

4. Environmental Setting

4.1 INTRODUCTION

The purpose of this section is to provide a “description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, from both a local and a regional perspective” pursuant to provisions of the California Environmental Quality Act (CEQA) and the State CEQA Guidelines. The environmental setting will provide a set of baseline physical conditions that will serve as a tool from which the lead agency will determine the significance of environmental impacts resulting from the Proposed Project. In addition, sections of Chapter 5, *Environmental Analysis*, provide a more detailed description of the local environmental setting for specific topical areas.

4.2 REGIONAL ENVIRONMENTAL SETTING

4.2.1 Regional Location

The City of Long Beach (City) is located in the southernmost portion of Los Angeles County, approximately 20 miles south of downtown Los Angeles and borders Orange County on its eastern edge. The City is bordered by the cities of Carson to its west, Paramount and Lakewood to the north, and Los Alamitos and Seal Beach to the east. The City also surrounds Signal Hills on all sides in its central area. The Pacific Ocean abuts the City’s southern border (see Figure 3-1, *Regional Location*).

4.2.2 Regional Planning Considerations

Air Quality and Climate Change

The City is in the South Coast Air Basin (SoCAB), which is managed by the South Coast Air Quality Management District. The SoCAB includes all of Orange County and the nondesert portions of Los Angeles, Riverside, and San Bernardino Counties. The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state law. These regulated air pollutants are known as criteria air pollutants and are: carbon monoxide, volatile organic compounds (VOC), nitrogen oxides (NO_x), sulfur dioxide, coarse inhalable particulate matter (PM₁₀), fine inhalable particulate matter (PM_{2.5}), and lead. VOC and NO_x are criteria pollutant precursors and go on to form secondary criteria pollutants, such as ozone (O₃), through chemical and photochemical reactions in the atmosphere. Air basins are classified as attainment/nonattainment areas for particular pollutants depending on whether they meet ambient air quality standards (AAQS) for that pollutant. The SoCAB is designated nonattainment for O₃, PM_{2.5}, PM₁₀, and lead

4. Environmental Setting

(Los Angeles County only) under the California and National AAQS and nonattainment for nitrogen (NO₂) under the California AAQS.^{1,2}

The Proposed Project's consistency with the applicable AAQS is discussed in Section 5.2, *Air Quality*.

Greenhouse Gas Emissions

Current State of California guidance and goals for reductions in greenhouse gas (GHG) emissions are generally embodied in Executive Order S-03-05; Assembly Bill 32 (AB 32), the Global Warming Solutions Act (2008); and Senate Bill 375 (SB 375), the Sustainable Communities and Climate Protection Act.

Executive Order S-3-05, signed June 1, 2005, set the following GHG reduction targets for the state:

- 2000 levels by 2010
- 1990 levels by 2020
- 80 percent below 1990 levels by 2050

AB 32 was passed by the California state legislature on August 31, 2006, to place the state on a course toward reducing its contribution of GHG emissions. AB 32 follows the 2020 tier of emissions reduction targets established in Executive Order S-3-05. Based on the GHG emissions inventory conducted for its 2008 Scoping Plan, the California Air Resources Board (CARB) approved a 2020 emissions limit of 427 million metric tons of carbon dioxide-equivalent (MMTCo_{2e}) for the state (CARB 2008).

Since release of the 2008 Scoping Plan, CARB has updated the statewide GHG emissions inventory to reflect GHG emissions in light of the economic downturn and measures not previously considered in the 2008 Scoping Plan baseline inventory. The updated forecast predicts emissions to be 507 MMTCo_{2e} by 2020.³ The new inventory identifies that an estimated 80 MMTCo_{2e} of reductions are necessary to achieve the statewide emissions reduction of AB 32 by 2020 (CARB 2012).

In 2008, SB 375 was adopted to connect the GHG emissions reductions targets established in the 2008 Scoping Plan for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light-duty trucks and automobiles (excludes emissions associated with goods movement) by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce vehicle miles traveled and vehicle trips. Specifically, SB 375 required CARB to establish GHG emissions reduction targets for each of the 17 regions in California managed by a metropolitan planning organization (MPO).

