conducted in such a way that the groundwater monitoring network is preserved and not compromised. The construction contractor shall take precautions to identify groundwater monitoring well locations and ensure that demolition, site clearing, and excavation activities do not interfere with the integrity of the wells. Therefore, without mitigation, the proposed project would result in a significant impact related to the disturbance of monitoring wells.

Operations

As discussed above, operation of the proposed project would involve the occasional use, storage, and disposal of hazardous materials that could include limited quantities of vehicle fuels, oils, transmission fluids, paints, solvents, cleaners and pesticides. Some chemicals can pose physical hazards (e.g., chemical burns) or health hazards (e.g., poisoning), including potential acute or chronic illnesses. The properties and health effects of different chemicals are unique to each chemical and depend on the extent to which an individual is exposed. The extent and exposure of individuals to hazardous materials would be limited by the quantities of these materials that would be stored and used on the project site. The project-related effects of hazardous materials handling and storage would generally be limited to the immediate areas where materials would be located, because this is where exposure would be most likely. Exposure at more distant locations would require some mechanism, like wind, to transport the material to the location. The proposed project would handle and store all materials in compliance with all codes, standards and regulations. Therefore, the proposed project would result in a less-than-significant impact related to the accidental release of hazardous materials into the environment during operation.

Mitigation Measures

Refer to Mitigation Measures HAZ-1 and HAZ-3.

HAZ-4 If clarifiers and hydraulic lifts are identified on the project site in the required Phase II ESA in Mitigation Measure HAZ-1, Metro shall identify whether there have been any unauthorized releases. If the site assessment identifies a recognized environmental condition (REC), Metro shall coordinate with the appropriate regulatory agencies to remediate hazardous conditions.

HAZ-5 Metro shall coordinate with the responsible party (Honeywell International Inc.) under the direction of the Regional Water Quality Control Board (RWQCB) to ensure that the existing groundwater monitoring wells at 9225 and 9601 Aviation Boulevard would not be disturbed during construction activities or operation of the proposed project.

Significance After Mitigation

The potential for significant impacts was identified related to the transport and disposal of contaminated soil, ACM, and LBP. The transport and disposal of such materials is strictly regulated by state, regional, and local agencies. Mitigation Measures HAZ-1 through HAZ-3 would ensure that Metro looks for hazardous contamination, prepares a SMP and an ACM and LBP survey, and transports and disposes of contaminated materials in accordance with regulatory requirements. In addition, a geophysical study specified in Mitigation Measure HAZ-4 would prevent an accidental release of hazardous materials cause by any unidentified USTs. Mitigation Measure HAZ-5 would ensure the protection of the existing groundwater wells and prevent any further contamination of groundwater on the site and at adjoining properties. Therefore, with mitigation, the proposed project would result in a less-than-significant impact related to hazards and hazardous materials.

Impact 3.3.3 Would the proposed project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Impact Analysis

Activities that would occur on the project site during construction of the proposed project would be different than those occurring under normal operating conditions in the future. The potential for significant public or environmental hazards resulting from the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school was evaluated individually for construction and operations based on the differences in pertinent environmental concerns.

Construction

The only school located within one-quarter mile of the project site is Bright Star Secondary Charter Academy, located approximately 0.1 miles east of the project site. The project site has been investigated and contaminated materials are known to exist within the construction area. Contaminated materials would need to be transported and disposed at appropriate facilities to avoid hazardous conditions. Therefore, without mitigation, construction of the proposed project would result in a significant impact related to the handling of hazardous materials within one-quarter mile of an existing school.

Operations

Regarding operational activities, the proposed project would include limited quantities of vehicle fuels, oils, transmission fluids, paints, solvents, cleaners and pesticides. Buses accessing the project site would be powered by alternative fuels (clean natural gas), instead of diesel fuel that results in exposure to the toxic air contaminant diesel particulate matter. No industrial uses or activities are proposed that would result in the use or discharge of unregulated hazardous materials. As discussed above, the project-related effects of hazardous materials handling and storage would generally be limited to the immediate areas where materials would be located and would be unlikely to affect people at the Bright Star Secondary Charter Academy. The proposed project would handle and store all materials in compliance with all codes, standards and regulations. Therefore, impacts regarding the accidental release of hazardous materials into the environment during operation of the proposed project are less than significant.

Mitigation Measures

Refer to Mitigation Measures HAZ-1 through HAZ-4.

Significance After Mitigation

The handling of hazardous materials is strictly regulated by state, regional, and local agencies. Mitigation Measures HAZ-1 through HAZ-3 would ensure that Metro identifies hazardous contamination, prepares a SMP and an ACM and LBP survey, and transports and disposes of any encountered contaminated materials in accordance with regulatory requirements. In addition, a geophysical study specified in Mitigation Measure HAZ-4 would prevent an accidental release of hazardous materials cause by any unidentified USTs. Therefore, with mitigation, the proposed project would result in a less-than-significant impact related to the handling of hazardous materials within one-quarter mile of an existing school.

Impact 3.3.4 Would the proposed project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Impact Analysis

The project site contains several existing hazardous materials contaminations. The following discussion provides an overview of the hazardous materials found on the project site. Table 3.3.1, above, identifies RECs for the project site. There is one hazardous materials site located on the project site which is considered a REC for the proposed project (See Table 3.3.1, Map ID No. 1). The site is associated with the former Honeywell International Inc. and the current Hertz facility.

As discussed above, some chemicals can pose physical hazards (e.g., chemical burns) or health hazards (e.g., poisoning), including potential acute or chronic illnesses. The properties

and health effects of different chemicals are unique to each chemical and depend on the extent to which an individual is exposed. The extent and exposure of individuals to hazardous materials would be limited by the quantities of these materials that are located on the project site.

Soils at the project site have been impacted by documented releases of VOCs and various other contaminants including petroleum hydrocarbons, SVOCs, and metals from former operations associated with the former Honeywell aerospace industrial facility. In addition, soils at the project site adjacent to the Metro ROW may contain hazardous substances from the use of weed control, including herbicides, pesticides, and arsenic, as well as petroleum hydrocarbons, VOCs, SVOCs, and metals from spills and leaks from trains transporting hazardous materials. Groundwater at the portion of the project site comprised by 9225 and 9601 Aviation Boulevard has been contaminated by VOCs from the former Honeywell facility. There are existing groundwater monitoring wells located on the project site used to monitor the groundwater VOC concentrations and migration.

As discussed in Subsection 3.3.2, ASTs were observed adjacent to the car wash facility. USTs were not observed on the property. However, fuel dispensers were observed adjacent to the car wash facility. USTs, clarifiers, sumps, and furnace pits were historically used on the subject property in connection with the former Honeywell facility and the disposition of some of the UST(s) is unknown. Therefore, until USTs have been identified and removed, impacts would be significant. In addition, the Phase I ESAs stated that the existing building structures on the subject property may contain ACM and LBP. Contaminated soils and ASTs and USTs would need to be transported off-site and disposed at appropriate waste reception facilities to avoid hazardous conditions.

Soil vapors are also stated to be present at the subject property. The suspected primary on-site sources of VOCs in soil, groundwater, and soil vapor are from previous features such as tanks, degreasers, drum storage areas and clarifiers, in the northern portion of the subject property. These vapors may present a hazard should they begin to intrude into the interior of the proposed project. Therefore, without mitigation, the proposed project would result in a significant impact related to locating a project on a hazardous materials site.

Mitigation Measures

Refer to Mitigation Measures HAZ-1 through HAZ-5.

HAZ-6 Metro shall conduct a soil vapor gas survey of the project site where enclosed structures are planned for the purpose of establishing a baseline for potential indoor vapor concentrations. If the study identifies concentrations that exceed Office of Environmental Health Hazard Assessment California Human Health Screening Levels for soil or soil gas, Metro—in coordination with California Occupational Safety and Health Administration—shall prepare a remediation plan that demonstrates that interior vapor concentrations would be mitigated to below safety standards. This plan shall be prepared prior to building occupancy.

Significance After Mitigation

The Phase I ESAs prepared for the proposed project identified the existing hazardous conditions on the project site. Hazardous materials site remediation and hazardous materials themselves are well regulated. All hazardous materials removal and monitoring would comply with all local, state, and federal regulations outlined in Subsection 3.3.1. Compliance with recommendations of the Phase I and Mitigation Measures HAZ-1 through HAZ-6 would ensure the proposed project would not create a significant hazard to the public or the environment by locating the proposed project on a hazardous materials site. Therefore, with mitigation, the proposed project would result in a less-than-significant impact related to locating a project on a hazardous materials site.

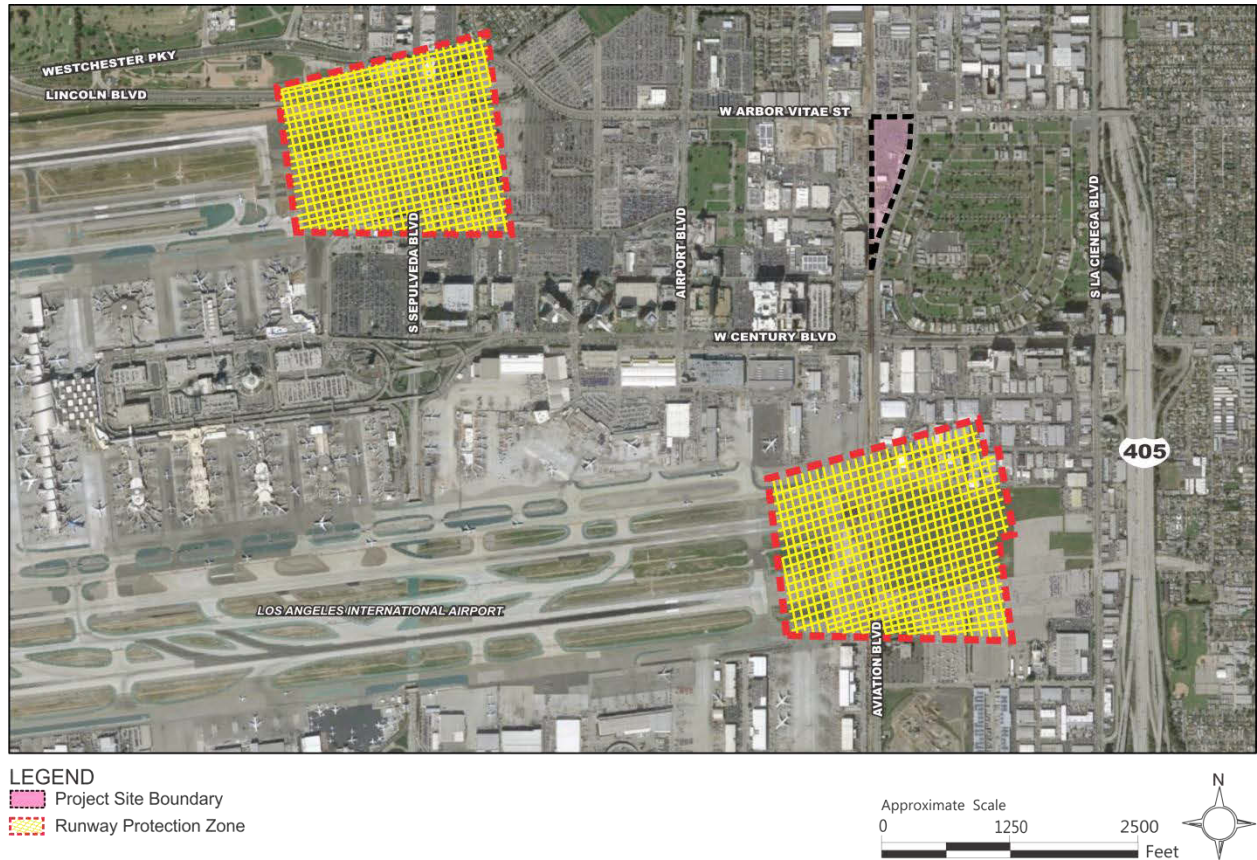
Impact 3.3.5 For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

Impact Analysis

The project site is located in the LAX airport influence area and has the potential to expose people working in the project area to hazards associated with close proximity to an airport (Los Angeles County ALUC, 2004). The proposed project is a transit facility that is designed to connect LAX and the regional transit system. By nature, the project site is would be exposed to hazards associated with proximity to LAX.

Air traffic control and aviation safety are well regulated and would reduce any safety hazards to a minimal level. The proposed project is governed by the Los Angeles County Airport Land Use Plan which has established safety zones for each airport under its jurisdiction in the form of RPZs. The RPZs' function is to enhance the protection of people and property on the ground by restricting building heights, limiting light and glare, limiting the attraction of flocks of birds, and other restrictions to reduce potential conflicts with airplanes. As shown in Figure 3.3.3, the project site is not located within the designated RPZs. However, the project site is located within the Airport Influence Area and is subject to FAA height restrictions. The mezzanine walkway would be approximately 26 feet above the ground surface with a canopy up to approximately 50 feet. Certain architectural, mechanical or signage elements could be taller, but would not to exceed 70 feet. Given that the proposed project is greater than one nautical mile (6,076 feet) from the eastern end of the nearest runway (24L), the height restriction should not be less than 100 feet. The specific determination will be made by the FAA to ensure that no obstruction to air navigation would occur. Metro is legally required by the CFR to file a Form 7460, Notice of Proposed Construction or Alteration, with the FAA to make an airspace determination. This determination would ensure compliance with height limitations and eliminate associated potential hazards. In addition, lighting at the project site would be directed down to avoid interference with aircraft flight patterns. Therefore, the proposed project would result in a less than significant impact related to safety hazards associated with public airports.

Figure 3.3.3 LAX Runway Protection Zones



Source: LAWA, 2016(a).

Mitigation Measures

This impact would be less than significant and does not require mitigation measures.

Impact 3.3.6 For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

Impact Analysis

The proposed project is not within the proximity of a private airstrip. Therefore, the proposed project would result in no impact related to safety hazards associated with private airstrips.

Mitigation Measures

This impact would not be significant and does not require mitigation measures.

Impact 3.3.7 Would the proposed project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Impact Analysis

The nearest emergency/disaster routes to the project site are Manchester Boulevard approximately one-half mile to the north, Lincoln Boulevard (East Pacific Coast Highway) approximately one mile to the west, Sepulveda Boulevard approximately one mile to the west, State Route-90 approximately three miles to the northwest, and Interstate 405 approximately one-half mile to the east (City of Los Angeles, 1996). The proposed project would not require the permanent closure of any public or private streets and would not impede emergency vehicle access to the project site or surrounding area. Construction activities would not result in full road closures, although may require occasional lane closures on Aviation Boulevard. Near the project site Aviation Boulevard includes four lanes and a single lane closure would not impede emergency vehicles. Per state and local regulations, emergency vehicle access would be maintained at all times during construction and operation of the proposed project. Therefore, the proposed project would result in a less-than-significant impact related to emergency plans.

Mitigation Measures

This impact would be less than significant and does not require mitigation measures.

Impact 3.3.8 Would the proposed project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Impact Analysis

Exhibit D of the City of Los Angeles Safety Element indicates that no portion of the project site is within or in close proximity to a Wildfire Hazard Area (City of Los Angeles, 1996). Accordingly, the project site and the surrounding area would not be subject to wildland fires. Therefore, the proposed project would result in a less-than-significant impact related to wildfires.

Mitigation Measures

This impact would be less than significant and does not require mitigation measures.

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3.4. LAND USE AND PLANNING

3.4.1. Regulatory Framework

Land use regulations are articulated in both regional and local plans. This section provides a brief discussion of the regional and local regulatory framework pertaining to land use and development within the vicinity of the project site. SCAG defines regional planning principles, while local municipalities define land use regulations for the specific areas in the project vicinity.

3.4.1.1. Federal

Federal Aviation Administration (FAA)

The FAA has established an advisory circular regarding safety concerns associated with the construction of high-rise buildings since such buildings may present a hazard to aircraft operations (FAA, 2014). This requirement is for buildings with a height of 200 feet above ground level (AGL) or more. Title 14, Part 77 of the CFR, Safe, Efficient Use, and Preservation of navigable Airspace, establishes minimum standards to ensure air safety by regulating the construction or alteration of buildings or structures that may affect airport operations (CFR, 2016(b)). In addition, all airports include a RPZ, a two-dimensional trapezoidal area centered along the extended runway centerline, which functions to enhance the protection of people and property on the ground.

The FAA does not have jurisdiction to approve a proposed project; rather, the FAA provides a written finding to the project applicant that the project represents one of three options: (1) not a problem with respect to air navigation; (2) is an obstruction, but not a hazard to air navigation; or (3) is a hazard to air navigation. This finding is advisory to the applicant and to local zoning jurisdictions. In addition, the FAA will review the proposed project to be certain that it does not create: (1) electromagnetic interference with air navigation facilities; (2) lighting effects; or (3) smoke that would interfere with aircraft in flight.

3.4.1.2. State

Senate Bill 375 (SB 375)

The Sustainable Communities and Climate Protection Act of 2008 (SB 375, 2008) supports the state's climate action goals to reduce GHG emissions through coordinated transportation and land use planning with the goal of creating more sustainable communities. SB 375 requires that each MPO must prepare a SCS as an integral part of its RTP. The SCS contains land use, housing, and transportation strategies that, if implemented, would allow the region to meet its GHG emission reduction targets. Once adopted by the MPO, the RTP/SCS guides the transportation policies and investments for the region (SB 375, 2008). SB 375 CEQA streamlining incentives for certain residential and mixed-use projects that are consistent with the regional SCS.

Senate Bill 743 (SB 743)

SB 743, adopted on September 27, 2013, amends the State Congestion Management Act (California Government Code Section 65088). Key provisions of SB 743 include adding a new chapter to the CEQA Guidelines for the Modernization of Transportation Analysis for Transit-Oriented Infill Projects, beginning in the PRC Section 21099. An infill site is defined by PRC Section 21099(a)(4) as “a lot located within an urban area that has been previously developed, or on a vacant site where at least 75 percent of the perimeter of the site adjoins or is separated only by an improved public right-of-way from parcels that are developed with qualified urban uses.” A Transit Priority Area (TPA) is defined by PRC Section 21099(a)(7) as “an area that is within ½ mile of a major transit stop that is existing or planned, if the project is scheduled to be completed within the planning horizon included in an adopted federal Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations.” Rules stating that certain infill projects need not evaluate aesthetics or parking impacts went into effect on January 1, 2014. SB 743 also required OPR to develop revisions to the CEQA Guidelines to establish criteria for determining the significance of transportation impacts of projects within TPAs that promote the reduction of GHG emissions, the development of multi-modal transportation networks, and a diversity of land uses. It also allows OPR to develop alternative metrics outside of TPAs (SB 743, 2013). In January 2016, OPR released a revised proposal for changes to the CEQA Guidelines for public review. The proposal focused on transportation because the statute requires new guidelines to address that issue. These new regulations are anticipated to become effective in 2019.

With respect to land use and planning, SB 743 creates a new exemption from CEQA for certain projects that are consistent with a Specific Plan (PRC Section 21155.4). The exemption cannot be applied if the project would cause new or worse significant impacts compared to what was analyzed in the Specific Plan’s EIR. In that case, supplemental environmental review must be prepared. This exemption applies if a project is: a residential, employment center, or mixed-use project; located within a TPA; consistent with a specific plan for which an EIR was certified; and consistent with an adopted SCS or alternative planning strategy.

3.4.1.3. Regional

SCAG Compass Growth Vision Report, 2004

The SCAG Compass Growth Vision Report, adopted in June 2004, predates the SCS, but many of the planning principles continue to be relevant as the SCS was built upon this foundation. In an effort to maintain the region’s prosperity, continue to expand its economy, house its residents affordably and protect its environmental setting as a whole, SCAG collaborated with interdependent sub-regions, counties, cities, communities and neighborhoods in a process referred to by SCAG as the “Southern California Compass.” This resulted in the development of a shared Growth Vision Report for SCAG region (SCAG, 2004). SCAG began Compass in 2002, spearheaded by the Growth Visioning Subcommittee, which consists of civic leaders from throughout the region. The shared regional vision sought to address timely issues such as congestion and housing availability and to anticipate future challenges to the year 2030, which may threaten the region’s livability.

The underlying goal of the growth visioning effort is to make the SCAG region a better place to live, work and play for all residents regardless of race, ethnicity or income. To organize the strategies for improving the quality of life in the SCAG region, a series of principles were established by the Growth Vision Subcommittee. These goals are contained in the Growth Vision Report and intended to promote and maximize regional mobility, livability, prosperity and sustainability. Decisions regarding growth, transportation, land use and economic development should support and be guided by these principles. Specific policy and planning strategies also are provided as a way to achieve each of the principles as shown in Table 3.4.1.

Table 3.4.1 SCAG Compass Growth Vision Report Principles and Policies

Principle/Policy	Principle/Policy Description
Principle 1	Improve mobility for all residents.
Policy	Encourage transportation investments and land use decisions that are mutually supportive.
Policy	Promote a variety of travel choices.
Principle 2	Foster livability in all communities.
Policy	Promote “people-scaled” pedestrian-friendly communities.
Principle 3	Enable prosperity for all people.
Policy	Ensure environmental justice regardless of race, ethnicity, or income class.
Principle 4	Promote sustainability for future generations.
Policy	Focus development in urban centers and existing cities.
Policy	Develop strategies to accommodate growth that use resources efficiently, eliminate pollution, and significantly reduce waste.

Source: SCAG, 2004.

SCAG Regional Comprehensive Plan (RCP), 2008

SCAG prepared and issued the 2008 RCP in response to SCAG’s Regional Council directive to define solutions to interrelated housing, traffic, water, air quality, and other regional challenges (SCAG, 2008). The 2008 RCP is an advisory document that describes future conditions if current trends continue, defines a vision for a healthier region, and recommends an Action Plan with a target year of 2035. The RCP is to be used by local jurisdictions in developing local plans and addressing local issues of regional significance. The plan incorporates principles and goals of the Compass Growth Vision Report, as well as the policies and strategies identified in the 2008 RCP. It also describes future conditions in the year 2035 should current trends continue. It includes nine chapters addressing land use and housing, transportation, air quality, energy, open space, water, solid waste, economy, and security and emergency preparedness. The action plans contained therein provide a series of recommended near-term policies that developers and key stakeholders should consider for implementation, as well as potential policies for consideration by local jurisdictions and agencies when conducting project review (SCAG, 2008).

Metro Congestion Management Plan (CMP), 2010

As the Congestion Management Agency for Los Angeles County, Metro is responsible for implementing the CMP. On October 28, 2010, the Metro Board adopted the 2010 CMP for

Los Angeles County (Metro, 2010). The CMP summarizes the results of 18 years of CMP highway and transit monitoring and 15 years of monitoring local growth. CMP implementation guidelines for local jurisdictions are also contained in the 2010 CMP. The CMP was created for the following purposes:

- To link local land use decisions with their impacts on regional transportation and air quality; and
- To develop a partnership among transportation decision makers on devising appropriate transportation solutions that include all modes of travel.

To meet these goals, the CMP requires the following:

- Track and analyze to determine how the regional highway and transit systems are performing;
- Locally analyze the impacts of local land use decisions on regional transportation;
- Locally implement Transportation Demand Management (TDM) design guidelines that ensure new development includes improvements supportive of transit and TDM; and
- Track new building activity throughout Los Angeles County.