¹ CARB approved SCAQMD's request to redesignate the SoCAB from serious nonattainment for PM₁₀ to attainment for PM₁₀ under the national AAQS on March 25, 2010, because the SoCAB has not violated federal 24-hour PM₁₀ standards during the period from 2004 to 2007. In June 2013, the EPA approved the State of California's request to redesignate the South Coast PM₁₀ nonattainment area to attainment of the PM₁₀ National AAQS, effective on July 26, 2013.

² CARB has proposed to redesignate the SoCAB as attainment for lead and NO₂ under the California AAQS (CARB 2013).

³ The Statewide inventory in 2008 and the 2012 update is based on the global warming potentials (GWP) in Intergovernmental Panel on Climate Change's (IPCC) Second Assessment Report. CARB has updated the inventory as part of the 2014 Update to the Scoping Plan with GWPs in the Fourth Assessment Report. However, the inventory has not yet been updated with the GWPs in the Fifth Assessment Report.

4. Environmental Setting

As the southern California region's MPO, the Southern California Association of Governments' (SCAG) targets are an 8 percent per capita reduction from 2005 GHG emission levels by 2020 and a 13 percent per capita reduction from 2005 GHG emission levels by 2035 (CARB 2010). The proposed targets would result in 3 MMTCO_{2e} of reductions by 2020 and 15 MMTCO_{2e} of reductions by 2035. Based on these reductions, the passenger vehicle target in CARB's 2008 Scoping Plan (for AB 32) would be met (CARB 2008).

The Proposed Project's consistency with CARB's Scoping Plan is discussed in Section 5.4, *Greenhouse Gas Emissions*.

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is a council of governments representing Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. SCAG is the federally recognized metropolitan planning organization (MPO) for this region, which encompasses over 38,000 square miles. SCAG is a regional planning agency and a forum for addressing regional issues concerning transportation, the economy, community development, and the environment. SCAG is also the regional clearinghouse for projects requiring environmental documentation under federal and state law. In this role, SCAG reviews proposed development and infrastructure projects to analyze their impacts on regional planning programs. As the southern California region's MPO, SCAG cooperates with the Southern California Air Quality Management District (SCAQMD), the California Department of Transportation (Caltrans), and other agencies in preparing regional planning documents. SCAG has developed regional plans to achieve specific regional objectives, as discussed below.

Regional Transportation Plan/Sustainable Communities Strategy

On April 4, 2012, SCAG adopted the 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy (2012-2035 RTP/SCS), "Towards a Sustainable Future". SCAG has placed a greater emphasis than ever on sustainability and integrated planning in the 2012–2035 RTP/SCS, and its RTP/SCS vision encompasses three principles that collectively work as the key to the region's future: mobility, economy, and sustainability. The 2012–2035 RTP/SCS includes a strong commitment to reduce emissions from transportation sources to comply with SB 375, improve public health, and meet the National AAQS as set by the federal Clean Air Act. The 2012–2035 RTP/SCS provides a blueprint for improving quality of life for residents by providing more choices for where they will live, work, and play and how they will move around (SCAG 2012).

The Proposed Project's consistency analysis with the applicable 2012 RTP/SCS policies is provided in detail in Section 5.7, *Land Use and Planning*.

High Quality Transit Areas

With the adoption of the 2012 RTP/SCS, the areas previously known as 2% Strategy Opportunity Areas were updated by SCAG and replaced with what are now called high quality transit areas (HQTAs), which are a part of and integrated into the SCS portion (Chapter 4 [Sustainable Communities Strategy]) of the 2012 RTP/SCS. An HQTAs is generally a walkable transit village or corridor that is within a half mile of a well-

4. Environmental Setting

serviced transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours. The overall land use pattern of the 2012 RTP/SCS focuses jobs and housing in the region's designated HQTAs (SCAG 2012). The entire Project Site is identified as a HQTA in the 2012 RTP/SCS (SCAG 2014).