Elements of the CMP include Highway and Roadway System monitoring, multi-modal system performance analysis, the TDM Program, the Land Use Analysis Program and local conformance for all the County's jurisdictions.

Complete Streets Act, 2011

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 (Assembly Bill 1358, 2011).

SCAG 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), 2016

SCAG serves as the MPO for Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura Counties. On April 7, 2016, SCAG's Regional Council adopted the 2016-2040 RTP/SCS, one of the tools used for identifying the transportation priorities of the Southern California region. The policies and goals of both plans focus on the need to coordinate land use and transportation decisions to manage travel demand within the region. The RTP/SCS provides a framework for the future development of the regional transportation system through the year 2040 and addresses all modes of transportation within the region (SCAG, 2016). The 2016-2040 RTP/SCS charts a course for closely integrating land use and transportation planning including in areas labeled as High Quality Transit Areas. High Quality Transit Areas reflect areas with rail transit service or bus service where lines have peak

headways of less than 15 minutes. It outlines \$556.5 billion in transportation system investments through 2040. Major themes in the 2016-2040 RTP/SCS that are relevant to the proposed project include integrating strategies for land use and transportation, striving for sustainability, protecting and preserving the existing transportation infrastructure, increasing capacity through improved system management, and giving people more transportation choice. The RTP/SCS is intended to aid local jurisdictions in developing local plans and addressing local issues of regional significance. The 2016-2040 RTP/SCS goals and guiding policies that are applicable to the proposed project are included in Table 3.4.2.

Table 3.4.2 SCAG RTP/SCS Guiding Policies and Goals

Guiding Policy /Goal	Description
Policy 1	Transportation investments shall be based on SCAG’s adopted regional Performance Indicators.
Policy 3	RTP/SCS land use and growth strategies in the RTP/SCS will respect local input and advance smart growth initiatives.
Policy 4	Transportation demand management (TDM) and active transportation will be focus areas, subject to Policy 1.
Goal 1	Align the plan investments and policies with improving regional economic development and competitiveness.
Goal 2	Maximize mobility and accessibility for all people and goods in the region.
Goal 3	Ensure travel safety and reliability for all people and goods in the region.
Goal 5	Maximize the productivity of our transportation system.
Goal 6	Protect the environment and health of our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking).
Goal 8	Encourage land use and growth patterns that facilitate transit and active transportation.

Source: SCAG, 2016.

3.4.1.4. Local

The project site is within the jurisdiction of the City of Los Angeles. It is also located in close proximity to the City of Inglewood and the County of Los Angeles (unincorporated area - Lennox). At the local level, the project site is subject to the City of Los Angeles’ General Plan and Municipal Code, which designate the site for limited manufacturing and limited industrial, respectively. The site is within a City of Los Angeles Enterprise Zone (EZ), which relates to the Enterprise Zone Act and the Employment and Economic Incentive Act of 1984. This Act established mechanisms for designating economic development and makes special tax incentives available for entities and individuals that operate or invest in a business within an EZ. As discussed under SB 743, above, the project site is designated as a TPA. It should be noted that the site and surrounding area is within a High Quality Transit Area half-mile buffer zone. The immediate project area consists primarily of airport and limited to light industrial uses Figures 3.4.1 through 3.4.3 depict the project site and surrounding land use conditions. Please refer to the Existing Setting section of this analysis for a more detailed discussion.

City of Los Angeles General Plan Citywide General Plan Framework, 2001

The Citywide General Plan Framework is an element of the City of Los Angeles General Plan, which is intended to guide the City's long-range growth and set a citywide context to guide the update of the community plan and citywide elements. It looks to the SCAG's 2010 population forecast as a basis for planning, anticipates supporting the completion of the Metro's rail transit system by 2010, and aims to establish priority corridors to continue transit development beyond 2010. The Framework establishes citywide planning policies regarding land use, housing, urban form and neighborhood design, open space and conservation, economic development, transportation, and infrastructure and public services. Three broad themes run throughout the Framework: sustained mobility with greater accessibility, economic opportunity and environmental quality (City of Los Angeles, 2001). Major land use policies that are germane to the project are shown in Table 3.4.3.

Table 3.4.3 City of Los Angeles General Plan Framework Goals, Objectives, and Policies

Goal/Objective/Policy	Description
Goal 3K	Transit stations to function as a primary focal point of the City's development.
Objective 3.15	Focus mixed commercial/residential uses, neighborhood-oriented retail, employment opportunities, and civic and quasi-public uses around urban transit stations, while protecting and preserving surrounding low-density neighborhoods from the encroachment of incompatible land uses.
Policy 3.15.5	Provide for the development of public streetscape improvements, where appropriate.
Policy 3.15.6	Establish standards for the inclusion of bicycle and vehicular parking at and in the vicinity of transit stations; differentiating these to reflect the intended uses and character of the area in which they are located (e.g., stations in some urban areas and "kiss-and-ride" facilities may have limited parking, while those in suburban locations may contain extensive parking).

Source: Citywide General Plan Framework, 2001.

City of Los Angeles General Plan – Land Use Element, 2001

For planning purposes, the Land Use Element of the City of Los Angeles General Plan is comprised of 35 community plans, which are the official guide to the future development of the City. Each community plan discusses goals, objectives, and policies for developing a public transit system that improves mobility with convenient alternatives to automobile travel, encouraging transportation demand strategies, developing active transportation options and coordinating activities with other jurisdictions. The individual plans are a means through which citywide land use policies are applied to specific development proposals. The project area is within the Westchester-Playa del Rey Community Plan (City of Los Angeles, 2003).

City of Los Angeles Westchester-Playa Del Rey Community Plan, 2004

The Westchester-Playa del Rey Community Plan is consistent with the City of Los Angeles Land Use/Transportation Policy. Applicable goals, objectives, and policies are listed in Table 3.4.4 (City of Los Angeles, 2004).

City of Los Angeles Mobility Plan 2035: An Element of the General Plan, 2016

In January 2016, City Council adopted the amended Mobility Plan 2035. The goals, objectives, and policies included in the Mobility Plan of the City of Los Angeles General Plan establish a citywide strategy to achieve long-term mobility and accessibility within the City. The Mobility Plan 2035 incorporates the overall vision of the Sustainable City pLAn, adopted on April 8, 2015, and considers both its long- and short-term goals for a cleaner environment. The main roadways surrounding the project site include, including Arbor Vitae Street, Aviation Boulevard, Century Boulevard and Airport Boulevard, are designated Major Highways Class II. In addition, the Mobility Plan 2035 identifies Century Boulevard as part of the Transit Enhanced Network. The Mobility Plan 2035 establishes goals and policies, of which the applicable ones to this proposed project are listed in Table 3.4.5 (City of Los Angeles, 2016).

Table 3.4.4 Westchester – Playa Del Rey Community Plan Relevant Goals, Objectives, and Policies

Goal/Objective/Policy	Description
Policy 2-4.2	Coordinate the future development of the Century Boulevard/98 th Street Corridor with the development and access to the Los Angeles International Airport and its ancillary facilities.
Objective 11-2	Ensure that the location, intensity and timing of development is consistent with the provision of adequate transportation infrastructure.
Goal 14	Develop additional public transit services which improve mobility with efficient reliable, safe, convenient alternatives to automobile travel.
Objective 14-2	Increase work trips and non-work trips made on public transit.
Policy 14-2.1	Develop coordinated intermodal public transit plans to implement linkages to future public transit services.
Policy 14-2.3	Continue to study and consider future extensions of the Metro Rail Green Line to serve the Westchester-Playa del Rey community and provide rail transit connections to Marina del Rey and possibly other Westside areas, such as Santa Monica, West
Policy 15-1.4	Promote the development of transportation facilities and services that encourage higher transit ridership, increased vehicle occupancy, and improved pedestrian and bicycle access.

Source: City of Los Angeles, 2004.

Table 3.4.5 Mobility Plan 2035 Relevant Goals and Policies

Goal/Policy	Goal/Policy Description
Goal 1	Safety First
Goal 2	World Class Infrastructure
Goal 3	Access for All Angelenos
Goal 4	Collaboration, Communication, and Informed Choices
Goal 5	Clean Environments and Healthy Communities
Policies	Consider the strong link between land use and transportation
	Promote “first mile-last mile” connections
	Increase the use of technology (applications, real time transportation information) and wayfinding to expand awareness of and access to parking options and a host of multi-modal options (car share, bicycle share, car/ van pool, bus and rail transit, shuttles, walking, bicycling, and driving)
	Consider community input before implementation of any Mobility Plan projects

Source: City of Los Angeles, 2016.

LAX Land Use Plans

The project site is within the LAX airport influence area, which is the area wherein current or future airport-related noise, over flight, safety and/or airspace protection factors may significantly affect land uses or necessitate restrictions on those uses. It includes LAWA property, RPZ, inner and outer safety zones and Community Noise Equivalent Level contours. The project site is within the airport noise contour area; however, it is not within a RPZ or safety zone. Section 3.5 of this Draft EIR addresses potential noise-related impacts. The following LAX-related plans are listed due to their proximity to the project site, although the proposed project is not directly governed by them:

- LAX Comprehensive Land Use Plan (1991)
- LAX Master Plan (2004)
- LAX Specific Plan Amendment Study (2013)

The proposed project's consistency with these plans is not included in the impact analysis in this chapter and the proposed project is not in conflict with nor would it prevent their implementation.

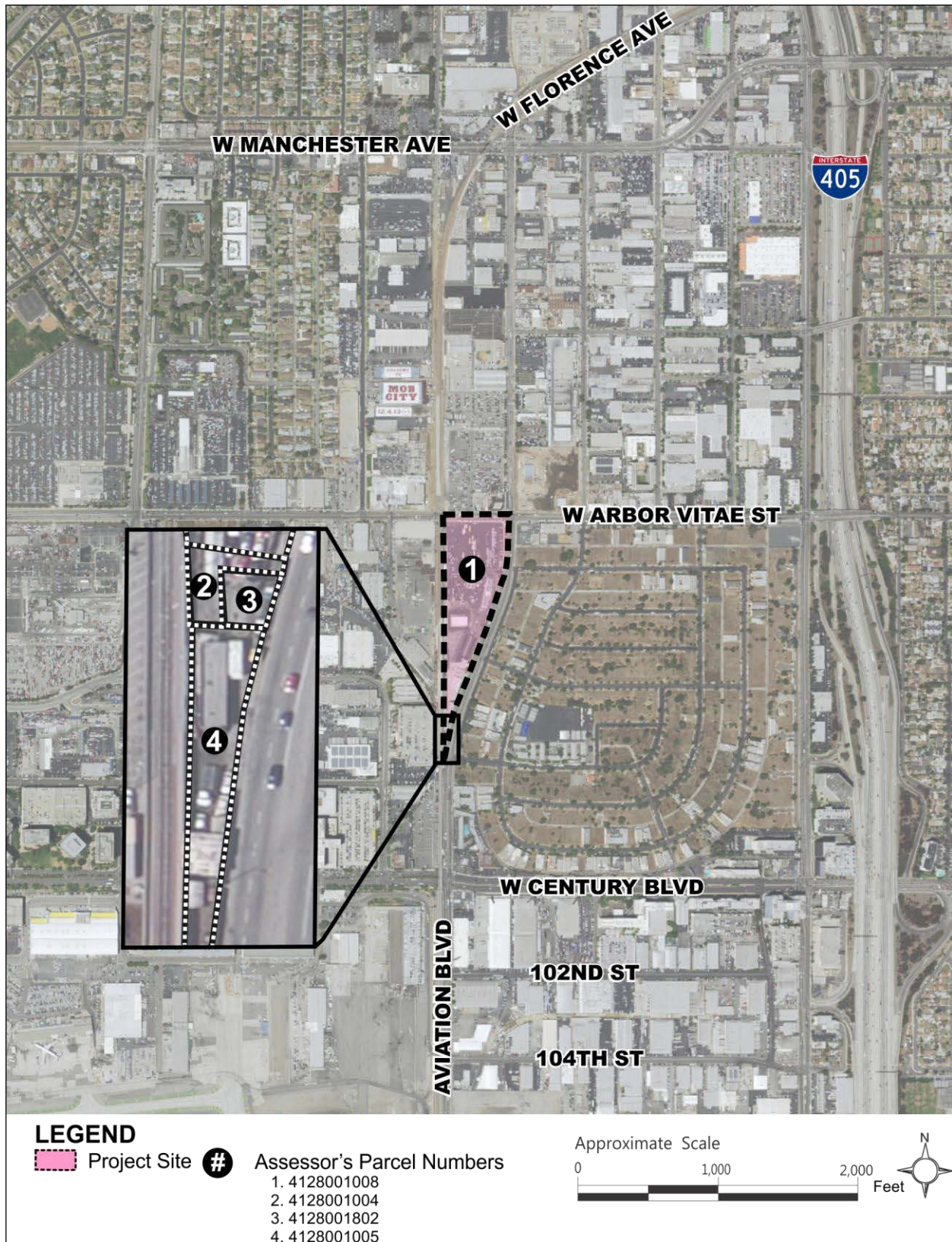
3.4.2. Existing Setting

Existing Land Uses

The project site is comprised of four parcels consisting of the following APNs and square footages: APN 4128-001-008 (411,618 square feet), APN 4128-001-005 (2,330 square feet), APN 4128001-004 (809 square feet) and APN 4128-001-802 (633 square feet), totaling approximately 9.5 acres (415,390 square feet) (Refer to Figure 3.4.1). It is located within a TPA in the eastern section of the Westchester-Playa del Rey Community Plan Area (CPA) of the City of Los Angeles. The CPA is roughly bounded by the communities of Marina del Rey and Del Rey to the north; Culver City to the northeast, the City of Inglewood to the east, LAX to the south, and the Pacific Ocean frontage to the west. The project site is bounded by West Arbor Vitae Street to the north, Aviation Boulevard to the east and south (West Century Boulevard is the nearest east-west thoroughfare to the south), and a Metro-owned ROW to the west. It is currently occupied by a car rental facility, a CNG fueling station and a towing storage yard.

Specific land uses within the immediate project vicinity are rental car facilities, a CNG fueling station, and a parking lot to the north; a gas station and Manchester Square, which consists mainly of vacant lots, some multi-family residences and an educational facility to the east; multi-family residences, a motel, a gas station and commercial uses to the south and Metro's maintenance facility and parking uses immediately to the west. More broadly, the area to the north/northeast in the City of Inglewood consists primarily of industrial and public facilities uses. Farther to the east of Manchester square and across La Cienega Boulevard is a pocket of commercial uses in the City of Inglewood. West Century Boulevard represents a commercial corridor, primarily occupied by a mix of commercial uses including restaurants, hotels, rental car facilities and gas stations.

Figure 3.4.1 Project Site Parcels



Properties to the south/southwest of the site are occupied by LAX-related uses such as airline cargo bays. LAX runways are located farther south of these uses. West of Metro's maintenance facility and a parking structure is a truck rental company and fronting Airport Boulevard are commercial and medium density residential properties. Manufacturing uses are located to the northwest. Industrial properties flank Bellanca Avenue and West Arbor Vitae Street. A medium density residential area abuts these uses to the northwest.

Land Use Designations (City of Los Angeles General Plan – Land Use Element, 2001)

The project site is designated by the City of Los Angeles General Plan as Limited Manufacturing. Land uses immediately adjacent to the project site are designated as follows: Industrial to the north, Public Facilities to the northeast, General Commercial at the southeast corner of Aviation Boulevard and West Arbor Vitae Street to the east; the remaining area to the east is zoned for LAX land uses. To the west of the project site, land uses are designated as Light Manufacturing. Other land uses in the project vicinity are commercial, multi-family residential, single-family residential, and low density residential, as shown in Figure 3.4.2.

Zoning

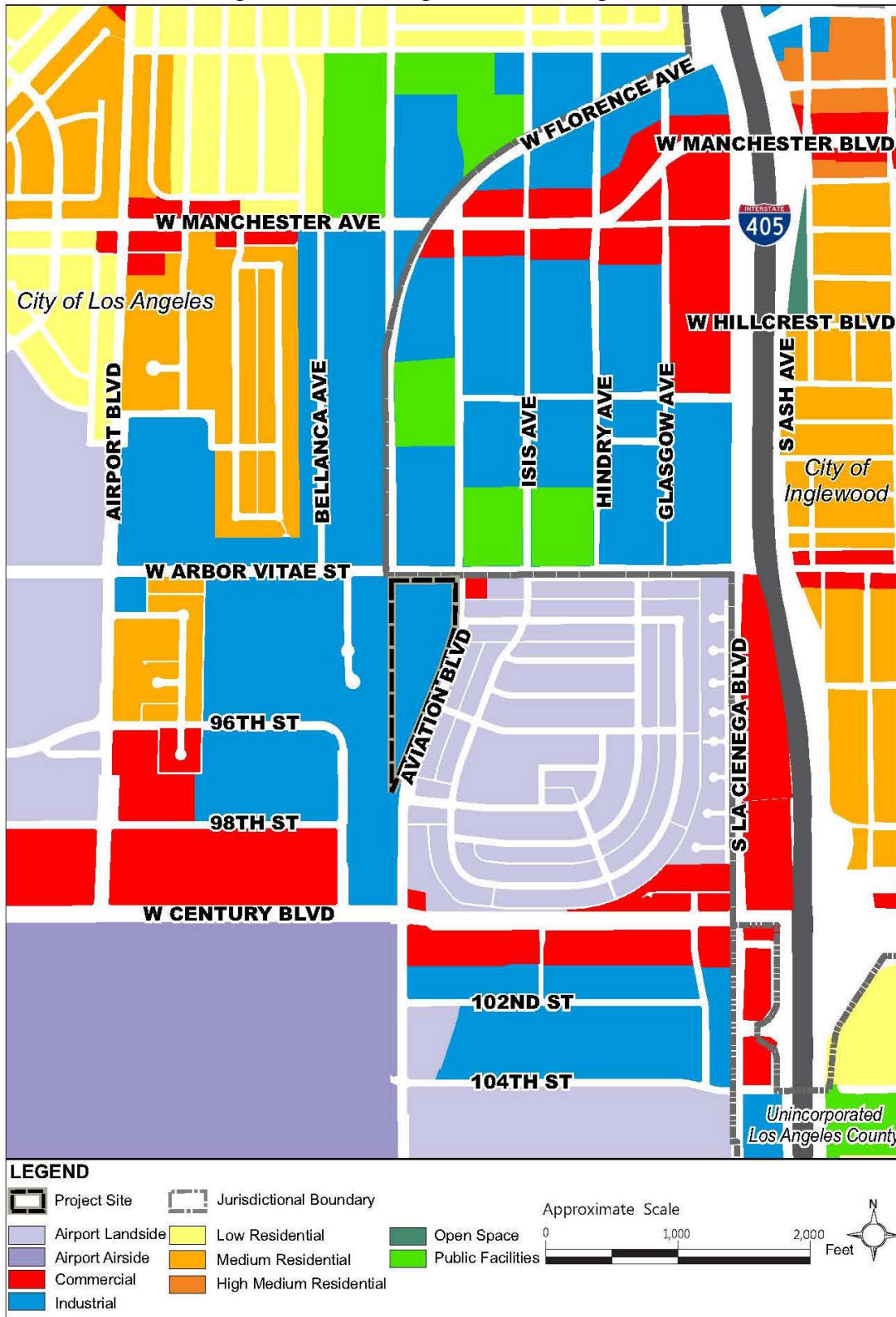
The project site is currently zoned as M1-1 Limited Industrial. The areas immediately surrounding the site are zoned as follows: the area to the north across West Arbor Vitae Street is zoned M-1 Light Manufacturing; the area to the east is primarily zoned as LAX with pockets of C2-1 Commercial Zone; to the south, there are pockets of C2-2, LAX, and M2-1 Light Industrial zoning; and the area to the west is zoned as M2-1, abutting the City of Inglewood. In the project area, there are some properties zoned for commercial uses along major corridors, such as West Century and Airport Boulevards. There are no residential, open space or public facility zones adjacent to the project site. The nearest residential zones in the City of Los Angeles are situated farther to the west and northwest of the project site consisting of a small pocket to the west, zoned as R3-1 Multiple Dwelling; an area west of Bellanca Avenue and north of West Arbor Vitae Street, which is mostly zoned as R2-1/R3-1 Multiple Dwelling; and an area zoned as R1-1 Single-Family west of Airport Boulevard. To the east in the City of Inglewood, the zoning is largely R2-1 Multiple Dwelling. Figure 3.4.3 depicts the existing zoning for the project site as well as the surrounding uses.

3.4.3. Thresholds of Significance

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

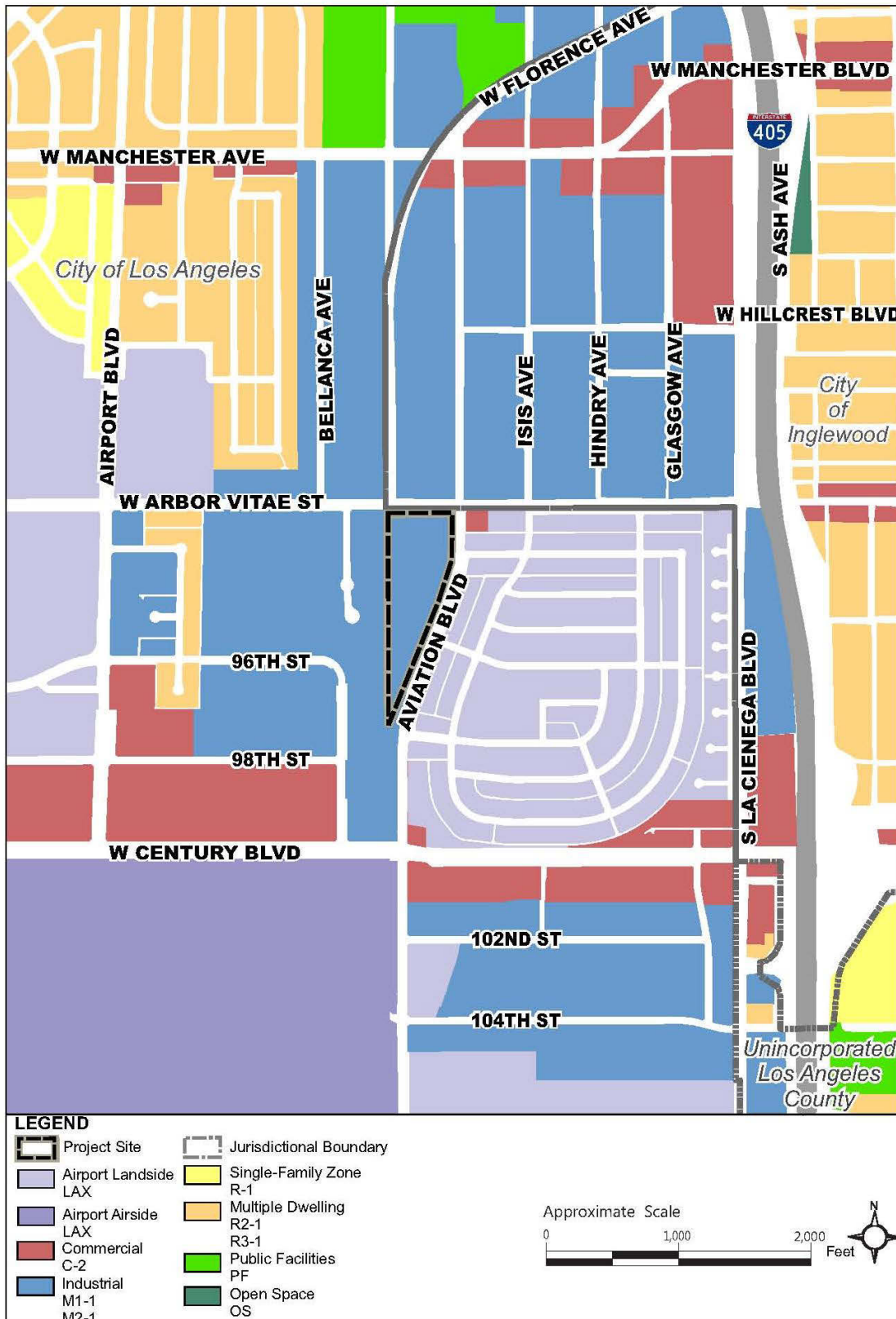
- Physically divide an established community;
- Conflict with applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or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

Figure 3.4.2 Existing Land Use Designations



Source: Terry A. Hayes Associates Inc., 2016.

Figure 3.4.3 Existing Zoning



Source: Terry A. Hayes Associates Inc., 2016.

3.4.4. Impact Analysis and Mitigation Measures

This section assesses potential impacts associated with the proposed project and, if necessary, identifies mitigation measures to eliminate or reduce impacts. The methodology implemented in this assessment consists of evaluating whether the proposed project would have significant land use impacts according to the above-stated thresholds. Impacts are primarily assessed by considering the project objectives and proposed uses in light of the regulatory setting as well as the existing and surrounding uses described above.

Impact 3.4.1 Would the proposed project physically divide an established community?

Impact Analysis

The project site consists of four contiguous parcels as shown in Figure 3.4.1. The proposed project would replace the existing car rental facility, CNG fueling station and towing storage yard with a multi-modal transportation center with light rail transit, bus, pedestrian and bicycle amenities within the confines of the existing site boundaries.

Situated in a largely commercial-industrial area, the project site is bounded by roadways to the north, east and south and a Metro-owned railroad right-of way to the west. It does not adjoin any established residential communities. Further, the project site does not provide access to any residential areas or community facilities. The closest residences are located in Manchester Square, which has been declining in residential units over the past ten years, across Aviation Boulevard to the east. The majority of these properties have been or are in the process of being acquired by LAWA for LAX noise abatement purposes. The project proposes various access and circulation improvements such as signalized lights, crosswalks, pedestrian paths and driveways; however, vehicular ingress and egress is from the existing roadways thereby maintaining the general land use pattern and circulation configuration in the surrounding area. Therefore, the proposed project would result in a less-than-significant impact related to dividing an established community.

Mitigation Measures

This impact would be less than significant and does not require mitigation measures.

Impact 3.4.2 Would the proposed project conflict with applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Impact Analysis

As described in the Regulatory Framework section of this analysis, the proposed project is subject to federal, state, regional, and local statutes related to land use and planning. The project's relationship to each of the relevant plans, policies, and regulations is evaluated accordingly in the following discussion.

Federal

Title 14, Part 77 of the CFR, Safe, Efficient Use, and Preservation of Navigable Airspace, establishes minimum standards to ensure air safety by regulating the construction or alteration of buildings or structures that may affect airport operations. The project site is located within the Airport Influence Area and is subject to FAA height restrictions. The mezzanine walkway would be approximately 26 feet above the ground surface with a canopy up to approximately 50 feet. Certain architectural, mechanical or signage elements could be taller, but would not to exceed 70 feet. Given that the proposed project is greater than one nautical mile (6,076 feet) from the eastern end of the nearest runway (24L), the height restriction should not be less than 100 feet. The specific determination will be made by the FAA to ensure that no obstruction to air navigation would occur. Metro is legally required by the CFR to file a Form 7460, Notice of Proposed Construction or Alteration, with the FAA to make an airspace determination. This determination would ensure compliance with applicable federal guidelines.

State

SB 375 and SB 743 both contain stipulations that pertain to land use and planning. An analysis of impacts related to GHG emissions, plans, and policies is provided in Section 3.2, Greenhouse Gas Emission of this Draft EIR. As discussed in Section 3.2, GHG emissions were determined to result in a less-than-significant impact. SB 375 and SB 743 each set forth CEQA streamlining processes for residential, mixed-use, or employment center (SB 743 only) projects that meet specific criteria and are consistent with the SCS. As the proposed project does not contain a residential, mixed-use, or employment center component, it does fully meet the necessary requirements for streamlining. Generally, a project that is consistent with the adopted SCS is also considered to be consistent with SB 375 and SB 743. As discussed below, the project proposes a regional transit connection to LAX, which is consistent with the regional transit goals of the 2016-2040 RTP/SCS.

Regional

Pursuant to CEQA, SCAG is responsible for reviewing regionally significant local plans, projects, and programs for consistency with SCAG's adopted regional plans. The proposed project does not generally meet the criteria for regional significance under CEQA (Section 15206), in part, because it would not cause significant effects on the environment extending beyond the City or County of Los Angeles, for example, by generating significant amounts of traffic or interfering with the attainment or maintenance of state or national air quality standards. As concluded in the air quality and traffic analyses presented in this Draft EIR, the proposed project would not cause significant impacts with the implementation of appropriate mitigation measures. The proposed project would not conflict with any of SCAG's stated principles, goals, or policies. Nevertheless, a succinct evaluation of the proposed project's compatibility with applicable SCAG goals and polices is provided below.

SCAG Compass Growth Vision Report. The applicable principles and policies set forth in the Growth Vision Report are appreciably similar to the goals and policies provided in the 2016-

2040 RTP/SCS. As established above, the proposed project is consistent with the region's multi-modal approach to transportation planning and encourages travel by non-auto modes. Therefore, only those topics not otherwise addressed in the above discussion are evaluated below.

Policy: Promote "people-scaled" pedestrian-friendly communities. The proposed project would include pedestrian-scaled improvements such as benches, trash receptacles, lighting, pedestrian plaza, public art, useable landscape areas, signage and wayfinding. The proposed project components would be linked together by a continuous system of elevated mezzanine walkways. The proposed project is consistent with this policy.

Policy: Ensure environmental justice regardless of race, ethnicity, or income class. Metro complies with Section 601 of Title VI of the Civil Rights Act of 1964 as well as the FTA's Title 6 program, which is designed to: ensure that the level and quality of public transportation service is provided in a nondiscriminatory manner; to promote full and fair participation in public transportation decision-making without regard to race, color, or national origin; and to ensure meaningful access to transit-related programs and activities by persons with limited English proficiency (FTA, 2012). Multi-lingual signage and information guides would be similar to those currently provided at Metro stations. The proposed project is consistent with this policy.

Principle 4: Promote sustainability for future generations. LAX is the seventh busiest airport in the world, accommodating 74.9 million annual passengers in 2015, but currently lacks a convenient transit connection. As growth in the SCAG Region is anticipated to continue, the project aims to increase the share of transit trips to and from LAX with minimal impact to airport facilities and surrounding communities and to help reduce air pollution. The proposed project has several defined mandatory goals for sustainability, specifically focused on achieving a LEED Silver minimum rating and compliance with the California Green Building Code. The proposed project includes sustainable design features such as selectively placed landscaped bio-swales, which help to retain and filter stormwater runoff. Chapter 2, Project Description of this Draft EIR, provides a comprehensive discussion of the proposed sustainability component. The proposed project represents a substantial transportation investment that supports smart growth and sustainability for future generations by providing transportation alternatives to access the LAX area and the regional transit system. The proposed project is consistent with this principle.

Policy: Focus development in urban centers and existing cities. The existing project site is developed with transportation-related uses in a densely developed urbanized area of the City. Of primary importance, the project site is adjacent to LAX, a major transportation center. The transportation center would facilitate transit and active transportation by connecting to the exiting regional transit system. As stated previously, the project site is within a High Quality Transit Area half-mile buffer zone, which supports SCAG's location efficiency outcome performance indicator. The proposed project is consistent with this policy.

SCAG Regional Comprehensive Plan (RCP). The RCP is to be used by local jurisdictions in developing local plans and addressing local issues of regional significance. As previously

discussed, the proposed project does not meet the criteria for regional significance under CEQA, in part, because it would not cause significant effects on the environment extending beyond the City or County of Los Angeles. As summarized in the Executive Summary, the proposed project would not cause significant and unavoidable impacts. The RCP incorporates principles and goals of the Compass Growth Vision Report, for which an evaluation of the project's consistency with its principles and policies is presented above. For the purposes of this land use and planning impact analysis, the proposed project is considered consistent with the RCP as it is not a project of regional significance and is substantially consistent with the RTP/SCS and the Compass Growth Vision Report.

Metro Congestion Management Plan (CMP). In addition to transportation system performance, the CMP emphasizes the relationship between local land use decisions and regional transportation. Metro's Land Use Analysis Program states all development projects that require preparation of an EIR must incorporate a CMP Transportation Impact Analysis (TIA) into the document. As discussed in Section 3.6 Transportation and Traffic, based on the project trip generation and resulting increases in traffic volumes in the traffic report's study area, no impacts would occur to CMP facilities associated with the proposed project and impacts would be less than significant. The traffic analysis presented in this Draft EIR includes a discussion of the proposed project with respect to the CMP. The proposed project is consistent with the CMP.

Complete Streets Act. Assembly Bill 1358 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. The proposed project would improve mobility and accessibility by connecting LAX to the regional bus and rail transit system, by consolidating transit services in the LAX area and providing pedestrian and bicycle amenities. The proposed project would include sidewalks, crosswalks and without reducing the existing number of vehicle traffic lanes along Aviation Boulevard. The traffic analysis presented in this Draft EIR includes further discussion of the proposed transportation improvements. The proposed project is consistent with the Complete Streets Act.

SCAG 2016-2040 RTP/SCS. The 2016-2040 RTP/SCS policies and goals focus on the need to coordinate land use and transportation decisions in order to manage travel demand within the region through the year 2040. The proposed project's objectives (to create a transit connection between LAX and the regional bus and rail transit system, to increase the share of transit trips to and from LAX with minimal impact to surrounding communities, and to help reduce air pollution) are consistent with the overarching aims of the RTP/SCS.

Policy 1: Transportation investments shall be based on SCAG's adopted regional Performance Indicators. The proposed project represents a substantial transportation investment that provides a transit connection to LAX and from the LAX area to the regional transit system. SCAG encourages, but does not require, agencies to be consistent with the RTP/SCS performance indicators to the extent practical in their planning studies. The RTP/SCS identifies location efficiency as an outcome for the plan and outlines performance indicators that "reflect the impact of improved land use and transportation coordination in support of

the SCS required under SB 375.” Related to the proposed project, one of SCAG’s performance indicators for location efficiency is to evaluate the share of growth in High Quality Transit Areas. Because the proposed project locates a new transportation center within a High Quality Transit Area half-mile buffer zone, it is consistent with this policy.

Policy 3: RTP/SCS land use and growth strategies in the RTP/SCS will respect local input and advance smart growth initiatives. Metro engaged the public, interested parties, and affected agencies and incorporated input throughout the planning process. In compliance with the CEQA, a NOP was prepared and distributed to the State Clearinghouse, various public agencies, and the general public for a 30-day review and comment period. Additionally, a scoping meeting was held to facilitate public review and comment on the proposed project and the EIR. The NOP and the comment letters received by Metro, as well as the transcript of the scoping meeting, are contained in Appendix A of this Draft EIR. SB 375 is considered “smart growth legislation” that is aimed at curbing sprawl and reducing vehicle miles traveled in an effort to cut GHG emissions from California’s largest emissions sector—automobiles and light trucks. The proposed project is consistent with this policy due to Metro’s public outreach combined with the proposed project’s congruence with SB 375.

Policy 4: Transportation demand management (TDM) and active will be focus areas, subject to Policy 1. The proposed project’s relationship to TDM is discussed in Section 3.6 Transportation and Traffic, of this Draft EIR where impacts are concluded to be less than significant. The project facilitates active transportation options for patrons of LAX and nearby uses as it proposes pedestrian and bicycle amenities, as well as streetscape and circulation improvements. Accordingly, the proposed project is consistent with this policy.

Goal 1: Align the plan investments and policies with improving regional economic development and competitiveness. The proposed project represents a substantial transportation investment as it provides a transportation center near LAX and would connect the area to the existing regional transit system. Bus and rail stop frequency and improved access to LAX, LAX-related uses, as well as the densely developed commercial-industrial area that surrounds the project site has the potential to accommodate local and regional economic investment. The proposed project is consistent with this goal.

Goal 2: Maximize mobility and accessibility for all people and goods in the region. A goal of the proposed project is to increase transit ridership and provide a reliable and convenient transit option to and from LAX and the regional bus and rail transit system. The proposed project would improve mobility and accessibility by consolidating bus services in the LAX area and providing rail service and pedestrian and bicycle amenities. The proposed project is consistent with this goal.

Goal 3: Ensure travel safety and reliability for all people and goods in the region. The proposed project is designed to maximize travel reliability, by providing a transportation center with consistent bus and rail service, and to ensure safety through the use of signage, wayfinding, lighting and traffic signalization. As discussed in the traffic analysis (Section 3.6 of this Draft EIR), none of the transportation system improvements proposed by the project

would introduce new safety hazards at intersections or along roadway segments, as most would be designed to improve safety for all roadway users. Accordingly, the proposed project is consistent with this goal.

Goal 5: Maximize the productivity of our transportation system. The proposed project responds to the high volume of daily vehicular trips and the absence of a convenient transit link by providing a new transit option to and from LAX and connecting the LAX area to the regional bus and rail transit system. Additionally, the project proposes a new transportation center within a High Quality Transit Area half-mile buffer zone, which supports SCAG's location efficiency outcome performance indicator. Therefore, the proposed project is consistent with this goal.

Goal 6: Protect the environment and health of our residents by improving air quality and encouraging active transportation. Pedestrian and bicycle amenities are fundamental components of the project design, facilitating the use of active transportation. The proposed project includes parking for up to 150 bikes in a secured location with adjacent amenities such as a bicycle repair area, a multi-use space and showers and lockers. The project proposes pedestrian amenities that include improved sidewalks along project site boundary, crosswalk improvements and vertical circulation equipment (i.e. elevators, escalators, stairs). Additionally, the proposed project's objective to increase the share of transit trips with minimal impact to surrounding communities and to help reduce air pollution is consistent with this goal.

Goal 8: Encourage land use and growth patterns that facilitate transit and active transportation. The project proposes transportation uses in a densely developed urbanized area and would not alter land use patterns in the project area. The transportation center would facilitate transit and active transportation by connecting to the existing regional transit system. As written above, active transportation options are encouraged through the provision of pedestrian and bicycle amenities as well as streetscape and circulation improvements. The proposed project is consistent with this goal.

Local

City of Los Angeles General Plan Citywide General Plan Framework. Three broad themes run throughout the Citywide General Plan Framework: sustained mobility with greater accessibility, economic opportunity, and environmental quality. As discussed throughout this Draft EIR, the proposed project promotes mobility, access, economic opportunity, and would have less than significant environmental impacts with the incorporation of mitigation measures. Thus, it is consistent with the overall themes presented in the General Plan Framework. The following is an evaluation of the proposed project as is germane to the General Plan Framework.

Goal 3K: Transit stations to function as a primary focal point of the City's development. As LAX is a major destination in the City, several bus routes serve the project area; however, under existing conditions, there is no transit station that serves a focal point. The proposed project develops a transportation center at a key location that will provide a link between the LAX area and the region. The proposed project is consistent with this goal.

Objective 3.15: Focus mixed commercial/residential uses, neighborhood-oriented retail, employment opportunities, and civic and quasi-public uses around urban transit stations, while protecting and preserving surrounding low-density neighborhoods from the encroachment of incompatible land uses. The nearest residential uses consist of various multi-family residences in Manchester Square. There are also medium density residential areas to the north and west; however, intervening industrial and commercial properties buffer the residences from the project site. There are no low-density neighborhoods surrounding the project site and the proposed uses would not encroach on such uses. Increased density of development on the project site would provide economic and employment opportunities above the existing uses. The proposed project is consistent with this objective.

Policy 3.15.5: Provide for the development of public streetscape improvements, where appropriate. The west side of Aviation Boulevard would include 15 foot sidewalks to promote pedestrian accessibility. The project proposes site improvements such as benches, trash receptacles, public art, and signage and wayfinding. The proposed project is consistent with this policy.

Policy 3.15.6: Establish standards for the inclusion of bicycle and vehicular parking at and in the vicinity of transit stations; differentiating these to reflect the intended uses and character of the area in which they are located (e.g., stations in some urban areas and “kiss-and-ride” facilities may have limited parking, while those in suburban locations may contain extensive parking). The proposed transit station includes parking for up to 150 bikes in a secured location with adjacent amenities such as a bicycle repair area, multi-use space, showers and lockers. Daily access to the site is primarily anticipated to be drop-offs and pick-ups to and from transit, including bus routes and the Crenshaw/LAX and Metro Green LRT lines. No parking other than for bus layovers are proposed as a part of this project. Further discussion of the proposed transportation improvements and modes of access is provided in Section 3.6 of this Draft EIR. The proposed project is consistent with this policy.

City of Los Angeles Westchester-Playa del Rey Community Plan. The project site is currently designated for Limited Manufacturing land uses. The industrial character of the Westchester-Playa del Rey CPA is influenced by its strategic location adjacent to LAX. The Community Plan identifies its industrial sector as an important resource and sets forth goals to preserve its industrial land uses and to foster investment in older or underutilized properties. The Community Plan “strongly supports efforts to attract new industrial development and requires that it be fully coordinated with the development of improved circulation and service systems capacities” for the overall benefit of the CPA. The proposed project is consistent with the Community Plan’s intent as it improves access in and to the LAX area, increases transit connectivity for both employees of local businesses, as well as air passengers, and supports the provision of adequate transportation infrastructure. The proposed project accomplishes this through the development of a multi-modal transportation center that would provide a link between the LAX area and the regional bus and rail transit system. The proposed project is generally consistent with the Westchester-Playa del Rey Community Plan.

City of Los Angeles Mobility Plan 2035: An Element of the General Plan. The goals, objectives, and policies included in the Mobility Plan 2035 establish a strategy to achieve long-term

mobility and accessibility within the City. The main roadways surrounding the project site include: Arbor Vitae Street, Aviation Boulevard, Century Boulevard and Airport Boulevard, which are designated as Major Highways Class II. This classification is maintained under the Mobility Plan 2035. In addition, the Mobility Plan 2035 identifies Century Boulevard as part of the Transit Enhanced Network. The Mobility Plan 2035 defines transit enhancements according to three classifications: moderate, moderate plus or comprehensive based on their benefits and intensity of implementation. Moderate enhancements typically include bus stop enhancements and increased service, with transit vehicles continuing to operate in mixed traffic. Moderate plus enhancements include an exclusive lane during the peak period only, while comprehensive enhancements typically include transit vehicles operating in an all-day exclusive lane. The traffic analysis presented in this Draft EIR also includes a discussion of the proposed project with respect to this plan.

The Mobility Plan 2035 was created, in part, to respond to the Complete Streets Act mandate that cities must include Complete Streets policies in their general plans. Complete Streets are characterized by balanced, multi-modal streets that meet the needs of all users (e.g. transit, vehicular, bicycle, pedestrian). The Mobility Plan 2035 includes the Complete Streets Manual, which provides technical design guidelines for engineers, planners and urban designers for creating safer, multi-modal streets. The Mobility Plan 2035 incorporates the 2010 Bicycle Plan and identifies Aviation Boulevard and Arbor Vitae Street as part of the Bicycle Enhanced Network (depicted in Figure 3.4.4), which identifies streets that facilitate bicycle mobility. Aviation Boulevard and Arbor Vitae Street have been designated as Tier 1/Protected Bicycle Lanes, defined as bicycle facilities on arterial roadways with physical separation. These streets will be upgraded in the future with shared lane markings and signage to increase motorist awareness of bicycle presence by the City of Los Angeles.

Mitigation Measures

This impact would be less than significant and does not require mitigation measures.

Impact 3.4.3 Would the proposed project conflict with any applicable habitat conservation plan or natural community conservation plan?

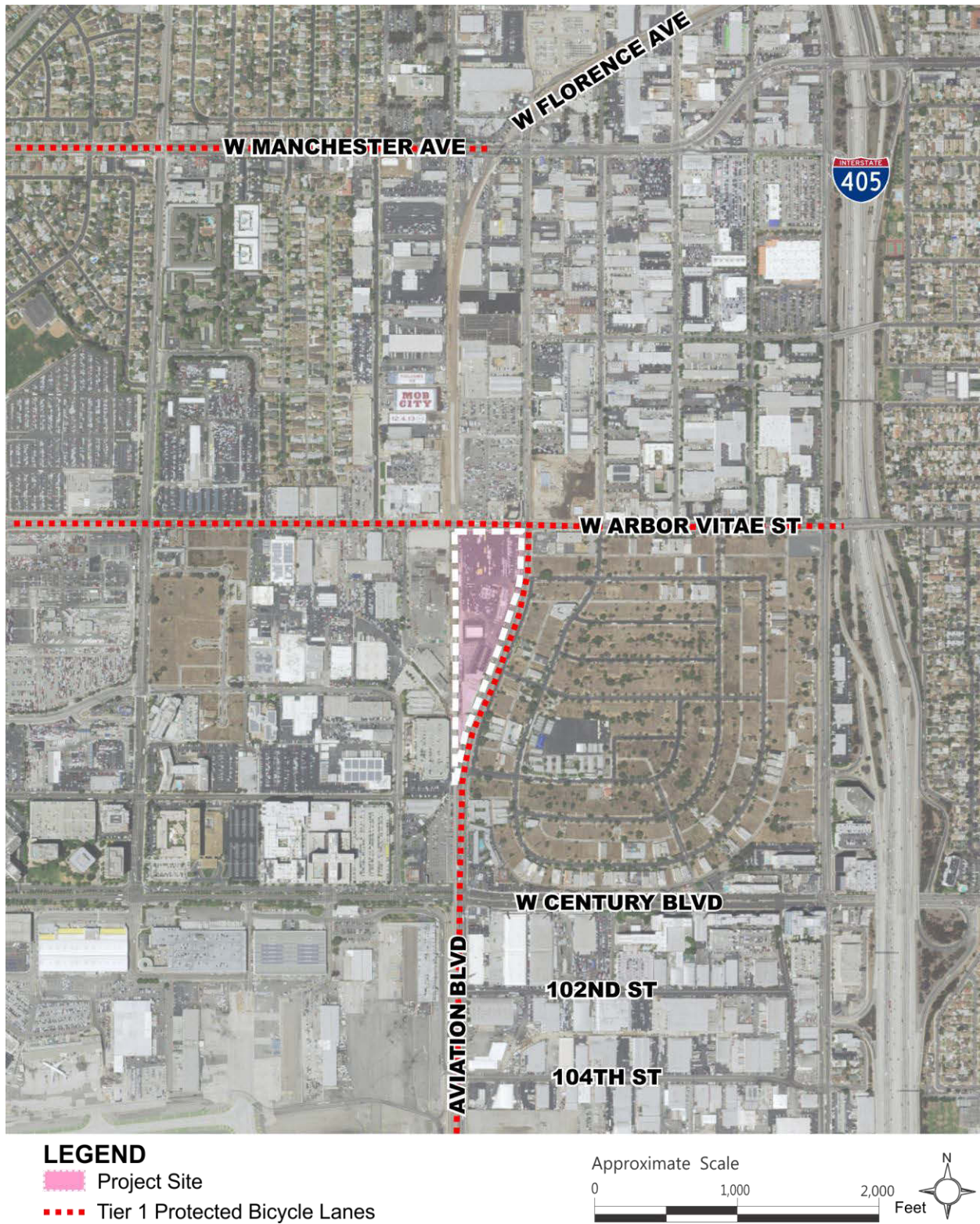
Impact Analysis

The project site is fully developed with industrial and commercial uses in a highly urbanized area of the City. Sparse landscaping occurs in a surface parking lot and along the perimeter of the site, primarily consisting of ornamental trees and grasses. The site is not identified as critical habitat for threatened or endangered species and does not contain any candidate, sensitive or special status species. Refer also to Subsection 4.4.3 of this Draft EIR for a discussion of impacts to biological resources. The proposed project would not conflict with any habitat conservation plan or natural community conservation plan. Therefore, no impact would occur.