Los Angeles Metropolitan Transit Authority

The Los Angeles Metropolitan Transit Authority (Metro) is Los Angeles County's designated congestion management agency. Metro is responsible for the conformance monitoring and updating of Los Angeles County's Congestion Management Program (CMP), a multimodal program. The most recent CMP was issued by Metro in 2010. The goals of the CMP are 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 provides:

- Tracking and analysis to determine how the regional highway and transit systems are performing.
- Local analysis of the impacts of local land use decisions on regional transportation.
- Local implementation of Transportation Demand Management (TDM) design guidelines that ensure new development includes improvements supportive of transit and TDM.
- Tracking new building activity throughout Los Angeles County (Metro 2010).

The Proposed Project's consistency with the CMP is provided in Section 5.12, *Transportation and Traffic*.

4.3 LOCAL ENVIRONMENTAL SETTING

4.3.1 Location and Land Use

Location

As shown in Figure 3-2, *Local Vicinity*, the Project Site (generally situated east of Pacific Avenue, west of Atlantic Avenue, north of Anaheim Street, and south of Wardlow Road) is just north of downtown Long Beach and consists of two areas: the Midtown Specific Plan area and an area outside of but adjacent to the Midtown Specific Plan boundary. The Midtown Specific Plan area spans approximately 369 acres along Long Beach Boulevard from Anaheim Street on the south to Wardlow Road on the north. The area outside the Midtown Specific Plan covers approximately 4 acres around Officer Black Park (west of Pasadena Avenue between 21st Street and 20th Street). Both of these areas make up the Project Site and together, comprise 373 acres spanning from Anaheim Street to Wardlow Road.

4. Environmental Setting

The eastern and western boundaries of the Project Site range from 300 feet at midblock locations to a quarter mile at transit nodes and north of Willow Street. Interstate 405 (I-405) intersects the northern half of the Project Site, and California State Route 1 (SR-1; also known as Pacific Coast Highway) runs perpendicular through the lower half of the Project Site.

Existing Land Uses

The Project Site is currently developed (see Figure 3-3, *Aerial Photograph*) and consists of a mix of residential, commercial, medical, institutional, and open space and recreation uses. The Project Site consists of just under 2,000 residential units and approximately 2.6 million square feet of commercial uses (see Table 3-3, *Overall Land Use Projections for Proposed Project*). Existing residential development consists of a mixture of single-family and multifamily homes, while commercial development consists of a range of small- to medium-sized retail and service establishments. Existing medical development consists of multiple hospitals and medical offices, in addition to diagnostic and research businesses. Institutional uses include ten schools: seven elementary and middle schools, and three high schools (including a satellite campus). Existing open space and recreation uses include several park spaces consisting of sport fields/courts, community recreation centers, and skate parks. As shown in Figure 3-3, the Metro Blue Line light rail runs along almost the entire length of Long Beach Boulevard within the Project Site. The light rail consists of various infrastructure improvements, including overhead power lines, metal tracks, and raised platforms.

Surrounding Land Uses

The Project Site is in a highly urbanized, built-out portion of the City. It is generally surrounded by residential uses, which vary widely in character and density and include single-family neighborhoods and apartment complexes. Long Beach Boulevard, which runs along the central portion of the Project Site (see Figure 3-3), acts as a main north-south thoroughfare through the City.

4.3.2 General Plan and Zoning

Current General Plan Land Use Designations

According to the City's General Plan Land Use Map and as shown in Figure 4-1, *Existing General Plan Land Use Designations*, the current land use designations of the Project Site include:

- Land Use District No. 1 – Single-Family District
- Land Use District No. 2 – Mixed Style Homes District
- Land Use District No. 3A – Townhomes District
- Land Use District No. 3B – Moderate Density Residential District
- Land Use District No. 7 – Mixed Use District
- Land Use District No. 8A – Traditional Retail Strip Commercial District
- Land Use District No. 8N – Shopping Nodes District
- Land Use District No. 8R – Mixed Retail/Residential Strip District

4. Environmental Setting

- Land Use District No. 9G – General Industry District
- Land Use District No. 10 – Institutional/School District
- Land Use District No. 11 – Open Space/Park District

Existing Zoning Designations

As shown in Figure 3-5, *Current and Proposed Zoning Designations*, the current zoning designations within the Project Site include:

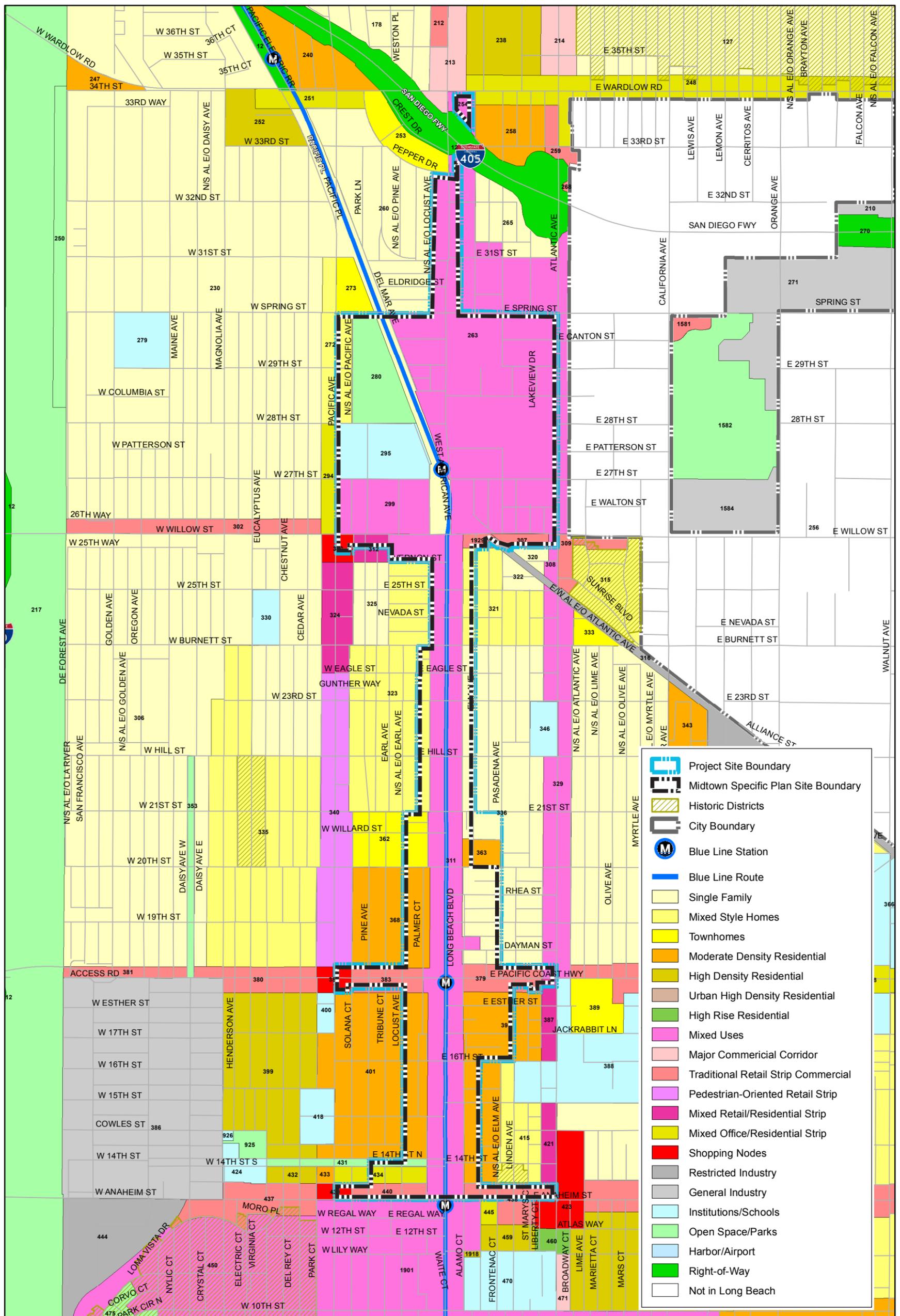
- Two-family Residential, standard lot (R-2-N)
- Moderate-Density Multifamily Residential (R-4-R)
- Community Commercial Automobile-Oriented (CCA)/Regional Highway Commercial (CHW)/Highway Commercial (CH)/Neighborhood Commercial Automobile-Oriented (CAN)/Neighborhood Pedestrian-Oriented Commercial (CNP)/Community R-4-N Commercial (CCN)
- Planned Development District (PD)-22, PD-25, and PD-29
- Institutional (I)
- Park (P)
- Public Right-of-Way (PR)