Mitigation Measures

This impact would be less than significant and does not require mitigation measures.

Figure 3.4.4 Planned Local Bicycle Network



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This noise analysis discusses sound levels in terms of Equivalent Noise Level (L_{eq}), Community Noise Equivalent Level (CNEL), and Day-Night Noise Level (L_{dn}). L_{eq} is the average noise level on an energy basis for any specific time period. The L_{eq} for one hour is the energy average noise level during the hour. The average noise level is based on the energy content (acoustic energy) of the sound. L_{eq} can be thought of as the level of a continuous noise which has the same energy content as the fluctuating noise level. The L_{eq} is expressed in units of dBA.

CNEL is an average sound level during a 24-hour period and is measured on a scale, which accounts for noise source, distance, single event duration, single event occurrence, frequency, and time of day. Humans perceive sound differently at certain times of the day. Sounds are perceived at 5 dBA higher than their actual decibel levels from 7:00 PM and 10:00 PM and at 10 dBA higher from 10:00 PM until 7:00 AM. This perception is the result of changes in background sound and human sensitivity. Because CNEL accounts for human sensitivity to sound, the CNEL 24-hour figure is always a higher number than the actual 24-hour average.

L_{dn} is a 24-hour L_{eq} with an adjustment to reflect the greater sensitivity of most people to nighttime noise. The adjustment is a 10-dBA penalty for all sound that occurs in the nighttime hours of 10:00 PM to 7:00 AM. The effect of the penalty is that in the calculation of L_{dn} , any event that occurs during the nighttime hours is equivalent to ten of the same event during the daytime hours.

Noise is generally defined as unwanted sound. The degree to which noise can impact the human environment ranges from levels that interfere with speech and sleep (annoyance and nuisance) to levels that cause adverse health effects (hearing loss and psychological effects). Human response to noise is subjective and can vary greatly from person to person. Factors that influence individual response include the intensity, frequency, and pattern of noise as well as the amount of background noise present before the intruding noise and the nature of work or human activity that is exposed to the noise source.

Studies have shown that the smallest perceptible change in sound level for a person with normal hearing sensitivity is approximately 3 dBA. A change of at least 5 dBA would be noticeable and would likely evoke a community reaction. A 10-dBA increase is subjectively heard as a doubling in loudness and would cause a community response.

Noise levels decrease as the distance from the noise source to the receiver increases. Noise generated by a stationary noise source, or "point source," will decrease by approximately 6 dBA over hard surfaces (e.g., reflective surfaces, such as parking lots or smooth bodies of water) and 7.5 dBA over soft surfaces (e.g., absorptive surfaces such as soft dirt, grass, or scattered bushes and trees) for each doubling of the distance. For example, if a noise source produces a noise level of 89 dBA across a hard surface at a reference distance of 50 feet, then the noise level would be 83 dBA at a distance of 100 feet from the noise source, 77 dBA at a distance of 200 feet and so on. Noise generated by a mobile source will decrease by approximately 3 dBA over hard surfaces and 4.8 dBA over soft surfaces for each doubling of the distance.

Generally, noise is most audible when traveling by direct line-of-sight. Barriers, such as walls, berms or buildings that break the line-of-sight between the source and the receiver greatly reduce noise levels from the source since sound can only reach the receiver by bending over the top of the barrier. However, if a barrier is not high or long enough to break the line-of-sight from the source to the receiver, its effectiveness is greatly reduced.

Vibration Definitions, Characteristics, and Effects

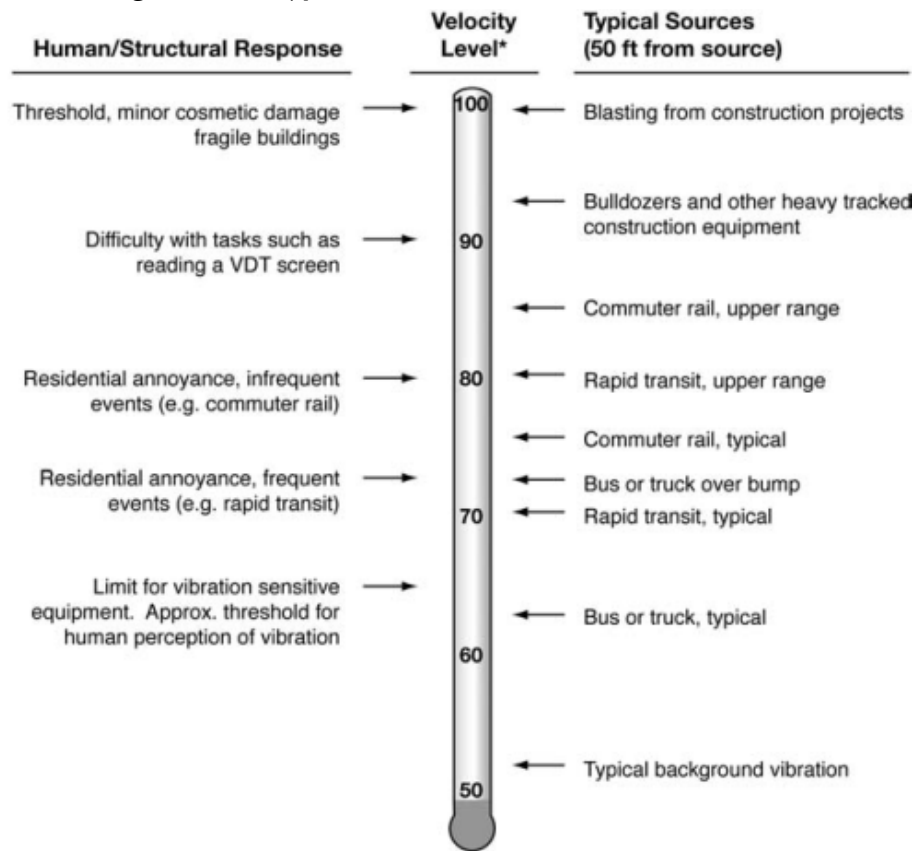
Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration can be a serious concern, causing buildings to shake and rumbling sounds to be heard. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of vibration are trains, buses on rough roads, and construction activities, such as blasting, pile driving, and heavy earth-moving equipment.

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings and is usually measured in inches per second. The root mean square (RMS) amplitude is most frequently used to describe the effect of vibration on the human body. The RMS amplitude is defined as the average of the squared amplitude of the signal. Decibel notation (Vdb) is commonly used to measure RMS. The Vdb acts to compress the range of numbers required to describe vibration.

High levels of vibration may cause physical personal injury or damage to buildings. However, groundborne vibration levels rarely affect human health. Instead, most people consider groundborne vibration to be an annoyance that can affect concentration or disturb sleep. In addition, high levels of groundborne vibration can damage fragile buildings or interfere with equipment that is highly sensitive to groundborne vibration (e.g., electron microscopes).

Unlike noise, groundborne vibration is not a phenomenon that most people experience every day. The background vibration velocity level in residential areas is usually 50 RMS or lower, well below the threshold of perception for humans which is around 65 RMS. Most perceptible indoor vibration is caused by sources within buildings, such as operation of mechanical equipment, movement of people or slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains and traffic on rough roads. If the roadway is smooth, the vibration from traffic is rarely perceptible. Typical levels of groundborne vibration are shown in Figure 3.5.2.

Figure 3.5.2 Typical Levels of Groundborne Vibration



* RMS Vibration Velocity Level in VdB relative to 10^{-6} inches/second

Source: FTA, 2006.

3.5.1. Regulatory Framework

3.5.1.1. Federal

Noise

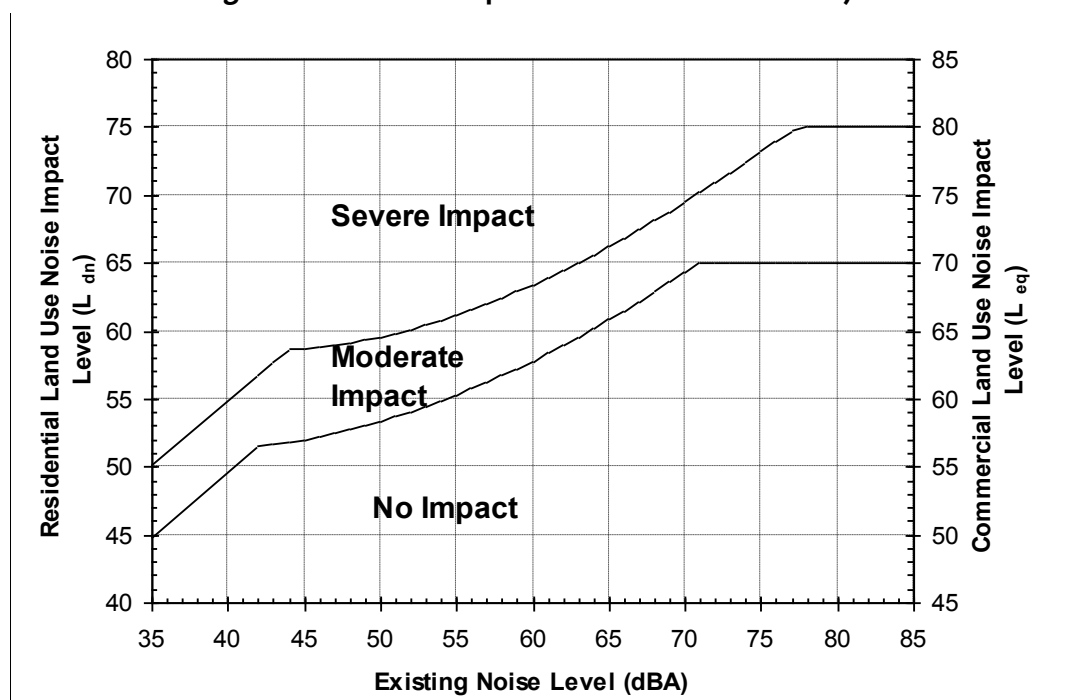
FTA standards and criteria for assessing noise impacts related to transit projects are based on community reactions to noise. The criteria reflect changes in noise exposure using a sliding scale where the higher the level of existing noise, the smaller increase in total noise exposure is allowed. Some land use activities are more sensitive to noise than others, such as parks, churches and residences, as compared to industrial and commercial uses. Non-sensitive uses do not require noise impact assessment. FTA Noise Impact Criteria groups sensitive land uses into the following three categories:

- Category 1 – Buildings or parks where quiet is an essential element of their purpose.
- Category 2 – Residences and buildings where people normally sleep. This includes residences, hospitals and hotels, where nighttime sensitivity is assumed to be of utmost importance.
- Category 3 – Institutional land uses with primarily daytime use that depend on quiet as an important part of operations, including schools, libraries and churches.

L_{dn} is used to characterize noise exposure for residential areas (Category 2), and a maximum 1-hour L_{eq} (during the period that the facility is in use) is utilized for other noise-sensitive land uses such as school buildings (Categories 1 and 3). The following two impact levels are included in the FTA criteria, as shown in Figure 3.5.3:

- Moderate:** In this range, other project-specific factors must be considered to determine the magnitude of the impact and the need for mitigation. These other factors may include the predicted increase over existing noise levels, the type and number of noise-sensitive land uses affected, existing outdoor-indoor sound insulation and the cost effectiveness of mitigating noise to more acceptable levels.
- Severe:** Noise mitigation will be specified for severe impact areas unless there is no practical method of mitigating the noise.

Figure 3.5.3 Noise Impact Criteria for Transit Projects



Source: FTA, 2006.

The noise impact criteria for transit operations are summarized in Table 3.5.1. The first column shows the existing noise exposure and the remaining columns show the additional noise exposure caused by a transit project that would result in the two impact levels. As the existing noise exposure increases, the amount of allowable increase in noise exposure from the project alternatives decreases. The future noise exposure would be the combination of the existing noise exposure and the additional noise exposure caused by a transit project.

Table 3.5.1 Noise Impact Criteria for Transit Operations

Existing Noise Exposure Leq(h) or Ldn (dBA)	Project Noise Impact Exposure, Leq(h) or Ldn (dBA)					
	Category 1 or 2 Sites			Category 3 Sites		
	No Impact	Moderate Impact	Severe Impact	No Impact	Moderate Impact	Severe Impact
<43	< Ambient + 10	Ambient + 10 to 15	>Ambient + 15	< Ambient + 15	Ambient + 15 to 20	>Ambient + 20
43	<52	52-58	>58	<57	57-63	63
44	<52	52-58	>58	<57	57-63	63
45	<52	52-58	>58	<57	57-63	63
46	<53	53-59	>59	<58	58-64	64
47	<53	53-59	>59	<58	58-64	64
48	<53	53-59	>59	<58	58-64	64
49	<54	54-59	>59	<59	59-64	64
50	<54	54-59	>59	<59	59-64	64
51	<54	55-60	>60	<59	59-65	65
52	<55	55-60	>60	<60	60-65	65
53	<55	55-60	>60	<60	60-65	65
54	<55	55-61	>61	<60	60-66	66
55	<56	55-61	>61	<61	61-66	66
56	<56	56-62	>62	<61	61-67	67
57	<57	57-62	>62	<62	62-67	67
58	<57	57-62	>62	<62	62-67	67
59	<58	58-63	>63	<63	63-68	68
60	<58	58-63	>63	<63	63-68	68
61	<59	59-64	>64	<64	64-69	69
62	<59	59-64	>64	<64	64-69	69
63	<60	60-65	>65	<65	65-70	70
64	<61	61-65	>65	<66	66-70	70
65	<61	61-66	>66	<66	66-71	71
66	<62	62-67	>67	<67	67-72	72
67	<63	63-67	>67	<68	68-72	72
68	<63	63-68	>68	<68	68-73	73
69	<64	64-69	>69	<69	69-74	74
70	<65	65-69	>69	<70	70-74	74
71	<66	66-70	>70	<71	71-75	75
72	<66	66-71	>71	<71	71-76	76
73	<66	66-71	>71	<71	71-76	76
74	<66	66-72	>72	<71	71-77	77
75	<66	66-73	>73	<71	71-78	78
76	<66	66-74	>74	<71	71-79	79
77	<66	66-74	>74	<71	71-79	79
>77	<66	66-75	>75	<71	71-80	80

Source: FTA, 2006.

The FTA has stated that construction noise criteria should take into account the existing noise environment, the absolute noise levels during construction activities, the duration of the construction and the adjacent land use (FTA, 2006). The following guidelines are considered by the FTA to be reasonable criteria for impact assessments. There may be adverse community reaction if the following one-hour L_{eq} noise levels are exceeded:

- Residential: 90 dBA during the day and 80 dBA during the night
- Commercial and Industrial: 100 dBA during the day and 100 dBA during the night

Vibration

FTA has developed impact criteria for acceptable levels of groundborne noise and vibration. These criteria, as summarized in Table 3.5.2, are based on standards, criteria and design goals, including noise and vibration guidelines from American National Standards Institute and the American Public Transit Association. Some buildings (e.g., concert halls, television, recording studios and theaters) can be very sensitive to vibration, but do not fit into any of the three FTA sensitive land use categories previously described. Because of these buildings' sensitivity to vibration, they usually warrant special attention during the environmental review.

Table 3.5.2 Groundborne Vibration and Groundborne Noise Impact Criteria for General Assessment

Land Use Category	Groundborne Vibration Impact Levels (VdB, 1 micro-inch / sec)			Groundborne Noise Impact Levels (dB, 20 micro Pascals)		
	Frequent Events ¹	Occasional Events ²	Infrequent Events ³	Frequent Events ¹	Occasional Events ²	Infrequent Events ³
Category 1: Buildings where vibration would interfere with interior operations. ⁴	65	65	65	N/A	N/A	N/A
Category 2: Residences and buildings where people normally sleep.	72	75	80	35	38	43
Category 3: Institutional land uses with primarily daytime use.	75	78	83	40	43	48
1. "Frequent Events" is defined as more than 70 vibration events of the same source per day. Most rapid transit projects fall into this category. 2. "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day. Most commuter trunk lines have this many operations. 3. "Infrequent Events" is defined as fewer than 30 vibration events of the same kind per day. This category includes commuter rail branch lines. 4. This criterion limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes.						

Source: FTA, 2006.

Table 3.5.3 lists criteria for acceptable levels of groundborne vibration for various types of special buildings. These land uses include concert halls, television studios, recording studios and auditoriums.

**Table 3.5.3 Groundborne Vibration and Groundborne Noise Impact
Criteria for Special Buildings**

Type of Building or Room	Groundborne Vibration Impact Levels (VdB, 1 micro-inch / sec)		Groundborne Noise Impact Levels (dB, 20 micro Pascals)	
	Frequent Events ¹	Occasional or Infrequent Events ^{2,3}	Frequent Events ¹	Occasional or Infrequent Events ²
Concert Halls	65	65	25	25
TV Studios	65	65	25	25
Recording Studios	65	65	25	25
Auditoriums	72	80	30	38
Theaters	72	80	35	43

1. "Frequent Events" is defined as more than 70 vibration events of the same source per day. Most rapid transit projects fall into this category.
 2. "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day. Most commuter trunk lines have this many operations.
 3. "Infrequent Events" is defined as fewer than 30 vibration events of the same kind per day. This category includes most commuter rail branch lines.

Source: FTA, 2006.

For evaluating potential annoyance or interference with vibration-sensitive activities due to construction vibration, the criteria for general assessment shown in Table 3.5.4 can be applied. In most cases, however, the primary concern regarding construction vibration relates to potential damage effects. Vibration damage criteria are given in Table 3.5.4 for various structural categories.

Table 3.5.4 Construction Vibration Damage Criteria

Building Category	PPV (inches/second)
I. Reinforced-concrete, steel or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Non-engineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

Source: FTA, 2006.

FTA guidelines suggest minimum safe distances between construction equipment and buildings based on the types of construction equipment and the category of a building (see Table 3.5.4). Minimum safe distances between construction and nearby buildings are presented in Table 3.5.5. For example, the minimum safe distance between the most invasive method of construction (impact pile driving) and a Category IV building (the most vibration-sensitive type of building) would be at least 136 feet. Conversely, a small bulldozer could safely operate less than five feet from a Category I building (the least vibration-sensitive type of building). This project would not involve impact or sonic pile driving. As a result, the minimum safe distance between construction activities and buildings for this project is 37 feet (Large Vibratory Roller) for a Category IV building. This distance would never be exceeded during construction of the proposed project. Distances in Table 3.5.5 are approximations based on typical equipment and construction activities and the general classification of structures.

Table 3.5.5 Calculated "Minimum Safe Distances" from Construction Equipment to Reduce Potential Vibration Damage

Equipment		Building Categories and FTA Guideline Damage Thresholds			
		Category I (0.5 PPV) Inch/Sec	Category II (0.3 PPV) Inch/Sec	Category III (0.2 PPV) Inch/Sec	Category IV (0.12 PPV) Inch/Sec
Pile Driver (Impact)	Upper Range	53	74	97	136
	Typical	30	42	55	77
Pile Driver (Sonic)	Upper Range	33	46	60	84
	Typical	13	18	23	32
Large Vibratory Roller		15	20	26	37
Hoe Ram		8	12	15	21
Large Bulldozer		8	12	15	21
Caisson Drilling		8	12	15	21

Source: FTA, 2006.

3.5.1.2. State

Noise

There are no state regulations relevant to the proposed project.

Vibration

There are no state regulations for transit-related vibration.

3.5.1.3. Local

Noise

City of Los Angeles

The City of Los Angeles has established policies and regulations concerning the generation and control of noise that could adversely affect its citizens and noise sensitive land uses. Los Angeles Municipal Code Section 114.02(b) states that noise regulations do not apply to vehicles which are operated upon any public highway, street or right-of-way, or work done within any district zoned for manufacturing or industrial use. Section 41.40 of the Los Angeles Municipal Code states that engaging in construction, repair, or excavation work with any construction type device or job-site delivering of construction materials without a Police Commission approved variance would constitute a violation:

- Between the hours of 9:00 PM and 7:00 AM of the following day.
- In any residential zone, or within 500 feet of land so occupied, before 8:00 AM or after 6:00 PM on any Saturday, or at any time on any Sunday.
- In a manner as to disturb the peace and quiet of neighboring residents or any reasonable person of normal sensitiveness residing in the area.

Los Angeles Municipal Code Section 112.05 (Maximum Noise Level of Powered Equipment or Powered Hand Tools) specifies the maximum noise level of powered equipment or powered hand tools. Any powered equipment or hand tool that produces a maximum noise level exceeding 75 dBA at a distance of 50 feet when operated within 500 feet of a residential zone is prohibited. However, this noise limitation does not apply where compliance is technically infeasible. Technically infeasible means the above noise limitation cannot be met despite the use of mufflers, shields, sound barriers and/or any other noise reduction device or techniques during the operation of equipment.

Los Angeles Municipal Code Section 41.40(j) states that the noise standards do not apply to major public works construction by the City of Los Angeles and its proprietary Departments, including all structures and operations necessary to regulate or direct traffic due to construction activities. It also states that the Board of Police Commissioners will grant a variance for this work and construction activities will be subject to all conditions of the variance as granted. Concurrent with the request for a variance, the City Department that will conduct the construction work will notify each affected Council district office and established Neighborhood Council of projects where proposed Sunday and/or Holiday work will occur.