4.3.3 Air Quality and Climate

As noted above, Long Beach is in the SoCAB, which is managed by SCAQMD. The SoCAB is designated as nonattainment for ozone (O₃), fine inhalable particulate matter (PM_{2.5}), and lead (Los Angeles County only) under the California and National AAQS and nonattainment for coarse inhalable particulate matter (PM₁₀) and nitrogen dioxide (NO₂) under the California AAQS.

The SoCAB is in a coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean in the southwest quadrant, with high mountains forming the remainder of the perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. This usually mild weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds (SCAQMD 2005).

Figure 4-1 - Existing General Plan Land Use Designations
4. Environmental Setting



- Project Site Boundary
- Midtown Specific Plan Site Boundary
- Historic Districts
- City Boundary
- Blue Line Station
- Blue Line Route
- Single Family
- Mixed Style Homes
- Townhomes
- Moderate Density Residential
- High Density Residential
- Urban High Density Residential
- High Rise Residential
- Mixed Uses
- Major Commercial Corridor
- Traditional Retail Strip Commercial
- Pedestrian-Oriented Retail Strip
- Mixed Retail/Residential Strip
- Mixed Office/Residential Strip
- Shopping Nodes
- Restricted Industry
- General Industry
- Institutions/Schools
- Open Space/Parks
- Harbor/Airport
- Right-of-Way
- Not in Long Beach



Source: City of Long Beach, Development Services and Department of Technology Services, January, 2012.

4. Environmental Setting

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4. Environmental Setting

The annual average temperature varies little throughout the SoCAB, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The climatological station nearest to the project site is the Long Beach, California Monitoring Station (ID No. 045082). The average low is reported at 44.8°F in January, and the average high is 80.7°F in August (WRCC 2014).

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all rain falls from November through April. Summer rainfall is normally restricted to widely scattered thundershowers near the coast, with slightly heavier shower activity in the east and over the mountains. Rainfall averages 12.72 inches per year in the project area (WRCC 2014).

An air quality analysis was performed for the Proposed Project and the results are discussed in Section 5.2, *Air Quality*. Project-related impacts from GHG emissions are discussed in Section 5.5, *Greenhouse Gas Emissions*. Existing climate and air quality conditions in the City are also provided in Sections 5.2 and 5.5.

4.3.4 Cultural Resources

One property (Packard Motors Building at 205 Anaheim Street) within the boundaries of the Project Site is currently listed as a Long Beach Historic Landmark, while 26 other properties were previously evaluated and determined ineligible for listing in the National Register of Historic Places. Refer to Section 5.3, *Cultural Resources*, for additional information concerning historical resources and an analysis of project impacts on such resources.

4.3.5 Geology and Landform

The City is within the Los Angeles Basin, a coastal plain at the north end of the Peninsular Ranges Geomorphic Province. The Peninsular Ranges Geomorphic Province is characterized by mountain ranges separated by northwest-trending valleys, and extends from southwestern California south into Mexico. The Los Angeles Basin is bounded by the Santa Monica Mountains and San Gabriel Mountains on the north, the Santa Ana Mountains on the east, and the Pacific Ocean on the south and west. The Santa Monica Mountains and San Gabriel Mountains are part of the Transverse Ranges Geomorphic Province, an east-west-trending series of steep mountain ranges and valleys extending from Santa Barbara County in the west to central Riverside County in the east.

The City is part of a large, seismically active region. Southern California is crossed by numerous active, potentially active, and inactive faults. There are several known active faults in the region, including the Newport-Inglewood Fault system and the Palos Verdes Fault. Most of the Project Site consists of mixed terrestrial and marine alluvium composed of siltstone, sandstone, and conglomerate, and of late to middle Pleistocene age (the Pleistocene Epoch extends from 11,000 years before present ([ybp] to 1.8 million ybp). The western part of the Project Site between Spring Street south to Willow Street consists of young alluvial flood plain deposits composed of soft clay, silt and loose to moderately dense sand and silty sand. These deposits are of Holocene and late Pleistocene age; the Holocene Epoch extends from the present to 11,000 ybp (USGS 2003).

4. Environmental Setting

The Newport-Inglewood Fault Zone, an active fault, passes through the site. Two fault traces of the Newport-Inglewood Fault Zone are mapped on a US Geological Survey geologic map dated 2003: one trace begins near the intersection of Long Beach Boulevard and Willow Street, extending southeast for several miles into the central part of the City of Long Beach; the second crosses Long Beach Boulevard at 32nd Street, extending northwest to just east of the I-405/I-710 interchange and southeast into the City of Signal Hill. The Newport-Inglewood Fault extends about 47 miles from the City of Culver City southeast, extending offshore; the offshore segment of the fault is known as the Newport-Inglewood – Rose Canyon Fault (SCEDC 2014). Several other active faults in the region are described in Section 5.3, *Geology and Soils*.

The terrain within the Project Site and its surrounding areas is flat. Overall, there is little change in elevation throughout the Project Site.

Refer to Section 5.4, *Geology and Soils*, for additional information concerning geological and soil conditions and an analysis of project impacts on geology and soils.

4.3.6 Hydrology and Water Quality

The Project Site is in the Los Angeles Watershed, and is above the Los Angeles West Coast Groundwater Basin. The nearest stream and receiving waters of the Project Site is the Los Angeles River, approximately one-half mile to the west.

The project site is served by two drainage systems, one operated and maintained by the City of Long Beach, and the other by the Los Angeles County Flood Control District. All runoff from the Project Site ultimately discharges into the Los Angeles River. The receiving water for the project site, Reach 1 of the Los Angeles River, is listed on the Clean Water Act Section 303(d) List for impairment by 11 pollutants.

Refer to Section 5.7, *Hydrology and Water Quality*, for additional information regarding hydrological conditions and an analysis of project impacts on hydrology and water quality.

4.3.7 Noise

The primary sources of noise within and near the Project Site come from vehicular traffic, primarily traffic from roadways within and adjacent to the Project Site (e.g., Long Beach Boulevard); background noise from I-405, which crosses the Project Site near the northern boundary; noise from the Blue Line light-rail trains; and sporadic miscellaneous events such as landscaping, street sweeping, and helicopter flights. Refer to Section 5.9, *Noise*, for additional information concerning the noise environment and an analysis of project-related noise impacts.

4.3.8 Public Services and Utilities

Public services and utilities are provided to the Project Site by providers listed in Table 4-1. Additional information describing the provision of public services and utilities in the City, and an analysis of project impacts on public services and utilities are found in Sections 5.11, *Public Services*, and 5.14, *Utilities and Service Systems*.

4. Environmental Setting

Table 4-1 Public Service and Utility Providers

Public Services	
Police	Long Beach Police Department
Fire Protection and Emergency Medical Services	Long Beach Fire Department
Public Schools	Long Beach Unified School District
Library	Long Beach Public Library
Parks	City of Long Beach Parks, Recreation, and Marine Department
Utilities	
Water	Long Beach Water Department
Wastewater Collection	Long Beach Water Department
Wastewater Treatment	Sanitation Districts of Los Angeles County
Solid Waste Collection	City of Long Beach Public Works Department, Environmental Services Bureau
Solid Waste Disposal (Landfills)	Sanitation Districts of Los Angeles County
Electricity	Southern California Edison
Natural Gas	City of Long Beach Gas & Oil Department; Southern California Gas Company

4.3.9 Transportation and Traffic

The existing local roadway network in the project area includes a number of roadways, including Long Beach Boulevard, Wardlow Road, Spring Street, Willow Street, Pacific Coast Highway, and Anaheim Street. Primary access to the Project Site is via Long Beach Boulevard. A detailed list and description of the roadway network in the project area is provided in Section 5.13, *Transportation and Traffic*.