Los Angeles International Airport (LAX)

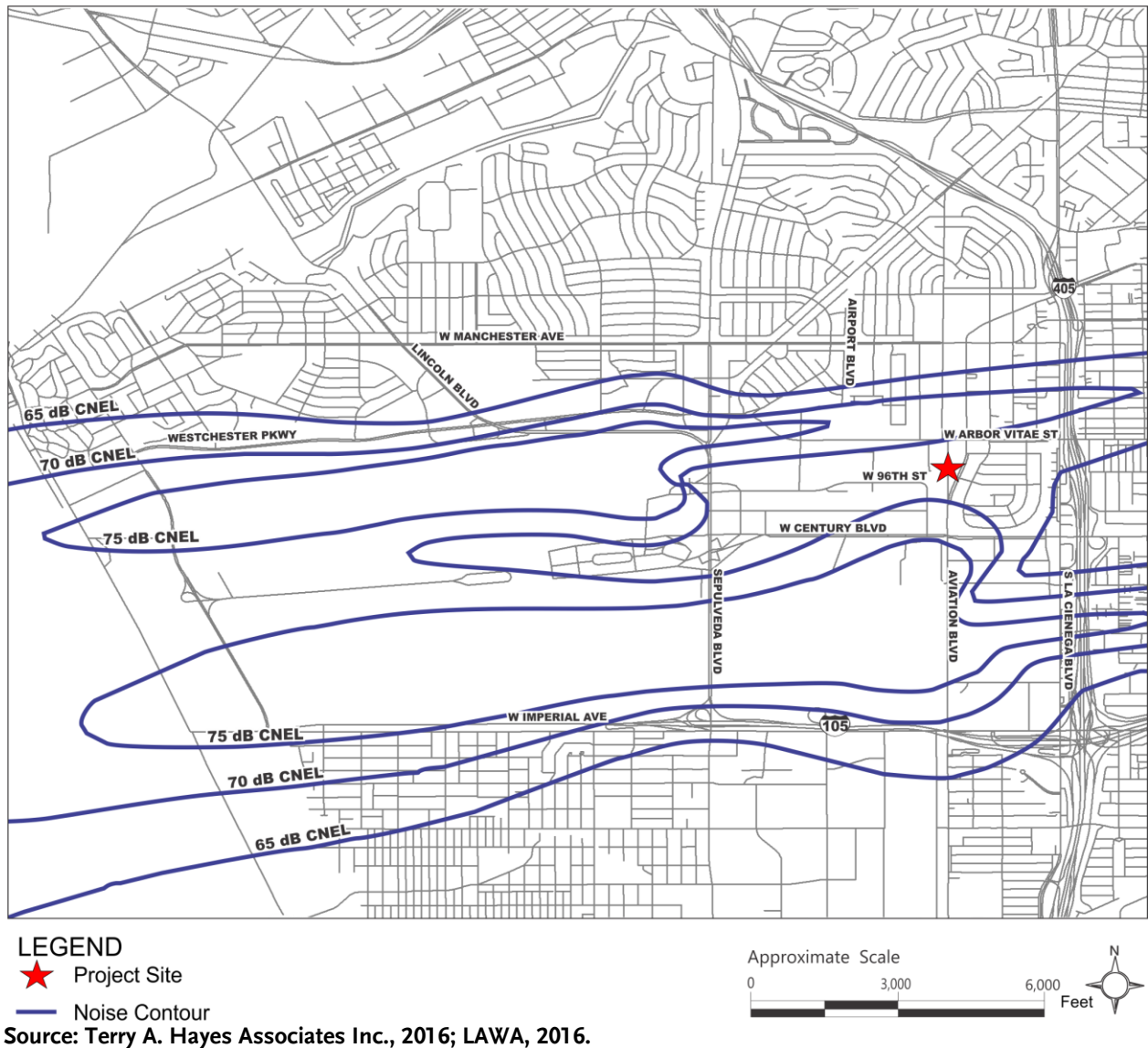
Since 1959, LAWA has developed and implemented noise abatement programs and sought partnership-based solutions with stakeholders. In particular, LAWA has worked with the FAA for many years to implement various noise abatement procedures. As part of this process, LAX produces quarterly noise reports to monitor and evaluate noise levels generated from aircraft operations. The noise contours are partially developed from an array of noise monitors located near LAX to record ambient noise levels. The noise contours in the report were developed by modeling annual operations at the airport and adjusting the levels based on actual noise measurement data.

As shown in Figure 3.5.4, the proposed project is located in the 65 to 70 dBA CNEL noise contour. The shape of the contours at the project site is primarily influenced by the predominance of aircraft operations, such as aircraft arrivals. The predominant aircraft flow at LAX is to the west (i.e., aircraft takeoff to the west and land from the east)

Vibration

There are no local regulations for transit-related vibration.

Figure 3.5.4 LAX Noise Exposure Map



3.5.2. Existing Setting

3.5.2.1. Noise

FTA has identified three categories of sensitive land uses. These land uses include 1) tracts of land where quiet is an essential element (e.g., recording studios), 2) residences and buildings where people normally sleep, and 3) institutional land uses with primarily daytime and evening use (e.g. schools and churches). Sensitive land uses are further defined in Table 3.5.6.

Operational Screening Distances

FTA has established a noise screening criteria designed to identify locations where operational activity may cause a noise impact. Relevant screening criteria are shown in

Table 3.5.7. Based on the screening criteria, sensitive receptors potentially impacted by operational activities are residences along the eastern side of Aviation Boulevard. Bright Star Secondary Charter Academy located on the east side of Aviation Boulevard would be outside of the FTA’s screening distance. The nearest residence is approximately 100 feet from the project site. Additionally, there is a Travelodge Hotel on the project site’s southwest side, approximately 100 feet to the southeast of project site.

Table 3.5.6 Land Use Categories and Metrics for Transit Noise Impact Criteria

Land Use Category	Noise Metric (dBA)	Description of Land Use Category
1	Outdoor $L_{eq}(h)$ ¹	Tracts of land where quiet is an essential element in their intended purpose. This category includes lands set aside for serenity and quiet, and such land uses as outdoor amphitheaters and concert pavilions, as well as National Historic Landmarks with significant outdoor use. Also included are recording studios and concert halls.
2	Outdoor L_{dn}	Residences and buildings where people normally sleep. This category includes homes, hospitals and hotels where a nighttime sensitivity to noise is assumed to be of utmost importance.
3	Outdoor $L_{eq}(h)$ ¹	Institutional land uses with primarily daytime and evening use. This category includes schools, libraries, theaters and churches where it is important to avoid interference with such activities as speech, meditation and concentration on reading material. Places for meditation or study associated with cemeteries, monuments, museums, campgrounds and recreational facilities can also be considered to be in this category. Certain historical sites and parks are also included.

1. L_{eq} for the noisiest hour of transit-related activity during hours of noise sensitivity.

Source: FTA, 2006.

Table 3.5.7 Screening Distances for Noise Assessment

Type of Project	Screening Distance (Feet) ¹	
	Unobstructed	Intervening Buildings
Rail Rapid Transit Station	200	100
Bus Transit Center	225	150

1. Measured from the centerline of guideway for mobile sources; from center of noise-generating activity for stationary sources.

Source: FTA, 2006.

Construction Screening Distances

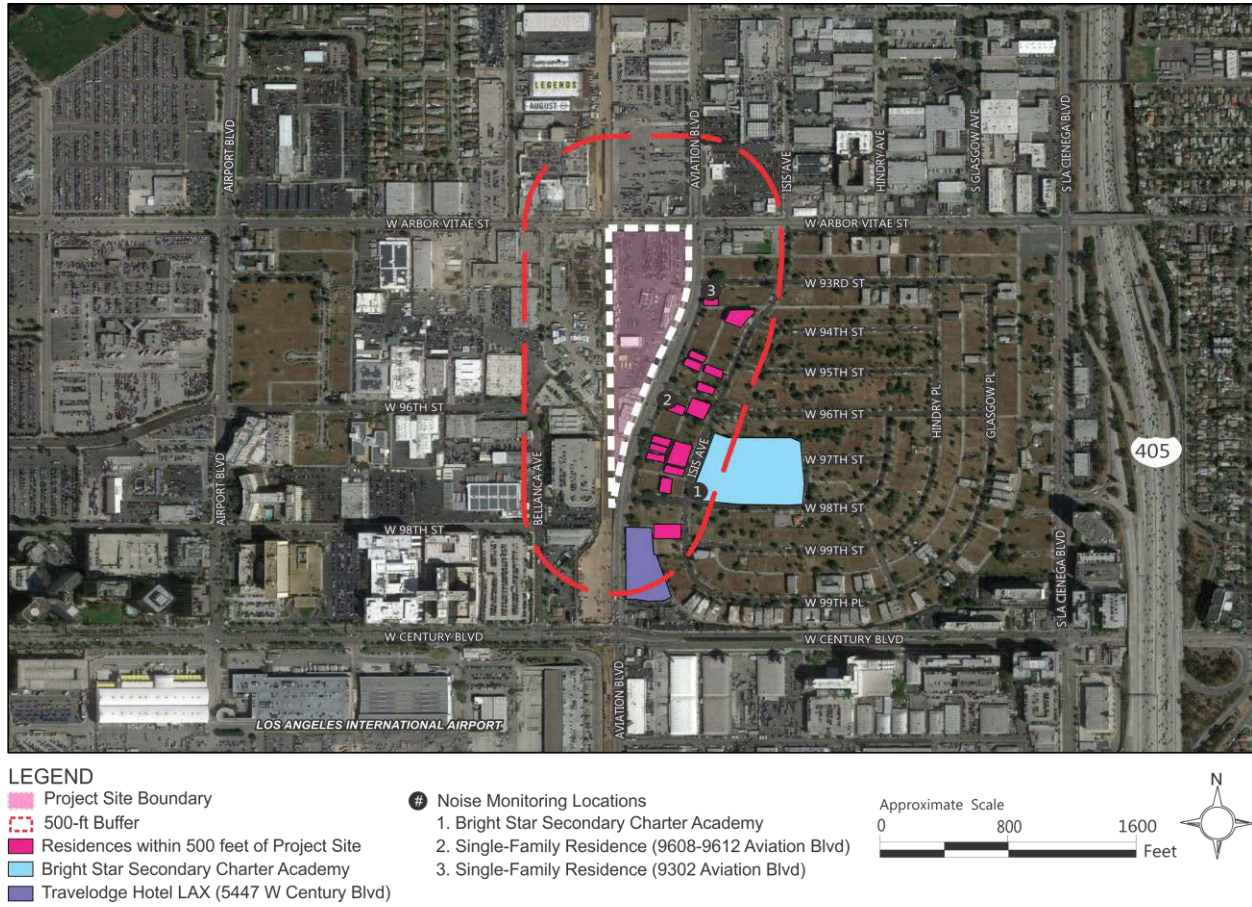
FTA has not established screening criteria distances for assessing construction noise. A 500-foot radius is often used for identifying land uses that may be impacted by construction noise. As shown in Figure 3.5.5 residences are located on the east side of Aviation Boulevard within 500 feet of the project site, as well as the Travelodge Hotel and Brightstar Secondary Charter Academy.

Existing Noise Levels

Sound measurements were taken at sensitive receptors using a SoundPro DL Sound Level Meter between 1:00 PM and 2:30 PM on January 20, 2016 to determine existing ambient daytime noise levels. These readings were used to establish existing ambient noise

conditions and to provide a baseline for evaluating noise impacts. Noise monitoring locations are shown in Figure 3.5.5. As shown in Table 3.5.8, existing ambient sound levels range between 63.3 and 70.0 dBA Leq. The existing noise levels are dominated by aircraft noise and, to a lesser extent, traffic on Aviation Boulevard. Aircraft noise levels do not vary greatly during the day as air traffic is generally a constant activity. The 24-hour noise level at the project site has been established using the LAX noise contours. As previously discussed, the proposed project is located in the 65 to 70 dBA CNEL noise contour.

Figure 3.5.5 Noise Sensitive Receptors and Monitoring Locations



Source: Terry A. Hayes Associates Inc., 2016.

Table 3.5.8 Existing Noise Levels

Key to Figure 3.5.5	Noise Monitoring Location	Distance from Project Site (feet)	Sound Level (dBA, Leq)
1	Bright Star Secondary Charter Academy (5431 W. 98 th St.)	500	63.3
2	Single-Family Residence (9608 – 9612 Aviation Blvd.)/ Travelodge Hotel LAX	100	70.0
3	Single-Family Residence (9302 Aviation Blvd.)	120	68.7

Source: Terry A. Hayes Associates Inc., 2016.

3.5.2.2. Vibration

FTA has identified three categories of sensitive land uses. Category 1 receptors are highly sensitive to vibration and typical land uses include vibration-sensitive research and manufacturing, hospitals with vibration-sensitive equipment and university research operations. Category 2 receptors include all residential land uses and buildings where people sleep, such as hotels and hospitals. Category 3 receptors include schools, churches, other institutions and quiet offices that do not have vibration-sensitive equipment, but still have the potential for activity interference.

Operational Screening Distances

FTA has published screening distance for vibration assessments of bus projects as shown in Table 3.5.9. As discussed above, the nearest residence is approximately 100 feet east of the project site. The FTA guidance does not include vibration screening criteria for light rail transit stations.

Table 3.5.9 Screening Distances for Vibration Assessment

Type of Project	Critical Distance for Land Use Categories Distance from Right-of-Way or Property Line ¹		
	Category 1	Category 2	Category 3
Bus Projects	100	50	--

1. The land-use categories are defined in Table 3.5.6, Land Use Categories and Metrics for Transit Noise Impact Criteria.

Source: FTA, 2006.

Construction Screening Distances

FTA has not established screening distances for construction vibration.

Existing Vibration Levels

The project area does not include substantial sources of vibration. Based on field visits, vibration is not perceptible outside the roadway right-of-way.

3.5.3. Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines, the proposed project would have a significant impact related to noise and vibration if it would result in:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels;
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;

- Exposure of persons residing or working in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or a public use airport, to excessive noise levels; and/or
- Exposure of persons residing or working within the vicinity of a private airstrip to excessive noise levels.

3.5.4. Impact Analysis and Mitigation

Impact Analysis

This section assesses potential impacts associated with the proposed project and, if necessary, identifies mitigation measures to eliminate or reduce impacts. The methodology implemented in this assessment consists of evaluating whether the proposed project would have significant noise and vibration impacts according to the above-stated thresholds.

Impact 3.5.1 Would the proposed project create levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Construction

Construction of the proposed project would result in temporary increases in ambient noise levels in the project area on an intermittent basis. Noise levels would fluctuate depending on the construction phase, equipment type and duration of use, distance between the noise source and receptor, and presence or absence of noise attenuation barriers. Construction activities typically require the use of numerous types of noise-generating equipment. Typical noise levels from various types of equipment that may be used during construction are listed in Table 3.5.10. The table shows noise levels at distances of 50 and 100 feet from the construction noise source.

Table 3.5.10 Maximum Noise Levels of Common Construction Machines

Noise Source	Noise Level (dBA)	
	50 Feet	100 Feet
Backhoe	77.6	71.5
Compressor (air)	77.7	71.6
Concrete Mixer Truck	78.8	72.8
Concrete Pump Truck	81.4	75.4
Crane	80.6	74.5
Dozer	81.7	75.6
Dump Truck	76.5	70.4
Excavator	80.7	74.7
Flat Bed Truck	74.3	68.2
Front End Loader	79.1	73.1
Grader	85.0	79.0
Paver	77.2	71.2
Roller	80.0	74.0
Welder / Torch	74.0	68.0

Source: FHWA, 2008.

To more accurately characterize construction-period noise levels, the average noise level was calculated based on the quantity, type, and usage factors for each type of equipment that would be used during each construction phase and are typically attributable to multiple pieces of equipment operating simultaneously. The noise levels shown in Table 3.5.11 take into account the likelihood that more than one piece of construction equipment would be in operation at the same time and lists the typical overall noise levels that would be expected for construction. The highest noise levels are expected to occur during the grading/excavation and finishing phases of construction. A typical piece of noisy equipment is assumed to be active for 40 percent of the eight-hour workday (consistent with the USEPA studies of construction noise), generating a noise level of 89 dBA L_{eq} at a reference distance of 50 feet.

Table 3.5.11 Outdoor Construction Noise Levels

Construction Phase	Noise Level At 50 Feet (dBA)
Ground Clearing	84
Grading/Excavation	89
Foundations	78
Structural	85
Finishing	89

Source: USEPA, 1971.

Construction noise levels were based on information obtained from USEPA. Noise levels associated with typical construction equipment were obtained from the Federal Highway Administration Roadway Construction Noise Model. This model predicts noise from construction operations based on a compilation of empirical data and the application of acoustical propagation formulas. Maximum equipment noise levels were adjusted based on anticipated percent of use. Example equipment noise levels were estimated by making a distance adjustment to the construction source noise level. The methodology used for this analysis can be viewed in Section 2.1.4 (Sound Propagation) of the California Department of Transportation (Caltrans) Technical Noise Supplement.

Noise levels would vary throughout the construction process depending on the activity and location. Metro, as the Lead Agency, has the discretion to establish the significance threshold for identifying potential construction noise impacts. The FTA has stated that, "Generally, local ordinances are not very useful in evaluating construction noise. They usually relate to nuisance and hours of allowed activity and sometimes specific limits in terms of maximum levels, but are generally not practical for assessing the impact of a construction project (FTA, 2006)." Land uses that would be affected by construction noise are located in the City of Los Angeles. Construction noise is addressed in Section 41.40 of the Los Angeles Municipal Code, which does not include a maximum permitted noise level. Construction activities would comply with Section 41.40 and design criteria established by Metro (e.g., well-maintained equipment with effective noise control devices, such as mufflers). In addition, the proposed project would not require nighttime construction activities and would comply with the time limitations in the Los Angeles Municipal Code (no construction between the hours of 9:00 PM and 7:00 AM of the following day).

In the absence of a construction noise limit in the Los Angeles Municipal Code, a quantitative impact assessment was completed using typical community responses to noise. As previously discussed, a change in existing noise levels of at least 5 dBA would be noticeable and would likely evoke a community reaction. Table 3.5.12 presents the estimated noise levels at sensitive receptors within 500 feet of the project site based on a noise source of 89 dBA Leq. The noise source was considered to be at the center of the project site as construction activity would occur throughout the project site and often on the western side of the project site away from the sensitive land uses across Aviation Boulevard. The maximum noise level increase would be 4.3 dBA, which would not likely evoke a community reaction. In addition, construction noise levels would not exceed the FTA daytime impact criteria of 90 dBA Leq for residences and 100 dBA Leq for commercial/industrial uses. Therefore, the proposed project would result in a less-than-significant impact related to construction noise.

Table 3.5.12 Construction Noise Levels

Sensitive Receptor (Figure 3.5.5)	Distance from the Center of Construction Activity (feet)	Maximum Construction Noise Level (dBA)	Existing Ambient Noise Level (dBA, Leq)	New Ambient Noise Level (dBA, Leq)	Increase
Bright Star Secondary Charter Academy (5431 W. 98 th St.)	800	64.9	63.3	67.2	3.9
Single-Family Residence (9608-9612 Aviation Blvd.)	500	69.9	70.0	72.5	2.5
Single-Family Residence (9302 Aviation Blvd.)	400	70.9	68.7	73.0	4.3
Travelodge Hotel LAX (5447 Century Blvd.)	1,300	60.7	70.0	70.5	0.5

Source: Terry A. Hayes Associates Inc., 2016.

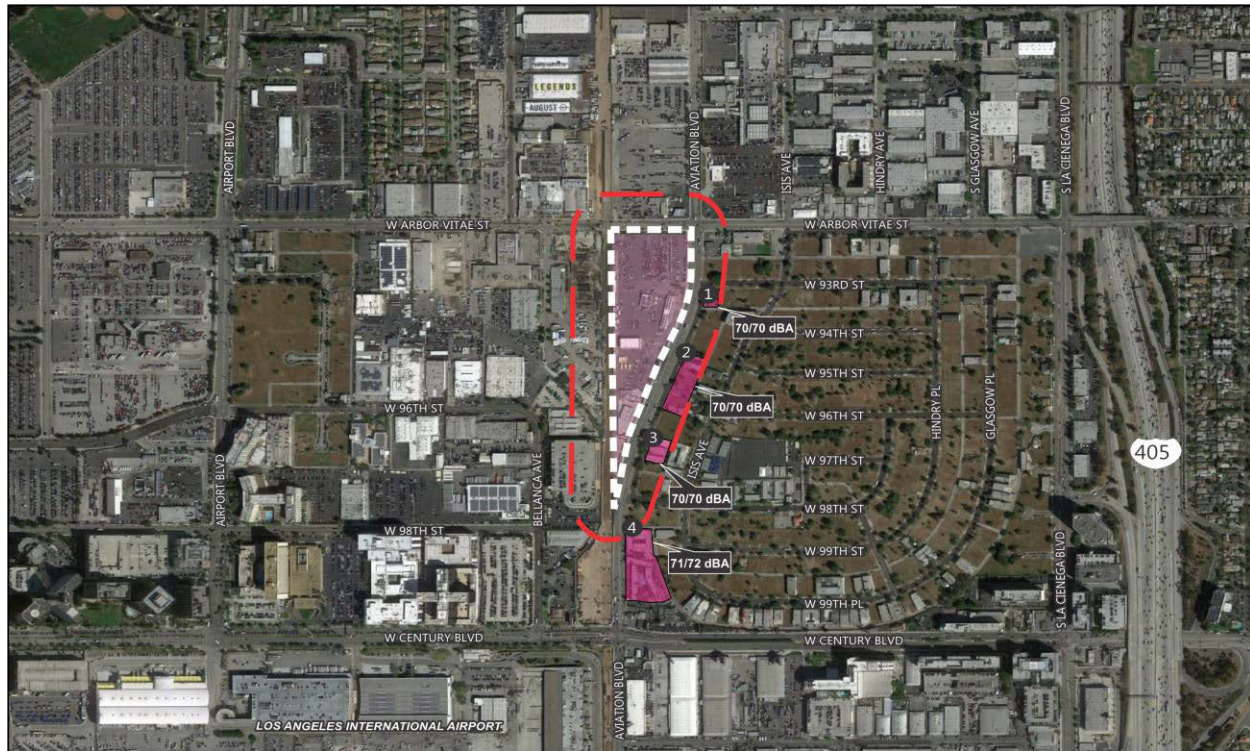
Operations

The proposed project would generate operational noise associated with bus and passenger vehicle movements on and off the project site and light rail activity at the station. An analysis of combined noise levels at sensitive receptors was completed using the FTA's Noise Impact Assessment Spreadsheet. The FTA Spreadsheet allows for multiple noise sources to be selected and attenuated as the distance to the receptor increases. A number of factors can be selected such as the average travel speed of the trains, as well as number of events per hour, number of intervening buildings, and the average number of buses per hour. A full description of the general assessment procedures can be found in Chapter Five of the FTA's Transit Noise and Vibration Impact Assessment Manual.

The FTA Spreadsheet was used to characterize the baseline conditions during the opening year. The analysis was conducted for four clusters of sensitive receptors. For each cluster, the closest receiver was selected and used as a reference point for noise distance attenuation from each noise source, as shown in Figure 3.5.6. The 225-foot buffer relates to the FTA screening distance for operational noise. Distances from source to receiver were calculated from each respective source's centerline. The existing conditions near the project site do not include the

Crenshaw/LAX or the Green LRT Lines and associated noise sources, such as the grade crossing at Arbor Vitae Street.

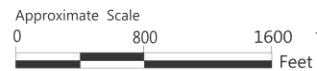
Figure 3.5.6 Noise Receivers and Sensitive Receptor Clusters



LEGEND

- Project Site Boundary
- 225-Foot Buffer
- Sensitive Receptor Cluster
- Noise Levels: Existing/Total Noise Exposure

- Noise Receiver
- 1. Single-Family Residence (9302 Aviation Blvd)
- 2. Single-Family Residence (9608-9612 Aviation Blvd)
- 3. Multi-Family Residence (9700 Aviation Blvd)
- 4. Travelodge Hotel LAX (5547 W Century Blvd)



Source: Terry A. Hayes Associates Inc., 2016.

The baseline noise conditions near the project site were established using the LAX Noise Contour Map and associated 70 dBA L_{dn}. The FTA Spreadsheet was used to add in rail and warning signal noise that will exist when the project begins operations. The noise modeling inputs included 24 trains per hour during daytime hours, 6 trains per hour during nighttime hours, 480 seconds of grade crossings per hour during daytime hours and 120 seconds of grade crossings per hour during nighttime hours. A train speed of 35 miles per hour was used to establish existing railway noise. Light rail trains will be equipped with a horn, known as quacker, which is sounded when entering stations. The quacker has not been included as a separate source in the noise analysis because the station would be located approximately 400 feet from the closest sensitive receptor. At this distance, the FTA analysis indicates that noise from the quacker would not audibly contribute to project-related noise levels at the sensitive land uses east of the project site due to distance.

Audible warnings are required by the CPUC at all gate-protected at-grade crossings. The required audible warnings are ringing bells that are located on the masts of the crossing gates and sounding of horns (quacker) located on the lead vehicle of the trains. The nearest at-

grade crossing is located at Arbor Vitae Street on the northwestern corner of the proposed project site.

The emergency horn is 10 dB louder than the quacker. Although train headways include 24 trains per hour during daytime hours and 6 trains per hour during nighttime hours, operation of the emergency horn is anticipated to be infrequent as the main purpose is to warn pedestrians or automobiles that are on the tracks as a train approaches.

Regarding light rail activity, noise is primarily generated by the train’s steel wheels rolling on steel rails. This rolling noise increases in direct proportion to increases in train speed, and also increases substantially when impacts occur as train wheels traverse the rail gaps and joints of special trackwork for crossovers and turnouts. In the project condition, the average train speed was adjusted from 35 to 20 miles per hour to account for the new station. No revisions were made to the number of trains per hour in the project condition. Similarly, no project-related change was made to grade crossing noise.

Regarding passenger vehicles, the proposed project would also generate 92 average daily vehicle trips (passenger pick-up and drop-off trips) along Aviation Boulevard, or 18 peak hour trips in the AM and PM peak hours. The existing without project AM and PM weekday peak hour traffic volumes at Aviation Boulevard are 1,568 and 1,536 vehicles, respectively. The project would increase passenger vehicles trips along Aviation Boulevard by less than 1.0 percent, and there would not be a quantifiable change in mobile source noise. As such, project-related passenger vehicles noise was not included in the analysis.

Project-related noise at noise receivers from all sources is shown in Table 3.5.13. This impact would be less than significant and does not require mitigation measures. The proposed project would increase noise levels by 1 dBA or less at sensitive receivers, and noise levels would not exceed the significance thresholds for moderate or severe impacts. Therefore, the proposed project would result in a less-than-significant impact related to operational noise.

Mitigation Measures

This impact would be less than significant and does not require mitigation measures.

Table 3.5.13 Project Daytime/Nighttime Noise Levels and Impacts

Noise Receiver (Figure 3.5.6)	Existing Ldn (dBA)	Total Noise Exposure Ldn (dBA)	Project Ldn - (dBA)	Noise Impact Criteria (dBA) (Table 3.5.1)		Impact
				Moderate	Severe	
1	70	70	52	64	69	None
2	70	70	59	64	69	None
3	70	70	60	64	69	None
4	71	72	64	65	70	None

Source: FHWA, 2007; Terry A. Hayes Associates Inc., 2016.

Impact 3.5-2 Would the proposed project expose people to or generate excessive ground-borne vibration or ground-borne noise levels?

Construction

Vibration levels generated by construction equipment were estimated using example vibration levels and propagation formulas provided by FTA (2006). The methodology used for the analysis can be viewed in Section 12.2 (Construction Vibration Assessment) of the FTA guidance.

Construction activity can generate varying degrees of vibration, depending on the construction procedure and the construction equipment used. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of a construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight structural damage at the highest levels.

In most cases, the primary concern regarding construction vibration relates to damage. Activities that can result in damage include demolition and drilling in close proximity to sensitive structures. Typical vibration levels associated with construction equipment are provided in Table 3.5.14. Heavy equipment (e.g., a large bulldozer) generates vibration levels of 0.089 PPV inches per second at a distance of 25 feet.

Table 3.5.14 Typical Construction Equipment Vibration Levels

Equipment	PPV at 25 feet (inches/second)	VdB at 25 feet (micro-inches/second)
Large Bulldozer	0.089	87
Loaded Trucks	0.076	86
Small Bulldozer	0.003	58
Caisson Drill	0.089	87

Source: FTA, 2006.

Minimum safe distances between construction and nearby buildings are presented in Table 3.5.5, above. This project would not involve impact or sonic pile driving or large vibratory rollers. As a result, the minimum safe distance between construction activities and buildings would be 37 feet for this project, which would not be exceeded. The nearest sensitive receptors are single family residences located at 9608 – 9612 Aviation Boulevard, approximately 100 feet to the east of the project site. The resulting vibration level at 100 feet from the use of a large bulldozer would be approximately 0.01 PPV inches per second or 69 VdB micro-inches per second. According to the FTA vibration damage criteria shown in Table 3.5.14, vibration can damage engineered concrete and masonry buildings (no plaster) when levels exceed 0.3 PPV inches per second. In addition, frequent vibration events, such as construction equipment activity, can result in residential annoyance when levels exceed 72 VdB micro-inches per second. Vibration levels would be below the relevant guidance for

assessing impacts. Therefore, the proposed project would result in a less-than-significant impact related to construction vibration.

Operations

Operational vibration would be generated by light rail activity on the Crenshaw/LAX and Metro Green LRT lines and bus activity on the roadway network. Regarding vibration from light rail, Crenshaw/LAX Transit Project EIR/EIS included a detailed vibration analysis associated with trains passing the project site at 35 miles per hour. No vibration impacts were identified near the project site. The proposed transit station would result in lower train speeds than assessed in the Crenshaw/LAX Transit Project EIR/EIS because the trains will need to slow to stop at the station. Trains generate less vibration at lower speeds and vibration levels would be less than presented for the Crenshaw/LAX Transit Project, and would not result in a new impact that was not disclosed in that EIR/EIS. Therefore, the proposed project would result in a less-than-significant impact related to operational vibration from light rail activity.

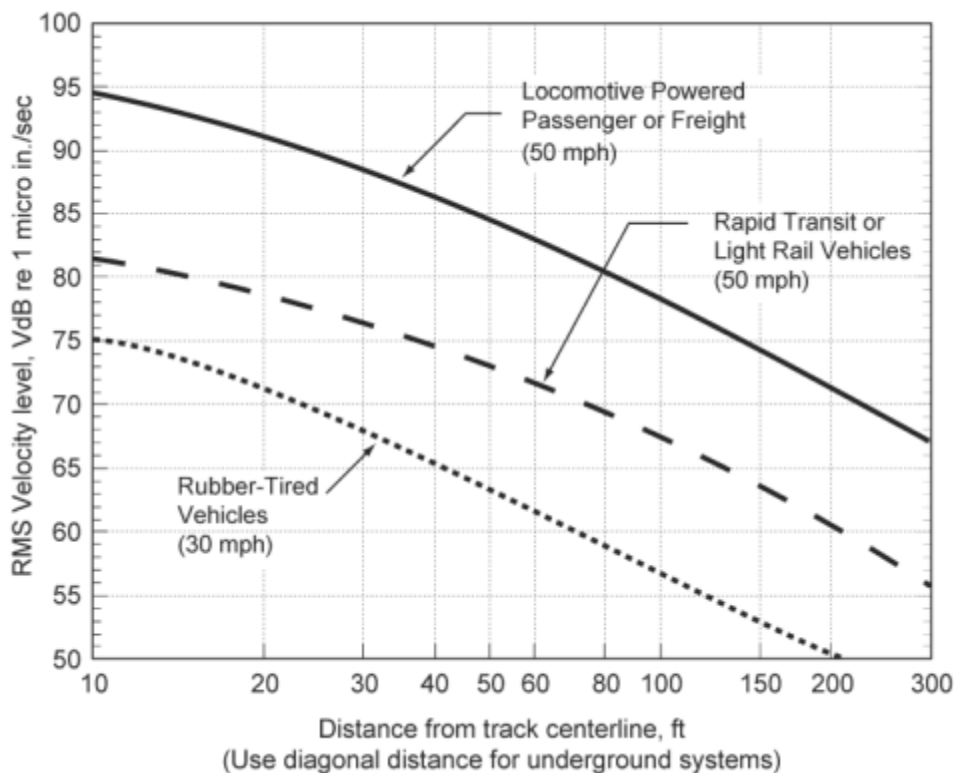
Regarding vibration, the FTA has stated that the rubber tires and suspension systems of buses provide vibration isolation, making it unusual for buses to cause ground-borne noise or vibration problems. When buses cause effects such as rattling of windows, the source is almost always airborne noise. Most problems with bus-related vibration can be directly related to a pothole, bump, expansion joint, or other discontinuity in the road surface. The roadway system near the project is in good condition.

Figure 3.5.7 shows that rubber-tired vehicles traveling 30 miles per hour typically generate a vibration level of approximately 64 VdB micro-inches per second at 50 feet. The greatest potential for impact would be to the Travelodge Hotel LAX, which is adjacent to Aviation Boulevard. The residences across and east of the project site are separated from Aviation Boulevard by a frontage road, and would be further from bus activity than the Travelodge Hotel LAX. The Travelodge Hotel LAX would be 35 feet from the Aviation Boulevard centerline, and the vibration level from buses would be 67 VdB micro-inches per second. This vibration level is based on a bus speed of 30 miles per hour, which considers the traffic light at the intersection of Aviation and Century Boulevards. The anticipated vibration level would be less than the 72 VdB micro-inches per second annoyance threshold for buildings where people sleep. Therefore, the proposed project would result in a less-than-significant impact related to operational vibration from buses.

Mitigation Measures

This impact would be less than significant and does not require mitigation measures.

Figure 3.5.7 Ground Surface Vibration Curves



Source: FTA, 2006.

Impact 3.5-3 Would the proposed project create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Impact Analysis

Potential permanent increases in ambient noise levels were assessed above for mobile and stationary sources. As discussed in Impact 3.5-1, above, operational activity would not significantly increase noise levels over existing conditions. Therefore, the proposed project would result in a less than significant impact related to a substantial permanent increase in ambient noise levels.

Mitigation Measures

This impact would be less than significant and does not require mitigation measures.

Impact 3.5-4 Would the proposed project create a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Potential temporary increases in ambient noise levels were assessed above for construction activity. As discussed in Impact 3.5-1, above, construction activity would not generate significant noise levels. Therefore, the proposed project would result in a less than significant impact related to a substantial temporary or periodic increase in ambient noise levels.

Mitigation Measures

This impact would be less than significant and does not require mitigation measures.

Impact 3.5-5 For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Impact Analysis

A significant impact would occur if the proposed project exposed persons residing or working in the area to risks associated with the proximity of an airport or airstrip. The project site is located in the noise contour of the LAX land use plan airport influence area and has the potential to expose people working in the project area to excessive noise levels (County of Los Angeles, 2003). The proposed project is a transportation center that is designed to serve LAX. By nature, the project site is exposed to increased noise levels associated with proximity to LAX. The existing CNEL at the project site ranges from 65 to 70 dBA CNEL and instantaneous noise levels associated with aircraft activity is in the 80 dBA range. Employees at the existing on-site land uses do not use personal noise protection devices. Similarly, it is not anticipated that patrons and employees of the proposed project would require personal noise protection devices. Because the project site is located near LAX, existing ambient noise levels are relatively high due to aircraft noise. However, as discussed above, the ambient noise levels are not considered excessive. Therefore, the proposed project would result in a less than significant impact related to excessive noise levels associated with public airports.

Mitigation Measures

This impact would be less than significant and does not require mitigation measures.

Impact 3.5-6 For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels.

Impact Analysis

A significant impact would occur if the proposed project exposed persons residing or working in the area to risks associated with the proximity of a private airstrip. The proposed project is not within the proximity of a private airstrip. Therefore, the proposed project would result in no impact related to excessive noise levels associated with private airstrips.

Mitigation Measures

This impact would be less than significant and does not require mitigation measures.

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3.6. TRANSPORTATION AND TRAFFIC

This section provides an overview of transportation and traffic in the study area. The study area is defined roughly by Manchester Avenue to the north, La Cienega Boulevard to the east, the Imperial Highway and I-105 to the south and Sepulveda Boulevard to the west. The following section provides a brief discussion of the regional and local regulatory framework pertaining to transportation and traffic and assesses potential construction and operational impacts associated with the proposed project.

3.6.1. Regulatory Framework

3.6.1.1. Federal

Americans with Disabilities (ADA) Act of 1990

Titles I, II, III, and V of the ADA have been codified in Title 42 of the United States Code, beginning at Section 12101. Title III prohibits discrimination on the basis of disability in “places of public accommodation” (businesses and non-profit agencies that serve the public) and “commercial facilities” (other businesses). The regulation includes Appendix A to Part 36 (Standards for Accessible Design), establishing minimum standards for ensuring accessibility when designing and constructing a new facility or altering an existing facility. Examples of key guidelines include detectable warnings for pedestrians entering traffic where there is no curb, a clear zone of 48 inches for the pedestrian travel way and a vibration-free zone for pedestrians (United States Code, 1990).

3.6.1.2. State

Complete Streets Act

Assembly Bill (AB) 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.

Statewide Transportation Improvement Program (STIP)

Caltrans administers transportation programming for the state. Transportation programming is the public decision-making process that sets priorities and funds projects envisioned in long-range transportation plans. It commits expected revenues over a multi-year period to transportation projects. The STIP is a multi-year capital improvement program of transportation projects on and off the State Highway System, funded with revenues from the State Highway Account and other funding sources (Caltrans, 2015).

3.6.1.3. Regional

Metro Congestion Management Program (CMP)

Metro, the local CMP agency, has established an approach to implement the statutory requirements of the CMP. The Metro Board adopted the 2010 CMP in October 2010. The approach includes designating a highway network that includes all state highways and principal arterials within the County and monitoring the network's congestion. The CMP identifies a system of highways and roadways, with minimum levels of service performance measurements designated at Level of Service (LOS) E (unless exceeded in base year conditions) for highway segments and key roadway intersections on this system. For all CMP facilities within the study area a traffic impact analysis is required. The analysis must: investigate measures which will mitigate the significant CMP system impacts; develop cost estimates, including the fair share costs to mitigate impacts of a proposed project; and, indicate the responsible agency. Selection of final mitigation measures is left at the discretion of the local jurisdiction. Once a mitigation program is selected, the jurisdiction self-monitors implementation through the existing mitigation monitoring requirements of CEQA (Metro, 2010).

Metro 2009 Long Range Transportation Plan (LRTP)

The 2009 LRTP includes funding for general categories of improvements, such as Arterial Improvements, Nonmotorized Transportation, Rideshare and Other Incentive Programs, Park-and-Ride Lot Expansion, and Intelligent Transportation System (ITS) improvements for which Call for Project Applications can be submitted for projects in Los Angeles County. Metro also has a Short Range Transportation Plan to define the near-term (through year 2024) transportation priorities in Los Angeles County. In addition to the regional transportation plans, Metro has recently adopted a Complete Streets Policy and a First Last Mile Strategic Plan (Metro, 2009).

Metro Complete Streets Policy

Metro's recently adopted Complete Streets policy is reinforcing the California Complete Streets Act (AB 1358). Effective January 1, 2017, Metro is requiring that all local jurisdictions within Los Angeles County must adopt a Complete Streets Policy, an adopted city council resolution supporting Complete Streets, or an adopted general plan consistent with the California Complete Streets Act of 2008 in order to be eligible for Metro capital grant funding programs, starting with the 2017 grant cycles (Metro, 2014).

SCAG 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and Regional Transportation Improvement Program (RTIP)

SCAG adopted the 2016-2040 RTP/SCS in April 2016. The RTP/SCS is a planning document required under state and federal statute that encompasses the SCAG region, including six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura and Imperial. The RTP/SCS forecasts long-term transportation demands and identifies policies, actions, and

funding sources to accommodate these demands. The RTP/SCS consists of the construction of new transportation facilities, transportation systems management strategies, transportation demand management and land use strategies (SCAG, 2016). The RTIP, also prepared by SCAG based on the RTP/SCS, lists all of the regional funded/programmed improvements over a six-year period (SCAG, 2015). The updated 2016 Model was unavailable prior to the completion of this report; therefore, the assumptions and Metro Model outputs are based on the prior 2012 RTP/SCS.

3.6.1.4. Local

City of Los Angeles Mobility Plan 2035

The City updated the Transportation Element of the City's General Plan, now referred to as Mobility Plan 2035 or MP 2035, to reflect policies and programs that will lay the policy foundation for safe, accessible, and enjoyable streets for pedestrians, bicyclists, transit users, and vehicles throughout the City of Los Angeles. The MP 2035 and Final EIR were adopted on August 11, 2015. MP 2035 is compliant with the 2008 Complete Streets Act (Assembly Bill 1358), which mandates that the circulation element of a city's General Plan be modified to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan (City of Los Angeles, 2016). MP 2035 identifies several typologies of "enhanced networks" to guide street design and prioritize one or more modes of travel appropriate to the character of the street and demand for certain travel needs. The typologies include transit, freight, bicycle and pedestrian, as well as vehicle enhanced (prioritizing critical through-traffic to connect with freeways) and neighborhood enhanced (prioritizing low-speed neighborhood streets with a focus on safety and sharing space between cars and active modes). Several streets in the study area are included in the enhanced networks of MP 2035.

Transit Enhanced Network

- Sepulveda Boulevard is identified as a Comprehensive Transit Enhanced Street
- Century Boulevard is shown as a Moderate Transit Enhanced Street

Neighborhood Enhanced Network

- Portions of 96th Street
- Aviation Boulevard
- Portion of Century Boulevard

Bicycle Enhanced Network

- Aviation Boulevard
- Westchester Parkway/Arbor Vitae Street
- Imperial Highway

Vehicle Enhanced Network

No streets in the study area are identified as part of the Vehicle Enhanced Network.

Pedestrian Enhanced Network

Segments of:

- Sepulveda Boulevard
- Aviation Boulevard
- Westchester Parkway / Arbor Vitae Street
- 96th Street
- 98th Street

Goods Movement Network

Sepulveda Boulevard is identified up to and continuing on Lincoln Boulevard as a truck route.

Los Angeles International Airport (LAX) Plan

The LAX Plan, an element of the City of Los Angeles General Plan, provides goals, objectives, policies, and programs that establish a framework for the development of facilities for movement and processing of passengers and cargo at LAX. It is intended to promote an arrangement of airport uses that encourage and contribute to the modernization of the Airport in an orderly and flexible manner within the context of the City of Los Angeles and the Los Angeles region (LAWA, 2004 (amended 2013)).

Los Angeles International Airport (LAX) Specific Plan

The LAX Specific Plan provides regulatory controls and incentives for the systemic and incremental execution of the LAX Plan, an element of the City of Los Angeles General Plan. The LAX Specific Plan establishes zoning and development regulations applicable to development at LAX, focusing primarily on land use, transportation, parking, and signage regulations, with the land use regulations containing both comprehensive regulations as well as regulations specific to the individual subareas of LAX (Airport Airside, Airport Landside and LAX Northside) (LAWA, 2013). Although the project site does not fall within the LAX Plan or Specific Plan boundaries, the area east of Aviation Boulevard across from the project site and bounded by Arbor Vitae Street, La Cienega Boulevard and Century Boulevard falls within the Airport Landside zone of the Specific Plan.

3.6.2. Existing Conditions

The following is a summary of the existing roadway network and traffic conditions in the study area. Descriptions are provided for existing conditions of major freeways and arterials in the study area.

3.6.2.1. Roadway Network

Freeways

The list below describes the regional freeways within the study area.

- **Interstate 405 (I-405)** is a major north-south freeway that connects the Westside region of Los Angeles with the San Fernando Valley, the South Bay region including the City of Torrance, the City of Long Beach, and southward through Orange County. I-405 is at the eastern edge of the study area and is responsible for carrying a large amount of the traffic bound for the airport from the north and south. I-405 experiences heavy congestion throughout much of the day, seven days a week.
- **Interstate 105 (I-105)** is a major east-west freeway extending from LAX east to the City of Norwalk. The Metro Green Line light rail service operates in the center median of the I-105 freeway.

Arterials

The list below describes key arterials and relevant local streets within the study area.

East-West Arterials and Streets

- **Manchester Avenue** is an arterial to the north of the study area.
- **Westchester Parkway** is an arterial that bounds the north end of the project site. Westchester Parkway provides connections from the shoreline east towards the airport.
- **Arbor Vitae Street** continues east where Westchester Parkway meets Airport Boulevard and continues east across I-405 into the City of Inglewood.
- **96th Street** is a local collector which extends in the study area from Sepulveda Boulevard eastwards past Airport Boulevard before turning south at Bellanca Avenue. 96th Street resumes east of Aviation Boulevard through the Manchester Square neighborhood.
- **98th Street** is a local collector extending in the study area from Sepulveda Boulevard eastwards to Bellanca Avenue. 98th Street resumes east of Aviation Boulevard for a short segment in the Manchester Square neighborhood.
- **Century Boulevard** is a major arterial with a direct connection from the CTA eastwards across South Los Angeles. As the primary arterial connection between the CTA and I-405, Century Boulevard carries a high volume of traffic through much of the day. Many airport-serving businesses such as hotels are located on Century Boulevard, as well.
- **Imperial Highway** is a major arterial at the southern end of the study area that parallels I-105 and runs along the southern edge of LAX.

North-South Arterials and Streets

- **Sepulveda Boulevard** is a principal arterial in the study area that provides direct access to the CTA and crosses beneath the southern runways. From the intersection with Lincoln Boulevard and continuing south, Sepulveda Boulevard serves as State Route 1, also known as the Pacific Coast Highway. To the north, Sepulveda Boulevard connects to University of California, Los Angeles (UCLA) and West Los Angeles before crossing over the Santa Monica Mountains into the San Fernando Valley and runs parallel to I-405. To the south, it continues through El Segundo and the South Bay communities as State Route 1.
- **Airport Boulevard** is a minor arterial which begins north of La Tijera Boulevard and continues south through the study area to Century Boulevard.
- **Aviation Boulevard** is an arterial and provides direct access to the project site. The road begins from the north at the intersection of Manchester Avenue and continues south past Century Boulevard and the eastern edge of LAX all the way to the City of Hermosa Beach where it intersects with Pacific Coast Highway.
- **La Cienega Boulevard** is an arterial to the east of the study area, running parallel to I-405. It begins at Sunset Boulevard in the City of West Hollywood and continues southwards through the City of Los Angeles and Inglewood, passing LAX near the intersection of I-405 and I-105 before ending just south of this junction at El Segundo Boulevard.