The regional transportation system in the vicinity of the Project Site includes I-405 to the north and I-710 to the west. The Project Site is adjacent to and in close proximity of existing Metro light-rail train and Long Beach Transit (LBT) bus routes along Long Beach Boulevard. For example, Metro provides light-rail service via the Metro Blue Line, which connects downtown Los Angeles to downtown Long Beach, and LBT provides bus services via Routes 1, 51, and 52.

Refer to Section 5.13 for additional information concerning existing transportation facilities and traffic conditions and an analysis of project-related impacts.

4.4 ASSUMPTIONS REGARDING CUMULATIVE IMPACTS

Section 15130 of the CEQA Guidelines states that cumulative impacts shall be discussed where they are significant. It further states that this discussion shall reflect the level and severity of the impact and the likelihood of occurrence, but not in as great a level of detail as that necessary for the project alone. Section 15355 of the Guidelines defines cumulative impacts to be "...two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Cumulative impacts represent the change caused by the incremental impact of a project when added to other proposed or committed projects in the vicinity.

4. Environmental Setting

The CEQA Guidelines (Section 15130 [b][1]) state that the information utilized in an analysis of cumulative impacts should come from one of two sources, either:

- 1) A list of past, present and probable future projects producing related cumulative impacts, including, if necessary, those projects outside the control of the agency; or
- 2) A summary of projections contained in an adopted general plan or related planning document designed to evaluate regional or area-wide conditions.

The cumulative impact analyses in this DEIR use method 2. Generally, the growth projections that are identified in the current Long Beach General Plan have been utilized.

The potential for cumulative impacts is contiguous with the City boundary, since the City is the service provider for various City services and public utilities. The land use element and associated land use districts map of the Long Beach General Plan designate the general distribution and location of land to be used for residential, commercial, industry, institutional, open space/parks, and other land use types. The land use categories established in the Long Beach General Plan guide future development and growth in a way that promotes the health, safety, and welfare of the community. To regulate the amount of building intensity, the Long Beach General Plan also includes development standards (e.g., maximum densities for each residential land use designation) that define the amount and type of physical development allowed in each land use category. This geographic planning framework is used in both the Long Beach General Plan and the City's Zoning Regulations (Title 21 of the City's Municipal Code).

The growth projections adopted by the City are used for the cumulative impact analyses of this DEIR. Please refer to Chapter 5, *Environmental Analysis*, of this DEIR for a discussion of the cumulative impacts associated with development and growth in the City and region.

4.5 REFERENCES

- California Air Resources Board (CARB). 2013, October 23. Proposed 2013 Amendments to Area Designations for State Ambient Air Quality Standards. <http://www.arb.ca.gov/regact/2013/area13/area13isor.pdf>.
- . 2012. Status of Scoping Plan Recommended Measures. http://www.arb.ca.gov/cc/scopingplan/status_of_scoping_plan_measures.pdf.
- . 2008, October. Climate Change Proposed Scoping Plan, a Framework for Change.
- Los Angeles County Metropolitan Transportation Authority (Metro). 2010 Congestion Management Program. http://media.metro.net/docs/cmp_final_2010.pdf.
- South Coast Air Quality Management District (SCAQMD). 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning.

4. Environmental Setting

- Southern California Association of Governments (SCAG). 2014. High Quality Transit Areas (HQTA) in the City of Long Beach [2035 Plan].
http://webapp.scag.ca.gov/scsmaps/Maps/Los%20Angeles/subregion/Gateway/Long%20Beach/image/Long_Beach_TPP.jpg.
- . 2012. 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy, “Towards a Sustainable Future”. <http://rtpscs.scag.ca.gov/Pages/default.aspx>.
- Southern California Earthquake Data Center (SCEDC). 2014, July 11. Newport-Inglewood Fault Zone. <http://www.data.scec.org/significant/newport.html>.
- US Geological Survey (USGS). 2003. Geologic Map of the Long Beach 30’ by 60’ Quadrangle, California. ftp://ftp.consrv.ca.gov/pub/dmg/rgmp/Prelim_geo_pdf/lb_geol-dem.pdf.
- Western Regional Climate Center (WRCC). 2014. Western U.S. Historical Summaries – Long Beach, California Monitoring Station (Station ID No. 045082). <http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca5082> (Accessed September 22 2014).

4. Environmental Setting

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