Pedestrian and Bicycle Facilities

Streets in the study area generally include a connected network of sidewalks and crosswalks present at major intersections. Due to land use, street widths and access opportunities, pedestrian volumes are generally low along most streets in the study area. Bicycle lanes or other bike facilities are also sparse in the study area. A bike lane is present on 96th Street from Vicksburg Avenue east to Airport Boulevard. Bike lanes are also present on Aviation Boulevard south of Century Boulevard. Bike lanes are present on Imperial Highway from Aviation Boulevard to the west, and on West 111th Street between Aviation and La Cienega Boulevard.

Transit Service

The study area is served by several transit agencies, including Metro, Santa Monica Big Blue Bus, Culver CityBus, Beach Cities Transit, Torrance Transit and Gardena Bus Lines. Additionally, LAWA operates the long-distance express FlyAway bus service between several communities throughout Los Angeles directly into the CTA. Table 3.6.1 summarizes the transit lines operating in the study area.

Existing Local Transit Ridership

Stop-level data were analyzed from the available agencies – Metro, Big Blue Bus, and Culver CityBus; stop-level data were not available for the other municipal operators serving the study area. Under existing conditions, most ridership activity is concentrated at either the LAX City

Bus Center at Lot C on 96th Street or the Aviation/LAX Green Line Station on Aviation Boulevard at Imperial Highway. A smaller share of boardings and alightings occur along Century Boulevard, especially at Aviation/Century Boulevards and Century Boulevard/International Road. Figure 3.6.1 shows the distribution of riders from these three operators within the study area.

Table 3.6.1 LAX-Area Transit Services

Operator & Route	Service Area	Average Peak Hour Headway (min)
Big Blue Bus (BBB) Line 3	Santa Monica to Green Line Aviation Station via Lincoln Blvd.	15
BBB Rapid 3		15
Culver CityBus (CC) Line 3	UCLA to Green Line Aviation Station via Sepulveda Blvd.	20
CC Rapid 3		15
Gardena Line 5	Green Line Imperial Station to Green Line Aviation Station via El Segundo Blvd.	30
Torrance Transit Line 8	Torrance to LAX City Bus Center via Hawthorne and Aviation Blvds.	20-30
Metro Line 102	South Gate to LAX City Bus Center via La Tijera and Exposition Blvds.	30-60
Beach Cities Transit Line 109	Redondo Beach to LAX City Bus Center via Beach Cities, Sepulveda and Aviation Blvd.	30-45
Metro Line 111	Norwalk Green Line Station to LAX City Bus Center via Florence Ave.	15-20
Metro Line 117	Downey to LAX City Bus Center via Century Blvd. and Imperial Hwy.	20
Metro Line 232	Long Beach to LAX City Bus Center via Sepulveda Blvd. and Pacific Coast Hwy.	30
LAX Flyaway	Van Nuys	15
	Union Station	30
	Westwood	60
	Santa Monica	60
	Hollywood	60
	Orange Line Woodley Station	60
	Long Beach	60

Source: Fehr and Peers, 2016.

Figure 3.6.1 Stop-Level Daily Boardings for Select Operators in Study Area



Source: Fehr and Peers, 2016.

3.6.2.2. Study Intersections

A total of 24 key intersections in the study area were selected for analysis based on the influence area of the proposed project as a multi-modal transportation center. This section describes the existing conditions at these intersections and details the methodology used to conduct the analysis. The study intersections are shown in Figure 3.6.2.

Figure 3.6.2 Study Intersections



Detailed AM and PM peak hour intersection turning movement counts were collected to represent existing traffic volumes on a typical weekday throughout the study area. The traffic count data were provided to Metro by LAWA as part of the LAMP planning and environmental process.

The operations analysis methodology rates intersection conditions based on the average delay, measured in seconds, experienced by drivers. LOS is a qualitative measure used to describe the condition of traffic flow, ranging from LOS A (free-flow conditions) to LOS F (congested conditions). Weekday 7:00 to 8:00 a.m. and 4:00 to 5:00 p.m. peak hours were selected for analysis because they represent the most critical periods of traffic congestion in the study area, compared to other time periods such as weekday, midday or weekend.

Two methods were used to assess potential impacts. The LADOT requires that the Critical Movement Analysis (CMA) method (Transportation Research Board, 1980) be used to determine the intersection volume-to-capacity ratio (V/C) and the corresponding LOS for the given turning movements and intersection characteristics at signalized intersections.

All other jurisdictions within the study area (El Segundo, County of Los Angeles and Inglewood) utilize the Intersection Capacity Utilization (ICU) analysis method to determine V/C and LOS at signalized intersections.

Existing Intersection Operations

Nineteen of the analyzed intersections are located entirely within the City of Los Angeles. Five intersections are located on the border of the City of Los Angeles and other cities and the unincorporated County of Los Angeles: three along the Imperial Highway are shared with the City of El Segundo, one at Aviation and Arbor Vitae Street is shared with the City of Inglewood, and the intersection of Aviation and Imperial Highway is shared with the City of Los Angeles, El Segundo, and Los Angeles County. All intersections in this analysis are signalized. For intersections bordering one or more jurisdictions, the intersection was analyzed using both the ICU and CMA methodology.

The results of the peak hour existing conditions analysis at the 24 study intersections are included in Table 3.6.2. The majority of the study intersections are operating at LOS D or better in the analyzed peak hours. Two intersections, Sepulveda Boulevard at the I-105 ramps and Sepulveda Boulevard at Imperial Highway, operate at LOS E or F during at least one peak hour.

Table 3.6.2 Existing Level of Service

#	N/S Street	E/W Street	Jurisdiction	Existing Conditions			
				AM		PM	
				V/C	LOS	V/C	LOS
1	Sepulveda Blvd.	Manchester Ave.	Caltrans/City of Los Angeles	0.715	C	0.808	D
2	Sepulveda Blvd.	La Tijera Blvd.	City of Los Angeles	0.656	B	0.712	C
3	Sepulveda Blvd.	Westchester Pkwy.	City of Los Angeles	0.735	C	0.784	C
4	Lincoln Blvd.	Sepulveda Blvd.	Caltrans/City of Los Angeles	0.601	B	0.620	B
5	Sepulveda Blvd.	Century Blvd.	Caltrans/City of Los Angeles	0.754	C	0.689	B
6	Sepulveda Blvd.	I-105 WB Ramps (n/o Imperial Hwy.)	Caltrans/City of Los Angeles	1.078	F	0.901	E
7	Sepulveda Blvd.	Imperial Hwy.	Caltrans/El Segundo/City of Los Angeles	0.774	C	1.089	F
8	Sepulveda Eastway	Westchester Pkwy.	City of Los Angeles	0.407	A	0.602	B
9	La Tijera Blvd.	Manchester Ave.	Caltrans/City of Los Angeles	0.508	A	0.504	A
10	Jenny Ave.	Westchester Pkwy.	City of Los Angeles	0.197	A	0.330	A
11	Avion Dr.	Century Blvd.	City of Los Angeles	0.381	A	0.292	A
12	Airport Blvd.	Manchester Ave.	Caltrans/City of Los Angeles	0.573	A	0.651	B
13	Airport Blvd.	Arbor Vitae St./ Westchester Pkwy.	City of Los Angeles	0.661	B	0.763	C
14	Airport Blvd.	96 th St.	City of Los Angeles	0.279	A	0.376	A
15	Airport Blvd.	98 th St.	City of Los Angeles	0.374	A	0.467	A
16	Airport Blvd.	Century Blvd.	City of Los Angeles	0.565	A	0.459	A
17	Nash St./I-105 WB Ramps	Imperial Hwy.	Caltrans/El Segundo/City of Los Angeles	0.414	A	0.350	A
18	Douglas St.	Imperial Hwy.	El Segundo/City of Los Angeles	0.346	A	0.579	A
19	Bellanca Ave.	Century Blvd.	City of LA	0.471	A	0.409	A
20	Aviation Blvd.	Arbor Vitae St.	Inglewood/City of Los Angeles	0.802	D	0.720	C
21	Aviation Blvd.	Century Blvd.	City of Los Angeles	0.730	C	0.729	C
22	Aviation Blvd.	104 th St.	City of Los Angeles	0.520	A	0.507	A
23	Aviation Blvd.	111 th St.	City of Los Angeles	0.475	A	0.459	A
24	Aviation Blvd.	Imperial Hwy.	City of Los Angeles	0.576	A	0.736	C

LOS results based on CMA methodology; Intersections on the border of the City of Los Angeles were also analyzed using the ICU methodology and the LOS results are included in the Traffic Appendix.

Source: Fehr and Peers, 2016.

3.6.3. Thresholds of Significance

State CEQA Guidelines

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

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;
- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
- Substantially increase in hazards due to a design feature or incompatible uses;
- Result in inadequate emergency access; and/or
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

The thresholds used for each impact analysis are described below.

Circulation System

The significant impact criteria related to the circulation system in the study area for each jurisdiction are outlined below. In the case of multi-jurisdiction analyses, the most stringent impact criteria were selected.

City of Los Angeles

The City of Los Angeles has established threshold criteria to determine significant impacts of a proposed project in its jurisdiction. Under the LADOT Guidelines, an intersection would be significantly impacted with an increase in V/C ratio equal to or greater than 0.04 for intersections operating at LOS C, equal to or greater than 0.02 for intersections operating at LOS D and equal to or greater than 0.01 for intersections operating at LOS E or F after the addition of project traffic. Intersections operating at LOS A or B after the addition of the project traffic are not considered significantly impacted regardless of the increase in V/C ratio. Table 3.6.3 summarizes the impact criteria.

Table 3.6.3 City of Los Angeles Traffic Impact Criteria

LOS	Final V/C Ratio	Project-Related Increase in V/C
C	> 0.700 – 0.800	Equal to or greater than 0.040
D	> 0.800 – 0.900	Equal to or greater than 0.020
E or F	> 0.900	Equal to or greater than 0.010

Source: City of Los Angeles Department of Transportation, 2014.

City of El Segundo

The City of El Segundo has established that an impact would occur at a signalized study intersection when the addition of project-generated trips causes:

- The peak hour LOS to change from A, B, C, or D to LOS E or F; or
- An ICU increase of 0.02 or more when the project condition LOS is E or F.

County of Los Angeles

The County of Los Angeles has established that an impact would occur at a signalized study intersection when the addition of project-generated trips causes:

- An increase of V/C ratio by 0.04 or more at an intersection operating at LOS C; or
- An increase of V/C ratio by 0.02 or more at an intersection operating at LOS D; or
- An increase of V/C ratio by 0.01 or more at an intersection that operates at LOS E or F.

City of Inglewood

For intersections that fall under the jurisdiction of the City of Inglewood, the significance criteria are consistent with the County of Los Angeles LOS policy described above.

Congestion Management Program

The CMP was implemented to analyze the impacts of local land use decisions on the regional transit system. Local jurisdictions are responsible for assessing the impacts of new development on the CMP system as part of the development review and entitlement process. CMP analyses are required only for project where the proposed project would add 50 or more trips during either the AM or PM weekday peak hours to CMP arterial monitoring intersections, including monitored freeway onramps or off-ramps, or where the project will add 150 or more trips, in either direction, during either the AM or PM weekday peak hours to Mainline freeway monitoring locations.

The proposed project would have a significant impact on a CMP freeway or arterial monitoring location if it would:

- Increase traffic demand on a CMP facility by 2 percent of capacity ($V/C \times 0.02$), causing LOS F ($V/C > 1.00$)
- If the facility is already at LOS F, it would increase traffic demand on a CMP facility by 2 percent of capacity ($V/C \times 0.02$)

Emergency Access

In accordance with the State CEQA Guidelines, the determination of impacts to transportation/traffic should consider whether a project would result in inadequate emergency access.

Construction

The CEQA Guidelines do not include criteria for the consideration of transportation-related construction impacts. Construction impacts typically rely upon a qualitative analysis of conditions pertaining to temporary impacts associated with construction, including temporary traffic impacts, loss of access, loss of bus stops or rerouting of bus lines and loss of on-street parking. For purposes of this EIR, the proposed project would have a significant transportation-related impact from construction activities if it would:

- Result in a substantial disruption to traffic during construction, which could include temporary street closures; temporary loss of regular vehicular or pedestrian access to existing land uses; temporary loss of an existing bus stop or rerouting of bus lines; or creation of traffic hazards.

3.6.4. Project Features

The proposed project includes changes to the roadway, bicycle, pedestrian and transit networks within the study area.

Changes to the transit network are a core feature of the proposed project. The primary change consists of shifting thirteen bus routes from serving the LAX City bus center and the Aviation/LAX transit center to serving a single, consolidated bus transit center at the proposed project. The primary consideration in determining the rerouting plan was to provide a direct route to the proposed project to optimize transit run time, while aiming to preserve as much of the existing routing as possible to minimize disruptions to existing riders. A secondary consideration was preservation of bus access within walking distance to land uses on Century Boulevard and continuing service to the Aviation /LAX LRT station for buses coming from south of the LAX area.

Under the future without project scenarios, local transit lines are assumed to shift travel patterns to connect with the Crenshaw/LAX Line station at Aviation and Century Boulevards. The complete analysis of existing bus transit travel pattern changes is contained in the appendix for this EIR.

The proposed project involves the addition of two driveways, at least one of which will be fully signalized, on Aviation Boulevard between Arbor Vitae Street and 98th Street. Lane configuration changes on Aviation Boulevard would include adding up to two northbound left-turn lanes and a southbound right-turn pocket on Aviation Boulevard for access to the project driveways.

The proposed project includes a passenger pick-up and drop-off area, with access on the southbound side of Aviation Boulevard, south of the main signalized driveway and north of 98th Street. The pick-up and drop-off area would be accessible to vehicular traffic heading southbound on Aviation Boulevard via a right-in-only driveway with no left-turn entry access for northbound vehicles. A right-out-only driveway would allow traffic to continue back onto Aviation Boulevard towards the intersection at Century Boulevard. No additional signals or crosswalks would be added to cross Aviation Boulevard at the pick-up/drop-off driveways.

The pedestrian network would be enhanced by a 15-foot wide sidewalk along the length of the project site. Additional crosswalks would be implemented at the fully signalized driveway intersection.

3.6.5. Impact Analysis and Mitigation Measures

This section assesses potential impacts associated with the proposed project and, if necessary, identifies mitigation measures to eliminate or reduce impacts. The methodology implemented in this assessment consists of evaluating whether the proposed project would have significant transportation and traffic impacts according to the above-stated thresholds. Impacts are primarily assessed by considering the project objectives and proposed uses in light of the regulatory setting as well as the existing and surrounding uses described above.

Impact 3.6.1: Would the proposed project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths and mass transit?

Transportation and traffic effects of the proposed project were assessed for existing with project conditions (2015) and proposed project conditions (2035), which do not assume the implementation of the LAMP. Cumulative transportation and traffic effects are addressed in Section 5.6. The existing with project scenario compares the effects of the proposed project as if it were complete under current roadway configurations and present-day traffic volumes. The proposed project scenario includes the forecast growth in regional traffic volumes. The following information was used to inform the impact analysis.

The primary traffic change associated with the proposed project would be the shift of bus routes from the LAX City bus center and the Aviation/LAX transit center to the project site.

There are 13 Metro and municipal bus routes currently serving the LAX City bus center and/or the Aviation/LAX transit center that would be rerouted to the project site. Utilizing current bus routing data from Metro and municipal agencies, the existing routes were modified to reach the project site in the most direct path available. In the future condition without the project, local transit lines would shift travel patterns to connect with the Aviation/Century station on the Crenshaw/LAX line.

Peak hour trip generation for the proposed project is shown in Table 3.6.4. The trip generation includes public transit buses, LAX shuttle buses and passenger vehicle pick-up and drop-off. The bus trip generation was based off of data obtained from the operators. For passenger vehicles, the daily trip generation was forecasted using the Metro Travel Demand Forecasting (TDF) Model. A factor of 20 percent was used to conservatively estimate peak-hour trips from the daily forecast produced using the TDF model. The pick-up/drop-off area would be accessible only by southbound traffic on Aviation Boulevard. No northbound left turns into the pick-up/drop-off area would be allowed, nor would vehicles be able to turn left onto Aviation Boulevard when exiting.

Table 3.6.4 Peak Hour Trip Generation for Proposed Project

Mode	In	Out
Rerouted Bus Transit Trips	31	34
Rerouted LAX Shuttle G Trips	8	8
New Kiss & Ride Trips	18	18
Total	57	61

Source: Fehr and Peers, 2016.

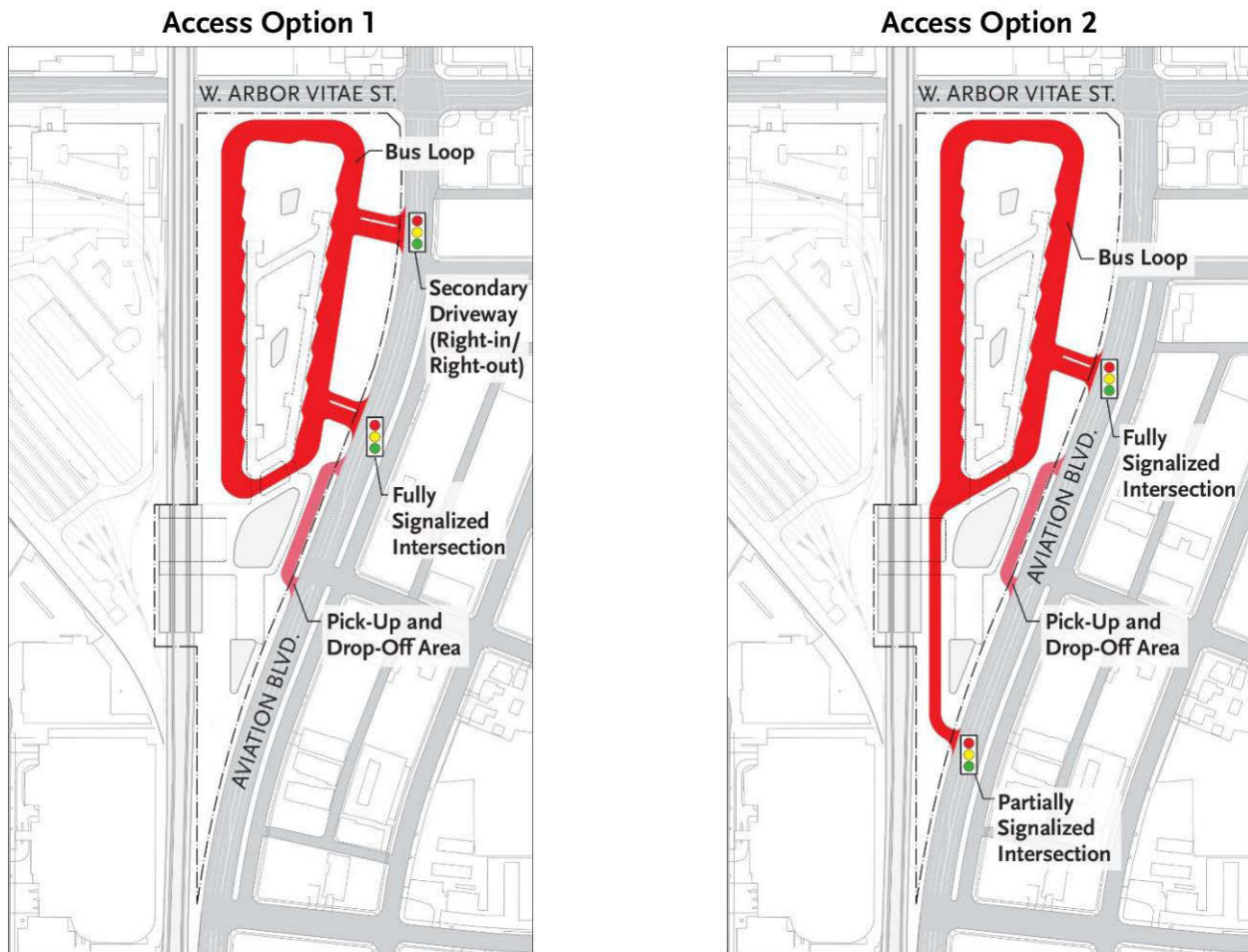
An entrance to the bus plaza would be located on Aviation Boulevard, approximately 500 feet south of Arbor Vitae Street (main entrance), as part of a new, fully signalized intersection. This entrance would be located slightly south of 93rd Street. Two options are under consideration for secondary access: one would be located north of the main entrance and the other would be located at the southern end of the project site. These entrances would facilitate access and throughput for the buses to the bus plaza and provide an alternative access option in the event the main driveway is blocked or closed.

Option 1 would locate a secondary driveway on Aviation Boulevard between Arbor Vitae Street and the main signalized project driveway. This secondary driveway would not be signalized and would only allow right turns into or out of the site on Aviation Boulevard.

Option 2 would locate a secondary driveway near the southern end of the site with a 24-foot wide roadway along the western side of the Metro hub and bike hub to connect Aviation Boulevard with the southern end of the bus plaza. The intersection with Aviation Boulevard would be partially signalized to provide a protected left turn for buses entering the facility from Aviation Boulevard against the southbound traffic flow. Since this option is not aligned

with a roadway on the east side of Aviation Boulevard, a full signal is not required. Options 1 and 2 are shown in Figure 3.6.3.

Figure 3.6.3 Proposed Driveway Options



Source: STV, 2016.

The change in site access between Options 1 and 2 only affects traffic flows and the resulting operations at the main, signalized driveway into the project site. For all other study intersections, each bus route follows the same travel path when traveling to and from the project site under both access options.

Impact Analysis

Construction Activities

For the proposed project, construction activities will be primarily limited to and contained within the project site, with the exception of the addition of traffic signals at the main project driveway on Aviation Boulevard and the installation of a second signal at the southern entry in Option 2. All construction and worker vehicles are anticipated to be accommodated on site throughout construction.

Table 3.6.5 shows the anticipated construction-related daily trip generation. The building construction phase will generate the most average trips per day, with up to 134 construction worker trips (combined inbound and outbound trips), though the average daily total is likely going to be less than this number (derived from worst-case CalEEMod model assumptions). The actual peak hour trip generation will vary depending on work hours, but typical construction worker shifts start and end before the AM and PM peak hours. Assuming 60 percent of construction worker trips occur outside of the peak hours, up to 40 percent of these trips (54 trips: 27 inbound during the AM peak hour, and 27 outbound in the PM peak hour) could be generated during this phase. This level of trip generation is not expected to significantly impact the operating conditions of any of the study intersections, because it is likely to dissipate from the site to the north, east, and south. Most construction worker traffic would likely use the I-405 freeway to reach the study area, and the future without project operating conditions (LOS D) at the intersection of Aviation Boulevard and Century Boulevard would have sufficient capacity to accommodate these worker trips. During other construction phases, worker trips would range from 16 to 42 trips per day.

Vendor trips would occur during the building construction phase, with a total of 60 trips per day (30 inbound and 30 outbound trips). Assuming an eight-hour day, and an even distribution of vendor trips, the maximum vendor trip activity would be 8 trips (4 inbound trips and 4 outbound trips). This level of vendor trip activity, combined with the construction worker trip activity, is not expected to generate significant impacts at any study intersections.

Haul trips per day would peak during the grading and excavation phase, with a total of 80 trips per day (40 inbound and 40 outbound trips). Assuming an eight-hour day, and an even distribution of haul trips, the maximum truck haul trip activity would be 10 trips (5 inbound trips and 5 outbound trips). This level of truck trip activity is not expected to generate significant impacts at any study intersections.

The typical path for haul and vendor trips will be between the site and I-405 or I-105 via Aviation and Century Boulevards. Site access will be primarily on Aviation Boulevard except for a brief period during the construction of the station platforms, during which time vehicle access and egress will occur on Arbor Vitae Street between the rail right-of-way and Aviation Boulevard. All truck staging will occur on site and would not generate impacts on the road network.

Table 3.6.5 Construction Trip Generation

Phase	Worker Trips/Day	Haul Trips/Day	Vendor Trips/Day	Days
Demolition	16	20	0	20
Site Preparation	18	68	0	20
Grading & Excavation	24	80	0	50
Building Construction	134	0	60	675
Paving & Architectural Coating	22	0	0	20

Sources: CAIEMod, Terry A. Hayes Associates Inc., 2016.

The construction phase may include temporary intermittent lane closures on adjacent streets, although this is unlikely to be necessary due to the center turn median on Aviation Boulevard. Some temporary and minor impacts due to encroachment may occur on Arbor Vitae during the construction of the station platforms. Pedestrian and bicycle access around the project site must be adequately maintained during construction.

The proposed project would implement the following during construction:

- A flagman shall be placed at the truck entry and exit from the project site
- Deliveries and pick-ups of construction materials shall be scheduled during non-peak travel periods to the degree possible and coordinated to reduce the potential of trucks waiting to load or unload for protracted periods of time
- Access shall remain unobstructed for land uses in proximity to the project site during construction
- Minimize lane and sidewalk closures to the extent feasible. In the event of a temporary lane or sidewalk closure, a worksite traffic control plan shall be implemented to route traffic, pedestrians or cyclists around any such lane or sidewalk closures
- A construction management plan shall be developed by the contractor and will be implemented during construction, to include the following:
 - Schedule vehicle movements to ensure there are no vehicles waiting off-site and impeding public traffic flow on the surrounding streets
 - Establish requirements for the loading, unloading, and storage of materials on the project site
 - Coordinate with the City and emergency service providers to ensure adequate access is maintained to the project site and neighboring businesses.

Therefore, the proposed project would result in a less-than-significant impact related to conflicting with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system during project construction.

Existing With Project Conditions. The traffic analysis assessed potential impacts at 24 intersections affected by the proposed project. Table 3.6.6 compares existing with project to existing conditions. The results show that the average increase in V/C was less than one percent under the CMA and ICU methods and there were no exceedances of the significance thresholds. In addition, as shown at the bottom of the table, both project driveway options would operate at LOS A. Therefore, the proposed project would result in a less-than-significant impact related to conflicting with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system in the existing with project condition.

Proposed Project Conditions. The traffic analysis assessed potential impacts at intersections affected by the proposed project. Table 3.6.7 compares proposed project to future without project conditions. The Future Without Project scenario reflects regional growth and transportation improvements identified in the 2012 SCAG RTP. The first step in developing the forecasts was to apply Metro's Travel Demand Model to determine the background

growth in traffic volumes in the study area. Using the growth in volumes at intersections within the study area, an annual average growth rate of 0.85 percent was applied to the existing counts to develop the initial 2035 forecasts. In this scenario, bus routes that would otherwise be re-routed to serve the proposed project are instead routed to serve a bus terminal to be located near the intersection of Century and Aviation Boulevards. The results show that the average increase in V/C was less than one percent under the CMA and ICU methods and there were no exceedances of the significance thresholds. Therefore, the proposed project would result in a less-than-significant impact related to conflicting with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system in the future condition.

Mitigation Measures

No mitigation measures are required.

Table 3.6.6 Existing With Project Conditions

Int #	Intersection	EXISTING (2015)				EXISTING - WITH PROJECT							
		AM		PM		AM		PM		AM		PM	
		V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	Delta	Impact?	Delta	Impact?
1	Sepulveda Blvd. & Manchester Ave.	0.715	C	0.808	D	0.715	C	0.808	D	0.000	NO	0.001	NO
2	Sepulveda Blvd. & La Tijera Blvd.	0.656	B	0.712	C	0.656	B	0.712	C	0.000	NO	0.000	NO
3	Sepulveda Blvd. & Westchester Pkwy.	0.735	C	0.784	C	0.740	C	0.784	C	0.005	NO	-0.001	NO
4	Lincoln Blvd. & Sepulveda Blvd.	0.601	B	0.620	B	0.601	B	0.620	B	0.000	NO	0.000	NO
5	Sepulveda Blvd. & Century Blvd.	0.754	C	0.689	B	0.755	C	0.688	B	0.001	NO	-0.001	NO
6	Sepulveda Blvd. & I-105 WB Ramps (n/o Imperial Hwy.)	1.078	F	0.901	E	1.078	F	0.901	E	0.000	NO	0.000	NO
7	Sepulveda Blvd. & Imperial Hwy.	0.774	C	1.089	F	0.773	C	1.089	F	-0.001	NO	0.000	NO
8	Sepulveda Eastway & Westchester Pkwy.	0.407	A	0.602	B	0.410	A	0.605	B	0.003	NO	0.003	NO
9	La Tijera Blvd. & Manchester Ave.	0.508	A	0.504	A	0.508	A	0.505	A	-0.001	NO	0.001	NO
10	Jenny Ave. & Westchester Pkwy.	0.197	A	0.330	A	0.197	A	0.331	A	0.000	NO	0.001	NO
11	Avion Dr. & Century Blvd.	0.381	A	0.292	A	0.383	A	0.293	A	0.002	NO	0.001	NO
12	Airport Blvd. & Manchester Ave.	0.573	A	0.651	B	0.573	A	0.653	B	0.001	NO	0.001	NO
13	Airport Blvd. & Arbor Vitae St./Westchester Pkwy.	0.661	B	0.763	C	0.663	B	0.762	C	0.002	NO	-0.001	NO
14	Airport Blvd. & 96 th St.	0.279	A	0.376	A	0.277	A	0.375	A	-0.001	NO	-0.001	NO
15	Airport Blvd. & 98 th St.	0.374	A	0.467	A	0.373	A	0.466	A	-0.001	NO	-0.001	NO
16	Airport Blvd. & Century Blvd.	0.565	A	0.459	A	0.563	A	0.456	A	-0.003	NO	-0.003	NO

Int #	Intersection	EXISTING (2015)				EXISTING - WITH PROJECT							
		AM		PM		AM		PM		AM		PM	
		V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	Delta	Impact?	Delta	Impact?
17	Nash St./I-105 WB Ramps & Imperial Hwy.	0.414	A	0.350	A	0.413	A	0.349	A	-0.001	NO	-0.001	NO
18	Douglas St. & Imperial Hwy.	0.346	A	0.579	A	0.347	A	0.579	A	0.001	NO	0.001	NO
19	Bellanca Ave. & Century Blvd.	0.471	A	0.409	A	0.472	A	0.411	A	0.001	NO	0.001	NO
20	Aviation Blvd. & Arbor Vitae St.	0.802	D	0.720	C	0.803	D	0.727	C	0.001	NO	0.007	NO
21	Aviation Blvd. & Century Blvd.	0.730	C	0.729	C	0.739	C	0.719	C	0.009	NO	-0.010	NO
22	Aviation Blvd. & 104 th St.	0.520	A	0.507	A	0.516	A	0.501	A	-0.004	NO	-0.005	NO
23	Aviation Blvd. & 111 th St.	0.475	A	0.459	A	0.470	A	0.453	A	-0.005	NO	-0.005	NO
24	Aviation Blvd. & Imperial Hwy.	0.576	A	0.736	C	0.573	A	0.730	C	-0.003	NO	-0.007	NO
--	Project Driveway - Option 1	--	--	--	--	0.238	A	0.233	A	--	NO	--	NO
--	Project Driveway - Option 2	--	--	--	--	0.219	A	0.242	A	--	NO	--	NO

LOS results based on CMA methodology; Intersections on the border of the City of Los Angeles were also analyzed using the ICU methodology and the LOS results are included in Appendix E, Transportation and Traffic Data. No impacts occur under the CMA or ICU methodologies.

Source: Fehr and Peers, 2016.

Table 3.6.7 2035 Proposed Project Conditions

Int #	Intersection	FUTURE WITHOUT PROJECT (2035)				FUTURE WITH PROJECT							
		AM		PM		AM		PM		AM		PM	
		V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	Delta	Impact?	Delta	Impact?
1	Sepulveda Blvd. & Manchester Ave.	0.853	D	0.960	E	0.854	D	0.960	E	0.001	NO	0.001	NO
2	Sepulveda Blvd. & La Tijera Blvd.	0.784	C	0.848	D	0.784	C	0.848	D	0.000	NO	0.001	NO
3	Sepulveda Blvd. & Westchester Pkwy.	0.877	D	0.933	E	0.883	D	0.931	E	0.006	NO	-0.001	NO
4	Lincoln Blvd. & Sepulveda Blvd.	0.721	C	0.741	C	0.720	C	0.741	C	-0.001	NO	0.000	NO
5	Sepulveda Blvd. & Century Blvd.	0.897	D	0.819	D	0.901	E	0.820	D	0.003	NO	0.001	NO
6	Sepulveda Blvd. & I-105 WB Ramps (n/o Imperial Hwy.)	1.278	F	1.070	F	1.279	F	1.070	F	0.001	NO	0.000	NO
7	Sepulveda Blvd. & Imperial Hwy.	0.922	E	1.288	F	0.922	E	1.289	F	0.000	NO	0.001	NO
8	Sepulveda Eastway & Westchester Pkwy.	0.493	A	0.719	C	0.496	A	0.723	C	0.003	NO	0.003	NO
9	La Tijera Blvd. & Manchester Ave.	0.611	B	0.606	B	0.611	B	0.607	B	0.000	NO	0.001	NO
10	Jenny Ave. & Westchester Pkwy.	0.248	A	0.402	A	0.248	A	0.403	A	0.000	NO	0.001	NO
11	Avion Dr. & Century Blvd.	0.463	A	0.358	A	0.465	A	0.359	A	0.002	NO	0.001	NO
12	Airport Blvd. & Manchester Ave.	0.687	B	0.778	C	0.688	B	0.779	C	0.001	NO	0.001	NO
13	Airport Blvd. & Arbor Vitae St./Westchester Pkwy.	0.790	C	0.904	E	0.792	C	0.907	E	0.002	NO	0.003	NO
14	Airport Blvd. & 96 th St.	0.341	A	0.453	A	0.341	A	0.454	A	0.001	NO	0.001	NO
15	Airport Blvd. & 98 th St.	0.454	A	0.562	A	0.454	A	0.561	A	0.000	NO	-0.001	NO
16	Airport Blvd. & Century Blvd.	0.678	B	0.552	A	0.675	B	0.549	A	-0.003	NO	-0.003	NO

Int #	Intersection	FUTURE WITHOUT PROJECT (2035)				FUTURE WITH PROJECT							
		AM		PM		AM		PM		AM		PM	
		V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	Delta	Impact?	Delta	Impact?
17	Nash St./I-105 WB Ramps & Imperial Hwy.	0.500	A	0.425	A	0.501	A	0.425	A	0.001	NO	0.000	NO
18	Douglas St. & Imperial Hwy.	0.423	A	0.693	B	0.424	A	0.693	B	0.001	NO	0.000	NO
19	Bellanca Ave. & Century Blvd.	0.589	A	0.516	A	0.569	A	0.496	A	-0.020	NO	-0.020	NO
20	Aviation Blvd. & Arbor Vitae St.	0.955	E	0.861	D	0.956	E	0.865	D	0.001	NO	0.004	NO
21	Aviation Blvd. & Century Blvd.	0.869	D	0.860	D	0.880	D	0.859	D	0.012	NO	-0.001	NO
22	Aviation Blvd. & 104 th St.	0.620	B	0.603	B	0.621	B	0.603	B	0.001	NO	0.001	NO
23	Aviation Blvd. & 111 th St.	0.567	A	0.547	A	0.568	A	0.547	A	0.001	NO	0.001	NO
24	Aviation Blvd. & Imperial Hwy.	0.685	B	0.869	D	0.687	B	0.869	D	0.002	NO	0.000	NO
--	Project Driveway - Option 1	--	--	--	--	0.238	A	0.233	A	--	NO	--	NO
--	Project Driveway - Option 2	--	--	--	--	0.219	A	0.242	A	--	NO	--	NO

LOS results based on CMA methodology; Intersections on the border of the City of Los Angeles were also analyzed using the ICU methodology and the LOS results are included in Appendix E, Transportation and Traffic Data. No impacts occur under the CMA or ICU methodologies.

Source: Fehr and Peers, 2016.

Impact 3.6.2: Would the proposed project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Impact Analysis

The CMP is a state-mandated program, administered by Metro for Los Angeles County, which provides a mechanism for coordinating land use and development decisions. The CMP requires establishment of LOS standards to measure congestion at specific monitoring locations on the freeway and arterial systems. LOS ranges from LOS A to F, with LOS A representing free-flow conditions and LOS F representing a high level of congestion.

The following CMP freeway monitoring locations fall within the project area:

- I-105 east of Sepulveda Boulevard (eastbound and westbound)
- I-405 north of La Tijera Boulevard (northbound and southbound)

The following CMP arterial monitoring locations are within the study area and are also project study intersections:

- Lincoln Boulevard and Sepulveda Boulevard
- Manchester Avenue and Sepulveda Boulevard

Since the proposed project would not add more than 150 trips to the freeway monitoring locations nor would it add more than 50 trips to the intersection monitoring locations, a CMP analysis is not necessary. Additionally, the intersection LOS impact analysis indicates that the V/C would change by less than 0.02 under existing with project and proposed project conditions at the two CMP monitoring locations. Based on the project trip generation and resulting increases in traffic volumes in the study area, no impacts would occur at any CMP monitoring location. Therefore, the proposed project would result in a less-than-significant impact related to CMP facilities.

Mitigation Measures

No mitigation measures are required.

Impact 3.6.3: Would the proposed project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

Impact Analysis

The project site is within the LAX airport influence area, which is the area wherein current or future airport-related noise, over flight, safety and/or airspace protection factors may significantly affect land uses or necessitate restrictions on those uses. It includes LAWA property, RPZs, inner and outer safety zones and Community Noise Equivalent Level

contours. The project site is not within a RPZ or safety zone. It is a surface transportation project and would not change air traffic patterns.

The overall intention of the proposed project is to satisfy existing and future transit demand in the airport vicinity. Utility and other infrastructure upgrades are also intended to meet project-related demand. The proposed project's demand for commercial goods and services would be met by new retail, services and community facilities and by existing retail, service and other resources already located within proximity to the project site. In conclusion, the proposed project would be consistent with regional policies to reduce urban sprawl, efficiently utilize existing infrastructure and reduce regional congestion. As a result, the proposed project would not induce unanticipated growth and development. Therefore, the proposed project would result in a less-than-significant impact related to changes in air traffic patterns.

Mitigation Measures

No mitigation measures are required.

Impact 3.6.4 Would the proposed project substantially increase hazards to a design feature or incompatible uses?

Impact Analysis

As discussed in subsection 3.6.4 above, none of the transportation system improvements proposed in the project would introduce new safety hazards at intersections or along roadway segments, as they would be designed to meet current design standards. Lane widths and turning radii would be designed to accommodate all bus types that would enter and exit the project site and signals would be configured so as to accommodate high volumes of bus traffic entering and exiting. Adequate site distance for new driveway intersections would be provided to meet engineering standards. Therefore, no impact would occur.

Mitigation Measures

No mitigation measures are required.

Impact 3.6.5: Would the proposed project result in inadequate emergency access?

Impact Analysis

Construction activities have the potential to affect emergency access, by adding construction traffic to the street network. However, as discussed above, most average trips per day would occur during the building construction phase, with up to 134 construction worker trips (combined inbound and outbound trips). Additionally, the construction phase may include temporary intermittent lane closures on adjacent streets, although this is unlikely to be necessary due to the center turn median on Aviation Boulevard. Some temporary and minor impacts due to encroachment may occur on Arbor Vitae during the construction of the station platforms. Despite the minimal increase in traffic on the roadway network, construction activities could slightly affect emergency access. However, emergency access to the project

site would be maintained during construction, these impacts would be negligible and temporary, and the project would be required to prepare a Construction Staging and Traffic Management Plan that would address traffic and access control during construction.

The proposed project would utilize the existing and planned network of regional and local streets in the study area. The project would comply with standard engineering practices and design standards, and would not include design elements that would increase roadway hazards or impede emergency access.

The project site and the surrounding area are currently served by City of Los Angeles Fire Department (LAFD) Fire Station 95, located at 10010 International Road (approximately half a mile to the southwest). The project site is also served by Fire Station 5 located at 8900 Emerson Avenue (approximately 1.5 miles to the northwest), Fire Station 51 located at 10435 Sepulveda Boulevard (approximately 1.6 miles to the southwest) and Fire Station 80 located at 7250 World Way (approximately 2.5 miles to the southwest) (CERT, 2015 and Los Angeles Fire Department, 2016).

To maintain the level of fire protection and emergency services at the time of buildout, the LAFD may require additional fire personnel and equipment. As there are four fire stations located in proximity to the project site, there would be no need to build a new or expand an existing fire station to serve the proposed project and maintain acceptable service ratios, response times, or other performance objectives for fire protection. In addition, the LAFD Deployment Plan has been in place since mid-2011. Under the LAFD Deployment Plan, the service delivery area of each fire station is drawn to allow fire apparatus to reach any address in that district within a specified response time. By analyzing data from previous years and continuously monitoring current data regarding response times, types of incidents, and call frequencies, LAFD can shift resources to meet local demands for fire protection.

Metro contracts with the Los Angeles Sheriff's Department (LASD) to provide law enforcement across the entire Metro system. Patrol of transit stations is performed by LASD security personnel and deputies overseen by the Transit Services Bureau part of the LASD's Office of Homeland Security. The two closest LASD stations are the Marina del Rey Station (approximately 4 miles to the northwest) and the South Los Angeles Station (approximately 5 miles to the southeast). The County of Los Angeles has a mutual aid agreement with the Los Angeles Police Department (LAPD), such that in the event of a significant event which requires immediate response by more law enforcement personnel, police responders from the Los Angeles Police Department may be called upon to respond to emergencies at the proposed transit center.

It is not anticipated that the proposed project would create a substantial increase in demand for police protection services. The LASD patrols transit stations and trains on a regular basis. Response times would be minimally affected by the proposed project due largely to the fact that most officers respond to calls for service from the field, and not from the station. In addition to regular LASD patrols at stations and on trains, the proposed project would incorporate security features to provide for the safety of visitors and employees. Therefore,

the proposed project would result in a less-than-significant impact related to emergency access.

Mitigation Measures

No mitigation measures are required.

Impact 3.6.6: Would the proposed project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Impact Analysis

The proposed project is being developed to connect LAX to the regional transit system. It is included in the 2009 LRTP and the Measure R Expenditure Plan to finance new transportation projects and programs. The proposed project would consolidate bus transit services in the LAX area and provide pedestrian and bicycle amenities. The project enhances bicycle and pedestrian access through and adjacent to the site. The enhancements would improve local network connectivity and access. The proposed project would link the multiple modes of transit on the project site and would be the area of transition for all passengers transferring from the LRT platforms and the bus facility. The facilities are planned to include food/beverage/concession kiosk-type spaces, passenger amenities, artwork, and passenger information. The new transportation center will create an informal meeting space that is outside of the airport but accessible by multiple modes of transportation, including bicycles and pedestrians. The Metro Hub would provide amenities for various user groups, ranging from commuters transferring at the station, employees of the airport, and visitors to Los Angeles. The bicycle hub would include secured parking for up to 150 bicycles. Additional space for up to 50 bicycles would be provided for short-term parking. Amenities associated with the bicycle hub could include a repair area, a multi-use space, showers and lockers.

All transport modes on the project site would be located at-grade, including the bus plaza, passenger pick-up and drop-off area, LRT platforms, and the bicycle hub. Transferring passengers would use an elevated mezzanine and walkways to safely transfer between the multiple transportation options of the proposed project. Using vertical circulation elements (i.e., stairs, escalators, and elevators) to enter and exit the elevated mezzanine level pedestrians and passengers would be kept separate from vehicle lanes, helping to avoid pedestrian and vehicle conflicts. This elevated network would provide access to all the transport functions on site, creating a zone where passengers can move in an unencumbered way.

The rerouting of bus routes would have a minimal reduction in direct access for passengers presently riding to destinations other than transfers to the regional transit system that are between 96th Street and Century Boulevard, depending on the bus line and the scope of rerouting. The proposed rerouting is not substantial and substantially increases connectivity and access to the transit system. The truncation of ten routes, typically from about one-half mile to two miles, results in a shorter overall run time for each line and is not anticipated to

change vehicle requirements or substantially effect operations otherwise. For the three routes being lengthened, the additional service miles are generally minimal; two routes are extended approximately a half mile and the third is extended just over one mile. These extensions would expand the run time only a small duration. The proposed project would have the capacity to accommodate both the existing and future passengers presently using the LAX City bus center and the Aviation/LAX transit center. The facility will be capable of handling the consolidated bus service with room for expanded frequency or additional lines in the future. Therefore, the proposed project would result in a less-than-significant impact related to public transit, bicycle, and pedestrian facilities.

Mitigation Measures

No mitigation measures are required.

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4. OTHER CEQA CONSIDERATIONS

Section 15126 of the CEQA Guidelines requires that all phases of a project must be considered when evaluating its impact on the environment, including planning, acquisition, development and operation. As part of this analysis, the EIR must also identify cumulative impacts, significant environmental effects of the proposed project, significant environmental effects that cannot be avoided if the proposed project is implemented, significant irreversible environmental changes that would result from implementation of the proposed project and growth-inducing impacts of the proposed project.

4.1. SIGNIFICANT AND UNAVOIDABLE IMPACTS

Section 15126.2(b) of the CEQA Guidelines requires that an EIR describe significant environmental impacts that cannot be avoided, including those effects that can be mitigated but not reduced to a less-than-significant level. Sections 3.1 through 3.6 of this Draft EIR provide a comprehensive identification of environmental effects, including the level of significance both before and after mitigation. The proposed project would not result in significant and unavoidable impacts.

4.2. LONG-TERM EFFECTS AND IRREVERSIBLE ENVIRONMENTAL CHANGES

Section 15126.2(c) of the CEQA Guidelines requires a discussion of any significant irreversible environmental changes that would be caused by the proposed project. Specifically, Section 15126.2(c) states:

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible, since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irreversible commitments of resources should be evaluated to assure that such current consumption is justified.

Generally, a project would result in significant irreversible environmental changes if any of the following would occur:

- The primary and secondary impacts would generally commit future generations to similar uses;
- The project would involve a large commitment of nonrenewable resources;
- The project involves uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).